



CONTRACT #2099

**NORTH JERSEY DISTRICT
WATER SUPPLY COMMISSION**

One F.A. Orechio Drive
Wanaque, New Jersey 07465

Notice to Bidders,
Information for Bidders, Form of Bid,
Sample Contract, Technical Specifications, Exhibits A, B, C,
Certification & Disclosure Form, Access Approval Form
Confidentiality and Non-Disclosure Agreement
Disclosure of Investment Activities in Iran
Certification of Non-Involvement in Prohibited Activities in Russia or Belarus

POST BROOK DAM IMPROVEMENT PROJECT

Howard L. Burrell)
Chairman)
)
Charles P. Shotmeyer)
Vice Chairman)
)
Alan S. Ashkinaze)
)
Jerome P. Amedeo)
)
Donald C. Kuser)
)
Robert C. Garofalo)
)
James L. Cassella)

Commissioners
of the

**NORTH JERSEY DISTRICT
WATER SUPPLY COMMISSION**

Prepared
NOVEMBER 2022

ALL DOCUMENTS CONTAINED HEREIN SHALL BE CONSIDERED PART OF THIS CONTRACT

CONTRACT #2099

TABLE OF CONTENTS

NOTICE TO BIDDERS	Page N-1 – N-5
INFORMATION FOR BIDDERS.....	Page I-1 – I-19
BID	Page I-20 – I-21
EXPERIENCE STATEMENT.....	Page I-22
EQUIPMENT STATEMENT.....	Page I-23
LISTING OF SUBCONTRACTORS	Page I-24
NONCOLLUSION STATEMENT.....	Page I-25
BIDDER DISCLOSURE STATEMENT	Page I-26 – I-27
SURETY’S CONSENT	Page I-28
ACKNOWLEDGEMENT OF RECEIPT OF CHANGES TO BID	Page I-29
DOCUMENTS FORM	
SAFETY TRAINING ACKNOWLEDGEMENT.....	Page I-30
SECURITY MEASURES ACKNOWLEDGEMENT.....	Page I-31
BID CHECKLIST	Page I-32

* * * * *

SAMPLE CONTRACT.....	Page C-1 – C4
GENERAL CONDITIONS.....	Page C-3 – C-30
EXECUTION OF CONTRACT.....	Page C-31
CERTIFICATE OF ACKNOWLEDGEMENT FOR CONTRACTOR	Page C-32
(CORPORATION)	
CERTIFICATE OF ACKNOWLEDGEMENT FOR CONTRACTOR	Page C-33
(INDIVIDUAL)	
CERTIFICATE OF ACKNOWLEDGEMENT FOR COMMISSION	Page C-34

* * * * *

CONTRACT #2099

TABLE OF CONTENTS

EXHIBITS:

EXHIBIT "A"..... TECHNICAL SPECIFICATIONS

**EXHIBIT "B"..... 2017 FORMAL INSPECTION REPORT FOR POST
BROOK DAM**

**EXHIBIT "C" CONSTRUCTION DRAWINGS: IMPROVEMENTS
TO POST BROOK DAM**

ATTACHMENTS:

1. ACCESS APPROVAL FORM (Attachment #1).....Pages (1)
2. VENDOR CERTIFICATION & DISCLOSURE OF POLITICAL CONTRIBUTION
FORMS (Attachment # 2).....Pages (7)
3. NON-DISCLOSURE AGREEMENT (Attachment #3).....Pages (5)
4. DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN
(Attachment #4).....Pages (1)
5. CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES
IN RUSSIA OR BELARUS PURSUANT TO P.L.2033, c.3.....Pages (1)

NOTICE TO BIDDERS BEGINS ON THE NEXT PAGE

CONTRACT #2099

NOTICE TO BIDDERS

The **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** the "Commission"), is Soliciting Bids from Contractors that have expertise in general construction, masonry, waterproofing and general small dam improvement construction. The Post Brook Dam is part of the North Jersey District Water Supply Commission's facilities located in Wanaque, Passaic County, New Jersey. The dam is located in Ringwood, New Jersey within the Wanaque Reservoir lands. The Post Brook Dam was built circa 1927. The dam was completed in late 1927 and is approximately 120 feet long and 10 feet high. The dam is a mortared stone masonry gravity dam that is founded on bedrock. The typical dam cross section consists of a vertical upstream face, approximately 5-foot wide crest and a 1H:2V sloping downstream face. The dam also has a gatehouse with two outlet structures housed inside that discharge a certain passing flow for the lake downstream.

The Scope of Work is to include, but not be limited to, outlet works replacement, re-constructing the downstream face of the dam to include leak repairs, masonry cleaning, joint re-pointing, masonry unit resetting, and masonry re-building (see Exhibits "A", "B" & "C"). The work shall be based on the following information:

Exhibit "A" - Technical Specifications

Exhibit "B" - 2017 Formal Inspection Report for Post Brook Dam

Exhibit "C" -Construction Drawings: Improvements to Post Brook Dam

The Successful Bidder shall be licensed in the State of New Jersey and shall have and provide upon request, demonstrable experience with general construction, masonry, waterproofing and dam repair. Bidders shall include references and at least ten (10) similar projects completed within their bids submitted to the Commission. In addition, the firm must own and maintain a local office within 100 miles of the Commission. The project will be constructed under a single prime contract.

Sealed bids must be received before **1:30 PM THURSDAY, JANUARY 5, 2023** by the **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** in its offices at One F.A. Orechio Drive, Wanaque, New Jersey 07465, at which point they will be publicly opened and read for:

CONTRACT #2099 POST BROOK DAM IMPROVEMENT PROJECT

Bid Specifications are obtainable beginning **TUESDAY, NOVEMBER 22, 2022** through emailing Margaret M. Maddalena, the Commission's Contract Administrator, via email at mmaddalena@njdwsc.com. All bids must be made on the blank forms supplied by the Commission.

CONTRACT #2099

NOTICE TO BIDDERS

A **non-mandatory pre-bid meeting** will be held at the **Commission Offices, One F.A. Orechio Drive, Wanaque, NJ 07465** at **10:00 a.m. on Thursday, December 1, 2022.** While attendance is not mandatory, all bidders are **strongly recommended** to attend this pre-bid meeting and site visit. Failure to attend the Pre-Bid meeting does not relieve the Bidder of any obligations or requirements. Bidder can be held to have knowledge that would have been gained if the Bidder attended the Pre-Bid Meeting.

The Commission and/or its employees do not express or imply any statements regarding existing conditions beyond what may be stated herein.

For the convenience of the bidders, the Commission has annexed a draft Contract herein. Please be advised that the Contract annexed hereto is a draft only, and the Commission reserves the right to alter or amend the terms set forth therein prior to the awarding of the bid.

Sealed bids for performing the work described herein will be received by the Commission and a contract awarded in accordance with the requirements of the Commission. However, the Commission reserves the right to reject a bidder based upon a prior negative experience or upon any other grounds permitted by law.

Access Approval Forms should be submitted, via email to Security, with a copy of a photo ID, twenty-four (24) hours in advance of arrival on site. Please note, a new **Access Approval Form** must be submitted to Security for every visit to the Commission. **Access Approval Forms** may be found in (**Attachment #1**) of the Bid Package.

The Selected Contractor will be required to sign a Confidentiality and Non-Disclosure Agreement at the time of the Contract award and it shall be incorporated as an Attachment into the final Contract.

The Commission and/or its employees do not express or imply any statements regarding existing conditions beyond what may be stated herein. Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27-1 et seq. and all other applicable statutes, laws or regulations concerning discrimination in employment of workers on public works projects. If awarded a contract your company/firm will be required to comply with requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27-1 et seq.

Bidders are required to submit a valid Business Registration Certificate from the State of New Jersey, Department of Treasury, Division of Revenue with their bid. Failure to submit proof of registration prior to the award of a contract shall be cause for rejection of the bid without further consideration.

CONTRACT #2099

NOTICE TO BIDDERS

Sealed Bids: Each bid submission must be enclosed in a sealed envelope addressed to:

**North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465
Attention: Margaret Maddalena, Contract Administrator**

The information below must be clearly shown on the outside envelope of all bids:

CONTENTS: SEALED PUBLIC BID

BID NUMBER: #2099

BID TITLE: POST BROOK DAM IMPROVEMENT PROJECT

BID TIME AND DATE: 1:30 P.M. – THURSDAY, JANUARY 5, 2023

QUESTION CUT OFF DATE: THURSDAY, DECEMBER 8, 2022

BIDS FORWARDED VIA OVERNIGHT SERVICES SHALL INDICATE THAT A SEALED BID CONTAINED THEREIN AND IDENTIFY CONTRACT #2099, THE COMMISSION WILL NOT ACCEPT BIDS SUBMITTED VIA FAX OR EMAIL AND THE SAME WILL BE REJECTED.

The Commission will assume no responsibility for bids, which are not properly labeled, whether delivered by the bidder or the bidder's representative, or sent by mail or courier service. The Commission **will not** accept any bids submitted via fax or email. Bidders are advised not to call the Commission for information. All inquiries must be submitted via email to mmaddalena@njdwsc.com.

Bid Security: Each bid shall be accompanied by a certified check, cashier's check or bid bond for ten (10%) percent of the contract price (not to exceed \$20,000) as a guarantee of execution of contract and the provision of performance security.

All bid securities, except the securities of the apparent three (3) lowest responsible bidders, will be, unless requested by the bidder, returned within ten (10) days after the opening of the bids (Saturdays, Sundays and holidays excepted). The bids of such bidders, other than the apparent three (3) lowest responsible bidders, shall then be considered officially withdrawn. Within three (3) days after the awarding of the Contract **and** the approval of the Contractor's Performance Bond (if required in the terms of this Contract), the bid securities of the remaining unsuccessful bidders shall be returned to them (Saturdays, Sundays and holidays excepted).

Surety's Consent: Every bid must be accompanied by the consent in writing of a surety company (or surety companies) qualified to do business in the State of New Jersey, who shall, at the time of submission of such bid, qualify as to its (or their) responsibility in an

CONTRACT #2099

NOTICE TO BIDDERS

amount equal to ONE HUNDRED PERCENT (100%) of the contract price of such bid, and, furthermore, bind itself (or themselves) in such form as shall comply with the requirements of the Statutes of the State of New Jersey in respect to Bonds of Contractors on Public Works, N.J.S.A. 2A:44-143 to 2A:44-147, as amended and supplemented.

All bidders should use the Surety Consent Form provided by the Commission for the reasons stated on the bottom of the form.

New Jersey Prevailing Wage Act (N.J.S.A 34.11-56.25 et seq.): The Contractor is put on notice that it must pay all of its employees rendering service under this Contract in compliance with the prevailing wage rates promulgated by the New Jersey Department of Labor, a copy of which is on file at the Commission's Administrative Offices in Wanaque, New Jersey, and is hereby made a part of this Contract. In addition, the Contractor shall conform to all other labor laws and statutes established in this State.

Bid

All bidders are considered to have full knowledge of the conditions and requirements, including the physical characteristics of the site and the project, which are necessary for an accurate bid. The Commission assumes no responsibility with respect to ascertaining for the Bidder the facts of these physical characteristics, other than the facilitation of the Pre-Bid Meeting and Site Tour. The Bidder shall be held to be aware of the Commission's Requirements prior to the time of submitting bids and to have appraised all conditions under which the Contract is to be performed.

.

By order of the **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION.**

DR. HOWARD L. BURRELL
Chairman

ATTEST: **KIM DIAMOND**
Commission Secretary

BID #2099

INFORMATION FOR BIDDERS

Note: The use of the masculine herein shall include the feminine, and the use of the plural shall include the singular, and vice versa.

Form to be Used: All bids must be made on the blank form "Bid" attached hereto and in accordance with the directions on the form.

Bid in Words and Figures: The price shall be printed in ink in both words and figures. Any bid which fails to name a price both in words and in figures per unit for each and every item, wherein quantities are given, may be held to be non-responsive and may be rejected. In case of any discrepancy or conflict, the price written in words will take precedence over the price written in figures, unit prices will take precedence over price extension, and the sum of individual items, including unit prices multiplied by estimated quantities, and/or individual lump sum and/or allowance amounts will take precedence over the total bid price or alternate bid price.

Bids Not to be Withdrawn: No bid will be permitted to be withdrawn for any reason whatsoever after it has been submitted (except as permitted by N.J.S.A. 40A:11-23.3).

Sealed Bids: Each bid submission must be enclosed in a sealed envelope addressed to:

**North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465
Attention: Margaret Maddalena, Contract Administrator**

The information below must be clearly shown on the outside envelope of all bids:

CONTENTS - SEALED PUBLIC BID

BID NUMBER: #2099

BID TITLE: POST BROOK DAM IMPROVEMENT PROJECT

BID TIME AND DATE: 1:30 P.M. on THURSDAY, JANUARY 5, 2023

QUESTION CUT OFF DATE: THURSDAY, DECEMBER 8, 2022

BIDS FORWARDED VIA OVERNIGHT SERVICES SHALL INDICATE THAT A SEALED BID IS CONTAINED THEREIN.

CONTRACT #2099

INFORMATION FOR BIDDERS

The Commission will assume no responsibility for bids, which are not properly labeled, whether delivered by the bidder or the bidder's representative or if sent by mail or courier service. The Commission will not accept any bids submitted via fax or email. Bidders are also advised not to call the Commission for information. All inquiries must be submitted via email to Margaret M. Maddalena at mmaddalena@njdwsc.com.

Bid Security:

Each bid shall be accompanied by a certified check, cashier's check or bid bond for ten (10%) percent of the contract price (not to exceed \$20,000), as a guarantee of execution of contract and the provision of performance security.

All bid securities, except the securities of the apparent three (3) lowest responsible bidders will be, unless requested by the bidder, returned within ten (10) days after the opening of the bids (Saturdays, Sundays and holidays excepted). The bids of such bidders, other than the apparent three (3) lowest responsible bidders, shall then be considered officially withdrawn. Within three (3) days after the awarding of the contract **and** the approval of the Contractor's Performance Bond (if required in the terms of this Contract), the bid securities of the remaining unsuccessful bidders shall be returned to them (Saturdays, Sundays and holidays excepted).

Default:

In the case of winning bidder's default, the Commission shall apply said bidder's bid security to the expenses incurred by the Commission in (i) rebidding the Contract and (ii) payment of any difference between the bid price and the price the Commission may be required to pay upon awarding this Contract to a subsequent bidder.

Surety's Consent:

Every bid must be accompanied by the consent in writing of a surety company (or surety companies) qualified to do business in the State of New Jersey, who shall, at the time of submission of such bid, qualify as to its (or their) responsibility in the amount of such bid, and, furthermore, bind itself (or themselves) in such form as shall comply with the requirements of the Statutes of the State of New Jersey in respect to Bonds of Contractors on Public Works, N.J.S.A. 2A:44-143 to 2A:44-147, as amended and supplemented, as follows:

That upon the awarding of the said Contract to the person (or persons) making the bid, the said surety company (or surety companies) shall become surety, firstly, for the faithful performance of the said work, and secondly, for the protection of all persons performing labor, or furnishing labor or materials. Therefore, as required by law, said performance bond is to be in an amount equal to **ONE HUNDRED PERCENT (100%)** of the contract price.

All bidders should use the Surety Consent Form provided by the Commission for the reasons stated on the bottom of the form.

CONTRACT #2099

INFORMATION FOR BIDDERS

Payment and Performance Bond:

The Contractor to whom the Contract is awarded shall give a bond for **ONE HUNDRED PERCENT (100%)** of the Contract price in satisfactory legal form of a surety company or companies authorized to do business by and operating in accordance with the laws of the State of New Jersey, and to be approved by the Commission for the faithful performance of all provisions of the contract relating to work included in these specifications, including the safeguarding against infringement of any or all patents; and said bond to be canceled upon the performance of the conditions therein specified and upon the payment for final delivery of material under these specifications. In addition this bond shall protect all persons furnishing materials or labor to the Contractor or any subcontractors for the completion of said Contract in accordance with the laws of the State of New Jersey, and shall be in such legal form as shall satisfy the requirements of N.J.S.A. 2A:44-143 to 2A:44-147, and amendments and supplements thereto, and shall not be canceled and returned until such time as the Commission determines that all liability to any and all persons protected by the condition of said bond has been met by the Contractor or person primarily liable for the payment thereof, or by the surety (or sureties) on said bond.

Corporate Acknowledgment:

In the event that a bidder is a corporation in which all offices are held by a ***single individual***, then any documents or instruments presented to the Commission in connection with bid shall be executed by said individual only as executive officer, and said officer's signature shall be authenticated and witnessed by a Notary Public licensed to act in such capacity under the laws of the State of New Jersey. This requirement shall apply only to those corporations satisfying the "single individual" criteria set forth above.

Compliance with All Laws:

The successful bidder will be required to keep itself informed and to comply with all Federal, State, County and Local laws, ordinances, and regulations as such may apply.

Non-Collusion:

Bidders are required to give their names together with the address of their places of business. If a bidder is a corporate entity, then any affidavit submitted in conjunction with a bid for this Contract must be signed by a corporate officer. If the Commission discovers that a person or persons submitting a bid is interested, in any manner, in any other bid for the same piece of work, both bids shall be deemed nonconforming and shall be immediately rejected. This provision shall not prevent a party from quoting prices on materials or equipment to more than one bidder. Every bid to be conforming must be in all respects fair and without collusion or fraud and Bidders shall expressly represent that the Bidder is the only person interested in said bid; that it is made without any connection with any person submitting another bid for the same Contract; that the bid is in all respects fair and without collusion, fraud or mental reservation; that no official of the Commission or any person in the employ of the Commission is directly or indirectly interested in said bid or in the supplies or work to which it relates, or in any portion of the profits thereof.

CONTRACT #2099

INFORMATION FOR BIDDERS

Bidders will be required to submit a fully executed Affidavit of Non-Collusion as part of the bid submission.

Balanced Bidding:

Any bid which, in the opinion of the Commission, is unbalanced, may be rejected in the sole discretion of the Commission.

Authorized to Reject Bids:

The Commission reserves the right to abandon the bid process or reject all bids and re-advertise and award the Contract in the regular manner if, in its judgment, such action will best serve the interest of the Commission.

The Commission reserves the right to reject any or all bids which may be non-responsive or the acceptance of which, in the sole judgment of the Commission, may be detrimental to its interests.

The Commission also reserves the right to reject a bidder based upon a prior negative experience or upon any other grounds permitted by law.

Time within which Contract is to be Executed:

The successful bidder shall execute this Contract and give to the Commission the required security within seven (7) working days from the date that the said contract has been awarded to him. Upon failure to do so, said bidder will be considered as having abandoned this Contract.

Buy American Acts:

Any successful bidder and his subcontractors, if any, must comply with all "Buy American" statutes or regulations, including N.J.S.A. 52:33-1 et seq.

The Commission reserves the right to accept non-domestic materials under this Contract in accordance with N.J.S.A. 52:33-2 and 52:33-3 in the event: (i) it determines the use of domestic materials is "impractical" or "inconsistent with the public interest"; (ii) it determines that the cost of using domestic materials is "unreasonable"; or (iii) domestic materials of the class or kind sought are not mined, produced, or manufactured, as the case may be, in the United States in commercial quantities and of a quality satisfactory to the Commission.

Brand Name or Equivalent:

Wherever a brand name is designated in the bid documents, it shall mean "brand name or equivalent." Bidders will be required to demonstrate, to the sole satisfaction of the Commission, that equivalent products are both compatible and effective.

CONTRACT #2099

INFORMATION FOR BIDDERS

Award of Contract:

The Contract will be awarded to the lowest responsible and responsive bidder, who, in the judgment of the Commission, is qualified to do the work. The Commission reserves the right to reject any and all bids, and to waive minor or non-material bid defects.

Worker and Community Right-to-Know Act (N.J.S.A. 34:5A-1 et seq.; N.J.A.C. 7:1G):

This Act requires employers to label all containers of hazardous substances. All goods offered for purchase to the Commission must be labeled in compliance with the provisions of this Act.

Material Safety Data Sheets also must be supplied as is required by law.

Bidder's Qualifications:

Only those bidders thoroughly experienced in quality work of the type required herein and in the installation of materials, as specified herein, may apply.

Bidders are put on notice that their previous experience and performance record will be carefully considered prior to award of contract. Bidders must also own and maintain a local office within one hundred (100) miles of the Commission.

Interpretations and Addenda:

No interpretations of the meanings of any portion of the bid documents will be made to any prospective bidder orally. Every request for an interpretation or correction shall be made in writing addressed to **MARGARET M. MADDALENA, CONTRACT ADMINISTRATOR, NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** and submitted via email to mmaddalena@njdwsc.com. **Requests for interpretations received later than THURSDAY, DECEMBER 8, 2022 will be considered untimely, and, at the sole discretion of the Commission, will not be considered.** Notice of corrections and any supplemental instructions in the form of written addenda to the bid documents will be published in a legal newspaper, faxed and/or mailed to bidders at their respective addresses furnished for such purposes, certified, not later than seven (7) days (Saturdays, Sundays and Holidays excepted) prior to the date fixed for the opening of bids. The failure of any bidder to receive any such addenda or interpretations shall not release said bidder from any obligations under his bid as submitted.

All addenda so issued shall become part of the bid documents. Only the written interpretations, corrections, and addenda so given by **MARGARET M. MADDALENA**, shall be binding, and the prospective bidders are warned that no other officer, agent or employee of the Commission is authorized to give information concerning, or to explain or interpret, the bid documents.

Each bidder is required to submit with its bid a completed ***"Acknowledgment of Receipt of Changes to Bid Documents Form"*** (Page I-29), included with these bid specifications. In the event no notices, revisions, or addenda to the bid advertisement, Technical

CONTRACT #2099

INFORMATION FOR BIDDERS

Specifications, or bid documents are received by the bidder, the bidder shall indicate **“none”** on that form, which must still be completed, acknowledged, signed and submitted with its bid.

Affirmative Action:

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. (P.L. 1975, c.127) and N.J.A.C. 17:27-1.1 et seq. Construction Contracts.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the Commission's compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, 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 Dept. of LWD, Construction EEO Monitoring Program, and to the Commission's compliance officer.

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

CONTRACT #2099

INFORMATION FOR BIDDERS

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 Dept. of LWD, Construction EEO Monitoring Program, 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 Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, 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 be prepared to provide such opportunities to 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 the 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 Dept. of LWD, Construction EEO Monitoring Program, 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

CONTRACT #2099

INFORMATION FOR BIDDERS

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 well as with applicable Federal and State 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 women worker. 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 non-discrimination 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 Dept. of LWD, Construction EEO Monitoring Program. 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.

(ii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iii) 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 subcontractor shall inform the individual in writing of the reasons for the determination, maintain

CONTRACT #2099

INFORMATION FOR BIDDERS

a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. of LWD, Construction EEO Monitoring Program.

- (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 Dept. of LWD, Construction EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program 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 Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program, through its website, 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 Dept. of LWD, Construction EEO Monitoring Program, 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 Dept. of LWD, Construction EEO Monitoring Program as may be requested by the

CONTRACT #2099

INFORMATION FOR BIDDERS

Dept. of LWD, Construction EEO Monitoring Program 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 Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

Patent Infringement:

No specification or specifications provided to the Contractor shall constitute a warranty, express or implied, against any claims for infringement for patents, copyrights, or trademarks and the Commission shall not be responsible to the Contractor, as indemnitor or otherwise, for or on account of any such claim or liability.

Contractor guarantees that the sale or use of its products will not infringe any United States or foreign patent, copyright, or trademark, and Contractor shall indemnify the Commission against all judgments, decrees, costs and expenses resulting from such alleged infringement, and covenants that Contractor will upon request of the Commission and at the Contractor's own expense, defend, or assist in the defense of, any suit or action which may be brought against the Commission or those selling or using any product or service of the Commission by reason of any alleged infringement of any patents, copyrights, or trademarks in the sale or use of the Commission's products or services.

Working Hours:

Contractor shall be permitted to perform work on Commission property during the hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, non-holiday periods.

Time for Completing Work:

The Contractor shall commence the work within seven (7) days from the issuance of the Notice to Proceed by the Commission. The Contractor shall achieve Substantial Completion within **One Hundred Twenty (120) Calendar Days** of the commencement of work.

Liquidated Damages:

If the Contractor shall not complete the work within the same time herein specified, or any proper extension thereof granted by the Commission then the Contractor does hereby agree, as part consideration for the awarding of this contract, to pay the Commission **Two Hundred (\$200.00) per calendar day**, commencing on the 31st calendar day of failure to achieve Substantial Completion, not as a penalty, but as a liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the **BID** for completing the work.

The Commission may, in its sole discretion, review any purported reasons for delay and consider an extension or change order pursuant to the terms of Contract. The Commission shall have the right to offset from monies owed the Contractor under this Contract any and all monies owed the Commission as Liquidated Damages.

CONTRACT #2099

INFORMATION FOR BIDDERS

Campaign Contributions and Expenditure Reporting:

In order to safeguard the integrity of the Commission's procurement process, the Commission has imposed restrictions to insulate the award of contracts from political contributions that pose the risk of improper influence, purchase of access, or the appearance thereof. The terms and conditions set forth in this section are material terms of any contract resulting from this Bid.

a. Definitions.

For the purposes of this section, the following shall be defined as follows:

(i) Contribution – means a contribution reportable by the recipient under “The New Jersey Campaign Contributions and Expenditures Reporting Act”, N.J.S.A.10:44A-1 et seq., and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25-10.1 et seq. Currently, contributions in excess of \$300 during a reporting period are deemed “reportable” under these laws.

(ii) Contractor – means any natural or legal person, business corporation, professional service corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. It also includes (a) all principals who own or control more than ten percent (10%) of the profits or assets of the Contractor or ten percent (10%) of the stock in the case of a contractor that is a corporation for profit, as appropriate; (b) any subsidiaries directly or indirectly controlled by the Contractor; (c) any political organization organized under 26 U.S.C.A. 527 that is directly or indirectly controlled by the Contractor, other than a candidate committee, election fund, or political party committee; and (d) if the Contractor is a natural person, that person's spouse or child, residing in the same household.

b. Breach of Contract.

It shall be a breach of the terms of any contract for the Contractor to (i) make or solicit a contribution in violation of the terms of this section, (ii) knowingly conceal or misrepresent a contribution given or received; (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate or holder of the public office of Governor, or to any State or county party committee; (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would subject that entity to the restrictions of this section; (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii) engage in any exchange of contributions to circumvent the intent of this section; or (viii) directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of this section.

c. Certification and Disclosure Requirements.

(i) The Commission is prohibited from entering into a contract with any

CONTRACT #2099

INFORMATION FOR BIDDERS

Contractor for services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Contractor has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor, or to any State or county political party committee: (i) within the eighteen (18) months immediately preceding the commencement of negotiations for the contract or agreement; (ii) during the term of office of a Governor, in the case of contributions to a candidate committee or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of such term; or (iii) within the eighteen (18) months immediately preceding the last day of the term of office of Governor, in which case such prohibition shall continue through the end of the next immediately following term of the office of Governor, in the case of contributions to a candidate committee or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of the latter term. Effective November 15, 2008, Executive Order No. 117 extends the above prohibition to contributions made to a candidate committee or election fund of any candidate for or holder of the office of Lieutenant Governor, and to contributions made to a legislative leadership committee or a municipal political party committee.

(ii) At the time of the submission of its Bid, a Bidder shall report all contributions the Contractor made during the preceding four (4) years to any political organization organized under 26 U.S.C.A. 527 of the Internal Revenue Code that also meet the definition of a "continuing political committee" within the meaning of N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.7. **The required forms and instructions are included in this Bid Specification package (Attachment #2) and must be returned with a bidder's bid fully completed. Failure to submit the fully completed Certification and Disclosure(s) with a Bid may result in the rejection of the Bid, as well as preclude future contract opportunities.**

(iii) Further, the Contractor is required, on a continuing basis, to report any contributions it makes during the term of the Contract, and any extension(s) thereof, at the time any such contribution is made. The required form and instructions are available for review on the Purchase Bureau website at <http://www.state.nj.us/treasury/purchase/forms.shtml> and shall be provided to the intended awardee with the Notice of Intent to Award.

d. Disclosure Review.

The Commission shall ensure that the completed Certification and Disclosure(s) submitted pursuant to this section, as well as any other pertinent information concerning the contributions or reports thereof by the Successful Bidder, or by the Contractor during the term of the Contract are reviewed by the appropriate authorities. If it is determined that any contribution or action by the Contractor constitutes a breach of

CONTRACT #2099

INFORMATION FOR BIDDERS

contract that poses a conflict of interest in the awarding of the Contract under this solicitation, the Commission shall disqualify the Contractor from award of such Contract.

Business Registration Act:

- A. Business Registration: Pursuant to N.J.S.A. 52:32-44, **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** is prohibited from entering into a contract with an entity unless the bid/proposal/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of Treasury.
- B. Prior to contract award or authorization, the contractor shall provide the Commission with its proof of business registration and that of any named subcontractor(s).
- C. Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Commission prior to the time a contract, purchase order or other contracting documents is awarded or authorized.
- D. During the course of contract performance:
 - (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
 - (2) the contractor shall maintain and submit to the Commission a list of subcontractors and their addresses that may be updated from time to time.
 - (3) the contractor and any subcontractors providing goods or performing services under a contract, and each affiliates, shall collect and remit to the Director of Division of Taxation in the Department of Treasury, 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 to the State. Any questions in this regard can be directed to the Division of Taxation at (609)2925-6200. Form NJ-REG can be filled out at www.state.nj.us/treasury/revenue/busregcert.html.
- E. Before final payment is made under the contract, the contractor shall submit to the Commission a complete list of all subcontractors and their addresses.

CONTRACT #2099

INFORMATION FOR BIDDERS

- F. Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contract agency.

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 proposal 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 subcontractors shall be registered prior to starting work on the project. It is the general contractor's responsibility that all non-listed subcontractors 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 any other state.

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

New Jersey Anti-Discrimination

Pursuant to N.J.S.A. 10:2-1, if awarded a contract, the contractor agrees that:

a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such material, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;

b. No contractor, subcontractor, nor any person on his behalf, shall in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engage in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or

CONTRACT #2099

INFORMATION FOR BIDDERS

services to be acquired under such contract, on account or race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;

c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day which such a person is discriminated against or intimidated in violation of the provisions of the contract; and

d. This contract may be canceled or terminated by the contracting public agency, and all money due to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the public agency of any prior violation of this section of the contract.

American with Disabilities Act 1990

The contractor and the 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 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, 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 the 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 of 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 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, employees, the owner shall expeditiously forward to the contractor every demand,

CONTRACT #2099

INFORMATION FOR BIDDERS

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 to the 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 actions available to it under any other provisions of the Agreement or otherwise at Law.

Disclosure of Investment Activities in Iran:

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 below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, 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 Division's website at:

<http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>.

Bidders must review this list prior to completing the below certification. Failure to complete the certification will render a bidder's proposal non-responsive. If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and 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.

Certification of Non-Involvement in Prohibited Activities in Russia or Belarus.

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 below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified as a person or entity engaging in prohibited activities in Russia or Belarus as such terms is defined in P.L. 2202.c.3, section1.e, except as permitted by federal law.

CONTRACT #2099

INFORMATION FOR BIDDERS

Diane B. Allen Equal Pay Act

Pursuant to N.J.S.A. 34:11-56.14, a contractor performing “qualifying services” or “public work” to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see <https://nj.gov/labor/equalpay/equalpay.html>.

Disabled Veteran-Owned Business Set-Aside

In accordance with the New Jersey Set-Aside Act for Disabled Veterans' Businesses, N.J.S.A. 52:32-31.1 et seq. (P.L. 2015, c. 116), it is the policy of the Commission that Disabled Veteran-Owned Businesses (“**DVOBs**”), as determined and defined by the State of New Jersey, Department of Treasury, Division of Revenue and Enterprise Services in N.J.A.C. 17:14-1.1 et seq. (the “**Division**”), have the opportunity to compete for and participate in the performance of contracts and subcontracts for construction services. The Commission further requires that its Contractors shall agree to take all necessary and responsible steps, in accordance with the aforementioned regulations, to ensure that DVOBs have these opportunities. The Contractor is encouraged to obtain a complete copy of the applicable regulations (N.J.A.C. 17:14-1.1 et seq.) prior to submitting bids to the Commission.

The Contractor agrees to make a good faith effort to award at least 3% of this Contract to Subcontractors registered by the Division as a DVOB firm. Subcontracting goals do not apply if the prime Contractor is a registered DVOB firm.

The following actions shall be taken by a bidder in establishing a good faith effort to solicit and award subcontracts to eligible disabled veteran-owned businesses, as established in the RFP:

- 1) The bidder shall attempt to locate qualified potential disabled veteran-owned business subcontractors;
- 2) The bidder shall consult the disabled veteran business database if none are known to the bidder;
- 3) The bidder shall keep a record of its efforts, including the names of businesses contacted and the means and results of such contacts, as well as documentation on any good faith efforts to solicit and award any subcontract to an eligible disabled veteran-owned business; and
- 4) The bidder shall provide all potential subcontractors with detailed information regarding the specifications.

CONTRACT #2099

INFORMATION FOR BIDDERS

In those circumstances where Federal law, rules, or regulations permit or require a procurement procedure other than those prescribed in this chapter, the State contracting agency shall follow the Federal procedures notwithstanding the provisions of this chapter, provided that the State contracting agency issues a written declaration that such Federal laws, rules, or regulations are in effect.

The Commission requires that DVOB Forms A, B, C, D, and F as applicable, be submitted within seven (7) days after Notice of Award. However, the Commission may extend the deadline for this requirement at its sole discretion.

If the Contractor submits the DVOB forms within the requested timeframe, but fails to meet the DVOB goal, a fully completed and notarized DVOB Form D must be submitted, and the Commission will evaluate the efforts made by the Contractor to determine whether a demonstration of good faith efforts has been made.

The listing of a DVOB firm by a Contractor on Form A shall constitute a representation by the Contractor to the Commission that such DVOB firm is qualified and available, and a commitment by the Contractor that it will enter into a subcontract with such DVOB firm for the portion of the work described in Form A and at the price set forth in its Bid. A DVOB Contractor which lists itself on Form A is committed to performing the work indicated with its own personnel.

A database of DVOBs is maintained by the State, accessible via a link on the Division's webpage at https://www20.state.nj.us/TYTR_SAVI/vendorSearch.jsp; the database lists vendors by designation, including DVOBs, and is available for use by State contracting agencies and others in confirming eligibility for set-aside contracts and subcontracts and in reporting progress toward established contract award goals. Use of this listing does not relieve the Contractor of its responsibility to seek DVOB participation from other sources.

Whenever the Commission issues Project Change Orders, the Commission may determine if increased DVOB participation will be required.

If at any time the Contractor believes or has reason to believe that a proposed DVOB has become unavailable or, due to change in ownership or management responsibility, does not meet the applicable standards, the Contractor shall, within 10 days, notify the Commission of that fact. Within 15 days thereafter, the Contractor shall, if necessary to achieve the stated goal, make every reasonable effort to subcontract the same or other work to other DVOB firms.

CONTRACT #2099

INFORMATION FOR BIDDERS

Should a DVOB become ineligible during the course of this Contract, effective as of the date of ineligibility, further contractual dollars expended with the DVOB shall not be counted toward the DVOB goal. Within 15 days after notification by the Commission to the Contractor of the ineligible DVOB, the Contractor will make every reasonable effort to satisfy the DVOB goal. The Contractor's effort to continue to meet the DVOB goal shall be coordinated with the Office of EEO.

To ensure that all obligations under subcontracts awarded to DVOBs are met, the Commission shall review the prime Contractor's DVOB involvement efforts during the performance of the contract. The Contractor shall monitor the performance of and collect and report data on DVOB participation to the **Office of EEO**. The form will be reviewed to determine Contract compliance with respect to the DVOB goal. Failure to submit this report may result in suspension of payments as provided in the section titled "Audit and Penalties" below. If, at any time, the Commission has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements, it shall refer the matter to the Attorney General of the State of New Jersey.

The Contractor agrees to pay each subcontractor and supplier for satisfactory performance of its subcontract no later than ten (10) days from the receipt of each payment the Contractor receives from the Commission.

In accordance with N.J.S.A. 52:32-40 and 52:32-41, the Contractor shall certify, prior to the issuance of a progress payment by the Commission, that all subcontractors and suppliers have been paid any amounts due from previous progress payments and shall be paid any amounts from the current progress payment. Alternatively, the Contractor shall certify that there exists a valid basis under the terms of the subcontract to withhold payment from the subcontractor or supplier and therefore payment is withheld.

If the Contractor withholds payment from the Subcontractor or supplier, the Contractor shall provide to the Subcontractor or supplier written notice thereof. The notice shall detail the reason for withholding payment and state the amount of payment withheld. The Contractor shall send a copy of the notice to the Surety of the Contract Bond. A copy of the notice shall also be submitted to the Commission with the certification that payments are being withheld.

Except as provided herein, the Contractor shall not have the work performed, or the materials or supplies furnished, by any other DVOB firm other than those named in Form A. However, the Contractor may, in unusual situations, be permitted to substitute a subcontractor(s). A request for substitution must be in writing, with complete justification for the request. The Contractor must have approval of the Commission before substitution of the DVOB subcontractor, regardless of the reason for the substitution. Failure to obtain approval from the Commission could result in the prime

CONTRACT #2099

INFORMATION FOR BIDDERS

Contractor being found to be in “noncompliance” with the requirements of the contract. The term “unusual situations” includes, but is not limited to, a DVOB subcontractor or DVOB joint venture partner(s):

- 1) Failure to qualify as a DVOB or maintain DVOB registration status.
- 2) Death or physical disability, if the named subcontractor or DVOB partner of the joint venture is an individual.
- 3) Dissolution, if a corporation or partnership.
- 4) Bankruptcy of the subcontractor, subject to applicable bankruptcy laws, and only in instances where the bankruptcy affects the subcontractor's ability to perform.
- 5) Inability to obtain, or loss of, a license necessary for the performance of the particular category of work.
- 6) Failure or inability to comply with a requirement of law applicable to the subcontract work.
- 7) Material failure to comply with the terms and conditions of the subcontract.
- 8) Material failure to successfully perform the subcontract tasks.

The prime Contractor is advised that failure to carry out the requirements of these specifications shall constitute a breach of contract and may result in termination of the contract by the Commission, or such remedy as the Commission deems appropriate. During the performance of the contract, and for a period of up to three (3) years following completion of the contract work, the Commission may conduct reviews for compliance with the requirements of the DVOB Program. Such reviews may include the evaluation of monthly reports, desk audits, and site visitations. Where a Prime Contractor, or any Subcontractor, is found to be in noncompliance with the requirements of the DVOB Program during the performance of the contract, it will be required to take corrective action. If corrective action is not promptly taken by the offending contractor, the following sanctions may be instituted (singularly, in any combination and in addition to any other remedies provided by law):

- 1) The Commission may withhold further payments under the Contract.
- 2) The Contract may be terminated for breach.
- 3) Suspension or debarment proceedings may be commenced in accordance with New Jersey law and the Commission regulations.
- 4) The Contract Bond may be enforced.

Copies of the following forms are located on the Commission website:

(a) Commission Form A: DVOB Participation Schedule:

List all DVOB firms scheduled to participate in the contract, including scope of work to be performed and the dollar value of their anticipated participation. Additionally, the name of the Contractor's DVOB liaison officer should be included on this form. Upon execution of a contract with the Commission the prime contractor must enter into a formal agreement with the DVOB(s) listed on Form A. There can be no substitution of the DVOB(s) listed on Form A without the prior written approval of the

CONTRACT #2099

INFORMATION FOR BIDDERS

Commission. If, for any reason Form A is not completed, then the Contractor must complete and provide Form D (see below).

- (b) Commission Form B: Affidavit of DVOB (If Applicable):
For each DVOB owned firm listed on Form A, Contractor shall include a complete and signed Form B. This form B is not required for set aside contract awards, nor in cases wherein the Contractor is a DVOB itself.
- (c) Commission Form C: Affidavit of DVOB (If Applicable):
Each DVOB firm to be utilized must sign Form C attesting to its status as a DVOB.
- (d) Commission Form D: DVOB Unavailability Certification (If Applicable):
If the Contractor is unable to identify DVOB(s) as required to meet the targeted goal set for this Contract, the Contractor shall complete and attach this form which documents the Contractor's good faith efforts to do so.
- (e) Commission Form E: DVOB Certificate of Participation:
This is the payment report that must be completed on a monthly basis by the Contractor, unless the Contractor is a DVOB itself.
- (f) Commission Form F: DVOB Certificate of Participation if Prime Contractor
is DVOB): If the Contractor is a DVOB itself, the Contractor shall complete this form and attach it with every Pay Estimate.

Prompt Payment of Construction Contracts Act:

On September 1, 2006, the New Jersey Legislature passed the Prompt Payment of Construction Contracts Act, N.J.S.A. 2A:30A-1 et seq.

N.J.S.A. 2A:30A-1 et seq. provides, in part, as follows: "If a prime contractor has performed in accordance with the provisions of a contract with the owner and the billing for the work has been approved and certified by the owner or the owner's authorized approving agent, the owner shall pay the amount due to the prime contractor for each periodic payment, final payment or retainage monies not more than thirty (30) calendar days after the billing date, which for a periodic billing, shall be the periodic billing date specified in the contract. The billing shall be deemed approved and certified twenty (20) days after the owner receives it unless the owner provides, before the end of the 20-day period, a written statement of the amount withheld and the reason for withholding payment, except that in the case of a public or governmental entity that requires the entity's governing body to vote on authorizations for each periodic payment, final payment or retainage monies, the amount due may be approved and certified at the next scheduled public meeting of the entity's governing body, and paid during the entity's subsequent

CONTRACT #2099

INFORMATION FOR BIDDERS

payment cycle, provided this exception has been defined in the bid specifications and contract documents.”

As a public entity that requires the authorization of its governing body for periodic or final payments, and payments for change orders or release of retainage, the Commission hereby places the prime contractor on notice that it not subject to the twenty (20) day period for the approval and certification of billings and, consistent with N.J.S.A. 2A:30A-1 et seq., in the event that the Commission is unable to obtain formal consideration and approval of any billing for work performed by a prime contractor as the basis for a periodic or final payment, or payments for change orders or retainage within the thirty (30) day time period mandated by N.J.S.A. 2A:30A-1 et seq., the Commission shall place the billing for work performed on its next regularly scheduled meeting of its Board of Commissioners and, should such billing for work performed be approved, pay the approved amount to the prime contractor during the Commission’s subsequent payment cycle.

New Jersey Prevailing Wage Act (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 Commission within (10) days of the payment of wages. In the event that is found that any worker, employed by the contractor or any subcontractor has been paid a rate of wages less than the prevailing wage required to be paid, the Commission may terminate the contractor’s or subcontractor’s right to proceed with work, or such part of work as to which there has been a failure to pay required wages and prosecute the work to completion.

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 for to be submitted by contacting the New Jersey Department of Labor and Workforce Development, Division of Workplace Standards. Additional information is available at http://lwd.dol.state.nj.us/labor/wagehour/wagerate/pwr_construction.html.

The Contractor is put on notice that it must pay all of its employees rendering service under this Contract in compliance with the prevailing wage rates promulgated by the New Jersey Department of Labor, a copy of which is on file at the Commission's Administrative Offices in Wanaque, New Jersey, and is hereby made a part of this Contract. In addition, the Contractor shall conform to all other labor laws and statutes established in this State.

Bid

All bidders are considered to have full knowledge of the conditions and requirements, including the physical characteristics of the site and the project, which are necessary for an accurate bid. The Commission assumes no responsibility with respect to ascertaining for the Bidder the facts of these physical characteristics, other than the facilitation of the Pre-Bid Meeting and site tour. The Bidder shall be held to be aware of the Commission’s Requirements prior to the time of submitting bids and to have appraised all conditions under which the Contract is to be performed.

CONTRACT #2099

TO: THE NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

FOR: CONTRACT #2099 POST BROOK DAM IMPROVEMENT PROJECT

MADE THIS _____ DAY OF _____ 2022

BY: _____

ADDRESS: _____

Bidder's Declaration: The party above named, as bidder, declares that the only person or persons interested in this bid as principal or principals is or are named above, and that no other person than hereinabove named has any interest in this Bid or in the Contract proposed to be taken; that this Bid is made without any connection with any other person or persons making a Bid for the same purposes; that the bid is in all respects fair and without collusion or fraud and that no officer or employee of the Commission is, shall be, or become, directly or indirectly, interested as contracting party, partner, stockholder, surety, or otherwise in the performance of the Contract, or in the supplies, work or business to which it relates or in any portion of the profits thereof; that he has had an opportunity to examine the site of the work; that he has examined the form of Contract, Technical Specifications, therein referred to, and has read the Information for Bidders hereto attached; and he proposes and agrees, if this Bid be accepted, that he will contract in the form provided, to perform all the work and furnish all material(s) mentioned in said form of Contract and Technical Specifications, and that he will accept in full payment therefore the following sum, to wit:

FOR THE POST BROOK DAM IMPROVEMENT PROJECT for the North Jersey District Water Supply Commission, including labor, equipment, materials and warranty and all work described in the Scope of Work, Technical Specifications, Exhibit "A", Exhibit "B" and Exhibit "C", for the lump sum price of

_____ dollars and _____ cents (\$_____)

NOTE: The price shall be printed in ink both words and figures. Any bid which fails to name a price both in words and in figures per unit and every item, wherein quantities are given, may be held to be non-responsive and may be rejected. In case of any discrepancy or conflict, the price written in words will take precedence over the written in figures and unit prices will take precedence over the sum of individual items.

CONTRACT #2099

What the Price is to Cover: The price is to include and cover the furnishing of the machinery, tools, apparatus and other means of construction and all material and labor necessary to complete the work in the manner and within the time set forth in the Contract.

Time within which Contract is to be Executed: The Successful Bidder shall execute this Contract and give to the Commission the required security within seven (7) working days from the date that said Contract has been awarded to him. Upon failure to do so, said Bidder will be considered as having abandoned the Contract.

Bidder acknowledges that the Commission reserves the right to reject any or all Bids which may be non-responsive or the acceptance of which, in the sole judgment of the Commission, may be detrimental to its interests.

Respectfully submitted,

BIDDER

SIGNATURE OF AUTHORIZED AGENT

TYPE OR PRINT NAME

TITLE

TELEPHONE NUMBER

E-MAIL ADDRESS

WITNESS (IF INDIVIDUAL, PARTNERSHIP OR OTHER BUSINESS ENTITY)

ATTEST: (CORPORATION)

SECRETARY

NOTE: AFFIX CORPORATE SEAL

CONTRACT #2099

EXPERIENCE STATEMENT

TO: NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

Gentlemen:

We hereby certify that we have performed the work listed below to the satisfaction of the Governing Bodies or Public Entities listed below. We further certify that we have never defaulted under any contract with a Municipality, County, or State, or any other Public Entity.

Note: Include no less than Ten (10) references. (Experience Statement may be attached)

Give name of Public Entity or Unit of Government, nature of work, amount of work performed, when completed, and name and telephone number of party in charge of work.

WITNESS

NAME OF COMPANY

ADDRESS

DATE

BY: _____
SIGNATURE

PRINT NAME AND TITLE

CONTRACT #2099

EQUIPMENT STATEMENT

TO: NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

Gentlemen:

We hereby certify that we are fully prepared with the necessary capital, material, and machinery to conduct the work as herein specified, and we further certify that the equipment required for the proper execution of this contract in the time specified is available as follows:

BY: _____
SIGNATURE

PRINT NAME AND TITLE

WITNESS

COMPANY NAME

DATE

ADDRESS

CONTRACT #2099

LISTING OF SUBCONTRACTORS TO BE USED

Each Bidder shall submit to the Commission with its Bid, the List of Subcontractors proposed to be employed by the Contractor, complete with the names of all such Subcontractors, Suppliers, and other individuals and entities and the percentage of work to be performed by each Subcontractor. The list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity, for each Subcontractor's work that is proposed to exceed ten (10) percent of the Bid price. If, after due investigation, the Commission has reasonable objection to any proposed Subcontractor, Supplier, or other individual or entity, the Commission may, before the Notice of Award is given, request the apparent Successful Bidder to submit an acceptable substitute Subcontractor without an increase in the Bid Price.

If the apparent Successful Bidder declines to make any such substitution, the Commission may award the Contract to the next lowest responsible and responsive Bidder that proposes to use acceptable Subcontractors, Suppliers, and other individuals and entities. Declining to make requested substitutions will not constitute grounds for sacrificing the bid security of any Bidder. Any Subcontractor, Supplier, or other individual or entity so listed and against which the Commission makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to the Commission, subject to revocation of such acceptance after the Effective Date of the Contract.

Should a Contractor utilize a substitute Subcontractor, Contractor shall immediately submit a revised form to the Commission, with the requisite information and documentation relating to the substitute Subcontractor.

WORK CATEGORY	SUBCONTRACTOR NAME	SUBCONTRACTOR ADDRESS

(Attach additional pages as required)

NOTE: Submission of the names and addresses of the Subcontractors is essential and non-waivable. Also, proof of registration pursuant to Public Works Contractors Registration Act for all named subcontractors is required to be provided prior to the award of a contract. Where **more than one** Subcontractor is named for a trade category, the bidder must identify, in the Bid, the scope of work that is to be performed by each subcontractor. Failure to comply with these requirements will result in the Bid being deemed nonresponsive.

CONTRACT #2099

NONCOLLUSION AFFIDAVIT

STATE OF }
 S.S.:
COUNTY OF }

I _____ of the city of _____ in the
County of _____ and the State of _____ of full age, being
duly sworn according to the law on my oath depose and say that: I am
of the firm of _____
(Title)

the Bidder making the Bid for the above named project, and that I executed the said Bid with
authority so to do; 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
the said Bid and in this Affidavit are sure and correct, and made with full knowledge that the
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION relies upon the truth of the
statements contained in said Bid 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.

NAME OF CONTRACTOR

OFFICER'S SIGNATURE

(Original signature only, stamped signature not accepted)

Subscribed and sworn
to before me this ____ day
of _____ 2023.

Notary Public of the State of _____.

My Commission expires _____, _____.

Affix notary stamp or print name below signature.

NOTARY'S SIGNATURE

CONTRACT #2099

BIDDER DISCLOSURE STATEMENT

NOTE: IF YOU FAIL TO PROPERLY OR CLEARLY COMPLETE THIS BIDDER DISCLOSURE STATEMENT, OR IF YOU FAIL TO INCLUDE IT WITH YOUR BID, YOUR BID WILL BE REJECTED.

N.J.S.A. 52:25-24.2, requires that all corporate and partnership bidders for public contracts submit a list of names and addresses of all stockholders owning 10% or more of any class of their stock or 10% or more of the stock of a corporate bidder; or, in the case of partnership, the names and addresses of those partners owning 10% or greater interest in the partnership. Furthermore, the Commission requires a statement from all bidders which, regardless of business form, must likewise indicate all principals of the bidder.

Therefore, this Bidder Disclosure Statement must be fully and accurately completed. If no entity or person owns 10% or more of any class of stock of your corporation, or of an interest in your partnership or other business entity, write the word "**NONE**" below and execute this document as indicated.

I. **BUSINESS FORM:**

INDICATE THE BUSINESS FORM BY PLACING AN "X" IN THE APPROPRIATE SPACE:

{	}	CORPORATION
{	}	PARTNERSHIP
{	}	OTHER, SPECIFY _____

II. **PRINCIPALS:**

	<u>NAME</u>	<u>HOME ADDRESS</u>	<u>TITLE</u>	<u>% OF OWNERSHIP</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

If one or more of the owners of the bidder is itself a corporation, partnership or other business entity, then for that owner, you must set forth the name, home address, title and percentage of ownership of every person who is an owner of 10% or more of that corporation, partnership or other business entity.

CONTRACT #2099

BIDDER DISCLOSURE STATEMENT

	<u>NAME</u>	<u>HOME ADDRESS</u>	<u>TITLE</u>	<u>% OF OWNERSHIP</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

ATTEST (FOR CORPORATION)

BY: _____

NAME: _____

TITLE: _____

WITNESS (FOR PARTNERSHIP OR OTHER BUSINESS ENTITY)

BY: _____

NAME: _____

TITLE: _____

BY: _____

NAME: _____

TITLE: _____

NOTE: **If the bidder is a corporation, the corporation's corporate seal must be affixed.**

CONSENT OF SURETY

KNOW ALL MEN BY THESE PRESENTS, THAT _____,
a corporation of the State of _____ having its principal office at _____
being (a) surety
company(ies) qualified to do business in the State of New Jersey, in consideration of the
premises, and of one dollar to it (them) in hand paid by the Commission, and of other good
and valuable consideration the receipt whereof is hereby acknowledged, do(es) consent
and agree, that if the Contract for which the preceding bid is made be awarded to the person
or persons making the same; it (they) will, upon award of such Contract, become surety,
first, for the full and faithful performance of said work, and, secondly, for the protection of all
persons in the performance of said Contract in the form required by N.J.S.A. 2A:44-143 to
2A:44-147 and the amendments thereof and supplements thereto; the performance bond
and the labor, material and supply obligations each to be conditioned so as to indemnify the
Commission against loss due to the failure of the Contractor to meet the stipulations of the
respective bonds; said bond to be in the amount of 100% of the Contract price.

IN WITNESS WHEREOF, the said _____ has
(have) caused its (their) corporate seal(s) to be hereto affixed and these presents to be
signed by its (their) _____ and attested to by its (their)
_____ this _____ day of
Two Thousand and Twenty-Three.

Corporate Seal

By: _____

(as Surety)

ATTEST:

**THE CONSENT OF SURETY FORM ABOVE CONTAINS THE LANGUAGE THE COMMISSION FINDS
ACCEPTABLE.**

**WE SUGGEST THE ABOVE BE COMPLETED BY YOUR SURETY COMPANY(IES) AND SUBMITTED
WITH YOUR BID IN LIEU OF SUBMITTING THE SURETY'S OWN FORM.**

**BY DOING THIS, YOU REDUCE THE RISK OF YOUR BID BEING REJECTED FOR HAVING
SUBMITTED A CONSENT OF SURETY WHICH CONTAINS INCORRECT AND UNSATISFACTORY
LANGUAGE.**

**NOTE: THE INDIVIDUAL EXECUTING THE SURETY CONSENT ON BEHALF OF THE SURETY
MUST SUPPLY WITH THE CONSENT, WRITTEN EVIDENCE THAT HE OR SHE IS
AUTHORIZED TO BIND THE SURETY AS OF THE DATE OF THE EXECUTION OF THE
CONSENT.**

**ACKNOWLEDGMENT OF RECEIPT OF CHANGES
TO BID DOCUMENTS FORM**

(Name of Contracting Unit)

(Name of Construction/Public Works Project)

(Project or Bid Number)

The undersigned Bidder hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, Bidder acknowledges the submitted Bid takes into account the provisions of the notice, revision or addendum. Note that the Commission's record of Notice to Bidders shall take precedence and that failure to include provisions of changes in a Bid may be subject for rejection of the Bid. In the event that no notices, revisions or addenda to the bid advertisement, specifications or bid documents are received by the Bidder, the Bidder must indicate ***"none"*** in the space below. ***Failure to submit "Acknowledgment of Receipt of Changes to Bid Documents Form" shall be deemed a material and non-waivable defect, and shall be cause for rejection of the Bid without further consideration.***

Commission's Reference Number or Title of Addendum/Clarification	How Received (mail, fax, pick-up, etc.)	Date Received

Acknowledgment by Bidder:

Name of Bidder: _____

By Authorized Representative: _____

Signature: _____

Printed Name and Title: _____

Date: _____

SAFETY TRAINING ACKNOWLEDGMENT

(Name of Contracting Unit)

(Name of Construction/Public Works Project)

(Project or Bid Number)

All equipment and work methods utilized in this Contract shall comply with OSHA and all other applicable local, state and/or federal safety standards and regulations. Contractor and all subcontractors shall be required to attend a Contractor Safety Orientation prior to beginning construction.

Acknowledgment by Bidder:

Name of Bidder: _____

By Authorized Representative: _____

Signature: _____

Printed Name and Title: _____

Date: _____

SECURITY MEASURES ACKNOWLEDGMENT

(Name of Contracting Unit)

(Name of Construction/Public Works Project)

(Project or Bid Number)

The undersigned Bidder hereby acknowledges that he/she is familiar with the Commission's security requirements for this project and agrees to abide by same. The Contractor shall be responsible for insuring that all subcontractors for this project abide by these security measures as well.

Contractors and all subcontractors shall be required to comply with said requirements prior to beginning construction on this Contract.*

Acknowledgment by Bidder:

Name of Bidder: _____

By Authorized Representative: _____

Signature: _____

Printed Name and Title: _____

Date: _____

***As required by the New Jersey Office of Counter Terrorism's Best Management Practices, Contractors must provide evidence that it has previously conducted a background check on all Contractor's employees who will be entering onto Commission property. Contractors shall provide the Commission with a corporate letter, on appropriate letterhead, stating the names of all employees who will require access to the Commission's property, and indicating that such background checks have, in fact, been performed. All subcontractors are also required to provide such employee list, and confirmation of background checks**

BID #2099
BID CHECKLIST

ALL ITEMS LISTED BELOW MUST ACCOMPANY THIS BID UNLESS OTHERWISE INDICATED. PLEASE CHECK ALL ITEMS BEFORE SUBMITTING:

A) FAILURE TO PROVIDE OR PROPERLY COMPLETE OR SIGN ANY OF THESE ITEMS BELOW WILL RESULT IN A MANDATORY REJECTION OF THE BID.

- ___ (1) SECURITY IN THE FORM OF:
- ___ A BID BOND IN AN AMOUNT EQUAL TO 10% OF THE TOTAL AMOUNT OF THIS BID, NOT TO EXCEED \$20,000.
- OR**
- ___ A CERTIFIED CHECK IN THE AMOUNT OF 10% OF THIS BID, BUT NOT IN EXCESS OF \$20,000.
- OR**
- ___ A CASHIER'S CHECK IN THE AMOUNT OF 10% OF THIS BID, BUT NOT IN EXCESS OF \$20,000.
- ___ (2) SURETY COMPANY CONSENT (IN ADDITION TO SECURITY IN ITEM #1 ABOVE).
- ___ (3) BIDDER DISCLOSURE STATEMENT
- ___ (4) ACKNOWLEDGMENT OF RECEIPT OF CHANGES TO BID DOCUMENTS

B) FAILURE TO PROVIDE OR PROPERLY COMPLETE OR SIGN ANY OF THE ITEMS BELOW MAY RESULT IN A REJECTION OF THE BID.

- ___ (1) BUSINESS REGISTRATION CERTIFICATE FOR CONTRACTOR OR ANY SUBCONTRACTORS
- ___ (2) PROOF OF PUBLIC WORKS CONTRACTOR REGISTRATION OR ANY SUBCONTRACTORS
- ___ (3) LIST OF SUBCONTRACTORS
- ___ (4) EXPERIENCE STATEMENT
- ___ (5) EQUIPMENT STATEMENT
- ___ (6) NONCOLLUSION AFFIDAVIT
- ___ (7) SAFETY TRAINING ACKNOWLEDGMENT
- ___ (8) SECURITY MEASURES ACKNOWLEDGMENT
- ___ (9) COMPLETED CONTRIBUTION CERTIFICATION AND DISCLOSURE(S) (ATTACHMENT #2)
- ___ (10) DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN
- ___ **(11) CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS PURSUANT TO P.L.2033, c.3**

(CONTRACTOR)

BY: _____
SIGNATURE

PRINT NAME AND TITLE

CONTRACT #2099

GENERAL CONDITIONS

**NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
WANAQUE, NEW JERSEY**

THIS AGREEMENT, made and entered into on the date set forth herein by and between the **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION**, party of the first part, hereinafter designated as the Commission, and _____ party of the second part, hereinafter designated as the Contractor.

COVENANTS: WITNESSETH, that the parties to these presents each in consideration of the undertakings, promises and agreements on the part of the other herein contained, have undertaken, promised and agreed, and do hereby undertake, promise and agree, the party of the first part for itself, its successors and assigns, and the party of the second part for heirs, executors and administrators, or successors and assigns, as follows:

PRICE FOR WORK: The Commission will pay and the Contractor shall receive as full compensation for furnishing all the shop drawings, materials and labor and for performing and completing all the work which is necessary or proper to be furnished or performed in order to complete the entire work in this Contract described and specified in said technical specifications and plans, described and shown; and also for all losses or damages arising out of the nature of the work aforesaid, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work; and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, the prices stipulated as follows.

FOR THE POST BROOK DAM IMPROVEMENT PROJECT for the North Jersey District Water Supply Commission, including labor, equipment, materials and warranty and all work described in the Scope of Work, Technical Specifications, Exhibit "A", Exhibit "B", Exhibit "C", for the lump sum _____ price _____ of

dollars and _____ cents (\$_____)

NOTE: The price shall be printed in ink both words and figures. Any bid which fails to name a price both in words and in figures per unit and every item, wherein quantities are given, may be held to be non-responsive and may be rejected. In case of any discrepancy or conflict, the price written in words will take precedence over the written in figures.

WHAT THE PRICE IS TO COVER: The price is to include and cover the furnishing of the machinery, tools, apparatus and other means of construction and all material and labor

CONTRACT #2099

GENERAL CONDITIONS

necessary to complete the work in the manner and within the time set forth in the Contract.

Article I - DEFINITIONS:

Commission: the **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION**, (the "Commission") Wanaque, New Jersey; the party of the first part to this Contract.

Contractor: the party of the second part to this Contract.

Contract: this Agreement covering the performance of the project and payments therefore, including the general conditions, the Bid Specifications for **Contract #2099** (including any Addendums/Clarifications) and all sheets, forms or documents attached to the Bid Specifications or hereto.

Engineer: Commission's Engineering Staff.

Exhibits: Exhibit A, Exhibit B, and Exhibit C included at the end of this Contract, incorporated herein by reference.

Proposal: the proposal submitted by the Contractor, dated _____, 2023, incorporated herein by reference.

Specifications: the Technical Specifications included As Exhibit A to this Contract, incorporated herein by reference.

Article II - RIGHTS AND DUTIES OF THE ENGINEER:

- A. The Engineer shall, subject to the provision of Articles III and IV, give all orders and directions contemplated under this Contract and determine in all cases the amount, quality, acceptability and fitness of the work and materials which are to be paid for by the Commission to the Contractor.
- B. The Engineer shall have the right to reject any or all work which does not conform to the plans and specifications of this Contract, or is not completed in a workmanlike manner. She/He shall also have the right to reject materials which do not meet the specifications herein contained, have become damaged, rendered unsatisfactory, or have been supplied without evidence of quantity and/or quality such as labels, bills of lading, etc.
- C. The Engineer shall have the free access to the work whenever and wherever it is in progress, for purposes of inspection. If any work should be covered up without prior approval or consent of the Engineer, it must, if required by the Engineer, be

CONTRACT #2099

GENERAL CONDITIONS

uncovered for examination at the Contractor's expense.

- D. The Engineer shall have the right to stop the work whenever such stoppage may be necessary for protection of the reservoir, for emergency conditions, or to prevent potential damage to property, equipment, or facilities and/or personal injury.
- E. The Engineer shall provide the Contractor with such basic lines, grades and points as are needed from which the Contractor shall establish such other points as he may need, unless otherwise specified.

Article III - REVIEW BY COMMISSION:

Notwithstanding anything herein contained, the Contractor shall have the right to appeal to the Commission, in accordance with Article XXII, concerning any matter in dispute and the Commission's decision on such appeal shall be final.

Article IV - CHANGES:

- A. Notwithstanding anything herein contained, no departure from or substitution, change or alteration in the terms, provisions or requirements of this Contract and the specifications thereof, shall be made without the prior order of the Commission as duly executed by its Chairman.
- B. The Engineer, however, shall have the right to make minor changes in the specifications during the conduct of the work if necessary in keeping with good engineering practice if such changes are consistent with the purpose, intent and/or conditions of the contract and shall not result in significant extra costs to the Contractor.
- C. Authorization for any additional work or materials (extras) requiring compensation not provided for in this Contract, or change orders, must be obtained in writing from the Commission. The Commission will not pay the Contractor for additional services or materials based on verbal agreements or conversations with a Commission employee.

Article V - OBLIGATIONS OF THE CONTRACTOR:

- A. The Contractor shall do all the work and furnish all the labor, supervision, transportation, materials, tools, equipment, etc., (except as herein otherwise provided), in accordance with this Contract and the Technical Specifications and/or the direction of the Engineer. The Contractor shall complete said work to the total satisfaction of the Engineer at a price agreed upon and fixed by the terms of this Contract.

CONTRACT #2099

GENERAL CONDITIONS

- B. It is understood that the Contractor shall have had an opportunity to carefully examine the areas and/or facilities involved in this Contract prior to entering into this Contract and that he has fully satisfied himself as to the nature and location of the work, subsurface conditions, the character of equipment and facilities needed, the time and labor requirements, and all such matters which can affect the work to be performed. The Commission will not be responsible for additional expenses incurred by the Contractor as a result of obtaining information from any person or employee of the Commission in lieu of personal inspection or investigation.
- C. The Contractor shall carefully preserve bench marks, reference points and stakes provided by the Engineer, and shall be responsible for any delays or mistakes that may be caused by their unnecessary loss or disturbance. The Contractor shall also carefully preserve all permanent property corners and bench marks, such as pipes, monuments, etc., and if lost or disturbed shall be responsible for resetting same, through the services of a licensed Land Surveyor whose services shall be paid for by the Contractor.
- D. The Contractor shall continuously provide adequate protection at the work site to prevent the possibility of injury to any and all persons or property whether of the Commission or not. The Contractor shall secure the work site at any time when work is temporarily halted by reason of weather, time, etc., by providing adequate barricades, fences, lighting, personnel, etc., so as to prevent injury to persons or property. All such damage, injury or loss, except as may be due to errors in the Contract or caused by employees of the Commission, shall be made good by the Contractor.
- E. The Contractor shall, during the progress of the work, attend the work site personally or through a competent English-speaking superintendent authorized to receive and carry out instructions.
- F. The Contractor will be required to check all dimensions and quantities on any drawings or specifications given to him by the Engineer. In case of error or omission, the Contractor will not be allowed to benefit thereby, and instead should report same to the Engineer to obtain special instructions.
- G. The Contractor shall be responsible for all materials, tools, equipment, etc., to be stored at or near the job site.
- H. The Contractor shall, upon completion of the work, and to the complete satisfaction of the Engineer, remove from all Commission and/or private property, at its own expense, all temporary structures, rubbish, spillage, waste materials, drums, etc., which have resulted from the Contractor's operations. Final inspection and/or

CONTRACT #2099

GENERAL CONDITIONS

acceptance of the project by the Engineer for payment will not be made until all work has been completed and all final cleaning operations have been performed.

Article VI - TIME FOR COMPLETING WORK, EXTENSION OF TIME, AND LIQUIDATED DAMAGES

A. Time for Completing Work:

The Contractor shall commence the work within seven (7) days from the issuance of the Notice to Proceed by the Commission. The Contractor shall achieve Substantial Completion within One Hundred-Twenty Days (120) Business Days of commencement of work.

B. Working hours shall be between 8:00 a.m. to 4:00 p.m. No work shall be permitted on Saturdays, Sundays and legal holidays without special prior consent of the Engineer.

C. Written approval of an extension of time, obtained by the Contractor from the Engineer, shall be the sole and exclusive remedy to the Contractor as a result of delays in the commencement, prosecution or completion of the work, resulting from, but not limited to:

1. acts or omissions of the Commission or Engineer or other contractor employed by the Commission, with respect to late drawings, plans or specifications, changes in sequence, lack of decision, lack of access, interference, errors, lack of approvals, erroneous bid specifications, lack of payments, issuance of change orders;
2. differing site conditions, strikes, labor or material shortages, unusual delays in transportation and acts of God, such as tornadoes, earthquakes or extreme weather.

D. The date of beginning and the time for completion, as specified herein, are **ESSENTIAL CONDITIONS** of this Contract; and it is agreed that the work embraced in this Contract shall be commenced within seven (7) days from the issuance of the Notice to Proceed. The work set forth in this Contract shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as shall insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Commission, that the time for the completion of the work described herein is a reasonable time for the completion of the same taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

E. LIQUIDATED DAMAGES

If the Contractor shall not complete the work within the same time herein specified,

CONTRACT #2099

GENERAL CONDITIONS

or any proper extension thereof granted by the Commission then the Contractor does hereby agree, as part consideration for the awarding of this contract, to pay the Commission **Two Hundred Dollars (\$200.00) per calendar day**, commencing on the 31st calendar day of non-completion, not as a penalty, but as a liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the **BID** and Contract for completing the work.

The Commission may, in its sole discretion, review any purported reasons for delay and consider an extension or change order pursuant to the terms of Contract. The Commission shall have the right to offset from monies owed the Contractor under this Contract any and all monies owed the Commission as Liquidated Damages

- F. Time is of the essence for each and every portion of work required herein. Where additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence under this Contract.
- G. The Contractor will not be charged with liquidated damages when, in the opinion of the Engineer, the delay in completion of the work is due to unforeseeable cause beyond the control and without the fault or negligence of the Contractor, such as but not restricted to, differing site conditions, strikes, labor or material shortages, unusual delays in transportation and acts of God, such as tornadoes, earthquakes or extreme weather.

Article VII - CONTRACTOR'S INSURANCE AND INDEMNIFICATION REQUIREMENTS

- A. The Contractor shall, at all times during the term of this Agreement, obtain and maintain continuously, at its own expense, and file with the North Jersey District Water Supply Commission (the Commission) and its insurance broker evidence of coverage as enumerated below.

1. Commercial General Liability Insurance:

Commercial General Liability Insurance, written on an industry standard occurrence form (CG 00 01), 1207 Edition or Equivalent

The Contractor shall maintain Products Completed Operations liability coverage for a period of at least 24 months following the Final Project Completion Date.

Such policy (ies) must provide the following minimum limits:

\$2,000,000 General Aggregate - Applies Per Project
Post Brook Dam Improvement Project

CONTRACT #2099

GENERAL CONDITIONS

\$1,000,000	Products & Completed Operations Aggregate
\$1,000,000	Personal & Advertising Injury
\$1,000,000	Each Occurrence Limit
\$ 100,000	Fire Damage Legal Liability

Any deductible or self-insured retention must be disclosed and is subject to approval by the Commission. The Cost of any claim payments falling within the deductible shall be the responsibility of the Company.

2. Business Automobile Liability:

Including coverage for owned, non-owned, leased or hired vehicles, written on an industry standard form (CA 00 01) or equivalent. Such policy (ies) must provide the following minimum limits:

\$1,000,000 Combined Single Limit (Bodily Injury & Property Damage)

Should include endorsement CA 9948 Pollution Endorsement

3. Worker's Compensation:

Worker's Compensation Limits: Statutory
Employer's Liability:

\$1,000,000	Each Accident
\$1,000,000	Disease – Policy Limit
\$1,000,000	Disease – Each Employee

4. Excess/Umbrella Insurance:

Schedule of Underlying to include: General Liability, Employers Liability and Auto Liability as outlined above.

Minimum Limit of Liability: \$3,000,000 Per Occurrence
\$3,000,000 Aggregate

5. Evidence of Insurance:

The following documents must be provided in conjunction with a Certificate of Insurance:

- A copy of the endorsement naming the Commission as an Additional Insured, on Form CG2010 or equivalent on all policies except Worker's Compensation.
- A copy of an endorsement stating that the coverages provided by this policy to

CONTRACT #2099

GENERAL CONDITIONS

the Commission shall not be terminated, reduced or otherwise materially changed without providing at least thirty (30) days prior written notice to the Commission.

- A waiver of subrogation in favor of the Commission should apply under all the policies outlined in this section except for Worker's Compensation.
- General Contractor and Subcontractors "if any" are required to maintain the same level of coverage as outlined in section 1 and provide Certificates of Insurance and copies of supporting endorsements.

All policies must be rated A-VII or higher in the A.M. Best's Key Rating Guide and licensed to do business in the State of New Jersey or are an eligible Surplus Lines Insurer or are an acceptable Joint Insurance Fund.

Acceptance by the Commission of deficit evidence of insurance does not constitute a waiver of contract requirement as provided by conditions of the contract.

B. Indemnification

The Contractor hereby agrees to fully indemnify, defend and hold harmless the Commission, the Commissioners, its members, directors, officers, agents, servants, employees and successors and assigns from and against all losses, fines, penalties, damages, lawsuits, claims, causes of action, liabilities, demands, obligations to Contractor, and expenses, including attorneys' fees in connection with the loss of life, personal injury, bodily injury, and/or property damage, if occasioned in whole or in part by any negligent act or omission of the Contractor or the Contractor's agent's, servants, employees, and subcontractors in the performance of services and provision of goods under this Contract. This obligation shall include the provision of a defense for the Commission at all stages of the claims or judicial process and together with all losses, fines, penalties, costs and expenses relating to any of the foregoing, including but not limited to, court costs and reasonable attorneys' fees arising out of this Contract and to enforce this indemnification provision.

Article VIII - LAWS, REGULATIONS AND PERMITS:

- A. The Contractor shall keep itself fully informed of all laws, ordinances and regulations or decrees which in any manner would affect persons or materials in any way used, engaged or employed in the work or which affect the conduct of the work.

If any discrepancy or inconsistency should be discovered in this Contract, or in the drawings or specifications herein referred to, in relation to any such law, ordinance, regulation, order of decree, the Contractor shall forthwith report the same in writing to the Commission.

- B. The Contractor shall at all times observe and comply with and shall cause all its

CONTRACT #2099

GENERAL CONDITIONS

agents and employees to observe all such laws, ordinances, regulations, orders and decrees, and shall protect, indemnify and save harmless the Commission and its officers and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor, its employees or agents.

- C. Permits and/or licenses of a temporary nature which are necessary for the prosecution of the work shall be secured and paid for by the Contractor prior to commencement of such work as would require permits and/or licenses.

Article IX - ASSIGNMENT:

- A. The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract, as a whole; or his right, title or interest in or to the same or any part thereof, without the previous consent in writing of the Commission endorsed herein or hereto attached; and it shall not assign, by power of attorney or otherwise, any of the monies to become due and payable under this Contract, unless by and with the like consent signified in like manner.
- B. If the Contractor shall, without such previous written consent, assign, transfer, convey, sublet, or otherwise dispose of this Contract, or of its right, title or interest therein, or any of the monies to become due hereunder, this Contract may, at the option of the Commission, be revoked and annulled, and the Commission shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the Contractor and to its assignee or transferee; and the Commission shall be in nowise deprived of or restricted in its right to sue for and recover damages for any breach of this Contract.

Article X - PATENTS:

The Contractor shall hold itself responsible for claims made against the Commission for infringement of patents by the use of patented articles in the construction and completion of the work, or in any process connected with the work agreed to be performed under this Contract or with the materials used upon the said work, and shall indemnify and save harmless the Commission for all costs, expenses and damages which the Commission shall be obliged to pay by reason of any infringement of patents used in the construction and completion of the work, including attorney's fees.

Article XI - NEW JERSEY PREVAILING WAGE ACT (N.J.S.A 34.11-56.25 et seq.):

- A. The Contractor is put on notice that it must pay all of its employees rendering services under this Contract in compliance with the prevailing wage rates promulgated by the New Jersey Department of Labor, a copy of which is on file at the Commission's Administrative Offices in Wanaque, New Jersey, and is hereby made a part of this Contract. In addition, the Contractor shall conform to all other labor laws and statutes established in this State.

CONTRACT #2099

GENERAL CONDITIONS

- B. In the event it is found that any employee of the Contractor or Subcontractor covered by this Contract has been paid a rate of wages less than the prevailing wages required to be paid by the Contractor or Subcontractor, this Commission shall have the right to terminate the Contract, or such part of the Contract as to which there has been a failure to pay the required wages and to prosecute the Contract to completion or otherwise. The Contractor and its sureties shall be liable to the Commission for any excess costs occasioned thereby.

Article XII - PAYMENTS:

The Contractor will be entitled to payment upon final inspection and acceptance of the work by the Commission's Engineer, less any retainage held by the Commission, within sixty (60) days after (a) all portions of work have been fully completed as required by the Contract to the satisfaction of the Engineer; and (b) the Engineer has certified such completion to the Commission.

The Contractor agrees that he shall indemnify and save the Commission harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, materialmen and furnishes of machinery and parts thereof, equipment power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this Contract. The Contractor shall, at the Commission's request, furnish satisfactory evidence that all obligations of the nature hereinabove designed have to be paid, discharged, or waived. If the Contractor fails to do so, then the Commission may, after having served written notice on the said Contractor, either pay unpaid bills, of which the Commission has written notice, directly or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor will be resumed, in accordance with the terms of this Contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Commission to the Contractor.

In paying any unpaid bills of the Contractor, the Commission shall be deemed the agent of the Contractor, and any payment, so made by the Commission, shall be considered as a payment made under the Contract by the Commission to the Contractor, and the Commission shall not be liable to the Contractor for such payment made in good faith.

A. Payment:

1. Upon receipt of written notice from the Contractor that the project is complete, the Engineer will make a final inspection and will notify the Contractor in writing of any particulars in which this inspection reveals that the work is defective. The Contractor shall immediately make such corrections as are necessary to remedy such defects.

CONTRACT #2099

GENERAL CONDITIONS

2. When the Contractor has completed all such corrections to the satisfaction of the Engineer and delivered all maintenance and operating instructions, schedules, as-built drawings, guarantees, bonds, certificates and other documents, all as required by the Contract, the Bid and the Bid Specifications (the "Contract Documents"), he may make application for final payment. The Engineer will review actual as-built field measurements, the amount of the work by the Contractor, and the value of such work pursuant to the terms of the Contract to determine whether to issue a final acceptance of the work. Upon final acceptance of the work, the Engineer will process the final payment upon receipt of a Maintenance Bond as described in the Bid Specifications.
3. The acceptance by the Contractor of Final Payment shall be and shall operate as a release to the Commission of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act or neglect of the Commission and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or his Sureties from any obligation set forth in the Contract Documents, including any applicable performance, payment, maintenance bond or other type of bid security.

B. Partial Payment:

1. No claim by the Contractor for additional payment based on any error in any periodic estimate will be recognized.
2. The Commission may withhold payment for any of the following:
 - a. Failure to submit a revised progress schedule, which has been approved by the Engineer, with each partial payment request.
 - b. Defective work not corrected.
 - c. Claims filed or responsible evidence indicating a reasonable probability of claims being filed.
 - d. Failure of the Contractor to make proper payments to Subcontractor or for material or labor.
 - e. Unpaid damages by the Contractor to Subcontractor, the Commission, or any other agency or person.
 - f. In the judgment of the Engineer the project is not proceeding in accordance with the Contract or the Contractor is not complying with the requirements of the Contract Documents.
 - g. The Contractor is found in to be in default under the terms of the Contract.
3. No payment voucher shall protect the Contractor, and no claims shall be

CONTRACT #2099

GENERAL CONDITIONS

founded thereof by the Contractor in case of overpayment, or in case it shall at any time appear that the project or any part thereof has not been constructed, completed and maintained in strict accordance with the Contract Documents.

4. No interim voucher shall be held to signify the approval of permanent work, materials, or other things to which such certificate relates and the Contractor shall not be relieved by any such certificates from any risks of liability to which he may be subject under the Contract until final payment hereinafter referred to has been granted to it.
5. Errors in any monthly measurements or bill, on being discovered, will be rectified by the Engineer in subsequent measurements and bills.
6. If any work, the value of which has been included in any interim bill is damaged or destroyed and has to be removed or reconstructed by the Contractor, an amount representing the value of the work so damaged or destroyed, less any insurance monies therefore received by the Commission, will be deducted by the Engineer in succeeding partial payments until such time as work has been renovated or reconstructed.
7. State law requires that all claims for payments be approved by the governing body of the Commission. The Contractor shall allow six (6) to eight (8) weeks for receipt of partial payment after the payment has been approved by the Engineer.

Article XIII - MONEY MAY BE RETAINED:

The Commission may keep any monies which would otherwise be payable at any time hereunder, and apply the same, or so much as may be necessary therefore, to the payment of any expenses, losses or damages, as determined by the Engineer, incurred by the Commission which, pursuant to this Contract or the specifications shall be borne by the Contractor, and may retain until all claims shall have been settled so much of such monies as the Commission shall be of the opinion will be required to settle all claims against the Commission and its officers and agents and all claims for labor on the work, and also all these claims for materials.

Article XIV – REPAIRS, BONDS, AND RETAINAGE:

- A. The Contractor shall at its own cost, upon notification from the Commission or Engineer, promptly make good any and all defects, in its work, or that of any subcontractor employed by it hereunder, which may occur or appear during the

CONTRACT #2099

GENERAL CONDITIONS

progress of the work.

- B. If, within ten (10) days after the delivery or mailing of notice in writing to the Contractor, or its agents, of the occurrence or appearance of any such fault in the work, the Contractor fails to remedy same, the Commission may remedy the same or cause it to be remedied without previous notice and/or in case of any emergency where, in the opinion of the Engineer, delay would cause serious loss or damage.
- C. The cost of any defects so remedied or caused to be remedied by the Commission shall be borne solely by the Contractor, and any sum expended, or any expense so incurred by the Commission shall be deducted from any money then due or thereafter growing due from the Commission to the Contractor.
- D. In order to secure the performance of the above, the Contractor shall furnish a **Performance and Payment Bond to the Commission** at the time of execution of this Contract, in the sum of one hundred percent (100%) of the Contract price. Said bond shall be in form and content satisfactory to the Commission.
- E. Upon completion of the work hereunder and prior to its final acceptance by the Commission, the Contractor shall furnish the Commission with a **Maintenance Bond** in the amount of 100% of the Contract price which shall remain in full force and effect for a period of one year from the final date of acceptance of the work by the Commission. Said bond shall be in the form and content satisfactory to the Commission.
- F. The Commission shall retain **five percent (5%)** of the total contract amount of money due for a period of **six (6) months** from the date of final acceptance of all of the work by the Commission, to be applied to any defects not remedied by the Contractor by the end of the six-month period.

Article XV - TERMINATION OF LIABILITY:

Upon acceptance by the Contractor, or his authorized agents, of the final payment under the provisions of this Contract, the project shall be considered completed and the Contractor shall have no further interest or claim whatever against the Commission or any of its officers or agents, except for amounts kept or retained or otherwise specifically provided herein.

Article XVI - STATUTORY COMPLIANCE:

The Contractor is required to comply with all applicable laws, regulations and ordinances.

Article XVII - BUY AMERICAN ACTS:

The Contractor and his subcontractors, if any, must comply with all "Buy American" statutes or regulations, including N.J.S.A. 52:33-1 et seq.

CONTRACT #2099

GENERAL CONDITIONS

The Commission reserves the right to accept non-domestic materials under this contract in accordance with N.J.S.A. 52:33-2 and 52:33-3, in the event: (i) it determines the use of domestic materials is "impractical" or "inconsistent with the public interest"; (ii) it determines that the cost of using domestic materials is "unreasonable"; or (iii) domestic materials of the class or kind sought are not mined, produced, or manufactured, as the case may be, in the United States in commercial quantities and of a quality satisfactory to the Commission.

Article XVIII - AFFIRMATIVE ACTION:

The Contractor is required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27-1 et seq.

The Contractor shall complete and submit an Initial Project Workforce Report Form AA-201 upon notification of the contract award. Proper completion and submission of this report shall constitute evidence of the Contractor's compliance with the regulations. The Contractor shall also submit a copy of the Monthly Project Workforce Report Form AA-202 once a month thereafter for the duration of the Contract to the Division of Contract Compliance and Equal Employment Opportunity in Public Contracts in the Department of Treasury and to the Commission (the "Division").

Additionally, 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, the Contractor will take affirmative action to ensure that such applicants are recruited and employed, 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 action 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;

CONTRACT #2099

GENERAL CONDITIONS

The Contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, 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. However, if a subcontractor has a total workforce of four (4) or fewer employees or if the Contractor or subcontractor is performing under an existing Federally approved or sanctioned affirmative action program, the contract shall contain only the mandatory language required by N.J.A.C. 17:27-3.8(a).

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 applicable employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Division may, in its discretion, exempt the 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 applicable 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 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. 10:531 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 (5) days prior to the commencement of construction work, the Contractor or subcontractor agrees to attempt to hire minority and women workers directly, consistent with the applicable employment goal. 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 the applicable employment goal, the Contractor's or subcontractor's agrees to be prepared to hire or schedule minority and women workers directly, consistent with the applicable employment goal, by complying with the hiring or scheduling procedures prescribed under B below; and the Contractor or subcontractor further agrees to take said action if it determines or is so

CONTRACT #2099

GENERAL CONDITIONS

notified by the Division that the union is not referring minority and women workers consistent with the applicable employment goal.

B. If the hiring or scheduling of a workforce consistent with the employment goal has not or cannot be achieved 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 consistent with the applicable county employment goals;

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 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 until such time as the workforce is consistent with the employment goal;

5. If it is necessary to lay off some of the workers in a given trade on the construction site, to assure, consistent with the applicable State and Federal statutes and court decisions, that sufficient minority and women employees remain on the site consistent with the employment goal; and to employ any minority and women workers so laid off by the Contractor on any other construction site on which its workforce composition is not consistent with an employment goal established pursuant to rules implementing N.J.S.A. 10:5-31 et seq.;

6. To adhere to the following procedure when minority and women workers apply or are referred to the Contractor or subcontractor;

i. 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 determine the qualifications of such individuals and if the Contractor's or subcontractor's workforce in each construction trade is not consistent with the applicable, employment goal, it shall hire or schedule those individuals who satisfy appropriate qualification standards. However, the 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

CONTRACT #2099

GENERAL CONDITIONS

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.

ii. If the Contractor's or subcontractor's workforce is consistent with the applicable employment goal, the name of any interested women or minority individual shall be maintained on a waiting list for the first consideration, in the event the Contractor's or subcontractor's workforce is no longer consistent with the applicable employment goal.

iii. 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 subcontractor 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.

iv. The Contractor or subcontractor shall interview the referred minority or women workers.

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 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) 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

C-17 Post Brook Dam Improvement Project

CONTRACT #2099

GENERAL CONDITIONS

once a month thereafter for the duration of this Contract to the Division and to the Public Agency Compliance Officer.

D. The Contractor and its subcontractors shall furnish such reports or other documents to the Division of Contract compliance & EEO 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 Contract Compliance & EEO for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code at N.J.A.C. 17:27-1 et seq.

Article XIX - WORKER AND COMMUNITY RIGHT-TO-KNOW ACT (N.J.S.A. 34:5A-1 et seq.; N.J.A.C. 7:1G):

This Act requires employers to label all containers of hazardous substances. All goods offered for purchase to the Commission must be labeled in compliance with the provisions of this Act.

Material Safety Data Sheets also must be supplied as is required by law.

Article XX - SAFETY:

All equipment and work methods utilized in this contract shall comply with O.S.H.A. and any other applicable local, State and Federal safety standards and regulations.

Article XXI – TAX EXEMPTION:

Purchases made by the Commission are exempt from payment of state sales taxes, and such tax shall not be included in the bid price.

Article XXII – DISPUTE RESOLUTION:

A. **NOTICE** – Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the Contractor to the Commission's Executive Director promptly (but in no event later than thirty (30) days) after the start of the event giving rise thereto. Notice of the amount or extent of the claim, dispute, or other matter with supporting data shall be delivered to the Commission's Executive Director within sixty (60) days after the start of such event (unless the Executive Director allows additional time to submit additional or more accurate data in support of such Claim, dispute, or other matter). Any claim for an adjustment in Contract Price and/or Contract Time shall be prepared in accordance with the provisions of an official change order or contract amendment approved by the Board of Commissioners. Each Claim shall be accompanied by the Contractor's written statement that the adjustment claimed is the entire adjustment to which the Contractor believes it is entitled as a result of said event. The Commission will respond to the Contractor within sixty (60) days after receipt of the Contractor's last submittal.

CONTRACT #2099

GENERAL CONDITIONS

B. APPEAL FROM BOARD OF COMMISSIONER'S DECISION – The Contractor may appeal the Board of Commissioner's decision rendered pursuant to the above Notice by delivering to the Commission within thirty (30) days after the date of such decision, a written notice of intention to appeal. The date of receipt of such notice by the Board of Commissioner's shall be the date upon which the time periods in these dispute resolution proceedings are calculated.

C. WORK CONTINUANCE AND PAYMENT – Unless otherwise agreed in writing, the Contractor shall continue to work, furnish required equipment and maintain the Schedule of the Work as outlined in the contract specifications during any dispute resolution proceedings. If Contractor continues to perform per the contract specifications, the Commission shall continue to make payments in accordance with this Contract.

D. INITIAL DISPUTE RESOLUTION – Upon issuance of a written notice of intention to appeal, the parties shall endeavor to settle the dispute first through direct discussions. The senior executives of the parties, who for the Contractor shall have the authority to settle the dispute and for the Commission shall be the Executive Director, shall meet within twenty-one (21) days after the date of receipt by the Commission of the notice of intention to appeal. If the dispute is not settled within thirty (30) days from the referral of the dispute to the senior executives, the parties shall submit the dispute to mediation in accordance with Paragraph E.

E. MEDIATION – If the dispute cannot be settled pursuant to Paragraph D, the parties shall endeavor to settle the dispute by mediation under the current Construction Industry Mediation Rules of the American Arbitration Association before recourse to any other dispute resolution procedures. Once one party files a request for mediation with the other party and with the American Arbitration Association, the parties agree to conclude such mediation within one hundred twenty (120) days of filing of the request.

The Commission and the Contractor shall cooperate with American Arbitration Association and with each other in selecting a mediator from American Arbitration Association, panel of neutrals and in scheduling the mediation proceedings. The Commission and the Contractor shall participate in the mediation in good faith, and shall share equally in its costs. All communications, documents, and other materials, whether written or oral, made in the course of or relating to the mediation by the Commission or the Contractor, or their agents, employees, experts or attorneys, or by the mediator or American Arbitration Association, employees, are confidential and privileged, and inadmissible for any purpose in any court, administrative, or other proceeding, provided that evidence that is otherwise admissible or discoverable shall not be rendered inadmissible or non-discoverable as a result of its use in the mediation. This agreement to mediate and any other agreement or consent to mediate entered into in accordance herewith as provided herein will be specifically enforceable under the laws of the State of New Jersey.

CONTRACT #2099

GENERAL CONDITIONS

Either party may terminate the mediation at any time after the first session but the decision to terminate shall be delivered in person by the party's representative to the other party's representative and the mediator.

F. MULTIPARTY PROCEEDINGS – All parties necessary to resolve a claim or dispute shall be parties to the same dispute resolution proceeding. Appropriate provisions shall be included in all other contracts relating to the Work to provide for the consolidation of such dispute resolution procedures.

G. CONCLUSION OF MEDIATION – In the event that mediation is concluded without a resolution of the dispute, Contractor and Commission may exercise such rights and remedies as either may otherwise have under the Contract Documents or by applicable law in respect of any dispute.

H. If, in the sole opinion of the Commission, a dispute arises which imperils the timely completion of the work, an excessive increase in costs, a substantial risk of harm to the public health or welfare, or an emergency or exigency which must be addressed immediately, then the Commission may institute court, administrative, or other proceedings without prior compliance with the dispute resolution provisions contained in this Contract.

ARTICLE XXIII – COMPLIANCE WITH COMMISSION CONTRACT AWARD POLICIES:

Contractor represents and warrants that it has not made any contribution that would bar the Commission from awarding the Contractor this Contract pursuant to the contract award policies adopted by the Commission and set forth in the Commission's Accounting Policies and Procedures Manual. Contractor shall have a continuing duty to report any contribution it makes during the term of this Contract. Consistent with the requirements of the Commission's contract award policies, the Contractor acknowledges that it is prohibited from being awarded this Contract if Contractor has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate or holder of the public office of Governor, or to any State or county political party committee: (i) within the eighteen (18) months immediately preceding the commencement of negotiations for the contract or agreement; (ii) during the term of office of a Governor, in the case of contributions to a candidate committee and/or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of such term; or (iii) within the eighteen (18) months immediately preceding the last day of the term of office of Governor, in which case such prohibition shall continue through the end of the next immediately following term of the office of Governor, in the case of contributions to a candidate committee and/or election fund of the holder of that office, or to any State or county political party committee of a political party nominating such Governor in the last gubernatorial election preceding the commencement of the latter term.

CONTRACT #2099

GENERAL CONDITIONS

It shall be a breach of the terms of this contract for Contractor to: (i) make or solicit a contribution in violation of either this subsection or the Commission's contract award policies; (ii) knowingly conceal or misrepresent a contribution given or received; (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee of any candidate or holder of the public office of Governor, or to any State or county party committee; (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would make or solicit any contribution, which if made or solicited by the business entity itself, would subject that entity to the restrictions of this subsection; (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii) engage in any exchange of contributions to circumvent the intent of this subsection or Executive Order; or (viii) directly or indirectly, through or by any other person or means, do any act which would subject that entity to the restrictions of this subsection.

Contractor is advised of the responsibility to file an annual statement on political contributions with the New Jersey Election Law Enforcement Commission pursuant to N.J.S.A. 19:44A-20.13 (P.L. 2005, c.271, s.3) if the Contractor receives contracts in excess of \$50,000 from public entities in a calendar year. It is the Contractor's responsibility to determine if filing is necessary. Additional information on this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

Article XXIV – BUSINESS REGISTRATION CERTIFICATE

- A. Business Registration: Pursuant to N.J.S.A. 52:32-44, **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** is prohibited from entering into a contract with an entity unless the bid/proposal/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of Treasury.
- B. Prior to contract award or authorization, the contractor shall provide the Commission with its proof of business registration and that of any named subcontractor(s).
- C. Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the Commission prior to the time a contract, purchase order or other contracting documents is awarded or authorized.
- D. During the course of contract performance:
 - (1) the contractor shall not enter into a contract with a subcontractor

CONTRACT #2099

GENERAL CONDITIONS

unless the subcontractor first provides the contractor with a valid proof of business registration.

(2) the contractor shall maintain and submit to the Commission a list of subcontractors and their addresses that may be updated from time to time.

(3) the contractor and any subcontractors providing goods or performing services under a contract, and each affiliates, shall collect and remit to the Director of Division of Taxation in the Department of Treasury, 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 to the State. Any questions in this regard can be directed to the Division of Taxation at (609)2925-6200. Form NJ-REG can be filled out at www.state.nj.us/treasury/revenue/busregcert.html.

- E. Before final payment is made under the contract, the contractor shall submit to the Contracting Agency a complete list of all subcontractors and their addresses.
- F. Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contract agency.

Article XXV – PUBLIC CONTRACTOR REGISTRATION

N.J.S.A. 34:11-56.48 et seq., required 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 proposal 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 subcontractors shall be registered prior to starting work on the project. It is the general contractor's responsibility that all non-listed subcontractors 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 any other state.

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/lssc/lspubcon.html. N.J.S.A. 34:11-56.55 specifically prohibits

CONTRACT #2099

GENERAL CONDITIONS

accepting applications for registration as a substitute for a certificate of registration.

ARTICLE XXVI – NEW JERSEY ANTI-DISCRIMINATION

Pursuant to N.J.S.A. 10:2-1, the Contractor agrees that:

- a. In the hiring of persons for the performance of work under this Contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such material, equipment, supplies or services to be acquired under this Contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;
- b. No contractor, subcontractor, nor any person on his behalf, shall in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engage in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account or race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;
- c. There may be deducted from the amount payable to the contractor by the Commission, under this Contract, a penalty of \$50.00 for each person for each calendar day which such a person is discriminated against or intimidated in violation of the provisions of the Contract; and
- d. This Contract may be canceled or terminated by the Commission, and all money due to become due hereunder may be forfeited, for any violation of this section of the Contract occurring after notice to the Contractor from the Commission of any prior violation of this section of the Contract.

Article – XXVII AMERICAN WITH DISABILITIES ACT 1990

The Contractor and the Commission 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,

CONTRACT #2099

GENERAL CONDITIONS

and activities provided or made available by public entities, and the rules and regulations promulgated pursuant there unto, are made part of this Contract. In providing any aid, benefit, or service 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, subcontractors violate or are alleged to have violated the Act during the performance of this Contract, the Contractor shall defend the Commission in any action or administrative proceeding commenced pursuant to the Act. The Contractor shall indemnify, protect, and save harmless the Commission, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages, of whatever kind of 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 in connection therewith. In any and all complaints brought pursuant to the Commission's grievance procedure, the Contractor agrees to abide by any decision of the Commission which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Commission, or if the Commission 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 Contractor 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 Commission or any of its agents, servants, employees, the owner shall expeditiously forward to the Contractor every demand, complaint, notice, summons, pleading, or other process received by the Commission or its representatives.

It is expressly agreed and understood that any approval by the Commission 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 to the pursuant to this paragraph.

It is further agreed and understood that the Commission 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 Contract. 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 Contract, nor shall they be construed to relieve the Contractor from any liability, nor preclude the Commission from taking any actions available to it under any other provisions of the Contract or otherwise at Law.

Article XXVIII – DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

Pursuant to Public Law 2012, c. 25, the Contractor shall complete the certification

CONTRACT #2099

GENERAL CONDITIONS

attached hereto to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, 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 Division's website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. The Contractor must review this list prior to completing the below certification. If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and 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.

Certification of Non-Involvement in Prohibited Activities in Russia or Belarus.

Pursuant to Public Law 2022,c.3, the Contractor must complete the certification attached hereto to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified as a person or entity engaging in prohibited activities in Russia or Belarus as such terms is defined in P.L. 2202.c.3, section1.e, except as permitted by federal law.

Article XXIX - DIANE B. ALLEN EQUAL PAY ACT

Pursuant to N.J.S.A. 34:11-56.14, a contractor performing “qualifying services” or “public work” to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see <https://nj.gov/labor/equalpay/equalpay.html>.

Article XXX - Disabled Veteran-Owned Business Set-Aside

In accordance with the New Jersey Set-Aside Act for Disabled Veterans' Businesses, N.J.S.A. 52:32-31.1 et seq. (P.L. 2015, c. 116), it is the policy of the Commission that Disabled Veteran-Owned Businesses (“**DVOBs**”), as determined and defined by the State of New Jersey, Department of Treasury, Division of Revenue and Enterprise Services in N.J.A.C. 17:14-1.1 et seq. (the “**Division**”), have the opportunity to compete for and participate in the performance of contracts and subcontracts for construction services. The Commission further requires that its Contractors shall agree to take all necessary and responsible steps, in accordance with the aforementioned regulations, to ensure that DVOBs have these opportunities. The Contractor is encouraged to obtain a complete copy of the applicable regulations (N.J.A.C. 17:14-1.1 et seq.) prior to submitting bids to the Commission.

CONTRACT #2099

GENERAL CONDITIONS

The Contractor agrees to make a good faith effort to award at least 3% of this Contract to Subcontractors registered by the Division as a DVOB firm. Subcontracting goals do not apply if the prime Contractor is a registered DVOB firm.

The following actions shall be taken by a bidder in establishing a good faith effort to solicit and award subcontracts to eligible disabled veteran-owned businesses, as established in the RFP:

- 5) The bidder shall attempt to locate qualified potential disabled veteran-owned business subcontractors;
- 6) The bidder shall consult the disabled veteran business database if none are known to the bidder;
- 7) The bidder shall keep a record of its efforts, including the names of businesses contacted and the means and results of such contacts, as well as documentation on any good faith efforts to solicit and award any subcontract to an eligible disabled veteran-owned business; and
- 8) The bidder shall provide all potential subcontractors with detailed information regarding the specifications.

In those circumstances where Federal law, rules, or regulations permit or require a procurement procedure other than those prescribed in this chapter, the State contracting agency shall follow the Federal procedures notwithstanding the provisions of this chapter, provided that the State contracting agency issues a written declaration that such Federal laws, rules, or regulations are in effect.

The Commission requires that DVOB Forms A, B, C, D, and F as applicable, be submitted within seven (7) days after Notice of Award. However, the Commission may extend the deadline for this requirement at its sole discretion.

If the Contractor submits the DVOB forms within the requested timeframe, but fails to meet the DVOB goal, a fully completed and notarized DVOB Form D must be submitted, and the Commission will evaluate the efforts made by the Contractor to determine whether a demonstration of good faith efforts has been made.

The listing of a DVOB firm by a Contractor on Form A shall constitute a representation by the Contractor to the Commission that such DVOB firm is qualified and available, and a commitment by the Contractor that it will enter into a subcontract with such

CONTRACT #2099

GENERAL CONDITIONS

DVOB firm for the portion of the work described in Form A and at the price set forth in its Bid. A DVOB Contractor which lists itself on Form A is committed to performing the work indicated with its own personnel.

A database of DVOBs is maintained by the State, accessible via a link on the Division's webpage at https://www20.state.nj.us/TYTR_SAVI/vendorSearch.jsp; the database lists vendors by designation, including DVOBs, and is available for use by State contracting agencies and others in confirming eligibility for set-aside contracts and subcontracts and in reporting progress toward established contract award goals. Use of this listing does not relieve the Contractor of its responsibility to seek DVOB participation from other sources.

Whenever the Commission issues Project Change Orders, the Commission may determine if increased DVOB participation will be required.

If at any time the Contractor believes or has reason to believe that a proposed DVOB has become unavailable or, due to change in ownership or management responsibility, does not meet the applicable standards, the Contractor shall, within 10 days, notify the Commission of that fact. Within 15 days thereafter, the Contractor shall, if necessary to achieve the stated goal, make every reasonable effort to subcontract the same or other work to other DVOB firms.

Should a DVOB become ineligible during the course of this Contract, effective as of the date of ineligibility, further contractual dollars expended with the DVOB shall not be counted toward the DVOB goal. Within 15 days after notification by the Commission to the Contractor of the ineligible DVOB, the Contractor will make every reasonable effort to satisfy the DVOB goal. The Contractor's effort to continue to meet the DVOB goal shall be coordinated with the Office of EEO.

To ensure that all obligations under subcontracts awarded to DVOBs are met, the Commission shall review the prime Contractor's DVOB involvement efforts during the performance of the contract. The Contractor shall monitor the performance of and collect and report data on DVOB participation to the **Office of EEO**. The form will be reviewed to determine Contract compliance with respect to the DVOB goal. Failure to submit this report may result in suspension of payments as provided in the section titled "Audit and Penalties" below. If, at any time, the Commission has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements, it shall refer the matter to the Attorney General of the State of New Jersey.

CONTRACT #2099

GENERAL CONDITIONS

The Contractor agrees to pay each subcontractor and supplier for satisfactory performance of its subcontract no later than ten (10) days from the receipt of each payment the Contractor receives from the Commission.

In accordance with N.J.S.A. 52:32-40 and 52:32-41, the Contractor shall certify, prior to the issuance of a progress payment by the Commission, that all subcontractors and suppliers have been paid any amounts due from previous progress payments and shall be paid any amounts from the current progress payment. Alternatively, the Contractor shall certify that there exists a valid basis under the terms of the subcontract to withhold payment from the subcontractor or supplier and therefore payment is withheld.

If the Contractor withholds payment from the Subcontractor or supplier, the Contractor shall provide to the Subcontractor or supplier written notice thereof. The notice shall detail the reason for withholding payment and state the amount of payment withheld. The Contractor shall send a copy of the notice to the Surety of the Contract Bond. A copy of the notice shall also be submitted to the Commission with the certification that payments are being withheld.

Except as provided herein, the Contractor shall not have the work performed, or the materials or supplies furnished, by any other DVOB firm other than those named in Form A. However, the Contractor may, in unusual situations, be permitted to substitute a subcontractor(s). A request for substitution must be in writing, with complete justification for the request. The Contractor must have approval of the Commission before substitution of the DVOB subcontractor, regardless of the reason for the substitution. Failure to obtain approval from the Commission could result in the prime Contractor being found to be in "noncompliance" with the requirements of the contract. The term "unusual situations" includes, but is not limited to, a DVOB subcontractor or DVOB joint venture partner(s):

- 9) Failure to qualify as a DVOB or maintain DVOB registration status.
- 10) Death or physical disability, if the named subcontractor or DVOB partner of the joint venture is an individual.
- 11) Dissolution, if a corporation or partnership.
- 12) Bankruptcy of the subcontractor, subject to applicable bankruptcy laws, and only in instances where the bankruptcy affects the subcontractor's ability to perform.
- 13) Inability to obtain, or loss of, a license necessary for the performance of the particular category of work.
- 14) Failure or inability to comply with a requirement of law applicable to the subcontract work.
- 15) Material failure to comply with the terms and conditions of the subcontract.
- 16) Material failure to successfully perform the subcontract tasks.

CONTRACT #2099

GENERAL CONDITIONS

The prime Contractor is advised that failure to carry out the requirements of these specifications shall constitute a breach of contract and may result in termination of the contract by the Commission, or such remedy as the Commission deems appropriate. During the performance of the contract, and for a period of up to three (3) years following completion of the contract work, the Commission may conduct reviews for compliance with the requirements of the DVOB Program. Such reviews may include the evaluation of monthly reports, desk audits, and site visitations. Where a Prime Contractor, or any Subcontractor, is found to be in noncompliance with the requirements of the DVOB Program during the performance of the contract, it will be required to take corrective action. If corrective action is not promptly taken by the offending contractor, the following sanctions may be instituted (singularly, in any combination and in addition to any other remedies provided by law):

- 5) The Commission may withhold further payments under the Contract.
- 6) The Contract may be terminated for breach.
- 7) Suspension or debarment proceedings may be commenced in accordance with New Jersey law and the Commission regulations.
- 8) The Contract Bond may be enforced.

Copies of the following forms are located on the Commission website:

- (g) Commission Form A: DVOB Participation Schedule:
List all DVOB firms scheduled to participate in the contract, including scope of work to be performed and the dollar value of their anticipated participation. Additionally, the name of the Contractor's DVOB liaison officer should be included on this form. Upon execution of a contract with the Commission the prime contractor must enter into a formal agreement with the DVOB(s) listed on Form A. There can be no substitution of the DVOB(s) listed on Form A without the prior written approval of the Commission. If, for any reason Form A is not completed, then the Contractor must complete and provide Form D (see below).
- (h) Commission Form B: Affidavit of DVOB (If Applicable):
For each DVOB owned firm listed on Form A, Contractor shall include a complete and signed Form B. This form B is not required for set aside contract awards, nor in cases wherein the Contractor is a DVOB itself.
- (i) Commission Form C: Affidavit of DVOB (If Applicable):
Each DVOB firm to be utilized must sign Form C attesting to its status as a DVOB.
- (j) Commission Form D: DVOB Unavailability Certification (If Applicable):
If the Contractor is unable to identify DVOB(s) as required to meet the

CONTRACT #2099

GENERAL CONDITIONS

targeted goal set for this Contract, the Contractor shall complete and attach this form which documents the Contractor's good faith efforts to do so.

(k) Commission Form E: DVOB Certificate of Participation:

This is the payment report that must be completed on a monthly basis by the Contractor, unless the Contractor is a DVOB itself.

(l) Commission Form F: DVOB Certificate of Participation if Prime Contractor

is DVOB): If the Contractor is a DVOB itself, the Contractor shall complete this form and attach it with every Pay Estimate.

Article XXXI – SAFETY MEASURES

All equipment and work methods utilized in this Contract shall comply with OSHA and all other applicable local, state and/or federal safety standards and regulations. Contractor and all subcontractors shall be required to attend a general Contract Safety Orientation prior to beginning construction.

Article XXXII – SECURITY MEASURES

The following measures must be adhered to as it relates to this contract:

1. The Contractor shall furnish a complete description of all equipment and vehicles that will enter onto Commission property. All equipment and vehicles will have ID or plate/tag numbers easily visible.
2. As required by the New Jersey Office of Counter Terrorism's Best Management Practices, Contractors must provide evidence that it has previously conducted a background check on all Contractor's employees who will be entering onto Commission property. Contractors shall provide the Commission with a corporate letter, on appropriate letterhead, stating the names of all employees who will require access to the Commission's property, and indicating that such background checks have, in fact, been performed. All subcontractors are also required to provide such employee list, and confirmation of background checks.

NO ONE WILL BE ALLOWED ONTO COMMISSION PROPERTY WITHOUT PRIOR APPROVAL.

CONTRACT #2099

GENERAL CONDITIONS

3. No specialized individuals will be allowed onto Commission Property without being previously approved. This includes mechanics, fuel deliveries, sanitary facility maintenance, etc. The **“Access Approval Form to Commission Facilities”** (Attachment #1) must be filled out completely, with a copy of **GOOD QUALITY PHOTO ID**, and submitted to the Commission at least **twenty-four (24) hours** prior to arrival. This form **MUST** be completed for **every** visit or delivery. Liquid delivery may be subject to sampling prior to entering onto Commission property. The Contractor shall make no claim against the Commission for loss of time associated with complying with this requested time frame.
4. Only the approved Contractor's employees and employees of any subcontractor listed by the Contractor on **page (I-25)** of the Bid Documents, and approved equipment will be allowed on Commission property.
5. Vehicles entering onto Commission property shall be subject to search.

NOTE: THE COMMISSION SHALL HAVE THE RIGHT TO EXPAND SECURITY REQUIREMENTS AND CONTRACTOR SHALL MAKE NO CLAIMS AGAINST THE COMMISSION FOR INCREASED SECURITY REQUIREMENTS MADE DURING THE LIFE OF THIS CONTRACT.

Article XXXIII – PROMPT PAYMENT OF CONSTRUCTION CONTRACTS ACT

On September 1, 2006, the New Jersey Legislature passed the Prompt Payment of Construction Contracts Act, P.L. 2006, c.96.

P.L. 2006, c.96, provides, in part, as follows: If a prime contractor has performed in accordance with the provisions of a contract with the Commission and the billing for the work has been approved and certified by the owner or the Commission's authorized approving agent, the Commission shall pay the amount due to the prime contractor for each periodic payment, final payment or retainage monies not more than thirty (30) calendar days after the billing date, which for a periodic billing, shall be the periodic billing date specified in the Contract. The billing shall be deemed approved and certified twenty (20) days after the Commission receives it unless the Commission provides, before the end of the 20-day period, a written statement of the amount withheld and the reason for withholding payment, except that in the case of a public or governmental entity that requires the entity's governing body to vote on authorizations for each periodic payment, final payment or retainage monies, the amount due may be approved and certified at the next scheduled public meeting of the entity's governing body, and paid during the entity's subsequent payment cycle, provided this exception has been defined in the bid specifications and contract documents.

CONTRACT #2099

GENERAL CONDITIONS

As a public entity that requires the authorization of its governing body for periodic or final payments, and payments for change orders or release of retainage, the Commission hereby places the prime contractor on notice that it not subject to the twenty (20) day period for the approval and certification of billings and, consistent with P.L. 2006, c. 96, in the event that the Commission is unable to obtain formal consideration and approval of any billing for work performed by a prime contractor as the basis for a periodic or final payment, or payments for change orders or retainage within the thirty (30) day time period mandated by P.L. 2006, c.96, the Commission shall place the billing for work performed on its next regularly scheduled meeting of its Board of Commissioners and, should such billing for work performed be approved, pay the approved amount to the prime contractor during the Commission's subsequent payment cycle.

Article XXXIV – CONFIDENTIALITY & NON-DISCLOSURE REQUIREMENTS:

The Contractor shall hold in trust and not reveal to any third party, except as provided in this Contract, between the Commission and the Contractor, any and all confidential or "Security Related" information as defined herein. The Contractor shall require its employees and sub-contractors to comply with the provisions of this Contract, if applicable, as it pertains to confidentiality. This Section must be included in all subcontracts entered into by the Contractor. Confidential or "Security Related" information shall include:

- Any and all financial, statistical, personnel and/or technical data supplied to the Contractor.
- Any and all data, technical information, material gathered, originated, developed, prepared, used or obtained in the performance of this Contract, including results and opinions of the Contractor.
- Any and all communications between the Commission and the Contractor and the Contractor and any third party regarding the performance of this Contract.

The Contractor is required to protect the confidentiality of such data. Any use, copying, distribution, sale or offering of this data in any form by the Contractor, or any individual or entity in the Contractor's charge or employ for purposes not connected with this Contract, will be considered a violation of this Contract and may result in contract termination and the Contractor's suspension or debarment from State contracting. In addition, such conduct may be reported to the State Attorney General for criminal prosecution to the extent allowed by law.

It is further agreed that any information supplied by the Commission to the Contractor and any information developed by the Contractor in satisfaction of the Scope of Work within this Contract is subject to the following conditions and restrictions:

- Information received from or developed for the Commission is to be used solely for the purpose(s) established in this Contract.

CONTRACT #2099

GENERAL CONDITIONS

- The data confidentiality matters coming within this Contract shall continue beyond the completion of all work involved in this Contract, unless specifically waived in writing by the Commission.

Article XXXV – GENERAL WARRANTY & GUARANTEE:

A. In addition to other promises and warranties contained herein, the Contractor warrants that the labor and materials to be furnished and installed under this Contract will be new and free from defects in material and workmanship for a period of **one year from the date of completion by the Contractor**. This warranty excludes damage or defect cause by abuse, modification, normal wear and tear, or improper maintenance or operation by persons other than the Contractor, its employees, subcontractors, or any other individual the Contractor utilizes to discharge its obligations under this Contract. In the event that the Commission determines, in its sole discretion, that the equipment furnished by the Contractor has failed prematurely or contains a defect in material or workmanship, then the Contractor shall repair or replace said defective free of charge and install said equipment free of charge. The Contractor shall proceed to remedy such defects in material and workmanship within seven (7) days of receipt of written notice from the Commission. All such replacement parts shall be shipped F.O.B., Commission's site.

B. The Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of the Work that is not in accordance with the Contract Documents or a release of the Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. Observations by the Commission;
2. The making of any milestone or final payment;
3. The issuance of a certificate of Substantial Completion;
4. Use or occupancy of the Work or any part thereof by the Commission;
5. Any review and approval of a Submittal;
6. Any inspection, test, or approval by others; or
7. Any correction of defective Construction by the Commission.

CONTRACT #2099

GENERAL CONDITIONS

Article XXXVI– APPLICABLE LAW:

This Contract shall be governed by the laws of the State of New Jersey without giving effect to principles of conflicts of law.

Article XXXVII – TERMINATION:

This Contract may be terminated by the Commission, with or without cause, upon three (3) days written notice to the Contractor. In the event of termination of this Agreement, the Commission shall only be responsible to pay the Contractor compensation for the Post Brook Dam Improvement services rendered up to the date of the Contractor's receipt of written notice of termination.

Article XXXVIII – NOTICES:

All notices, requests, demands and other communication provided for by this Contract shall be in writing and shall be deemed to have been given when mailed at any general branch United States Post Office enclosed in a certified postpaid envelope and addressed to the address of the respective party stated herein or to such changed address as the party may have fixed by notice.

Article XXXIX– NON-WAIVER:

No delay or failure by either party in exercising any right under this Contract, and no partial or single exercise of that right, shall constitute a waiver of that or any other right.

Article XL– COUNTERPARTS:

This Contract may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

SIGNATURES ON THE FOLLOWING PAGE

**CONTRACT #2099
CERTIFICATE OF ACKNOWLEDGMENT
FOR CONTRACTOR (CORPORATION)**

IN WITNESS THEREOF, the parties hereto have caused this contract to be duly and properly executed in duplicate this _____ day of _____, 2023 copy, thereof to remain with the Commission and one to be delivered to the Contractor.

**NORTH JERSEY DISTRICT
WATER SUPPLY COMMISSION**

BY: _____
DR. HOWARD L. BURRELL, CHAIRMAN

ATTEST:

KIM DIAMOND, COMMISSION SECRETARY

(CONTRACTOR)

BY: _____
(SIGNATURE)

(TYPED SIGNATURE)

(TITLE)

ATTEST/WITNESS:

* _____ **(*Witness must also complete page C-32)**
(SIGNATURE)

(TYPED SIGNATURE)

(TITLE)

SEAL:

**CONTRACT #2099
CERTIFICATE OF ACKNOWLEDGMENT
FOR CONTRACTOR (CORPORATION)**

STATE OF }
 S.S.
COUNTY OF }

BE IT REMEMBERED, that on this _____ day of _____, 2023 before me, a Notary Public of the State of _____ personally appeared * _____ (Witness), who, being duly sworn, doth depose and make proof to my satisfaction, that he/she well knows the corporate seal of _____ Contractor named in the foregoing contract, that the seal affixed is the proper corporate seal of said Contractor, that the same was so affixed thereto and the said contract signed by _____ who was at the date and execution thereof, the _____ of said company, in the presence of said deponent, as the voluntary act and deed of said company, and that the said deponent thereupon signed the same as subscribing witness.

NOTARY PUBLIC

SWORN AND SUBSCRIBED TO BEFORE

ME THIS _____ DAY OF

_____, 2023.

*

WITNESS' SIGNATURE

TYPED SIGNATURE

TITLE

***Please note – this page must be completed by the person who attested/witnessed the execution of the contract on page C-31.**

CONTRACT #2099

CERTIFICATE OF ACKNOWLEDGEMENT
FOR CONTRACTOR (INDIVIDUAL)

STATE OF }
 S.S.
COUNTY OF }

BE IT REMEMBERED, that on this _____ day of _____, 2023
before me a Notary Public of the State of _____ personally appeared
who being by me duly sworn, doth depose and make proof to my satisfaction, that he (she)
is the Contractor named in the foregoing contract, and the said contract signed by him (her)
voluntary act and deed.

(CONTRACTOR)

(TYPED SIGNATURE)

NOTARY PUBLIC:

SWORN AND SUBSCRIBED TO BEFORE

ME THIS _____ DAY OF

_____ 2023.

CERTIFICATE OF ACKNOWLEDGEMENT
FOR COMMISSION

STATE OF }
 S.S.
COUNTY OF }

BE IT REMEMBERED, that on this _____ day of _____, 2023
before me personally appeared **KIM DIAMOND**, (Commission Secretary) who being by me
duly sworn, doth depose and make proof to my satisfaction, that she well knows the
corporate seal of the North Jersey District Water Supply Commission, the Commission
named in the foregoing contract, that the seal thereto affixed is the proper corporate seal of
said Commission, that the same was so affixed thereto and the said contract signed by **DR.**
HOWARD L. BURRELL, who was at the date and execution thereof, the Chairman of the
North Jersey District Water Supply Commission, in the presence of the said deponent, as
the voluntary act and deed of the said Commission, and that the said deponent thereupon
signed the same as subscribing witness.

KIM DIAMOND, COMMISSION SECRETARY

NOTARY PUBLIC:

SWORN AND SUBSCRIBED TO BEFORE

ME THIS _____ DAY OF

_____ 2023

EXHIBIT “A”

**TECHNICAL SPECIFICATIONS AND GENERAL
REQUIREMENT**

CONTRACT #2099

SECTION 011000 GENERAL REQUIREMENTS

PART 1: GENERAL

1.01 SCOPE OF WORK

It is the intent of the Commission to solicit Bids from Contractors that have expertise in general construction, masonry, waterproofing and general small dam improvement construction. The Post Brook Dam is part of the North Jersey District Water Supply Commission's facilities located in Wanaque, Passaic County, New Jersey. The dam is located in Ringwood, New Jersey within the Wanaque Reservoir lands. The Post Brook Dam was built circa 1927. The dam was completed in late 1927 and is approximately 120 feet long and 10 feet high. The dam is a mortared stone masonry gravity dam that is founded on bedrock. The typical dam cross section consists of a vertical upstream face, approximately 5-foot wide crest and a 1H:2V sloping downstream face. The dam also has a gatehouse with two outlet structures housed inside that discharge a certain passing flow for the lake downstream.

The Scope of Work is to include, but not be limited to, outlet works replacement, re-constructing the downstream face of the dam to include leak repairs, masonry cleaning, joint re-pointing, masonry unit resetting, and masonry re-building (see Exhibits "C" & "D"). The work shall be based on the following information:

Exhibit "B" - 2017 Formal Inspection Report for Post Brook Dam

Exhibit "C"-Construction Drawings: Improvements to Post Brook Dam

The Successful Bidder shall be licensed in the State of New Jersey, shall have and provide upon request, demonstrable experience with general construction, masonry and dam repair. Bidders shall include references and at least ten (10) similar projects completed within their bids submitted to the Commission. In addition, the firm must own and maintain a local office within 100 miles of the Commission.

1.02 WORK INCLUDED

- A. The Contractor is to furnish all labor, equipment and materials required to comply with the Scope of Work of the Contract Documents/Specifications including the outlet works replacement, re-construction, leak repair, masonry cleaning, joint re-pointing and masonry unit resetting. Applicable tests, samples, shop drawings and certifications are to be provided in a timely manner in order not to delay the review process or the construction schedule.

CONTRACT #2099

1.03 SUBMITTALS

- A. Prior to starting work, the Contractor must submit the following:
 - 1. Shop drawings showing layout, details of construction, and identification of materials.
 - 2. Submit a Letter of Certification from the manufacturers which certifies all the material used for the project.

1.04 RELATED WORK

- A. Section 011000 - General Requirements (Submittals)
- B. Section 024000 - Removal of Structures
- C. Section 02600 - Pipe Line Installation
- D. Section 02602 – Leakage Test
- E. Section 02618 – Ductile Iron Pipe
- F. Section 04400 – Stone Masonry
- G. Section 04520 – Masonry Restoration
- H. Section 051200 – Structural Steel Framing
- I. Section 055000 – Metal Fabrication
- J. Section 055300 – Metal Gratings
- K. Section 3312 16.01 – Gate Valves Three Inches and Larger

1.05 WORK SEQUENCE

- A. Schedule and execute work to prevent excessive disruption of normal traffic patterns along the dams or roads to the project site. Care should be exercised to provide protection for any structures including, but not limited to, existing dams, curbing, sidewalks, storm inlets, railings and other structures associated with the project, not directly listed. The Contractor will be responsible for any damage and necessary repairs to the associated structures.
- B. Do not disrupt normal roadway operations or dam related activities. If required, a traffic control work summary outlining new traffic patterns during work hours as well as a traffic safety description.

1.06 USE OF THE PREMISES

- A. Before beginning the Work, the Contractor must secure approval from the Commission for the following:
 - 1. Areas permitted for personnel parking.
 - 2. Access to the site.
 - 3. Areas permitted for storage of materials and debris.
 - 4. Maintenance and Protection of facilities.
 - 5. Proposed traffic path of construction vehicles.
 - 6. Areas permitted for the location of cranes, hoists and chutes for loading

and unloading materials, if applicable.

- B. Commission-owned restroom facilities may not be used by the Contractor at any time.

1.07 EXISTING CONDITIONS

If discrepancies are discovered between the existing conditions and those noted on the drawings or in the technical specs, immediately notify the Commission by email and phone prior to commencing with the Work. Necessary steps shall be taken to review and resolve the discrepancy.

1.08 PRE-CONSTRUCTION CONFERENCE

- A. A Pre-construction meeting will be held at the job site prior to commencing Work. Contact the Commission if there are any questions.
- B. Prior to initiating construction work, the Contractor shall schedule and perform a job site inspection to observe actual conditions and verify all dimensions.

1.09 TEMPORARY FACILITIES AND CONTROLS

A. Temporary Utilities:

1. Provide all hoses, valves and connections for water (if applicable) from a source designated by the Commission when made available.
2. When available, electrical power should be extended as required from the source. Provide all trailers, connections and disconnects if applicable.

B. Temporary, Sanitary Facilities:

Sanitary facilities will not be available at the job site. The Contractor shall be responsible for the provision and maintenance of portable toilets or their equal.

C. Facility Site:

1. The Contractor shall use reasonable care and responsibility to protect the facility and site against damage. The Contractor shall be responsible for the correction of any damage incurred as a result of the performance of the Contract.
2. The Contractor shall remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the dam, or create a safety hazard for the vehicles driving on dam roads.

D. Security:

The Contractor must obey the Commission's requirements for personnel

CONTRACT #2099

identification, inspection and other security measures.

1.10 JOB SITE PROTECTION

- A. The Contractor shall adequately protect the structures, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The Contractor shall repair or be responsible for costs to repair all property damaged during construction.
- B. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- C. Store moisture susceptible materials above ground and protect with waterproof coverings.
- D. Remove all traces of piled bulk material, dispose properly of debris, and return the job site to its original condition upon completion of the Work.

1.11 SAFETY

The Contractor shall be responsible for all safety means and methods and shall comply with all applicable local, county, state and federal requirements that are safety related. **Safety shall be the responsibility of the Contractor.**

All involved personnel shall be instructed daily to be mindful of the full-time requirement to maintain a safe environment.

1.12 WORKMANSHIP

- A. Applicators installing material and related work shall be trained in the installation as per the manufacturer's specifications.
- B. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the Commission's satisfaction.
- C. There shall be a supervisor on the job site at all times while work is in progress.

PART 2: PRODUCTS

- A. Refer to the following Technical Specifications:

Exhibit "A"- Technical Specifications

PART 3: EXECUTION

The Contractor is to proceed with construction work only after the release to start the work is provided by the Commission.

CONTRACT #2099

The Contractor is to examine the conditions under which the dam repair work is to be performed and notify the Commission, in writing, of unsatisfactory conditions or conditions detrimental to the proper and timely completion of the Work. He is not to proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to the Commission.

The Contractor is to proceed with the Work only when the existing and forecast weather conditions will permit the work to be performed in accordance with the manufacturer's recommendations, using established procedures and approved schedules. The Contractor is to proceed only if he is willing to guarantee the Work without reservations or restrictions.

Workmanship is to be of the highest grade in every respect. All work is to be properly protected until the completion of the project. All materials are to be the best of their respective kinds.

Where there is a question as to the type of material to be used in the Work, or when any of several materials might reasonably be expected to perform the same function satisfactorily, the Contractor is to consult with the Commission to determine the choice of materials.

All materials are to be delivered to the site in original unopened containers or wrappings, bearing the manufacturer's name and brand name. All materials are to be carefully stored to protect them from the weather. An approved staging area for equipment and material shall be at the dam's staging area. However, it's the responsibility of the Contractor to secure and protect all equipment and material. All materials are to be kept dry during delivery, storage, and handling. Any materials damaged are not to be used.

END OF SECTION

* * * * *

SECTION 02 40 00 REMOVAL OF STRUCTURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the requirements for disassembly or demolition, removal and disposal of structures and sections of structures at locations shown on the Contract Drawings or as directed by the Engineer. The Work includes, but is not limited to the following:
 - 1. Removal of the following items within the outlet works: wood post, steel floor plate, ladder rungs, copper cylinder, and 8" diameter shear gate.

1.2 REFERENCES

Not Used

1.3 SUBMITTALS

Not Used

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Survey existing conditions and correlate with requirements indicated to determine extent and quantity of demolition required. Before structure removal begins, submit report of findings to the Engineer for review.

3.2 PROTECTION

- A. Protect all structures (or portions thereof) that are to remain during the demolition operations.
- B. Contractor shall design and install all necessary fall protection requirements for all personnel performing the work outlined in this contract. The fall protection procedures will follow OSHA regulations for such design and installation necessary in the demolition and erection required for this project.

3.3 STRUCTURE REMOVAL – GENERAL

- A. The Contractor shall be responsible for compliance with all Federal, State, and local laws and regulations relative to disposal by removal, and for obtaining all necessary permits and payment of fees for removal and disposal.
- B. Methods of structure removal shall be proposed by the Contractor and shall be subject to review by the Engineer. The Contractor shall determine the methods for removal and disposal of waste material generated from structure removal from the site.
- C. Blasting will not be permitted.
- D. Sequence of structure removal is the sole responsibility of the Contractor.

- E. Any voids resulting from the removal of structures shall be properly repaired or backfilled with an approved material within a reasonable and prudent time period.
- F. All materials resulting from structure removal that are not designated as adequate fill materials, or as reusable by the Engineer shall become the property of the Contractor and shall be removed from the site and disposed of by the Contractor, or otherwise disposed of, in accordance with all applicable laws, rules, and regulations.
- G. Precautions should be taken to prevent debris from entering any watercourse, particularly during high flow.
- H. Any structure removed and/or damaged outside the limits of structure removal shown on the Contract Drawings shall be repaired and/or replaced in kind at the expense of the Contractor.

END OF SECTION

SECTION 02600 PIPE LINE INSTALLATION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for all metallic and non-metallic pipe, fittings and specials of the type and quality as shown in the Contract Drawings and as specified for the pipe.

1.2 REFERENCES

- A. Materials and installation shall be in accordance with the latest edition and revision of codes, standards, and specifications from the following organizations, except where more stringent requirements have been specified herein:
 - 1. American Society of Testing and Materials (ASTM)
 - 2. American Water Works Association (AWWA)

1.3 SUBMITTALS

- A. In addition to those submittals identified in the General Provisions, the following items shall be submitted:
 - 1. Test reports, certifications, shop drawings and samples are required as set forth in the Sub-section entitled "Submittals" in the specification Section for the type of pipe to be installed.
 - 2. Layout drawings are required for pipelines to be installed within structures showing the location including the support system, fittings, sleeves, wall castings and appurtenances.

PART 2 - PRODUCTS

2.1 MATERIALS AND CONSTRUCTION

- A. Pipe
 - 1. Materials for the piping, joints and fittings shall be as specified in the Section for the type of pipe to be installed or as shown in the Contract Drawings.
 - a. Pipe and appurtenances shall comply with the applicable standards for its type of material.
- B. Joints
 - 1. Pipe joints shall be mechanical or push-on bell and spigot connections except as shown or noted on the Contract Drawings.
 - 2. Grooved and shoulder type joints of the rigid design may be used in lieu of flanged joints on ductile iron or steel pipe, only with the prior acceptance of the Engineer and only for pipe sizes acceptable to the Engineer.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Pipe and appurtenances shall be inspected by the Contractor in the presence of the Engineer on delivery and prior to installation for conformance with the standards and specifications.
 - 1. Materials not conforming to the standards and specifications shall not be stored on site but removed at once and replaced with material conforming to the specifications.

3.2 INSTALLATION - UNDERGROUND

A. General

- 1. Blocking will be permitted where the pipe is to be laid in concrete encasement.
- 2. No pipe shall be laid upon a foundation in which frost exists; nor at any time when there is danger of the formation of ice or the penetration of frost at the bottom of the excavation.

B. Location and Grade

- 1. Pipelines and appurtenances shall be located as shown on the Contract Drawings or as directed.
- 2. The alignment and grades shall be determined and maintained by a method acceptable to the Engineer.
- 3. Contractor shall document pipe invert elevations and provide elevation information to Engineer for inclusion on Record Drawings.

C. Joints

- 1. Joints shall be assembled using oakum, gaskets, lubricants and solvents as furnished by the pipe manufacturer and in accordance with the manufacturer's recommendations.

3.3 FINAL INSPECTION OF PIPELINE

- A. Each section of pipe shall be inspected before final acceptance.
 - 1. The inspection shall be by observation with illumination.
- B. The inspection shall determine the pipeline to be true to line and grade, to show no leaks, to have no obstruction to flow, to have no projections or protruding of connecting pipes or joint materials, shall be free from cracks and shall contain no deposits of sand, dirt or other materials.
- C. All deficiencies located during the inspection shall be corrected.

3.4 CUTTING AND SPECIAL HANDLING

- A. Field cuts of pipes shall be in accordance with the manufacturer's instructions.
- B. Where a pipe requires special handling or installation it shall be in accordance with the Section for that type of pipe.

3.5 LEAKAGE TEST

- A. All pipelines shall be tested for leakage in accordance with the Section 02602 - Leakage Test.

END OF SECTION

SECTION 02602 LEAKAGE TESTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for testing of all hydraulic structures and non-pressure piping for leakage as specified.
 - 1. The Contractor shall furnish labor, equipment, test connections, vents, water and materials necessary for carrying out the leakage tests.
- B. Testing shall be witnessed by the Engineer or the Owner at their request.

1.2 REFERENCES

- A. Materials and installation shall be in accordance with the latest revisions of the following codes, standards, and specifications except where more stringent requirements have been specified herein.
 - 1. American Society for Testing and Materials (ASTM)
 - 2. American Water Works Association (AWWA)

1.3 SUBMITTALS

- A. The following items shall be submitted:
 - 1. Reports of test results.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

3.1 TEST FOR NON-PRESSURE PIPELINES FOR TRANSPORT OF WATER

- A. General
 - 1. Contractor shall not encase pipeline within concrete until pipeline has passed all tests and inspections.
 - 2. Pipelines designed to carry water in open channel flow or at minimal pressures shall be tested for leakage prior to being placed in service.
 - 3. The leakage shall be determined by exfiltration.
 - a. The testing method directed by the Engineer shall take into consideration the groundwater elevation of the section of pipe being tested.
 - 4. Intermediate leakage tests during construction shall be made at the Contractor's discretion. Upon completion of any pipeline, the entire system including manholes shall be tested for compliance to allowable leakage.
 - 5. If the line fails the test, the Contractor shall explore for the cause of the excessive leakage and after repairs have been made the line shall be retested. This procedure shall be repeated until the pipe complies.

B. Exfiltration Testing

1. Exfiltration tests shall be made by filling a section of pipeline with water and visually checking the pipe for leakage.
2. Any leaks detected shall be permanently stopped.

END OF SECTION

SECTION 02618 DUCTILE IRON PIPE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for centrifugally cast ductile iron pipe and fittings as indicated in accordance with the Contract Documents.

1.2 REFERENCES

- A. Materials and installation shall be in accordance with the latest edition and revision of codes, standards and specifications from the following organizations, except where more stringent requirements have been specified herein:
 1. American National Standards Institute (ANSI)
 2. American Water Works Association (AWWA)
 3. American Society for Testing and Materials (ASTM)

1.3 SUBMITTALS

- A. In addition to those submittals identified in the General Provisions, the following items shall be submitted:
 1. The manufacturer shall furnish statements that all of the specified tests have been made and the results thereof comply with the requirements of the specified standards.
 2. Pipe and joint details.
 3. Layout drawings for ductile iron pipe to be installed within structures showing the location including details of the support system, joint restraints, sleeves and appurtenances.

PART 2 - PRODUCTS

2.1 MATERIALS AND CONSTRUCTION

- A. Ductile Iron Pipe
 1. Ductile iron pipe and ductile iron fittings shall comply with the following standards:

ANSI/AWWA

Ductile Iron Pipe	C151
Fittings	C110
Joints-Mechanical and Push-On	C111
Joints-Flanged	C115
Cement Lining	C104
Polyethylene Encasement	C105
Compact Fittings	C153

- B. All shipments of material shall be tested in accordance with the provisions for testing in the applicable standards.

2.2 ACCESSORIES

A. Joints

1. The type of joints for ductile iron pipe and fittings shall be Push-On type joints unless otherwise shown on the Contract Drawings.
2. Flanged joints shall be assembled with through bolts of the size required for the pipe being installed. Stud bolts shall be used only where shown or required. Connecting flanges shall be in proper alignment and no external force shall be required or used to bring them together. Ductile iron pipe to be used with flanged joints shall be AWWA Thickness Class 53.
 - a. Flanges for flanged joints shall be drilled for 125 psi pressure unless otherwise specified.
 - 1) Flange bolts and nuts shall be steel, ASTM A307, Grade B, and shall be cadmium plated unless otherwise indicated in the Contract Documents. Cadmium plating shall be a thickness of 0.0003 to 0.0005 inches.
 - 2) Flange bolts and nuts shall be stainless steel for buried or submerged locations.
 - 3) Gaskets for flanged joint piping shall be full-faced, 1/8 inch thick rubber gaskets meeting requirements of AWWA C111 for water and sewage application.
 - 4) Gaskets for other service shall be as specified.
3. Grooved and shoulder type joints of the rigid design will not be allowed in lieu of flanged joints without the prior acceptance of the Engineer, except where specifically called for in the Contract Documents. Grooved and shoulder type joints of the rigid design shall be in accordance with AWWA C606 and Table 5 for iron pipe.
 - a. Bolts and nuts shall be cadmium plated steel. Bolts and nuts shall be stainless steel for buried or submerged locations.
 - b. Details of supports, anchors and couplings shall be submitted for review.
4. "Dresser" couplings shall be manufactured by Dresser Industries, or approved equal, and shall be properly sized for the outside diameter of the pipe. Temporary pipe supports shall be used to align the two pipe sections prior to fitting of the coupling.

2.3 COATING, PAINTING, AND LINING

- A. Coating, painting and lining shall be as follows unless otherwise indicated in the Contract Document:
 1. Pipe installed in the ground, in exposed exterior locations, in contact with water or inside structures but not specified for painting:

Interior:	Standard thickness cement lining with sealcoat unless otherwise specified.
Exterior:	None.

PART 3 - EXECUTION

3.1 INSTALLATION AND HANDLING

- A. Ductile iron pipe shall be installed in accordance with the applicable provisions of Section 02600 - PIPELINE INSTALLATION.
- B. All ductile iron pipe and fittings shall be handled with padded slings or other appropriate equipment. The use of cables, hooks or chains will not be permitted.

3.2 FIELD TESTING

- A. Perform hydrostatic and leakage tests in accordance with the applicable provisions of the Section 02602 - LEAKAGE TESTS, at the test pressure specified or scheduled.

END OF SECTION

SECTION 04400 STONE MASONRY

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Provide stone masonry work as shown and specified. The work includes repair of existing rubble stone masonry non-overflow section and abutments.

1.2 QUALITY ASSURANCE

- A. Materials and methods of construction shall comply with the following standards and association recommendations:
 - 1. North Jersey District Water Supply Commission standards.
 - 2. American Society for Testing and Materials, (ASTM).
- B. Comply with the applicable requirements of local governing authorities and the latest edition of ACI 530, Building Code Requirements for Masonry, for the types of stone masonry construction indicated.
- C. Stone standards:
 - 1. Stone type, quality, strength, color etc. shall match with existing on-site stone.
- D. Installation: Performed only by experienced stone masons (5 years minimum on historic projects) in accordance with the Secretary of the Interior's Standards for Historic Preservation, with satisfactory record of performance on complete projects of comparable size and quality.
- E. Sample panel: Before starting stone masonry work, provide a sample panel and/or pier using materials, bond, and joint tooling indicated for the project work. Build panel at the site of full thickness. Provide the range of color, texture, and workmanship proposed for the work. Correct and rebuild sample panel until the Owner's acceptance of the work. Retain panel during construction as a standard for completed stone masonry work.
 - 1. The approved sample panel may be a portion of the work and remain in place. Location as directed by the Engineer.
 - 2. Provide a sample panel for each type of stone masonry required.
- F. Provide each type of stone from only one quarry to ensure consistent color range and texture.
- G. Do not change source or brands of mortar materials during the course of the work.

1.3 SUBMITTALS

- A. Submit manufacturer's product data for each type of stone, colored mortar, and accessory required.
- B. Submit samples of each type and color of stone required. Include the full range of exposed color and texture proposed for the work. Provide cut stone samples not less than 12" x 12" in size.
- C. Submit samples of colored mortar selected for the work.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Stone masonry materials:
 - 1. Deliver, store, and handle rough stone materials to prevent soiling and damage. Stack rough stone materials off the ground.
- B. Masonry accessories: Deliver, store, and handle masonry accessories to prevent weather damage and deterioration.
- C. Mortar materials:
 - 1. Deliver cement, lime, and admixture materials in manufacturer's unopened and undamaged containers with labels intact and legible. Store materials off the ground, under cover, and protect from weather damage and deterioration.
 - 2. Stockpile and handle aggregates to prevent mixing with foreign materials.

1.5 PROJECT CONDITIONS

- A. Do not use metal accessories with loose coatings, including ice, which will reduce bond.
- B. Protect partially completed stone masonry work against weather damage and moisture, when work is not in progress. Cover tops of walls with strong, waterproof, non-staining membrane. Extend membrane at least 2'-0" down both sides of walls and hold securely in place.
- C. Brace unsupported and newly laid masonry walls. Maintain bracing in place until walls reach design strength.
- D. Cold weather construction:
 - 1. Precondition masonry materials to maintain 50 degrees F. when installed.
 - 2. Do not install stone masonry work when the temperature of the outside air is below 40 degrees F. and falling unless suitable means acceptable to the Project Coordinator are provided to protect work from cold and frost and ensure that mortar will set without freezing. Comply with International Masonry Industry All-Weather Council cold weather construction and protection recommendations.
 - 3. No masonry work will be permitted when outside air temperature is below 25 degree F.
 - 4. Do not use frozen materials or materials mixed or coated with ice or frost.
 - 5. Do not build on frozen work. Remove and replace masonry work damaged by frost or freezing.
 - 6. Do not use anti-freeze or calcium chloride in any mortar.
 - 7. Protect completed masonry work against freezing for not less than 4 days after laying.
- E. Protect sills, ledges, and projections from mortar droppings. Remove excess mortar and stains as work progresses.
- F. Protect adjacent work from damage, soiling, and staining during masonry work operations.

PART 2 - PRODUCTS

2.1 ROUGH STONE MATERIALS

- A. Reuse existing stone or on-site borrow stone wherever possible.
- B. Rough stone: Matching existing or
 - 1. Quarried/supplied by: On-site borrow or <insert supplier> or approved equal.
 - 2. Color range: Match existing on-site stone.

3. Surface finish:
 - a. Random rubble stone pattern to match existing.
4. Size: Match existing on-site stone and as shown on the drawings.
5. Grade/quality: Match existing on-site stone.
- C. Natural variations in color and markings which are characteristics of the stone materials and do not impair strength or appearance are acceptable. Provide only sound stone, free from defects detrimental to appearance and durability.
- D. Color range, texture, and finish of rough stone materials shall be within the range of the Project Coordinator's accepted samples.

2.2 STONE ACCESSORIES

- A. Masonry veneer ties: Corrugated metal, not less than 7/8" wide x 7" long, size to extend to within 3/4" of masonry veneer face. Provide 20 gage steel with hot dipped galvanized finished steel materials.
- B. Anchoring devices: Provide strap anchors, inserts, and rods of type and size indicated. Provide stainless steel materials.
- C. Cut stone anchors: Stone fabricator shall design anchorage system to securely fasten stone work in place. All dowels, anchors, bolts, nuts and washers in contact with stone work fabricated from type 304 stainless steel, other materials hot-dip galvanized steel.
 1. Indicate all materials, conditions and designs on shop drawings.
 2. Provide structural design calculations, when requested, by the Project Coordinator.
- D. Setting pads and shims: stainless steel, aluminum or plastic of thickness required for joint size required and of size required to maintain uniform joint width.
- E. Joint sealants: Non-staining elastomeric type, two component polysulfide or polyurethane complying with FS TT-S-00227 and recommended by the manufacturer for joint sealants for natural stone materials.
 1. Color selected by the Project Coordinator.
 2. Color: match existing.
- F. Weeps: 1/4" diameter clear plastic tubing.

2.3 MORTAR MATERIALS

- A. Portland cement: ASTM C150, Type I, white non-staining type.
- B. Masonry cement: ASTM C91, white non-staining type.
- C. Hydrated lime: ASTM C207, Type S.
- D. Aggregate: ASTM C144, clean masonry sand, 100% passing #16 sieve.
 1. White mortar: Natural white sand or ground white stone.
- E. Water: Clean, fresh and potable.
- F. Colored mortar pigment: Lime proof and alkali-proof mineral oxide pigments.
 1. Manufacturer and type: To be approved by Project Coordinator, submit sample.
 2. Color selected by the Project Coordinator.

2.4 STONE MORTAR MIXES

- A. Setting mortar: 1 part non-staining masonry cement, 1 part hydrated lime, and 6 parts

damp loose sand.

- B. Pointing mortar: 1 part non-staining cement, 1/2 part hydrated lime, and 4 parts damp loose sand.
- C. Grout: 1 part non-staining Portland cement, 1-1/2 part damp loose sand.
- D. Measure and batch materials either by volume or weight. Use accurate measuring devices to ensure uniformity and coloration of mix. Shovel count measurement of sand is not acceptable.
- E. Mix cementitious materials and aggregate in a clean mechanical mixer for at least 5 minutes. Add water in amount to provide satisfactory workable consistency of mortar.
- F. Proportion colored mortar pigment with other ingredients to match the approved samples.
- G. Re-temper mortar as required within 2 hours of mixing to replace water lost by evaporation. Use and place mortar in final position within 2-1/2 hours of the initial mixing. Discard mortar after 2-1/2 hours of the initial mixing.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine substrates and installation conditions. Do not start stone masonry work until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Establish lines, levels, and coursing.
- B. Clean rough stone work before setting by thoroughly scrubbing with fiber bristle brushes and clean water. Drench stone with clean water just prior to setting.
- C. Ferrous metal: Where stone work will contact ferrous metal surfaces concealed in construction (anchors, supports, structural framing, and similar surfaces) apply a heavy coat of bituminous paint on metal contact surfaces prior to setting stone.
- D. Do not use stone units with chips, cracks, voids, stains, or other visible defects.
- E. Remove all shrubs, tree roots prior to preceding any masonry work.

3.3 INSTALLATION: ROUGH STONE

- A. Installation: Performed only by experienced stone masons, (5 years minimum on historic projects) in accordance with the Secretary of the Interior's Standards for Historic Preservation, with satisfactory performance on projects of comparable size and quality.
- B. Re-set existing rough stone rather than install new rough stone wherever possible.
- C. Provide necessary field cutting as stone is installed.
- D. Select stone at the job site and install materials to provide an even distribution of various colors throughout the work. Maintain stone as clean as possible as work progresses.
- E. Erect rough stone to align with surrounding existing masonry surface, accurately set in position, securely anchored to substrate.
 - 1. Provide a rustic rubble uncoursed ashlar pattern, nominal 4" rough bedded, utilizing random size pieces with small pieces used for filling and chinking.
- F. Lay stone with full mortar coverage on horizontal and vertical joints.
 - 1. Provide joints tooled with tool. Repointing: Rake out mortar joints to depth of at least one inch or to sound mortar beyond one inch. Point with new mortar in layers of no

more than one half depth as each layer hardens to thumb print hardness. Tool joint with jointer. Mortar joints shall match size, texture, profile, and color of mortar joints in existing stone wall.

- G. Anchor rough stone to back-up with corrugated wall ties spaced not over 16" on center vertically and horizontally.

3.4 **CLEANING**

- A. Clean stonework not less than 6 days after completion of work, using clean water and stiff-bristle brushes. Do not use wire brushes, acid type cleaning agents or other cleaning compounds with caustic or harsh fillers.
- B. Upon completion of the work, remove from site all excess materials, debris, tools, and equipment. Repair damage resulting from stone masonry work operations.

END OF SECTION

SECTION 04520 MASONRY RESTORATION

PART 1 - GENERAL

1.1 SECTION INCLUDED

- A. Provide all labor, equipment, materials, and services required to complete the work shown on the Contract Drawings and as specified herein.
- B. The Contract Drawings define three Masonry Repair types which may include the following masonry restoration work:
 - 1. Pointing
 - a. Repoint area of stone masonry where indicated.
 - b. Place grout/report areas of rubble masonry.
 - 2. Masonry Rebuilding
 - a. Replace failed masonry with material to match existing.
 - b. Repair broken or cracked stones by rebuilding with mortar, for whole missing units at water line, rebuild with matching stone.
 - 3. Patching
 - a. Removal and replacement of all loose and/or deteriorated cementitious patches.
 - 4. Accessories:
 - a. Stainless steel or clear plastic cushions/shims to maintain joints.
 - b. Installation of new stainless steel mechanical anchors.

1.2 RELATED SECTIONS

- A. Section 04400 Stone masonry

1.3 REFERENCES

- A. National Building Granite Quarries Association, Inc. (NBGQA): Specifications for Building Granite.

1.4 QUALITY ASSURANCE

- A. Contractor performing the work of this section shall have a minimum of ten (10) years experience in masonry repointing and restoration, and shall have successfully completed three masonry restoration projects of a similar historic nature within the previous five years.
- B. Contractor shall, if requested by the Commission, submit a statement describing the experience and qualifications of the firm and of key personnel who will work on this project. Include the names and address of projects successfully completed, and for each, the name and address of the Owner, and the name and address of the Architect, if any.
- C. Contractor shall submit qualifications of Testing Agency for analysis of historic materials.
- D. For conditions where on site borrow stone is not feasible, contractor shall have Single Source Responsibility for Stone:
 - 1. Obtain each color, grade, finish, type and variety of stone from a single quarry with

resources to provide materials of consistent quality in appearance and physical **properties**, including the capacity to cut and finish material without delaying the progress of work.

2. Obtain materials for masonry restoration from a single source for each type of material required, including face brick, cement, sand, etc. to ensure match of quality, color, pattern, and texture.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01350.
- B. Work Plan:
 1. A fully written step-by-step description of the entire proposed project, including procedures and methods for each type of work. Do not proceed with the work of this section until the work plan is approved by the Commission and Engineer. Work plan shall emphasize methods of protecting historic fabric, and detailed description of materials, methods and equipment to be used for each phase of restoration work.
 2. If alternative methods and materials to those indicated are proposed for any phase of restoration work, provide written description, including evidence of successful use on other comparable projects, and program of testing to demonstrate effectiveness.
- C. Product Data: Provide manufacturer's data on the following:
 1. Design mix data for mortars, grout, and settings.
 2. Stone patching mortar.
 3. One (1) of each type mechanical anchor. Provide letter of verification from manufacturer that anchor is appropriate.
 4. Dowels for patch anchorage.
 5. Submit manufacturer's product literature for epoxy adhesives or resins including mixing instructions.
- D. Samples: Submit the following:
 1. Each type of sand used for pointing mortar.
 - a. For blended sands, provide samples of each component and blend. Identify sources, both supplier and quarry, of each type of sand.
 2. Complete color range of stone patching mortars.
 3. Stone replacement units from on-site borrow or quarry (where required).
- E. Quality Control Submittals: Submit the following information related to quality assurance requirements for matching of historic material:
 1. Design data: Submit proposed mix designs and test data before mortar and grouting operations begin.

1.6 FIELD SAMPLES

- A. Test Panels: Contractor shall prepare sample panels for the following work, to be used as a quality standard for the work on this Section.
 1. Repointing: Prepare minimum 10 square-foot test panel. Rake out and repoint joints using methods specified to establish workmanship and tooling to be used. One sample area shall be left temporarily unpointed to demonstrate methods and quality of workmanship expected in removal of mortar from joints.
 2. Stone patching mortar: Color-match patch samples fabricated on pieces of appropriate

masonry on the dam using the specified repair mortar as indicated. All samples must be applied to masonry. Prepare samples in an area where they will be exposed to the same conditions as on the dam during curing. Allow samples to cure at least three days before obtaining the Commission's approval for color match.

- B. Approved sample panels and test procedures shall become part of the work, and shall serve as a quality standard for all other work on the dam.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, protect, and handle products under provisions of Section 01610.
- B. Maintain packaged materials clean, dry, and protected against dampness, freezing and foreign matter in accordance with manufacturer's written instructions.
- C. Protect stone during storage and construction against moisture, soiling, staining, and physical damage.
- D. Handle stone to prevent chipping, breakage, soiling, or other damage. Do not use punch or wrecking bars without protecting edges of stone with wood or other rigid materials. Lift with wide-belt type slings wherever possible: do not use wire rope or ropes containing tar or other substances which might cause staining. If required, use wood roller and provide cushion at end of wood slides.
- E. Store stone on wood skids or pallets, covered with a non-staining waterproof membrane. Place and stack skids and stone to distribute weight evenly and to prevent breakage or cracking of stone. Protect stored stone from weather with waterproof, non-staining covers or enclosures, but allow air to circulate around stone.

1.8 ENVIRONMENTAL REQUIREMENTS

- A. Weather conditions. No work in this section shall be executed when the ambient temperature is less than 40 degrees F and rising, or 45 degrees F and falling, or higher than 90 degrees F. No pointing shall be executed when freezing temperatures are expected within 48 hours.
- B. Stone Patching Mortar. In addition to weather conditions described above, protect mortar from direct sunlight and wind using submitted and approved protection measures when ambient air temperature exceeds 70 degrees F. Do not use or prepare mortar when ambient air temperature exceeds 100 degrees F.
- C. The Contractor shall be responsible for protecting all existing adjacent materials during the execution of work.
 - 1. Prevent grout or mortar used in repointing and repair work from staining face of surrounding masonry and other surfaces. Immediately remove grout and mortar in contact with exposed masonry and other surfaces. Protect sills, ledges, and other projections from mortar droppings.
- D. The Contractor shall repair all damage to adjacent materials caused by execution of this section at no expense to the Commission. Damaged materials shall be repaired or replaced by mechanics experienced in the respective type of work to the satisfaction of the Commission.
- E. Additional Work Required: during the course of the work, it may become apparent that within areas to be restored, additional masonry restoration work may be required, other than as indicated on the Contract Drawings. Report areas requiring additional work to the Commission for evaluation.

1.9 COORDINATION

- A. Coordinate work under provisions of Section 01311.
- B. Coordinate schedule and installation with surrounding related Work.
- C. Sequencing/Scheduling: Perform Masonry Restoration work in the following sequence:
 - 1. Perform Masonry Cleaning work specified on the Contract Drawings.
 - 2. Perform Masonry Inspection, Evaluation or Summary Reports specified on the Contract Drawings.
 - 3. Perform Masonry Restoration work as specified on the Contract Drawings and in this Section, except for raking of joints and repointing.
 - 4. Rake-out mortar joints indicated to be repointed as specified in this Section.
 - 5. Repoint mortar joints indicated to be repointed as specified in this Section.
 - 6. Final cleaning of masonry surfaces to remove excess mortar as specified in this Section.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Jahn Stone Patching Mortar: Provide materials from the following manufacturer:
 - 1. Cathedral Stone Products, Inc., Jahn Restoration Mortars, 7266 Park Circle Drive, Hanover, Maryland 21076 (800-684-0901), www.jahnmortars.com / www.cathedralstone.com
- B. Masonry Adhesives: Bonstone Materials Corporation, 707 Swan Drive, Mukwonago, WI 53149 (800-425-2214).
- C. Substitutions: Unless noted otherwise, substitutions will be considered under provisions of Section 01630.

2.2 MATERIALS

- A. Stone: On-site borrow or rough granite conforming to ASTM C 615. Natural building stone of type (classification), finish, color, texture, size, depth, width, and typical lengths to match existing, and as indicated on Contract Drawings.
- B. Mortar Materials: ASTM C270.
 - 1. Natural Moderately Hydraulic Lime (NHL 3.5): colored to match existing mortar.
 - a. Available Distributors and Manufacturers:
 - 1) Pennsylvania Lime Works, distributors of St. Astier Natural Moderately Hydraulic Lime (NHL 3.5), Milford Square, PA, 215-536-6706.
 - 2) Virginia Lime Works, distributors of Otterbein Natural Hydraulic Lime (NHL 3.5), Monroe, VA, 434-929-8113.
 - 2. Mortar Sand: ASTM C 144, unless otherwise indicated.
 - a. Color: Provide natural sand or ground marble, granite, or other sound stone, of color necessary to produce required mortar color.
 - b. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands, if necessary, to achieve suitable match.
 - 3. Water: Potable.
- C. Grouting Mortar for Concealed Cavities: ASTM C 476
 - 1. White Portland Cement: ASTM C 150, Type I, non-staining, without air entrapment.

2. Hydrated Lime: ASTM C 207, Type S.
3. Aggregate: ASTM C 404.
4. Water: Clean and potable.
5. Admixtures: no admixtures are permitted.
- D. Rebuilding Mortar for Exposed Surfaces/Rubble Masonry:
 1. Same as pointed mortar.
- E. Anchoring Devices:
 1. Provide all anchors, dowels, and other anchoring devices required to properly support stonework.
 2. Dowels: Threaded rod of sizes and length appropriate for application, Type 302 or 304 stainless steel.
- F. Masonry Adhesives: Bonstone Touchstone Clear Gel Systems, two-part knife grade epoxy past, clear resin gel.
- G. Cushions used to Maintain Joints: Stainless steel or clear plastic of thickness required for the joint size indicated. Do not use wood shims.
- H. Stone Patching Mortar: Pre-mixed cementitious patching material formulated to match the color and texture of the existing masonry that does not contain any acrylic, latex, or other synthetic polymer additives.
 1. Jahn Restoration Mortars M70, M150, M160 as recommended by manufacturer.
 2. Edison System 45 Masonry Repair Compounds as recommended by manufacturer.
 3. Bonding Agent: Only as required, if required, by patching manufacturer.
 4. Aggregate for Finish Matching: Appropriate aggregate (granite dust, etc.) to add to the surface for proper finish, color, and texture matching.

2.3 MORTAR MIXES

- A. Mortar Mixes, General: The following mixes are given as a guide to indicate relative physical properties for pointing and setting applications. Final mixes will be approved based on requirements of Article 1.05 of this Section.
 1. Contractor to submit recommended mortar and grout mix designs.
 2. Produce mortar of color required by using selected ingredients.
 3. Guide mix for mortar for repointing.
 - 1 part white Portland cement by volume
 - 2.5 parts Natural Hydraulic Lime (NHL 3.5) by volume
 - 8 parts sand by volume
- B. Mortar Mixing Procedures:
 1. Mix mortars in accordance with ASTM C 270
 2. Measure materials by volume or equivalent weight. Do not measure by shovel.
 3. Mix ingredients in clean mechanical batch mixer 3-5 minutes.
 4. Let mortar sit 20 minutes prior to use to allow for initial shrinkage. Place mortar in final position within 2 hours of mixing. Do not retemper or use partially hardened material.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify site conditions under provisions of Section 01610 and the Contract Drawings.
- B. Verify, by field measurement, those dimensions affecting the work. Coordinate with shop drawing submittal.

3.2 REPOINTING

- A. General: Repoint areas of stone shown on the Contract Drawings.
- B. Joint Raking: Rake out deteriorated mortar joints of the exterior surface of the dam areas identified to be repointed. Joints shall be raked by hand using a chisel $\frac{1}{4}$ " or less in width. Clean all mortar from surfaces within the joint so that the new pointing mortar bonds to the building material, not old mortar. Do not chip or spall edges of the stone. If work is found unacceptable, all raking will cease without additional cost to the Commission until deficiencies in tools, workmanship or methodologies have been corrected to the Commission's satisfaction.
 - 1. For raking joints, Contractor may propose alternate hand held equipment, such as a hand held air chisel as manufactured by Hilti. Prior to proceeding, obtain written approval from the Commission based on submission by Contractor of a satisfactory quality control program and demonstrated ability of operators to use tools without damage to masonry. Quality control program shall include provisions for supervising performance and preventing damage due to worker fatigue. Mechanical grinding is unacceptable. If air chiseling is found unacceptable, Contractor shall use only non-power hand tools.
- C. Joint depth shall be at least 2-1/2 times joint width but in all cases rake back to expose sound mortar.
- D. Brush, vacuum, or flush joints or cracks to remove all dirt and loose debris.
- E. Apply mortar in $\frac{1}{4}$ " thick layers, allowing each layer to reach thumb-print hardness before applying the succeeding layer.
- F. When the final layer of mortar is thumb-print hard, tool joint to match existing. Avoid feather edging of mortar joints.
- G. Keep joints damp for 72 hours after repointing.
- H. As work proceeds, remove excess mortar from edge of joint by brushing. Remove any stray mortar with bristle brushes after mortar dries but before it hardens.

3.3 STONE REMOVAL AND REPLACEMENT

- A. Preparation:
 - 1. Carefully remove by hand at locations indicated, any stone which has deteriorated, shifted, is damaged beyond repair, or is scheduled for removal to access or install other work.
 - 2. All existing stones removed and scheduled for reinstallation, shall be reinstalled in their original position, unless noted otherwise.
 - 3. Coordinate installation of items required for stonework that are to be installed by others.
 - 4. Remove mortar, loose particles, and other debris from salvaged stone and stone surrounding removed units in preparation for resetting. Clean stone surfaces prior to setting, using fiber brushes followed by a thorough drenching with clear water. No cleaning compounds or detergents shall be allowed.

B. Setting Stone

1. Replace removed stone with salvaged stone, where possible, or with new stone to match existing.
2. Use skilled stone-fitters to perform field-cutting when required. Cut stone with power saws. Cut exposed edges straight and true.
3. Coordinate stoneworks installation with other work. Close up temporary openings, after other work is complete, with work matching work already installed.
4. Set stone as indicated on the Contract Drawings.
5. Set stone in patters indicated to match existing, with uniform joints of dimension to match existing.
6. Setting tolerances:
 - a. Variation from plumb of vertical lines, corners and surfaces. Do not exceed $\frac{1}{4}$ inch in 10 feet; $\frac{3}{8}$ inch in 20 feet maximum; or $\frac{1}{2}$ inch in any length over 40 feet.
 - b. Variation from level of horizontal lines, corners, and level surfaces: Do not exceed $\frac{1}{2}$ inch in 20 feet maximum, or $\frac{3}{4}$ inches in any dimension over 40 feet.
 - c. Variation from position in plan: Do not exceed $\frac{1}{2}$ inch in 20 feet maximum, or $\frac{3}{4}$ inch in any dimension over 40 feet.
 - d. Variation between face surfaces of adjacent pieces of stone and adjacent panels: Do not exceed plus or minus $\frac{1}{8}$ inch.

C. Mortar Joints:

1. Wet stones thoroughly at time of setting. All joint surfaces not thoroughly wet shall be drenched with clear water just prior to setting.
2. Lay stones with fully mortared bed and head (vertical) joints, unless otherwise indicated.
3. Use setting buttons or shims under heavy stones in same thickness as joint, and in sufficient quantity to prevent mortar from being squeezed out. Set buttons back from face of stone at least the width of joint.
 - a. For heavy stones, also wait until mortar supporting stones below has hardened.
 - b. Support cantilevered and unbalanced stones until work above is complete.

D. Pointing:

1. Mortar shall be flush with surrounding masonry units; remove all unsound mortar.
2. Where mortar has been removed to different depths, apply layers of pointing mortar a maximum of $\frac{3}{8}$ inch thick to form a joint of uniform depth.
3. Point joints with 3 layers of pointing mortar.
 - a. Compact each layer fully and allow to become hard to the touch before placing next layer.
4. Tool joints promptly when mortar becomes hard to the touch.

3.4 MASONRY PATCHING**A. Preparation:**

1. Do not use any additives such as bonding agents, accelerators, or retarders in the mortar without prior written approval from the manufacturer of the patching mortar.
2. Adhere to instructions and recommendations provided by manufacturer of patching mortar.

3. Remove any existing patches which have failed.
4. At areas to receive patches, remove all loose mortar and masonry. Cut away an additional $\frac{1}{2}$ " of substrate to ensure the surface to be patched is solid and stable. "Sound" masonry with a hammer to verify its integrity.
5. Cut the edges of the repair area to a minimum depth as recommended by manufacturer.
6. Roughen the substrate surface as required to achieve the surface roughness recommended by the manufacturer for good bond, but do not damage the substrate surface.
7. For deep patches, install dowels according to manufacturer's installation instructions.
8. Clean all pores from surface and pores of the substrate, using clean water and scrub brush. Leave surface damp for optimum bond.

B. Installation:

1. Mix mortar according to manufacturer's recommendations for each application.
2. Apply patching mortar according to manufacturer's written instructions.
3. Allow material to set, cure, and finish according to manufacturer's written instructions. Finish texture shall match surrounding existing materials.
4. Apply aggregate to match surrounding material; add to the surface of the damp mortar.

3.5 STONE REPAIR

A. Crack Repair of Stone

1. For cracks, clean crack of dirt, dust, algae growth by brushing with small fiber bristle brush. Remove all loose chips or particles of stone from crack.
2. Inject the specified patching mortar per the manufacturer's recommendation. Finish flush with adjacent surfaces.
3. Clean excess mortar from the face of stone before it hardens.

B. Reattachment of Loose Pieces of Stone:

1. Carefully remove loose stone pieces. Minimum size piece requiring reattachment: 2 square inches of exposed area. Reuse only pieces of spalled stone which are in sound condition.
2. Remove soil, loose stone particles, mortar, algae growth, and other debris and foreign material from surfaces to be bonded of both the fragment and the stone from which it was removed, by cleaning with a stiff fiber bristle brush. Surfaces must be dry prior to attachment.
3. Apply adhesive according to manufacturer's written instructions. Coat bonding surface of building stone with masonry adhesive completely filling all voids and covering all surfaces. Fit stone fragments onto building stone while adhesive is still tacky and hold fragment securely in place until adhesive has cured. Do not place adhesive near edge of fragment or base piece to allow for "squeeze-out". Remove all excess adhesive from face of stone immediately after placing.
4. After adhesive has fully cured, further anchor fragments larger than 6" x 6" for any dimension with $\frac{3}{8}$ " diameter threaded stainless steel rods set into holes drilled at 45 degree downward angle through the face of the stone. Center and space the anchor rods not more than 4" and not less than 3" apart, and no less than 2" from any edge. Provide a minimum of two (2) anchors per stone. Fill the holes with epoxy adhesive and insert the rods so that they extend no less than 2" into the backup masonry and are countersunk no less than $\frac{3}{4}$ " from the face of the stone.

5. Clean any residual adhesive from edges. Wet stone and fill any chipped areas and drill holes with patching mortar. Avoid feather edging. Finish flush with surface of stone and furnish to match texture and color of surrounding stone surfaces.

3.6 FIELD QUALITY CONTROL

- A. Perform field inspection under provisions of Section 01450.
- B. Field inspections shall comply with the City of Philadelphia Building Code Special Inspections, including but not limited to testing of mortar and grout and construction operations, including protection during cold weather. Required Special Inspection reports shall be furnished directly to the code official and the Project Coordinator.

3.7 PROTECTION AND CLEANING

- A. Remove and replace stone units which are broken, chipped, stained, or otherwise damaged. Where directed, remove and replace units which do not match adjoining stonework. Provide new matching units installed as specified to eliminate evidence of replacement.
- B. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar, repair materials, and foreign matter using stiff nylon or bristle brushes and clean water spray applied at low pressure (under 500 psi).
- C. Use of metal scrapers or wire brushes will not be permitted. Use of acid or alkali cleaning agents will not be permitted.
- D. Provide final protections and maintain conditions which ensure stonework will be protected from damage, discoloration, or deterioration during subsequent construction.

END OF SECTION

SECTION 05 12 00 STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes structural steel, as shown on the Contract Drawings, complete including framing members, base and anchor plates, connections, grouting under base and anchor plates, fabrication, delivery and installation.

1.2 REFERENCES

- A. Materials and installation shall be in accordance with the latest revisions of the following codes, standards and specifications, except where more stringent requirements are specified herein:
 - 1. American Society for Testing and Materials (ASTM)
 - a. ASTM A6 - General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling.
 - b. ASTM A36 - Carbon Structural Steel.
 - c. ASTM A123 - Zinc (Hot Dipped Galvanized) Coatings on Iron and Steel Products.
 - d. ASTM A153 - Zinc Coating (Hot Dip) on Iron and Steel Hardware.
 - e. ASTM A325 - Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 - f. ASTM A992, Grade 50 - Structural Steel Shapes.
 - g. ASTM F959 - Compressible - Washer - Type Direct Tension Indicators for Use with Structural Fasteners.
 - h. ASTM F1554 - Anchor Bolts, Steel, 36, 55 and 105 KSI Yield Strength.
 - 2. American Welding Society
 - a. AWS D1.1 - Structural Welding Code.
 - b. AWS A2.0 - Standard Welding Symbols.
 - 3. American Institute of Steel Construction
 - a. ANSI/AISC 360-10- Specification for the Design Structural Steel for Buildings.
 - 4. SSPC - Steel Structures Painting Council.
 - 5. Research Council on Structural Connections (RCSC) Specification for Structural Joints Using A325 or A490 bolts.

1.3 SUBMITTALS

- A. In addition to those submittals identified in the General Provisions, the following items shall also be submitted:
- B. Product data for each type of product indicated.
- C. Shop drawings showing fabrication of structural-steel components.
 - 1. Include profiles, sizes, spacing and locations of structural members, details of cuts, connections, splices, camber, holes, and other pertinent data.

2. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld.
3. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pre-tensioned and slip-critical, high-strength bolted connections.
- D. Manufacturer's certificates, certifying welders employed on the Work, verifying AWS qualifications within the previous 12 months.
- E. Mill test reports signed by manufacturers certifying that the following products comply with requirements:
 1. Structural steel including chemical and physical properties.
 2. Bolts, nuts, and washers including mechanical properties and chemical analysis.
 3. Shop primers.

1.4 QUALITY ASSURANCE

- A. Fabricator qualifications: Engage a firm experienced in fabricating structural steel similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to fabricate structural steel without delaying the Work. Fabricator shall have AISC Category I, II, or III Quality Certification or have 5 years of documented experience in the fabrication and erection of structures of a similar size and nature.
- B. Installer qualifications: Engage an experienced Installer who has completed structural steel work similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- C. Perform work in accordance with the applicable provisions of the following specifications and documents:
 1. ANSI/AISC 360-10, "Specification for Structural Steel Buildings."
 - a. Connections, unless noted otherwise on the Contract Documents, shall be designed for standard end loads as determined by the uniform load constants indicated in the AISC Manual of Steel Construction (Allowable Strength Design) Connections shall be made with double clip angles unless otherwise indicated on the Contract documents. Shop standards shall be used to the largest extent possible.
 - b. Design connections not detailed on the Contract Drawings under direct supervision of a Professional Engineer experienced in design of this work and licensed in the state of New Jersey.
 2. ANSI/AISC 360-10 Section F10, "Single-Angles."
 3. ANSI/AISC 341-10, "Seismic Provisions for Structural Steel Buildings."
 4. ASTM A6, "Specification for General Requirements for Rolled Steel Plates, Shapes, and Bars for Structural Use."
 5. Research Council on Structural Connections (RCSC), "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 6. AWS D1.1, "Structural Welding Code".
- D. Professional Engineer shall be a licensed engineer legally authorized to practice in the State of New Jersey and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for projects with structural steel framing that are similar to that indicated for this Project in material, design, and extent.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver structural steel to project site in such quantities and at such times to ensure continuity of installation.
- B. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from erosion and deterioration.
 - 1. Store fasteners in a protected place. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - 2. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.

1.6 FIELD MEASUREMENTS

- A. Verify that field measurements are as shown on Contract Drawings.

1.7 SEQUENCING

Supply anchorage items to be embedded in, or attached to, other construction without delaying the Work. Provide setting diagrams, templates, instructions, and directions, as required, for installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Not applicable.

2.2 MATERIALS AND CONSTRUCTION

- A. W-Shapes shall comply with ASTM A992, Grade 50, high-strength steel.
- B. Steel channels, angles, plates, and threaded rods shall comply with ASTM A36, carbon steel.
- C. Bolts, nuts, and washers shall meet ASTM A325.
 - 1. Provide beveled washers for S-shapes and channels.
- D. Welding materials shall meet AWS D1.1, type required for materials being welded.
- E. Primer shall be fast curing, lead and chromate free, universal primer with good resistance to normal atmospheric corrosion, complying with performance requirements of FS-TT-P-664. Primer shall be compatible with finish paint system.

2.3 FABRICATION

- A. Fabricate and assemble in shop to greatest extent possible. Fabricate items according to ANSI/AISC 303-10 "Code of Standard Practice for Steel Buildings and Bridges" and AISC specifications referenced in this section, and as indicated on final shop drawings.
 - 1. Properly mark and match-mark materials for field assembly. Fabricate for delivery sequence which will expedite erection and minimize field handling of materials. Coordinate with Owner's Representative for fabrication sequence.
 - 2. Identify high-strength structural steel according to ASTM A 6 and maintain markings until structural steel has been erected.
 - 3. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
 - 4. Comply with fabrication tolerance limits of ANSI/AISC 303-10 for structural steel.

5. Provide cambered structural-steel members where indicated.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1.
- C. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- E. Holes: Provide holes required for securing other work to structural steel and for passage of other work through steel framing members.
 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning. Drill holes in bearing plates.
 2. Weld threaded nuts to framing and other specialty items indicated to receive other work.
- F. Where finishing is required, complete assembly, including welding of units, before start of finishing operations. Provide finish surfaces of members exposed in final structure free of marking, burns, and other defects.

2.4 FINISH

- A. Prepare structural component surfaces in accordance with SSPC specifications. Exposed structural steel shall receive a finish paint system.
- B. Surface preparation, primer and finish coating shall be as specified in the specification entitled "Painting."

2.5 SHOP CONNECTIONS

- A. High Strength Bolts: Shop-install high-strength bolts according to RCSC's "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified.
- B. Welded Connections: Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work.
 1. Remove backing bars or runoff tabs, back gouge, and grind steel smooth.
 2. Assemble and weld built-up sections by methods that will maintain true alignment of axes without exceeding tolerances of ANSI/AISC 303-10 for mill material.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Examination
 1. Verify that field conditions are acceptable and are ready to receive work.
 2. Beginning of installation means erector accepts existing conditions.
- B. Erection
 1. Allow for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.
 2. Erect structural steel accurately in locations and to elevations indicated and according to AISC specs referenced in this section.
 3. Field weld components indicated on Contract Drawings. Components shall be free of

primer and paint prior to field welding.

4. Do not field cut or alter structural members without prior notification to the Engineer.
5. After erection, prime welds, abrasions, and surfaces not shop primed except surfaces to be in contact with concrete.
6. Level and plumb individual members of structures within specified AISC tolerances.

C. FIELD CONNECTIONS

1. **High-Strength Bolts:** Install high-strength bolts according to RCSC's "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified.
2. **Welded Connections:** Comply with AWS D1.1 for welding procedure specifications, tolerances, appearance, and quality of welds and for methods used in correcting welding work. Field weld components indicated on Contract Drawings. Components shall be free of primer and paint prior to field welding.

3.2 QUALITY CONTROL

- A. **Testing Agency:** The Contractor shall engage a qualified independent testing and inspecting agency to inspect field welds and high-strength bolted connections as required by the International Building Code-NJ Edition, 2009.
- B. **Bolted Connections:** Bolted connections shall be tested and inspected according to RCSC's "Specification for Structural Joints Using High-Strength Bolts."
- C. **Welded Connections:** Welded connections shall be inspected according to AWS D1.1.
- D. Correct deficiencies in Work that test reports and inspections indicate do not comply with the Contract Documents.

END OF SECTION

SECTION 05 50 00 METAL FABRICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the requirements for designing, furnishing and installing metal fabrications as shown on the Contract Drawings including (but not limited to) metal grating, cast-in metal frames, access ladders, and their related fasteners and anchorages.

1.2 RELATED WORK NOT INCLUDED

- A. Section 05 53 00 – METAL GRATINGS

1.3 REFERENCES

- A. The Work shall be in accordance with the latest revisions of the following codes, standards, and specifications except where more stringent requirements have been specified herein.
 1. American Society for Testing and Materials (ASTM)
 2. American Welding Society (AWS)
 3. American Institute of Steel Construction (AISC)
 4. Specialty Steel Industry of North America (SSINA)
 5. The Aluminum Association

1.4 GENERAL

- A. Like items of equipment provided hereunder, although for different services, shall be the end products of one manufacturer in order to achieve standardization for appearance, operation, maintenance, spare parts, and manufacturer's service.

1.5 SUBMITTALS

- A. A Schedule of Values shall be submitted with a cost breakdown for each item the contractor elects to invoice for progress payments. The Schedule of Values will be used in determining partial payment for work completed according to these specifications.
- B. Product data for products used in miscellaneous metal fabrications, including paint products.
- C. Shop drawings detailing fabrication and erection of each metal fabrication indicated. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage, locking mechanisms, and accessory items. Provide templates for anchors and bolts specified for installation under other sections.
 1. Indicated welded connections using standard AWS A2.0 welding symbols. Indicate net weld length.
- D. Samples representative of materials and finished products as may be requested by Engineer.
- E. Welder certificates signed by Contractor certifying that welders comply with requirements specified in Part 1, Article QUALITY ASSURANCE.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: Firm experienced in producing metal fabrications similar to those indicated for this Project with a record of successful in-service performance, and with sufficient production capacity to produce required units without delaying the Work.
- B. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code – Steel", and AWS D1.3 "Structural Welding Code - Sheet Steel".
 - 1. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone re-certification.

1.7 FIELD MEASUREMENTS

- A. Check actual locations of all other construction to which metal fabrications must fit, by accurate field measurements before fabrication; show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay of work.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Preparation for Shipment:
 - 1. Insofar as practical, factory assemble items specified herein.
 - 2. Package and clearly tag parts and assemblies that are of necessity shipped unassembled, in a manner that will protect materials from damage, and facilitate identification and field assembly.

PART 2 - PRODUCTS

2.1 GENERAL

- A. The use of the manufacturer's name and model or catalog number is for the purpose of establishing the standard of quality and general configuration desired only. Other manufacturers' equipment will be considered in accordance with the General Conditions.
- B. Metal Surfaces, General: For metal fabrications exposed to view in the completed Work, provide materials selected for their surface flatness, smoothness, and freedom from surface blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.
- C. Furnish Miscellaneous Items:
 - 1. Miscellaneous metalwork and castings as shown, or as required, to secure together various parts and to provide a complete installation.
 - 2. Items specified herein are not intended to be all-inclusive. Provide metalwork and castings shown, specified, or which can reasonably be inferred as necessary to complete the project.
- D. Unless otherwise indicated, materials shall meet the latest issue of ASTM Specifications as follows:

Item	ASTM Specification
Aluminum:	
Bar Grating & Toe Boards:	B221, Alloy 6063-T6, Mill Finish
Handrails:	B221, Alloy 6061-T6, Mill Finish
Steel:	

Rolled Shapes	A992 or A572, Grade 50
Bars	A36 or A588, Grade 50
Pipe	A53 Type S Grade B
Plates:	A588, Grade 50

Stainless Steel:	
Bars & Shapes:	A276, Type 304
Bolts	A193, AISI 304
Nuts	A194, AISI 304

Welding Rods and Low Hydrogen Electrodes:	E70XX
--	-------

2.2 CONNECTIONS

- A. Connections to aluminum shall be aluminum or stainless steel unless otherwise noted. All screws and bolts used for aluminum shall be stainless steel.
- B. Tamper resistant self-tapping screws shall be stainless steel TORX screws, or equal. Contractor shall provide Owner with 2 TORX keys and insert bits.

2.3 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide framing and supports for applications indicated that are not specified in other sections.
- B. Fabricate units to sizes, shapes, and profiles indicated and required to receive other adjacent construction retained by framing and supports. Cut, drill, and tap units to receive hardware, hangers, and similar items.
 - 1. Equip units with integrally welded anchors for casting into concrete. Furnish inserts if units must be installed after concrete is placed.

2.4 FINISHES, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applying and designing finishes.
- B. Finish metal fabrications after assembly.

2.5 STEEL FINISHES

- A. Galvanizing: All items shall be galvanized. Apply zinc coating by the hot-dip process complying with the following requirements:
 - 1. ASTM A123 for galvanizing both fabricated and unfabricated steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch thick or thicker.
 - 2. ASTM A153 for galvanizing of iron and steel hardware.

PART 3 - EXECUTION

3.1 FABRICATION, GENERAL

- A. Form metal fabrications from materials of size, thickness, and shapes indicated but not less than that needed to comply with performance requirements indicated. Work to dimensions indicated or accepted on shop drawings, using proven details of fabrication and support.

Use type of materials indicated or specified for various components of each metal fabrication.

- B. Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges.
- C. Shear and punch metals cleanly and accurately. Remove burrs.
- D. Ease exposed edges to a radius of approximately 1/32 inch, unless otherwise indicated. Form bent metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- E. Remove sharp or rough areas on exposed traffic surfaces.
- F. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing, and contour of welded surface matches those adjacent.
- G. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated or, if not indicated, Phillips flat-head (countersunk) screws or bolts. Locate joints where least conspicuous.
- H. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space-anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- I. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- J. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- K. Fabricate joints that will be exposed to weather in a manner to exclude water, or provide weep holes where water may accumulate.

3.2 WELDING

A. General

- 1. Meet codes for Arc and Gas Welding in Building Construction of the AWS and AISC for techniques of welding employed, appearance, quality of welds made, and the methods of correcting defective work.
- 2. Welding Surfaces: Free from loose scale, rust, grease, paint, and other foreign material, except mill scale which will withstand vigorous wire brushing may remain.
- 3. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
- 4. Obtain fusion without undercut or overlap.
- 5. Remove welding flux immediately.
- 6. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing, and contour of welded surface matches those

adjacent.

B. Welding Operators: As specified in PART 1, Article QUALITY ASSURANCE.

3.3 INSTALLATION OF FABRICATED METALWORK

A. General:

1. Install in accordance with shop drawings, the Contract Drawings, and these Specifications.
2. Install fabricated metalwork plumb or level as applicable.
3. Completed installations shall be rigid, substantial, and neat in appearance.
4. Erect structural steel in accordance with applicable portions of AISC Code of Standard Practice, except as modified.
5. Install commercially manufactured products in accordance with manufacturer's recommendations.

B. Aluminum:

1. Erection: In accordance with the Aluminum Association Standards and manufacturers recommendations.
2. Do not remove mill markings from concealed surfaces.
3. Remove inked or painted identification marks on exposed surfaces not otherwise coated after installed material has been inspected.

3.4 ANCHOR BOLTS

A. Accurately locate and hold anchor bolts in place with templates at the time concrete is placed.

3.5 CONCRETE ANCHORS

- A. Do not begin installation until concrete receiving anchors have attained design strength.
- B. Do not install an anchor with its centerline closer than six times its diameter to either an edge of concrete or to another anchor unless specifically shown otherwise.
- C. Install in accordance with manufacturer's written instructions. Use manufacturer's recommended drills and equipment.
- D. Adhesive Anchors: Do not install when temperature of concrete is below 35 degrees F or above 110 degrees F.

3.6 ELECTROLYTIC PROTECTION

A. Aluminum:

1. Where in contact with dissimilar metals, or embedded in masonry or concrete, protect surfaces with a coat of Copper's Bitumastic or equal.
2. Allow paint to dry before installation of the material.
3. Protect painted surfaces during installation.
4. Should coating become marred, prepare and touch up per paint manufacturer's written instructions.

3.7 ADJUSTING AND CLEANING

- A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touch-up of field painted surfaces.
 - 1. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

END OF SECTION

SECTION 05 53 00 METAL GRATINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section Includes the Following:
 - 1. Heavy-duty metal bar gratings.

1.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide gratings capable of withstanding the following structural loads without exceeding the allowable design working stress of the materials involved, including anchors and connections:
 - 1. Floors: Capable of withstanding a uniform load of 125 lb/sq. ft. or a concentrated load of 2,000 lb, whichever produces the greater stress. Limit deflection to $L/360$ or 1/4 inch, whichever is less.

1.3 REFERENCES

- A. The Work shall be in accordance with the latest revisions of the following codes, standards, and specifications except where more stringent requirements have been specified herein.
 - 1. American Welding Society (AWS)
 - 2. American Society for Testing and Materials (ASTM)
 - 3. American Institute of Steel Construction (AISC)
 - 4. Specialty Steel Industry of North America (SSINA)

1.4 QUALITY ASSURANCE

- A. Fabricator shall be experienced in producing gratings similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- B. Metal Bar Grating Standards: Comply with applicable requirements of the following:
 - 1. Heavy Duty Metal Bar Gratings: Comply with NAAMM MBG 532, "Heavy Duty Metal Bar Grating Manual for Structural Carbon Steel and Stainless Steel".
- C. Comply with applicable provisions of AWS D1.1 "Structural Welding Code – Steel", AWS D1.2 "Structural Welding Code – Aluminum", and AWS D1.3 "Structural Welding Code – Sheet Steel".
 - 1. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification.

1.5 SUBMITTALS

- A. Product Data: For the following:
 - 1. Heavy-duty metal bar gratings.
 - 2. Clips and anchorage devices for gratings.

- B. Shop Drawings detailing fabrication and erection of gratings. Include plans, elevations, sections, and details of connections. Show areas of fixed and removable sections, anchorage, accessory items, and load tables. Provide templates for anchors and bolts specified for installation under other Sections.
- C. Welding Certificates: Copies of certificates for welding procedures and personnel.
- D. Mill Certificates: Signed by manufacturers of stainless-steel sheet certifying that products furnished comply with requirements.
- E. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

1.6 PROJECT CONDITIONS

- A. Field Measurements: Where gratings are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating gratings without field measurements. Coordinate construction to ensure that actual dimensions correspond to established dimensions. Allow for trimming and fitting.

1.7 COORDINATION

- A. Coordinate installation of anchorages for gratings, grating frames, and supports. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. McNichols Co.
 - 2. IKG Borden
 - 3. or approved equal.

2.2 FASTENERS

- A. General: Provide Type 304 or 316 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B633, Class Fe/Zn 5, where built into exterior walls. Select fasteners for type, grade, and class required.
- B. Bolts and Nuts: Regular hexagon-head bolts, ASTM A 307, Grade A; with hex nuts, ASTM A 563; and, where indicated, flat washers.
- C. Plain Washers: Round, carbon steel, ASME B18.22.1.
- D. Lock Washers: Helical, spring type, carbon steel, ASME B18.21.1

- E. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and equal to four times the load imposed when installed in concrete, as determined by testing per ASTM E488, conducted by a qualified independent testing agency.
 - 1. Material: Carbon-steel components zinc-plated to comply with ASTM B633, Class Fe/Zn 5.
 - 2. Material: Alloy Group 1 or 2 stainless-steel bolts complying with ASTM F593 and nuts complying with ASTM F594.

2.3 FABRICATION

- A. Shop Assembly: Fabricate grating sections in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Cut, drill, and punch material cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- C. Form from materials of size, thickness, and shapes indicated, but not less than that needed to support indicated loads.
- D. Fit exposed connections accurately together to form hairline joints.
- E. Welding: Comply with AWS recommendations and the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
- F. Provide for anchorage of type indicated; coordinate with supporting structure. Fabricate and space the anchoring devices to secure gratings, frames, and supports rigidly in place and to support indicated loads.
 - 1. Fabricate toe plates to fit grating units and weld to units in shop, unless otherwise indicated.
 - 2. Fabricate toe plates for attaching in the field.
 - 3. Toe plate Height: 4 inches, unless otherwise indicated.

2.4 METAL BAR GRATINGS

- A. Fabricate welded, heavy-duty steel gratings as follows:
 - 1. Grating Mark: As indicated on the Contract Drawings.
- B. Traffic Surface for Steel Bar Gratings: As follows:
 - 1. . Plain.
- C. Steel Finish: As follows:
 - 1. Hot-dip galvanized with a coating weight of not less than 1.8 oz./sq. ft. of coated surface.
- D. Removable Grating Sections: Fabricate with banding bars attached by welding to entire perimeter of each section. Include anchors and fasteners of type indicated or, if not

indicated, as recommended by manufacturer for attaching to supports.

1. Provide no fewer than four weld lugs for each heavy-duty grating section, with each lug shop welded to two bearing bars.
2. Provide no fewer than four saddle clips for each grating section composed of rectangular bearing bars 3/16 inch or less in thickness and spaced 15/16 inch or more o.c., with each clip designed and fabricated to fit over two bearing bars.
3. Provide no fewer than four weld lugs for each grating section composed of rectangular bearing bars 3/16 inch or less in thickness and spaced less than 15/16 inch o.c., with each lug shop welded to three or more bearing bars. Interrupt intermediate bearing bars as necessary for fasteners securing grating to supports.
4. Furnish threaded bolts with nuts and washers for securing grating to supports.
5. Furnish self-drilling fasteners with washers for securing grating to supports.
6. Furnish galvanized malleable-iron flange clamp with galvanized bolt for securing grating to supports. Furnish as a system designed to be installed from above grating by one person.
 - a. **Products:** Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - 1) Kee Industrial Products, Inc.; Grating Clip.
 - 2) Lindapter North America, Inc.; Grate-Fast.
- E. **Fabricate cutouts in grating sections for penetrations indicated. Arrange cutouts to permit grating removal without disturbing items penetrating gratings.**
 1. **Edge-band openings in grating that interrupt four or more bearing bars with bars of same size and material as bearing bars.**
- F. **Do not notch bearing bars at supports to maintain elevation.**

2.5 GRATING FRAMES AND SUPPORTS

- A. **Frames and Supports for Metal Gratings:** Fabricate from metal shapes, plates, and bars of welded construction to sizes, shapes, and profiles indicated and as necessary to receive gratings. Miter and weld connections for perimeter angle frames. Cut, drill, and tap units to receive hardware and similar items.
 1. Equip units indicated to be cast into concrete with integrally welded anchors. Unless otherwise indicated, space anchors 24 inches o.c. and provide minimum anchor units in the form of steel straps 1-1/4 inches wide by 1/4 inch thick by 8 inches long.

2.6 STEEL FINISHES

- A. **Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products"** for recommendations for applying and designating finishes.
- B. **Finish gratings, frames, and supports after assembly.**
- C. **Galvanizing:** Hot-dip galvanize items as indicated to comply with ASTM A 153 for steel and iron hardware and with ASTM A 123 for other steel and iron products.
- D. **Preparation for Shop Priming:** Prepare uncoated ferrous-metal surfaces to comply with minimum requirements indicated below for SSPC surface-preparation specifications and environmental exposure conditions of installed items:
 1. **Exteriors (SSPC Zone 1B):** SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."

- E. Apply shop primer to uncoated surfaces of gratings, frames, and supports, except those with galvanized finishes and those to be embedded in concrete or masonry, unless otherwise indicated. Comply with SSPC-PA 1, "Paint Application Specification No. 1," for shop painting.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing gratings to in-place construction. Include threaded fasteners for concrete and masonry inserts, through-bolts, lag bolts, and other connectors.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing gratings. Set units accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
- C. Provide temporary bracing or anchors in formwork for items that are to be built into concrete or masonry.
- D. Fit exposed connections accurately together to form hairline joints.
 - 1. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade the surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- E. Attach toe plates to gratings by welding at locations indicated.
- F. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
- G. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.

3.2 INSTALLING METAL BAR GRATINGS

- A. General: Install gratings to comply with recommendations of referenced metal bar grating standards that apply to grating types and bar sizes indicated, including installation clearances and standard anchoring details.
- B. Attach removable units to supporting members with type and size of clips and fasteners indicated or, if not indicated, as recommended by grating manufacturer for type of installation conditions shown.
- C. Attach non-removable units to supporting members by welding where both materials are same; otherwise, fasten by bolting as indicated above.

3.3 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.

- B. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Division 09 painting Sections.
- C. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780.

END OF SECTION

SECTION 33 12 16.01 GATE VALVES THREE INCHES AND LARGER

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes gate valves 3 inches and larger for all services specified or shown on the Contract Drawings, complete with accessories.
- B. The work included in this section consists of the replacement of an existing shear gate valve with a new flanged ductile iron gate valve, transition spool piece, operator stem guide, and floor stand operator. The existing pipeline is cast iron with flanged joints.

1.2 REFERENCES

- A. Comply with the latest revision of the following codes, standards and specifications, except where more stringent requirements have been specified herein:
 - 1. American Water Works Association (AWWA)

1.3 SUBMITTALS

- A. Product Data: "Catalog cuts" and specification sheets marked to specifically indicate the equipment and materials proposed for this project. Indicate selections with arrows, and cross out irrelevant data.
- B. Shop Drawings: Submit shop fabrication drawings for gate valve, spool piece and mating/transition flange, floor stand operator, etc.
- C. Certificates: Manufacturer's certification that all materials furnished are in compliance with the applicable requirements of the referenced standards and this specification.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Resilient seated gate valves shall be in accordance with the requirements of AWWA C509.
- B. Gate valves 12 inches and smaller with specified working pressure of 50 psi to 250 psi shall conform to the requirements of AWWA Standards. Gate valves of sizes or pressure classes outside of the above ranges shall conform to manufacturer's standards with materials and construction conforming to the AWWA Standards as applicable.
- C. Unless otherwise scheduled or shown on the Contract Drawings, gate valves shall be:
 - 1. Non-rising stem
 - 2. Dual O-ring stem seal
 - 3. Counterclockwise direction of opening
- D. Bronze Grade B or C shall not be used in valve construction.
- E. Valve Joints
 - 1. Where the joint type is not scheduled or shown, joints shall conform to the type of pipe joint at the point of installation.
- F. All hardware (nuts, bolts, and similar) shall be stainless steel.

2.2 ACCESSORIES

A. Gearing

1. Gear ratios shall conform to AWWA Standards.
2. Exposed non-rising stem valves with gearing shall have position indicators, unless otherwise scheduled.

B. Operators

1. Valves installed shall be fitted with handwheel and floor stand.
2. Operators shall be supplied with a cast arrow showing the direction of valve opening.

C. Extension Stems

1. Valves shall have extension stems as shown on the Contract Drawings. Provide stem guides as indicated on the Contract Drawings.

D. Transition Spool Piece

1. Provide transition 8" diameter flanged ductile iron spool piece as shown on the Contract Drawings and Section 02618 "Ductile Iron Pipe". One flange shall match the new gate valve bolt pattern and bolt hole diameter, and the other shall match the existing cast iron pipe bolt pattern and bolt hole diameter.

2.3 SHOP FINISHES

- A. Finish: ANSI 61 light gray paint.
- B. With the exception of those parts and components customarily furnished unpainted, prepare and coat all metal surfaces with rust inhibitive shop paint. Shop paint shall be fully compatible with the field paint specified.
- C. Protect machined surfaces against damage and corrosion by other means.

PART 3 - EXECUTION

3.1 EXISTING CONDITIONS

- A. Contractor shall identify and record all existing conditions.
- B. The existing shear gate valve shall be removed as indicated on the Contract Drawings and in accordance with Section 2400 "Removal of Structures".
- C. After the existing valve has been removed, the Contractor shall clean the existing cast iron flange and create a template of the existing cast iron flange's bolt pattern and bolt hole diameter. This template is to be used for the fabrication of the transition spool piece's mating flange to the existing piping.

3.2 INSTALLATION

- A. Install valves as shown on the Contract Drawings, Section 02600 "Pipeline Installation", and in accordance with the manufacturer's installation instructions.
- B. Support valves independently from equipment and pipelines as shown on the Contract Drawings.

3.3 PAINTING

- A. Perform field painting in accordance with the Section "Field Painting".
- B. Valves shall be shop coated with asphalt varnish in accordance with AWWA Standards.

- C. Valves to be field painted or coated shall have the same paint or coating as the pipeline in which they are in-stalled.
- D. Prior to applying a paint or coating valves shall have applied a minimum of one coat of Inertol "tar stop", or equal, to cover the asphalt varnish shop coating or sandblasted as specified in the Section entitled "Field Painting", before additional coats are applied.

END OF SECTION

EXHIBIT “B”

2017 FORMAL INSPECTION REPORT
FOR POST BROOK DAM
BY O’BRIEN & GERE ENGINEERS, INC.



Known for excellence. Built on trust.



2017 Formal Inspection Report for Post Brook Dam - No NJ Dam File No.



Prepared for:



**North Jersey District Water Supply
Commission**

1 F.A. Orechio Drive
Wanaque, New Jersey 07465

GZA GeoEnvironmental, Inc.

55 Lane Road, Suite 407 | Fairfield, NJ 07004

32 Offices Nationwide

www.gza.com

GZA File No. 01.0172165.20



Known for excellence.
Built on trust.

GEOTECHNICAL
ENVIRONMENTAL
ECOLOGICAL
WATER
CONSTRUCTION
MANAGEMENT

55 Lane Road
Suite 407
Fairfield, NJ 07004
T: 973.774.3300
F: 973.774.3350
www.gza.com



October 5, 2018
File No. 01.0172165.20

North Jersey District Water Supply Commission
One F.A. Orechio Drive
Wanaque, New Jersey 07465

Attn: Ms. Maria M. Alliegro, P.E., LEED AP – Director of Engineering
Mr. James Stachura, Engineering

Re: 2017 Formal Dam Inspection
Post Brook Dam
Ringwood Borough, Passaic County, New Jersey

Dear Ms. Alliegro and Mr. Stachura:

In accordance with our Contract No. 2024 with the North Jersey District Water Supply Commission (Commission) dated October 13, 2017, GZA GeoEnvironmental, Inc. (GZA) has completed a Formal Inspection of the Post Brook Dam.

This report fulfills the Commission's obligation to conduct an inspection of the Post Brook Dam in accordance with the State of New Jersey's Dam Safety Standards – N.J.A.C. 7:20-1.11. The results and recommendations presented herein are subject to the Limitations attached as **Appendix A**.

The visual inspection of the dam was completed on October 17, 2017. Based on our visual inspection and review of available information, it is GZA's opinion that the Post Brook Dam is in **FAIR** Condition in accordance with the NJDEP Dam Inspection Program Guidelines. A further discussion of our evaluation and recommendations are presented in the attached Formal Inspection Report.

A Compliance Schedule must also be submitted with the inspection report. The Compliance Schedule identifies the dates by which the repairs, long-term improvements and studies will be completed. We have included a Compliance Schedule for Post Brook Dam. GZA will then send one hard copy and an electronic copy of the report and Compliance Schedule to the Commission and to the NJDEP Bureau of Dam Safety.

GZA has enjoyed working closely with you on this assignment. We hope to have the opportunity to continue to serve the Commission on future assignments. If you have any questions or comments, please do not hesitate to call us.

GZA GEOENVIRONMENTAL, INC.

Charles B. Nourse, P.E.^(MA)
Project Manager

Matthew A. Taylor, P.E.
Principal-In-Charge

Christopher S. Adams, P.E.
Inspecting Engineer/Principal



TABLE OF CONTENTS

	<u>SECTION</u>	<u>PAGE</u>
1.0	PROJECT DESCRIPTION	1-1
1.1	General	1-2
1.2	Pertinent Data	1-2
1.3	Relevant Documents	1-2
2.0	VISUAL INSPECTION	2-1
3.0	HYDROLOGIC AND HYDRAULIC REVIEW	3-1
4.0	STABILITY REVIEW	4-1
5.0	SUMMARY	5-1
5.1	Assessment	5-1
5.2	Recommendations	5-2

LIST OF FIGURES

FIGURE 1 – LOCUS MAP

LIST OF APPENDICES

APPENDIX A	LIMITATIONS
APPENDIX B	VISUAL INSPECTION CHECKLIST, POST BROOK DAM
APPENDIX C	PHOTOGRAPHS, POST BROOK DAM



1.1 GENERAL

Post Brook Dam is located just downstream of a bend in Post Brook and upstream of the Wanaque Reservoir in Passaic County, New Jersey. Post Brook Dam and its appurtenant structures were constructed between July 7, 1927 and November 28, 1927. The purpose of the dam was to divert flow into Wanaque Reservoir. Post Brook Dam is located approximately 800 feet west of Green Swamp Dam No. 1 on Wanaque Reservoir. Refer to **Figure 1 – Post Brook Dam – Locus Plan** for the approximate location of dam. The dam is owned and operated by the North Jersey District Water Supply Commission (NJDWSC).

Information describing the dam and its appurtenant structures in this report was obtained from the “Operations and Maintenance (O&M) Manual for the Wanaque Reservoir System”, the Updated December 2010 and the 2011 Formal Inspection Report for Post Brook Dam, prepared by French & Parrello Associates, P.A, (F&P) and the 2014 Formal Inspection Report prepared by GZA. This report references left and right assuming the observer is looking downstream while standing upstream of the dam.

The dam is a mortared stone masonry gravity dam that is approximately 120 feet long and approximately 10 feet high at its maximum section and is founded on bedrock. The typical dam cross section consists of a vertical upstream face, approximately 5-foot wide crest, and a 1H:2V sloping downstream face.

A gatehouse is located on the upstream side of the dam, approximately 50 feet to the right of the left abutment. Cast iron grates were constructed near the bottom of the upstream face to permit flow into a gaging well at the bottom of the gatehouse. The gaging well consists of a 16-inch diameter sheet copper cylinder that was originally used to continuously record water surface elevations in the impoundment behind Post Brook Dam. The sheet copper cylinder remains in the gatehouse, but the flow measuring devices used to record water surface elevations have been removed. A staff gage is mounted on the upstream face of the dam outside the gatehouse to measure water surface elevations in the impoundment.

The dam has two outlet conduits which extend from the gatehouse, through the dam, and discharge on the downstream side of the dam. The outlet conduits consist of two, 8-inch nominal diameter Class A cast iron pipes. The upper pipe is approximately 8 feet, 5 inches long and 1-foot higher than the lower pipe. The lower pipe is approximately 8 feet, 10 inches long. The outlet pipes are used as a “blow-off” and for flow control. The as-built drawings show shear gate valves on the upstream ends of the pipes. The NJDWSC reports that the upper 8-inch diameter pipe has been permanently closed at its upstream end.

Post Brook Dam has an overflow weir spillway located to the left of the left abutment of the dam. The weir is approximately 40 feet long and is founded on 24 inches of rubble masonry according to the as-built drawings. The overflow weir has an upstream slope of 2H:1V and a downstream slope of 1H:1V. The overflow weir ties into rubble masonry abutments/training walls that have cement mortar overlays. The downstream toe of the spillway is protected with a stone paver apron that is reported to be 18-inches thick. The spillway discharges into an approximately 300-foot long spillway channel that leads to the Wanaque Reservoir. The spillway channel was excavated with 2H:1V side slopes, an average bottom width of 11 feet, and an average depth of 6 feet.



1.2 PERTINENT DATA

According to the 2010 O&M Manual and the 2014 Inspection Report by GZA, the Post Brook Dam is classified as a Class III – Low hazard dam per the New Jersey Dam Safety Standards N.J.A.C. 7.20.1-9. The top of dam is at El. 436.0 and the overflow weir crest is El. 434.0. Elevations in this report are based the on the original as-built drawing datum, which is assumed to be equivalent to National Geodetic Vertical Datum of 1929 (NGVD29). The surface area at normal pool was previously estimated to be 0.5 acres in the 2011 F&P Inspection Report. The storage capacity of the pond has been estimated to be 2.5 acre-feet at normal pool and 5 acre-feet at maximum capacity. The estimated drainage area for the impoundment is approximately 3.5 square miles. The overflow weir spillway capacity has been reported as 625 cubic feet per second. GZA did not independently check or confirm the data reported herein.

1.3 RELEVANT DOCUMENTS

The following documents were reviewed for the inspection of the Post Brook Dam:

Document	Prepared by	Date
Operation and Maintenance Manual for the Wanaque Reservoir System	NJDWSC	June 2000 (updated Dec. 2010)
As-Built Drawings for Post Brook Diversion Works Dam and Weir (contained in the O&M Manual)	NJDWSC	April 30, 1931
2011 Formal Inspection Report	French & Parrello Associates, P.A.	April 19, 2011
2013 Regular Inspection Report	NJDWSC	October 3, 2013
Emergency Action Plan	Schnabel Engineering, Inc.	September 2000, Revised May 2013, Flowchart updated October 29, 2014
2014 Formal Inspection Report	GZA GeoEnvironmental, Inc. and Civil Dynamics, Inc.	December 3, 2014



GZA GeoEnvironmental, Inc. with Civil Dynamics, Inc. (then an independent subconsultant; now a division of GZA) conducted the visual inspection for the Formal Inspection of the Post Brook Dam on October 17, 2017.

The inspection was conducted in accordance with the Guidelines for Inspection of Existing Dams, dated January 2017, prepared by the NJDEP Bureau of Dam Safety (Bureau) and the requirements of the New Jersey Dam Safety Standards (N.J.A.C. 7:20-1.11(b)). This report is subject to the Limitations in **Appendix A**.

The visual inspection was conducted by Matthew A. Taylor, P.E., Christopher Adams, P.E. and Jessica Bergmann, P.E. of GZA GeoEnvironmental, Inc. James Stachura of the North Jersey District Water Supply Commission was present during the inspection.

For a detailed description of the visual inspection for Post Brook Dam, refer to the Visual Inspection Checklist included in **Appendix B**. Selected photographs taken during the inspection are contained in **Appendix C**.



The following sections present a summary of previous hydrologic and hydraulic (H&H) analyses that include Post Brook Dam along with GZA's evaluation and opinion of the current adequacy of the analyses. Performance of independent detailed H&H analyses for Post Brook Dam were not part of our scope of work.

According to the 2011 F&P Formal Inspection Report, Post Brook Dam was included within the detailed H&H analyses performed as part of the 1983 Phase II inspection report for the Wanaque Reservoir Dams since the Post Brook Dam is within the drainage basin for the Wanaque Reservoir. The 2011 report only provided the spillway capacity (i.e. 625 cfs) from the 1983 H&H analysis. The spillway design storm, maximum reservoir pool elevation, inflows, outflows and freeboard values were not reported in the 2011 report.

Similar to the 2014 GZA Formal Inspection Report, it is GZA's opinion that an updated H&H analysis specific to the Post Brook Dam and its associated watershed is not warranted given the low hazard potential of the dam.



The following section presents GZA's review of previous stability analyses and our opinion of the need for performing a stability analysis at Post Brook Dam. Performance of independent stability analyses of Post Brook Dam was not part of our scope of work.

According to the 2011 F&P Report, there is no record of a stability analysis for Post Brook Dam. The Commission did not provide any new information indicating that a stability analysis for the Post Brook Dam exists.

The stone masonry dam and overflow weir structures appeared to be visually stable during our 2017 visual inspection. The Commission reported missing stones from the downstream face of the dam, identified in 2014, were reportedly replaced in 2016, but the areas were not repointed. Additionally, leakage was apparent through the downstream face of the dam.

Similar to our 2014 Formal Inspection, it is GZA's opinion that a stability analysis for Post Brook Dam is not necessary at this time. However, the NJDWSC should continue to visually observe the dam and re-evaluate the need for repairs and a stability analysis based on the observed physical condition of the dam at the time of the inspections.



5.1 ASSESSMENT

Based on the visual inspection and our review of available background data, it appears that the Post Brook Dam and appurtenances have minor deficiencies that require some relative minor remedial/maintenance related repairs. Thus, as defined by the NJDEP Dam Inspection Program Guidelines, we are assigning a “**FAIR**” rating because minor remedial repairs are necessary.

The following recommendations are provided based on our review of previous inspection reports, our review of available historic project documentation, and the current Formal Inspection findings. Recommendations from the 2013 Regular Inspection Report and 2014 Formal Inspection Report are included as applicable.

2013 Identified Deficiency or Recommendation	Status of Resolution or Implementation
1. Repair cracks and spalls in overflow weir.	Repointing of the abutments was reportedly performed in 2014. The cement mortar overlays at the abutments were deteriorated and obscured observation of the original stone masonry abutment.
2. Repair areas where missing rubble masonry is present.	Stones were replaced on the downstream face in 2016. However, the repointing of the downstream face was not yet completed.
3. Cut & maintain vegetation at downstream toe between dam and fence line.	Appeared completed based on the 2017 visual inspection.
4. Remove small trees growing within 25' of overflow weir.	Apparently not completed based on 2017 visual inspection.
5. Repair cement mortar in overflow weir sidewalls.	Not completed. The need for this repair work should be re-evaluated.
6. The Operation and Maintenance Manual should be updated as needed.	To be completed.
7. Investigate repairs to downstream masonry face as well as downstream toe.	Stones were replaced on the downstream face in 2016. However, the repointing of the downstream face was not yet completed.



2014 Identified Deficiency or Recommendation	Status of Resolution or Implementation
1. Repointing and replacement of stones and mortar on the downstream face of the dam and at the spillway. We understand the NJDWSC intends to perform this in the summer of 2017.	Stones were replaced on the downstream face in 2016. However, the repointing of the downstream face was not yet completed.
2. Consider installing a seepage monitoring device to monitor flow from the left groin.	To be completed.
3. Investigate the standing water observed at the dam toe downstream of the left groin and in the area between the left groin and the low-level outlets.	To be completed.
4. Based on the investigation of the standing water at the dam toe, consider repairs that may be necessary to reduce the apparent seepage through the dam.	To be completed.
5. Investigate the ability to operate the lower 8-inch diameter cast iron pipe and consider the need to operate the upper 8-inch diameter pipe.	To be completed.

5.2 RECOMMENDATIONS

The following repairs/short-term improvements should be implemented:

1. Repointing of missing and deteriorated joints in the rubble masonry downstream face of the dam.
2. Repointing and replacement of stones and mortar at the upstream face of dam, as necessary.
3. Repair scour holes along the downstream toe of the dam.
4. Repair low-level outlet valve and exercise the valve.
5. Repair cracks in the spillway weir.
6. Repair spillway weir training walls.

The following long-term improvements should also be undertaken:

1. Monitor leakage through the downstream face of the dam.
2. Investigate the standing water observed at the downstream toe of dam at the left groin and in the area between the left groin and the low-level outlets. Based on the investigation of the standing water at the dam toe, consider repairs that may be necessary to reduce the apparent seepage through the dam.



3. Investigate the ability to operate the lower 8-inch diameter cast iron pipe and consider the need to operate the upper 8-inch diameter pipe.

The following studies should also be undertaken:

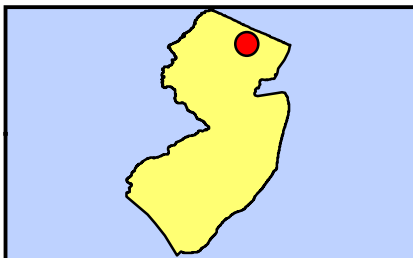
1. No studies are recommended. See discussion below.

The 2014 Formal Inspection recommended evaluating if the dam could be reduced from a Class III to a Class IV dam. However, based on a recent discussion with the NJDEP Bureau of Dam Safety, it was clarified that the purpose of a Class IV classification is intended mainly for storm water detention basins. Therefore, it is unlikely that an existing Class III dam would be reclassified as a Class IV dam.

Additionally, future inspections of the dam may be Regular Inspections since Formal Inspections are not required for Class III dams according to the New Jersey Dam Safety Standards.



FIGURES



SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRIID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY.

Data supplied by:



PROJ. MGR.: CBN
DESIGNED BY: LP
REVIEWED BY: MAT
OPERATOR: LP

DATE: 10-17-2017

POST BROOK DAM LOCUS PLAN

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
WANAQUE, NEW JERSEY

JOB NO.
01.172165.20

FIGURE NO.
1



APPENDIX A - LIMITATIONS



USE OF REPORT

1. GZA GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of North Jersey District Water Supply Commission (Client) for the stated purpose(s) and location(s) identified in the Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

STANDARD OF CARE

2. Our findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. Our services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

SUBSURFACE CONDITIONS

4. If presented, the generalized soil profile(s) and description, along with the conclusions and recommendations provided in our Report, are based in part on widely-spaced subsurface explorations by GZA and/or others, with a limited number of soil and/or rock samples and groundwater /piezometers data and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
5. Water level readings have been made in test holes (as described in the Report), monitoring wells and piezometers, at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this Report. Fluctuations in the groundwater and piezometer levels, however, occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, reservoir and tailwater levels, the presence of subsurface utilities, and/or natural or artificially induced perturbations.

GENERAL

6. The observations described in this report were made under the conditions stated therein. The conclusions presented were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.
7. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein available to GZA at the time of the evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.
8. Any GZA hydrologic analysis presented herein is for the rainfall volumes and distributions stated herein. For storm conditions other than those analyzed, the response of the site's spillway, impoundment, and drainage network has not been evaluated.



9. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the structure or site, or to structures on the site was unavailable or limited, GZA renders no opinion as to the condition of that portion of the site or structure. In particular, it is noted that water levels in the impoundment and elsewhere and/or flow over the spillway may have limited GZA's ability to make observations of underwater portions of the structure. Excessive vegetation, when present, also inhibits observations.
10. In reviewing this Report, it should be realized that the reported condition of the dam is based on observations of field conditions during the course of this study along with data made available to GZA. It is important to note that the condition of a dam depends on numerous and constantly changing internal and external conditions, and is evolutionary in nature. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued inspection and care can there be any chance that unsafe conditions be detected.

COMPLIANCE WITH CODES AND REGULATIONS

11. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.
12. This scope of work does not include an assessment of the need for fences, gates, no-trespassing signs, repairs to existing fences and railings and other items which may be needed to minimize trespass and provide greater security for the facility and safety to the public. An evaluation of the project for compliance with OSHA rules and regulations is also excluded.

COST ESTIMATES

13. Unless otherwise stated, our cost estimates are for comparative, or general planning purposes. These estimates may involve approximate quantity evaluations and may not be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over the labor and material costs required to plan and execute the anticipated work, our estimates were made using our experience and readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

ADDITIONAL SERVICES

14. It is recommended that GZA be retained to provide services during any future: site observations, explorations, evaluations, design, implementation activities, construction and/or implementation of remedial measures recommended in this Report. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



APPENDIX B - VISUAL INSPECTION CHECKLIST, POST BROOK DAM

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

TYPE OF INSPECTION: Formal

Dam Name: Post Brook Dam
Dam File Number: Unassigned
Location: Bloomingdale, Passaic County, New Jersey – Wanaque Reservoir
Owner: North Jersey District Water Supply Commission (NJDWSC)
Operator: North Jersey District Water Supply Commission (NJDWSC)
Date of Inspection: October 17, 2017

Reservoir Information:

Normal Reservoir Elevation (ft.) 434.0±

Reservoir Elevation at time of Inspection (ft.) 433.8±

Weather Conditions (including recent rainfall).

Upper 30s and sunny. Last rainfall occurred on October 12, 2017 (0.16 inches).

INSPECTION PERSONNEL

New Jersey Licensed Professional Engineer(s):

Name	Affiliation	Area of Expertise
Matthew Taylor, P.E.	GZA GeoEnvironmental, Inc.	Dam Engineering
Christopher S. Adams, P.E.	GZA GeoEnvironmental, Inc.	Dam Engineering
Jessica Bergmann, P.E.	GZA GeoEnvironmental, Inc.	Dam Engineering

Non-Licensed Technical Expert(s) and Advisor(s):

Name	Affiliation	Area of Expertise
None		

New Jersey State Representative(s):

Name	Affiliation	Area of Expertise

Dam Owner Representative(s):

Name	Affiliation	Area of Expertise
Jim Stachura	NJDWSC	Engineering

Others:

Name	Affiliation	Area of Expertise

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

GENERAL INFORMATION

Name of Dam: Post Brook Dam	
Federal I.D. Number: Unknown	NJ Dam Number: Unassigned
River Basin: Passaic	
Town: Bloomingdale	County: Passaic
Block: 2	Lot: 34
Nearest Downstream	
City or Town: Wanaque, NJ	
Stream Name: Post Brook	
Tributary of: Wanaque River	
Latitude: 41°02'35" N	Longitude: 74°19'38" W
Type of Dam: Rubble Masonry	
Purpose of Dam: Diversion	Hazard Category: Low (Class III)
Crest Elevation (ft): 436.0	Drainage Area (sq.miles): 3.5± (estimated)
Height (ft): 10	Length (ft): 120
Normal Surface (ac): 0.5 (estimated)	Normal Capacity (af): 2.5 (estimated)
Maximum Capacity (af): 5 (estimated)	Spillway Capacity (cfs): 625± (estimated)

Note: Portions of General Information are based on the previous inspection reports.

HISTORY

Date Constructed: July 7, 1927 to November 28, 1927	Date(s) Reconstructed: Unknown
Original Designer: NJDWSC	Reconstruction Designer: N/A
Originally Constructed By: Clifford E. MacEvoy Company	Reconstructed By: N/A
Owner: North Jersey District Water Supply Commission	
Owner's Address: NJDWSC 1 F.A. Orechio Drive Wanaque, NJ 07465	
Owner / Operator present during inspection:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

PREVIOUS INSPECTION

Date of Last Inspection:	<u>Oct. 2, 2013</u>	Date of Last Regular Inspection:	<u>Oct. 2, 2013</u>
Date of Last Phase I Inspection:	<u>May 1978</u>	Date of Last Formal Inspection:	<u>Dec. 5, 2014</u>

EMERGENCY ACTION PLAN (Required for all Class I and Class II dams)

Date of Approved Plan: September 2000, Revised May 2013.
Flowchart updated October 29, 2014.

DOWNSTREAM HAZARD CLASSIFICATIONS

Present Hazard Classification: Low Hazard, Class III

Changes in downstream Land Use and Habitation: No significant changes apparent.

Is the present classification appropriate? Yes.

OPERATION AND MAINTENANCE

Date of Operation and Maintenance Plan: June 2000, last updated December 2010.

Are instructions adequate? Yes.

Do operating personnel follow instructions? Yes.

What are the operating personnel capabilities? NJDWSC staff includes engineers, skilled craftsmen, plumbers, electricians, equipment operators, and laborers.

EXAMINATION OF CONCRETE AND MASONRY DAMS

DESCRIPTION OF STRUCTURE

Type of Dam (Gravity, Arch, etc.) Rubble Masonry Dam.

Post Brook Dam diverts flow from Post Brook into the Wanaque Reservoir.

Internal Drainage System: None.

Movement (Horizontal & Vertical Alignment): None observed.

Miscellaneous: None.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

UPSTREAM FACE

Description: Rubble masonry with an approximately vertical slope.

Condition of Concrete or Masonry: The upstream face was visible above the normal pool elevation. Mortar was missing at joints between stones in several locations. Some stones were missing from the upstream face near the right abutment. Minor weedy vegetation was growing in some joints.

Cracking of Upstream Face: None observed.

<u>Location</u>	<u>Orientation</u>	<u>Length, Width, and Type</u>
N/A	N/A	N/A

DOWNSTREAM FACE

Description: Rubble masonry with an approximate slope of 1H:2V.

Condition of Concrete or Masonry: The downstream face above the ground surface was observed from immediately downstream of the dam. According to NJDWSC staff, missing stones along the downstream face were replaced in 2016; however, these areas were not repointed. Mortar was missing from joints between stones in several locations. Weedy vegetation was growing within the joints throughout the downstream face.

Cracking of Downstream Face: None observed.

Leakage through Dam (Location and Estimated Flow): Leakage was observed along the downstream face. Specifically, near-continuous leakage was observed across the bottom 3 feet of the downstream face of dam.

CREST

Description: Rubble masonry crest with a top width of 4 feet, 10 inches.

Condition of Concrete or Masonry: According to NJDWSC staff, the crest was repointed in 2016. Masonry crest appeared intact and in good condition. No missing mortar or stones observed.

Cracking of Crest: None observed.

Signs of Movement: None observed.

Differential Movement (Joint or Crack Separation or Offset): None observed.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

FOUNDATION

Condition of Rock or Concrete Not visible. According to prior inspection reports, borings conducted in 1983 indicate bedrock is very hard granitic gneiss.

Lining:

Cracking: None observed.

Signs of Movement: None observed.

Seepage (Location and Estimated Flow): See discussion below.

ABUTMENTS AND TOE AREA

Seepage or Wet Areas: Standing water was observed on the ground surface at the downstream toe between the left groin and the low-level outlets. Downstream of the left groin and the low-level outlets, water flows through natural swales into Post Brook.

Signs of Movement: None observed.

Cracking: None observed.

Erosion: Scour holes were observed between the downstream left groin and the low-level outlets. Scour holes extended about 3 feet downstream from the dam.

Unusual Conditions: Leakage on the downstream face was observed in the same area where standing water was observed between the left groin and the low-level outlets. This could be an indication that water is seeping through the dam and along the contact with the foundation.

EXAMINATION OF SPILLWAYS AND OUTLET WORKS

TYPES AND DESCRIPTION OF SPILLWAY

Primary: An approximately 40-foot long concrete weir located about 160 feet upstream (east) of the dam. The weir is approximately 1 foot high.

Secondary (Auxiliary): None.

Emergency: None.

Other: None.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

ENTRANCE CHANNEL

- Description:** An approximately 40-foot wide channel connects the pond retained by Post Brook Dam to the primary spillway.
- Vegetation (Trees, Bushes):** Small diameter trees were observed on the banks of the entrance channel and on a small island within the channel upstream of the spillway.
- Debris:** Minor leafy and woody debris.
- Channel Side-Slope Stability:** Appeared stable.
- Slope Protection/Erosion:** None observed.
- Unusual Conditions:** None observed.

SPILLWAY CREST AND DOWNSTREAM FACE

- Description:** As-built drawings show the spillway is a concrete overflow weir founded on a 24-inch thick layer of rubble masonry. The drawings show an approximate upstream slope of 2H:1V and approximate downstream slope of 1H:1V for the concrete overflow weir.
- Condition of Material:** Concrete crest and downstream face of spillway appeared intact but weathered.
- Signs of Movement:** No movement apparent. Spillway weir appeared straight.
- Joints:** No obvious joints, but cracks were observed at two potentially original joints in the spillway. The larger of the two cracks was measured at a maximum of 4 inches deep and 5 inches wide.
- Unusual Conditions:** None observed.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

SPILLWAY TRAINING WALLS

- Description:** Vertical rubble masonry walls with cement mortar overlays where the wall faces the overflow weir.
- Condition of Material:** Walls appeared intact but deteriorated. Cement mortar overlays were deteriorated and completely missing in some areas. Cracking, spalling, and efflorescence of the mortar was observed. The rubble masonry was difficult to observe due to the mortar layer. Stones were missing from the top of the right rubble masonry wall where mortar was missing. Repointing of walls was reportedly performed in the summer of 2014.
- Signs of Movement:** No movement apparent.
- Joints:** Difficult to observe joints of rubble masonry walls due to mortar layer. Where visible, mortar appeared to be missing from some joints.
- Drains:** None known.
- Unusual Conditions:** None observed.

DOWNSTREAM APRON

- Description:** The as-built drawings show 18-inch thick stone masonry pavers downstream of the overflow weir.
- Condition of Material:** The stone masonry pavers were difficult to observe due to flow conditions. However, it appeared that there was some movement of the stone paving.
- Signs of Movement:** Some minor displacement of stones observed, but apron appeared stable.
- Unusual Conditions:** None observed.

SPILLWAY EXIT CHANNEL

- Description:** The downstream apron constricts to the natural stream width as flow enters the exit channel. There were many large boulders and rocks within the channel and along the sides of the channel. The diversion channel flows directly into Wanaque Reservoir.
- Vegetation (Trees, Bushes):** Small diameter trees were observed on the overbank (floodplain) sections of the channel.
- Debris:** None observed.
- Channel Side-Slope Stability:** Appeared stable.
- Erosion:** Some scouring of natural channel banks observed.
- Unusual Conditions:** None observed.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

LOW LEVEL OUTLETS

Description: Two 8-inch nominal diameter, Class A cast iron pipes with shear gate valves extending from the gatehouse to the downstream face of dam.

Condition: The pipes were observed from the downstream outlet and no deficiencies were observed. NJDWSC staff previously reported that a plate was placed over the inlet to the upper pipe. The lower pipe on the right was partially open at the time of the inspection. NJDWSC staff reported that the gates were not operating properly.

Trash Rack: No trash racks were observed.

Leakage: Unknown. Upper left pipe was dry during this inspection, but lower right pipe was partially open and flowing.

Location

Estimated Flow

Unknown

Unusual Conditions: None observed or reported.

Was the Low Level Outlet operated during the inspection? No.

Were there difficulties operating the Low Level Outlet? N/A.

When was the Low Level Outlet last operated and did this conform with the Operation and Maintenance procedures? Unknown.

Miscellaneous: Gates reported to not operate properly.

LOW LEVEL OUTLET EXIT CHANNEL

Description: The low-level outlet pipes discharge into a swale that flows into Post Brook approximately 100 feet downstream of the dam. Water also flows from the left groin into Post Brook.

Vegetation (Trees, Bushes): Minor weedy vegetation observed upstream of the fence.

Debris: Minor leafy debris.

Channel Side-Slope Stability: Appeared stable.

Erosion: Minor erosion observed along the right bank immediately downstream of the low-level outlets.

Unusual Conditions: None observed.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

EXAMINATION OF OTHER FEATURES

INSTRUMENTATION

Location and condition Monumentation / Surveys, Observation Wells, Weirs, Piezometers, etc;

Item	Location	Condition
Staff Gage	Upstream face of dam near the gatehouse.	Generally good condition.

RESERVOIR

Slopes:	Appeared stable.
Sedimentation:	Unknown, but lake appeared to have little storage capacity.
Unusual Conditions Which Affect the Dam:	Heavy, thick stand of phragmites observed in lake upstream of dam.
Unusual Conditions:	Water impounded by Post Brook Dam flows into Wanaque Reservoir.

APPURTENANT STRUCTURES

Power House, Gatehouse, Penstocks, Water Supply, etc.

Item	Location	Condition
Gatehouse for low level outlet pipes.	Approximately 50 feet from left abutment.	The red brick masonry exterior is in satisfactory condition. Minor corrosion of steel cover plate inside the gatehouse was observed. Some minor cracking, spalling, and delamination of concrete interior was observed, particularly on the downstream face. The 16-inch sheet copper cylinder gaging well was present and minor weathering was observed. The timber and recording device shown on the as-built drawings have been removed.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

FORMAL INSPECTION CHECKLIST

ENGINEERING STUDIES

Hydrology & Hydraulics:

Description and date of document(s) reviewed:

According to the 2011 F&P Formal Inspection Report, Post Brook Dam was included within the detailed H&H analyses performed as part of the 1983 Phase II inspection report for the Wanaque Reservoir Dams since the Post Brook Dam is within the drainage basin for the Wanaque Reservoir. The 2011 report only provided the spillway capacity (i.e. 625 cfs) from the 1983 H&H analysis.

What is the SDF and how was it established?

The dam is a Class III structure with an associated SDF equal to the 100-year storm event. Establishment of SDF is unknown.

Is study appropriate? If no previous studies, is study needed?

See Section 3.0 of the Formal Inspection Report.

Dam Breach Analysis:

Description and date of document(s) reviewed:

No known dam breach study.

Downstream development since approval of study? If yes, please provide comparison/mapping. Is re-evaluation necessary?

No significant change that requires reevaluation.

Is study appropriate? If no previous studies, is study needed?

See Section 3.0 of the Formal Inspection Report.

Geotechnical/Seepage Analysis:

Description and date of document(s) reviewed:

None known. See Section 4.0 of the Formal Inspection Report.

Is study appropriate? If no previous studies, is study needed?

See Section 4.0 of the Formal Inspection Report.

Structural Stability Analysis:

Description and date of document(s) reviewed:

No record of stability analysis. See Section 4.0 of the Formal Inspection Report.

Is study appropriate? If no previous studies, is study needed?

See Section 4.0 of the Formal Inspection Report.

HISTORICAL DOCUMENTATION OF INSTRUMENTATION

Evaluate recorded instrument readings, changes in instrumentation, condition of instruments, observations, and conclusions from past 10 years or previous formal inspection.

There is no instrumentation at the dam.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

UNDERWATER INSPECTIONS

Date of last underwater inspection:

None known.

Underwater inspection needed?

No.

FORMAL INSPECTION CHECKLIST

SIGNIFICANT DAM EVENTS/EMERGENCIES (Overtopping Events, Damage, Failure, Other)

Description of each event within past 10 years or since previous formal inspection, including any repairs completed.

No events known or reported within the past 10 years. No significant repairs have been conducted within the past 10 years.

CONCLUSION

DAM INSPECTION PROGRAM GUIDELINES

The following new guidelines have been established by the NJDEP Bureau of Dam Safety & Flood Control to help meet the requirements of the National Inventory of Dams condition assessment of existing dam structures. Please follow the guidelines/definitions below and select the appropriate checkbox.

SATISFACTORY

No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all required loading conditions (static, hydrologic, seismic) in accordance with the applicable regulatory criteria. Minor maintenance items may be required.

FAIR

Acceptable performance is expected under all required loading conditions (static, hydrologic, seismic) in accordance with the applicable dam safety regulatory criteria. Minor deficiencies may exist that require remedial action and/or secondary studies or investigations.

POOR

A dam safety deficiency is recognized for any required loading condition (static, hydrologic, seismic) in accordance with the applicable dam safety regulatory criteria. Remedial action is necessary. POOR also applies when further critical studies or investigations are needed to identify any potential dam safety deficiencies.

UNSATISFACTORY

Considered unsafe. A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution. Reservoir restrictions may be necessary.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

I hereby state that the dam structure referenced herein was personally inspected by me and in my professional opinion based on the visual inspection, the dam was found to be in the following condition **(select one only)**:

- ☐ SATISFACTORY
- ☒ FAIR
- ☐ POOR
- ☐ UNSATISFACTORY

I recommend the following repairs be made immediately:

1. Repointing of missing and deteriorated joints in the rubble masonry downstream face of the dam.
2. Repointing and replacement of stones and mortar at the upstream face of dam, as necessary.
3. Repair the scour holes along the downstream toe of the dam.
4. Repair the low-level outlet valve and exercise the valve.
5. Repair cracks in the spillway.
6. Repair spillway training walls.

The following long term improvements should also be undertaken:

1. Monitor leakage through the downstream face of the dam.
2. Investigate the standing water observed at the downstream toe of dam at the left groin and in the area between the left groin and the low-level outlets. Based on the investigation of the standing water at the dam toe, consider repairs that may be necessary to reduce the apparent seepage through the dam.
3. Investigate the ability to operate the lower 8-inch diameter cast iron pipe and consider the need to operate the upper 8-inch diameter pipe.

**POST BROOK DAM
VISUAL INSPECTION CHECKLIST
NJ INSPECTION YEAR 2017**

The following studies are recommended:	<table style="width: 100%; border: none;"><tr><td style="width: 30px; text-align: center;"><input type="checkbox"/></td><td>Hydrologic and Hydraulic analysis</td></tr><tr><td style="text-align: center;"><input type="checkbox"/></td><td>Stability analysis</td></tr><tr><td style="text-align: center;"><input type="checkbox"/></td><td>Failure/Inundation analysis</td></tr><tr><td style="text-align: center;"><input type="checkbox"/></td><td>Other:</td></tr><tr><td style="text-align: center;"><input checked="" type="checkbox"/></td><td>None (See note below.)</td></tr></table>	<input type="checkbox"/>	Hydrologic and Hydraulic analysis	<input type="checkbox"/>	Stability analysis	<input type="checkbox"/>	Failure/Inundation analysis	<input type="checkbox"/>	Other:	<input checked="" type="checkbox"/>	None (See note below.)
<input type="checkbox"/>	Hydrologic and Hydraulic analysis										
<input type="checkbox"/>	Stability analysis										
<input type="checkbox"/>	Failure/Inundation analysis										
<input type="checkbox"/>	Other:										
<input checked="" type="checkbox"/>	None (See note below.)										

Note: The 2014 Formal Inspection recommended evaluating if the dam could be reduced from a Class III to a Class IV dam. However, based on a recent discussion with the NJDEP Bureau of Dam Safety, it was clarified that the purpose of a Class IV classification is intended mainly for storm water detention basins. Therefore it is unlikely that an existing Class III dam would be reclassified as a Class IV dam.

Additionally, future inspections of the dam may be Regular Inspections since Formal Inspections are not required for Class III dams according to the New Jersey Dam Safety Standards.

Have the recommendations above included those from the Phase I Inspection Report or previous Regular or Formal Inspection Reports? If not, indicate why. **Yes.**

NJ Dam Safety Compliance Schedule Form (attached).

This form must be completed or the Inspection Report will be deemed incomplete. **Yes.**

Name of Professional Engineering Company/Consultant Representing the Owner:

**GZA GeoEnvironmental, Inc.
55 Lane Rd, Suite 407
Fairfield, New Jersey 07004**

New Jersey Licensed Professional Engineer representing the dam owner in responsible charge of the inspection:

Sign _____

Date October 5, 2018

Christopher S. Adams, P.E.

New Jersey Professional Engineer License Number: **24GE03130000**

SEAL



APPENDIX C - PHOTOGRAPHS, POST BROOK DAM



**Photo 1: Overview of the rubble masonry dam from the left abutment.
Note the heavy stand of phragmites upstream of the dam.**



**Photo 2: View across the crest and downstream face of the dam from left abutment.
Note the vegetation growth on the downstream face.**



Photo 3: View across the downstream face of the dam from right side.



Photo 4: View of downstream face of the dam near looking towards the right abutment. Note standing water in the scour hole at the downstream toe of the dam. Also note the location of the low-level outlet discharge pipes.



**Photo 5: Downstream face of the dam near the left abutment.
Note the swale at the downstream toe.**



Photo 6: Closeup of scour hole, near the center of the dam, with standing water at the downstream toe.



**Photo 7: View of the dam crest looking right.
Note the intact condition of the stone masonry.**



Photo 8: View of crest of the dam and gatehouse for the low-level outlet valves.



Photo 9: View across the spillway entrance channel and spillway overflow weir crest.



**Photo 10: Looking left across the spillway entrance channel and spillway overflow weir crest.
Note the crack in the spillway.**



Photo 11: Closeup of the larger of the two cracks in the overflow weir crest.



Photo 12: Right spillway overflow wier training wall. Note the missing mortar at the top of the wall.



Photo 13: Overview of spillway over flow weir, left abutment and downstream apron.



Photo 14: Closeup of stone masonry apron.



Photo 15: Low-level outlet discharge pipes at the downstream face of the dam.



Photo 16: Looking downstream at the low-level outlet exit channel.



Photo 17: Interior of gatehouse. Note the copper cylinder gaging well.



Photo 18: Staff gage on upstream face of dam to the right of the gatehouse.

New Jersey Dam Safety Compliance Schedule Form

Dam Name and NJ Dam File No:
Post Brook Dam – No NJ Dam No.

Owner: North Jersey District Water
Supply Commission
Address: One F.A. Orechio Drive
Address: Wanaque, New Jersey 07465
Phone: (973) 835-3600
Email: malliegro@njdwsc.com

Owners Engineering Firm:
Name: GZA GeoEnvironmental, Inc.
Address: 55 Lane Road, Suite 407
Address: Fairfield, New Jersey, 07004
Phone: (973) 697-3496
Email: christopher.adams@gza.com

The purpose of this form is to allow the dam owner, through consultation with their engineer, to establish a time line for addressing the deficiencies identified in the inspection report for the dam and bringing the dam into compliance with the New Jersey Dam Safety Standards, N.J.A.C. 7:20-1.1 et seq.

Proposed time frame for submission of required information and implementation of recommended repairs:

(Engineer should check required sections and propose appropriate time frames. However, the Dam Safety Section reserves the right to require additional dates and/or information as needed.)

- ☒ **Performance of maintenance and repairs not requiring approval from the Dam Safety Section** (Such work includes grass mowing, brush removal, debris removal, filling of animal burrows, minor concrete repairs, minor gate repairs, filling of areas of minor surface erosion, etc. The Dam Safety Section must be notified upon completion of these activities.)

Work to be completed no later than: December 30, 2018

- ☐ **Engineering Report / Studies** (This work includes any required hydrologic and hydraulic analysis, structural analysis, alternative analysis, geotechnical investigations or dam breach analysis that may be recommended by your engineer and/or required by the Dam Safety Section.)

Studies to be submitted for review no later than:

- ☐ **Permit Application:** (A permit application must be submitted for any construction activity at the dam. The permit application must address all deficiencies as identified in the inspection report and the subsequent engineering report / studies.)

Permit application to be submitted no later than _____ months after the date of the Dam Safety Section's approval of any required studies. (Please provide date if no studies are required.)

- ☐ **Construction to start no later than _____ months after the date of issuance of the permit by the Dam Safety Section.**

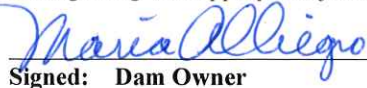
- ☐ **Operation and Maintenance Plan (O&M):** (An O&M is required for all dams. O&M's should be submitted with the permit application or sooner if possible. Existing O&M's may need to be updated if a dam is being rehabilitated. Please indicate date a new or revised O&M will be submitted if there is not an existing and approved Manual on file with this office.)

O&M to be submitted no later than: _____

- ☐ **Emergency Action Plan (EAP):** (EAPs are required for all high and significant hazard dams and should be submitted as soon as possible. Existing EAPs should be reviewed on a yearly basis and revised as necessary. Please indicate date a new or updated EAP will be submitted if there is not an existing and approved Plan on file with this office.)

EAP to be submitted no later than: _____

The dates provided above will be reviewed by the Dam Safety Section to determine if the schedule is acceptable to achieve compliance with the Dam Safety Standards. Requests for extensions to the accepted time frames outlined above must be submitted to this office in writing along with appropriate justification and will be considered on its merits on a case by case basis.



Signed: Dam Owner

10/5/18

Date



Signed: Owner's Engineer

10-5-2018

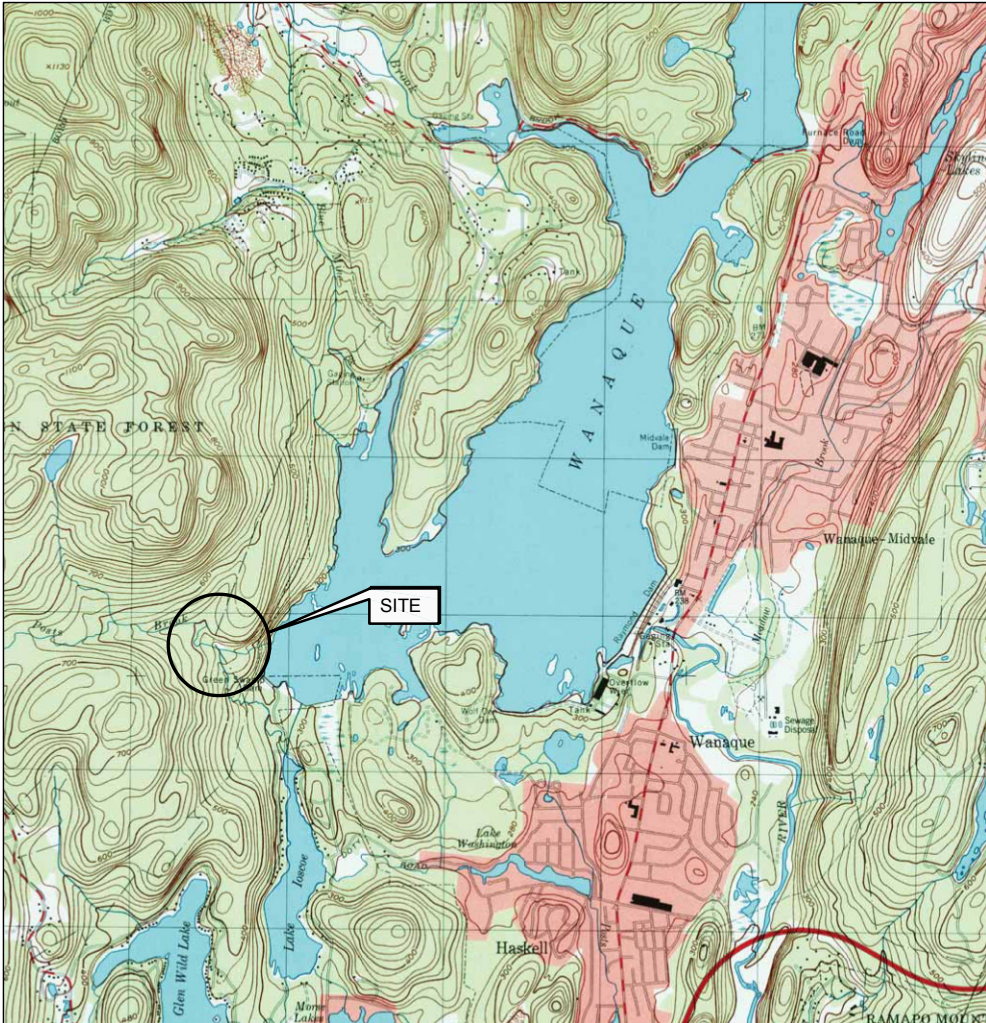
Date

Additional information including Dam Safety Section forms, standards and inspection guidelines as well and EAP guidelines and a sample O&M is available at <http://www.state.nj.us/dep/damsafety> or contact this office via e-mail at Damsafety@dep.state.nj.us or telephone at (609)984-0859. Please submit the completed form to: Mail Code 501-01A, P.O. Box 420, Trenton, NJ 08625-0420

EXHIBIT “C”

CONSTRUCTION DRAWINGS:
IMPROVEMENTS TO POST BROOK DAM
PREPARED BY O'BRIEN & GERE ENGINEERS,
INC.

I:\NJ-Dist-Water\13200\51052\Consulting-Serv\Docs\POST BROOK DAM\DWG\SHEETS\51052-PB-G00.dwg



SOURCE: WANAQUE, NJ U.S.G.S. 7.5 MIN. QUADRANGLE, DATED 1995

SITE LOCATION MAP
SCALE: 1" = 2,000'

CONTRACT DRAWINGS

IMPROVEMENTS TO
POST BROOK DAM

CONTRACT NO. 1037

NORTH JERSEY DISTRICT
WATER SUPPLY COMMISSION
WANAQUE, NEW JERSEY


MAY 2015



HAWTHORNE
22 SAW MILL RIVER ROAD
1st FLOOR
HAWTHORNE, NY 10532
PHONE: 914-345-1616

INDEX TO DRAWINGS

TITLE SHEET	
GENERAL	
G-1	EXISTING SITE PLAN, PROFILE & SECTIONS
STRUCTURAL	
S-1	MASONRY REPAIR AREAS IDENTIFICATION & LOCATION
S-2	MASONRY REPAIR NOTES & DETAILS
S-3	OUTLET WORKS DEMOLITION & REPAIRS PLANS & SECTIONS
S-4	MISCELLANEOUS STRUCTURAL SECTIONS & DETAILS

 IT IS A VIOLATION OF LAW FOR ANY
PERSON UNLESS ACTING UNDER THE
DIRECTION OF A LICENSED PROFESSIONAL
ENGINEER TO ALTER THIS DOCUMENT.

5/5/2015 11:08 AM



THIS DRAWING WAS PREPARED AT THE SCALE INDICATED.
INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED
WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS.
USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE.

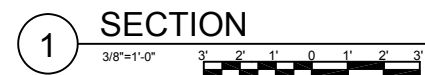


O'BRIEN & GERE
O'BRIEN & GERE ENGINEERS, INC
HAWTHORNE, NY

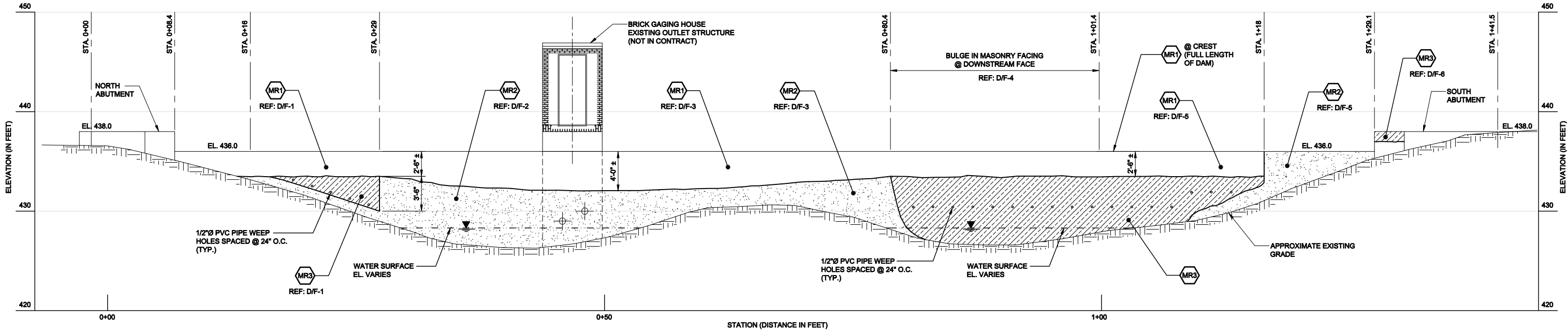
GENERAL POST BROOK DAM IMPROVEMENTS EXISTING SITE PLAN, PROFILE & SECTIONS

FILE NO.	13200.51052 -PB-G01
DATE	04/10/2015

G-1



1. THE EXISTING CONDITIONS SHOWN ON THIS SHEET ARE THE REMAINS OF THE POST BROOK DIVERSION WORKS, GAGING HOUSE AND THE DAM SECTION. THIS DRAWING IS BASED UPON CONSTRUCTION-RECORD DRAWINGS "WANAQUE RESERVOIR POST BROOK DIVERSION WORKS DAM AND WEIR" AND "WANAQUE RESERVOIR POST BROOK DIVERSION WORKS GAGING HOUSE" BOTH DATED APRIL 30, 1931.



ELEVATION - DOWNSTREAM FACE OF POST BROOK DAM



NOTES:

- THE AREAS OF DETERIORATION ARE BASED UPON O'BRIEN & GERE ENGINEERS FIELD INVESTIGATIONS CONDUCTED IN APRIL 2014. THESE AREAS OF DETERIORATION PROVIDE A MINIMUM FOR THE CONTRACTOR'S SCOPE OF MASONRY RESTORATION WORK.
- THE APPROXIMATE LOCATIONS AND EXTENTS OF REPAIR SHOWN ABOVE AND THE PHOTOGRAPHS PROVIDED BELOW ARE FOR THE CONTRACTOR'S CONVENIENCE AND DO NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO VERIFY & ESTABLISH ALL EXISTING FIELD CONDITIONS PRIOR STARTING THE WORK.
- SEE SHEET S-2 FOR STRUCTURAL NOTES AND DESCRIPTIONS OF MASONRY RESTORATION METHODS & PROCEDURES.
- 1/2" DIA. PVC WEEPS SHALL BE PLACED IN NEW MORTAR JOINTS, APPROXIMATELY EVERY 24" O.C. HORIZONTALLY, AS INDICATED ON THE ELEVATION. EXTEND WEEPS 1" BEYOND STONE MASONRY FACE. WEEPS ARE INTENDED TO BE LOCATED WHERE SEEPAGE OCCURS THROUGH MASONRY JOINTS.

MASONRY RESTORATION TYPES:

- MR1** MASONRY CLEANING & LIMITED JOINT POINTING:
CLEAN MASONRY UNITS AND MORTAR JOINTS ACCORDING TO THE NOTES AND SPECIFICATIONS. INSPECT JOINTS FOR MISSING OR DETERIORATED MORTAR. SPOT REPAIR JOINTS AS NEEDED WITH NEW MORTAR TO MATCH SURROUNDING JOINT COLOR AND RELIEF.
- MR2** JOINT POINTING & LIMITED MASONRY UNIT RESETTING:
CLEAN MASONRY UNITS AND MORTAR JOINTS ACCORDING TO THE NOTES AND SPECIFICATIONS. INSPECT JOINTS FOR MISSING OR DETERIORATED MORTAR. INSPECT MASONRY FOR ANY LOOSE UNITS. REMOVE ALL UNSOUND MORTAR FROM DETERIORATED JOINTS TO EXPOSE SOUND MORTAR OR A MAXIMUM DEPTH OF 2". REPOINT ALL JOINTS WITH NEW MORTAR. NEW MORTAR JOINTS SHALL BE FLUSH WITH MASONRY UNITS (NO JOINT RELIEF). CHIP OUT AND RESET ANY LOOSE MASONRY UNITS.
- MR3** MASONRY REBUILDING:
CLEAN MASONRY UNITS AND MORTAR JOINTS ACCORDING TO THE NOTES AND SPECIFICATIONS. USE HAND TOOLS AND PRESSURE WASH TO REMOVE ALL SURFICIAL VEGETATION & SOIL DEPOSITS FROM THE DETERIORATED JOINTS, ALONG WITH ALL STUMPS AND ROOTS. TO A MAXIMUM DEPTH OF 10". REMOVE ALL UNSOUND MORTAR FROM DETERIORATED JOINTS TO EXPOSE SOUND MORTAR OR A MAXIMUM DEPTH OF 10". INSPECT MASONRY FOR LOOSE OR MISSING MASONRY UNITS. REMOVE, CLEAN, & STOCKPILE LOOSE STONE FOR RE-USE. TOTAL DEPTH OF REMOVAL (MASONRY UNITS AND/OR JOINTS) SHALL NOT EXCEED 10". USE 3/8" DIAMETER STAINLESS STEEL EPOXY ANCHORS PER DETAIL ON SHT. S-2 TO SECURE ALL RE-USED OR NEW MASONRY UNITS. NEW OR RE-USED MASONRY UNITS SHALL BE LAID IN A RANDOM ASHLAR PATTERN TO BLEND IN WITH THE SURROUNDING STONE MASONRY. PLACE NEW UNITS ON FRESH BED OF MORTAR, AT LEAST 1" THICK. FULLY BUTTER ALL SIDES OF MASONRY UNITS. NEW JOINTS SHALL BE FLUSH WITH MASONRY UNITS (NO JOINT RELIEF). PROFILE, PATTERN, AND BATTER OF RECONSTRUCTED MASONRY SHALL MATCH THAT OF THE SURROUNDING, UNDAMAGED EXISTING MASONRY.



D/F-1



D/F-2



D/F-3



D/F-4



D/F-5



D/F-6

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE.

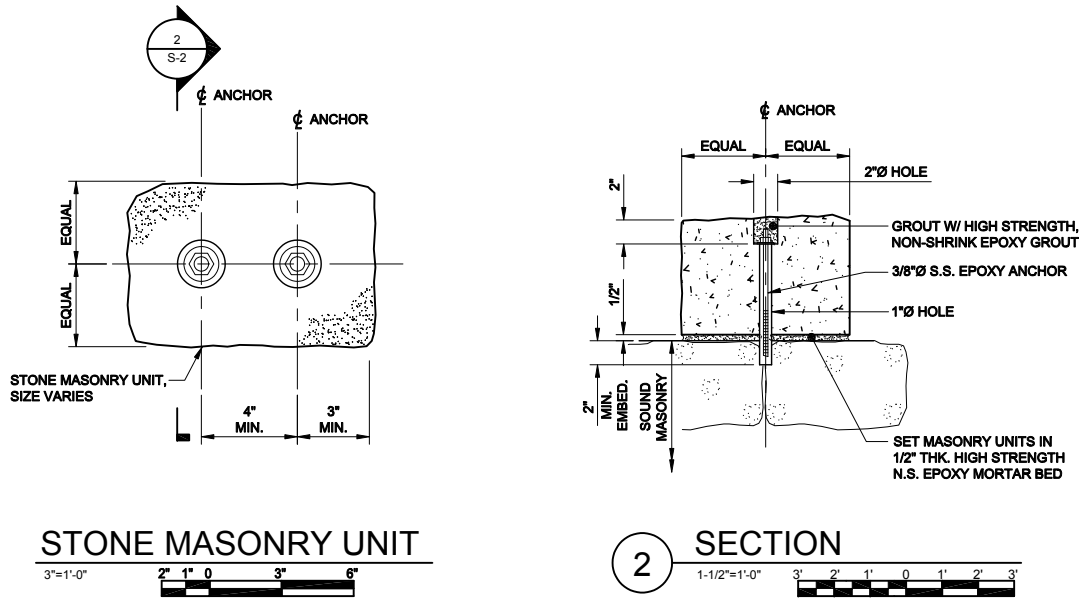
IN CHARGE OF	RRB								
DESIGNED BY	MAD								
CHECKED BY	SHS								
DRAWN BY	MK								
		0	05/05/2015	ISSUED FOR CONSTRUCTION				RRB	
		A	04/10/2015	ISSUED FOR CLIENT REVIEW				RRB	
		NO.	DATE	REVISION				INT.	



NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
IMPROVEMENTS TO
POST BROOK DAM
WANAUKE, NEW JERSEY

STRUCTURAL
POST BROOK DAM IMPROVEMENTS
MASONRY REPAIR AREAS
IDENTIFICATION & LOCATION

FILE NO.	13200.51052 -PB-S01
DATE	04/10/2015



STRUCTURAL NOTES:

1. THE DOWNSTREAM FACE OF THE DAM GENERALLY CONSISTS OF THREE (3) CONDITIONS: SOUND MASONRY (UNITS & JOINTS), PARTIALLY UNSOUND MASONRY (EITHER UNSOUND MASONRY UNITS OR JOINTS), & UNSOUND MASONRY(LOOSE/MSSING/UNSOUND UNITS, DETERIORATED OR MISSING MORTAR JOINTS). THESE DRAWINGS, NOTES, AND SPECIFICATIONS PROVIDE GENERAL GUIDANCE TO ADDRESS THESE CONDITIONS.
2. APPROXIMATE LOCATIONS & EXTENTS OF MASONRY RESTORATION WORK & PHOTOGRAPHS OF THE DOWNSTREAM FACE OF DAM ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE. IT STILL REMAINS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING FIELD CONDITIONS. ACTUAL AND FINAL LOCATIONS AND EXTENTS OF MASONRY RESTORATION MAY VARY FROM THOSE SHOWN ON THESE DRAWINGS.
3. AT NO TIME SHALL MASONRY REMOVAL BE PERFORMED IN SUCH A MANNER OR TO AN EXTENT THAT ANY COMPONENT OF THE DAM WOULD BE DAMAGED AND/OR DESTABILIZED. IF POTENTIAL FOR SUCH CONDITIONS EXISTS, THE CONTRACTOR SHALL INFORM THE ENGINEER PRIOR TO MASONRY REMOVAL WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY SHORING OR TEMPORARY STABILIZATION MEASURES THAT MAY BE REQUIRED DURING ANY STAGE OF THE WORK.
4. ALL MASONRY WORK SHALL BE DONE IN ACCORDANCE WITH MASONRY SPECIFICATIONS 04400 & 04520.
5. STONE MASONRY FOR ALL NEW MASONRY WORK AND MASONRY REPAIR WORK SHOWN ON THE CONTRACT DRAWINGS SHALL BE OBTAINED FROM ONSITE FIELD STONE. ALL ON-SITE FIELD STONE SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER. STONE SELECTED FOR MASONRY UNITS SHALL BE COMPETENT SOUND STONES FREE OF WEAK FRACTURES AND INTERNAL BANDING/BEDDING LINES AND SHALL MATCH EXISTING STONE IN TYPE, SIZE, AND SURFACE FINISH.
6. ANCHOR DOWELS IN EXISTING MASONRY WITH 3/8" DIA. HAS RODS & HIT HY 200 ADHESIVE ANCHOR SYSTEM AS MANUFACTURED BY HILTI CORP., MIN. EMBEDMENT = 2 INCHES.

MASONRY RESTORATION AND REPAIR NOTES: METHODS & PROCEDURES

- THESE MASONRY RESTORATION METHODS & PROCEDURES SHALL BE IMPLEMENTED WITH SPECIFICATIONS 04400 & 04520.
1. LOW PRESSURE WASH SHALL BE MAXIMUM 1,500 PSI. AFTER LOW PRESSURE WASH, THE CONTRACTOR SHALL INSPECT ALL MASONRY SURFACES AND MORTAR JOINTS IN DEFINED REGION AND MARK (DELIBLE MARK) AREAS WHERE MASONRY OR MORTAR IS DETERIORATED OR MISSING AND REQUIRES REPAIR OR RESTORATION. AFTER VISUAL INSPECTION, THE CONTRACTOR SHALL PERFORM HAMMER SOUNDING TESTS ON RANDOM AREAS, AREAS WITH EVIDENCE OF DETERIORATION, AND AREAS AROUND THE MARKED DETERIORATED ZONES TO FURTHER DEFINE BOUNDARIES OR EXTENT OF DETERIORATION.
 2. REMOVE MOSS, FUNGAL AND VEGETATIVE GROWTH FROM MORTAR JOINTS, DETERIORATED MASONRY UNITS, OR VOIDS/CRACKS USING D/2 BIOLOGICAL SOLUTION, AVAILABLE FROM ALLIED BUILDING PRODUCTS CORP. OR CATHEDRAL STONE PRODUCTS, AND A SOFT BRISTLE BRUSH. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR D/2 APPLICATION AND GROWTH REMOVAL.
 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER CLEANING TO PERFORM A FINAL MASONRY PREPARATION INSPECTION TO ASSESS THE CONDITION OF THE MASONRY AND MORTAR.
 4. AFTER INITIAL INSPECTION, IDENTIFICATION, AND EVALUATION OF DETERIORATED SECTIONS, THE CONTRACTOR SHALL IDENTIFY AREAS WHERE MASONRY (OR MASONRY UNITS) ARE MISSING OR SEVERELY DETERIORATED AND REQUIRE REPLACEMENT. REMOVAL/REPLACEMENT OF MASONRY UNITS SHALL BE APPROVED BY THE ENGINEER AND SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION 04520, SECTION 3.3. REPLACEMENT MASONRY SHALL BE DISPLACED STONE OR ON-SITE FIELD STONE.
 5. PATCHES OR AREAS OF MASONRY WITH UNSOUND MORTAR, MISSING MASONRY UNITS, OR SEVERELY DETERIORATED MASONRY AS IDENTIFIED BY INSPECTION AND TESTING (PER NOTE 1 ABOVE) SHALL BE RENOVATED AND/OR REPAIRED PER THESE NOTES AND CONTRACT SPECIFICATION 04520.
 6. WHERE PARTIALLY DETERIORATED, LOOSE, OR CRACKED MASONRY IS ENCOUNTERED, THE CONTRACTOR SHALL EXTRACT LOOSE/DETERIORATED SECTIONS OF THE DEFECTIVE MASONRY (OR MASONRY UNIT) AND REPLACE MASONRY WITH SOUND MASONRY CUT TO FIT, OR PATCH MASONRY WITH COLOR/TEXTURE MATCHED PATCHING MORTAR IN ACCORDANCE WITH SPECIFICATION 04520, SECTION 3.4 AND 3.5. EPOXY ADHESIVES AND DOWELS SHALL BE USED TO ANCHOR MASONRY SECTIONS AND PATCHED AREAS IN ACCORDANCE WITH THIS SPECIFICATION. REPLACEMENT SECTIONS OF MASONRY, MASONRY UNITS, AND MASONRY PATCHING SHALL MATCH SURROUNDING MASONRY IN SIZE, COLOR, AND TYPE.
 7. STONE MASONRY SHALL BE SUPPORTED WHILE THE MASONRY CURES.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE.

IN CHARGE OF	RRB								
DESIGNED BY	MAD								
CHECKED BY	SHS	0	05/05/2015	ISSUED FOR CONSTRUCTION				RRB	
DRAWN BY	MK	A	04/10/2015	ISSUED FOR CLIENT REVIEW				RRB	
		NO.	DATE	REVISION				INT.	



NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

IMPROVEMENTS TO
POST BROOK DAM

WANAQUE, NEW JERSEY

STRUCTURAL

POST BROOK DAM IMPROVEMENTS

MASONRY REPAIR

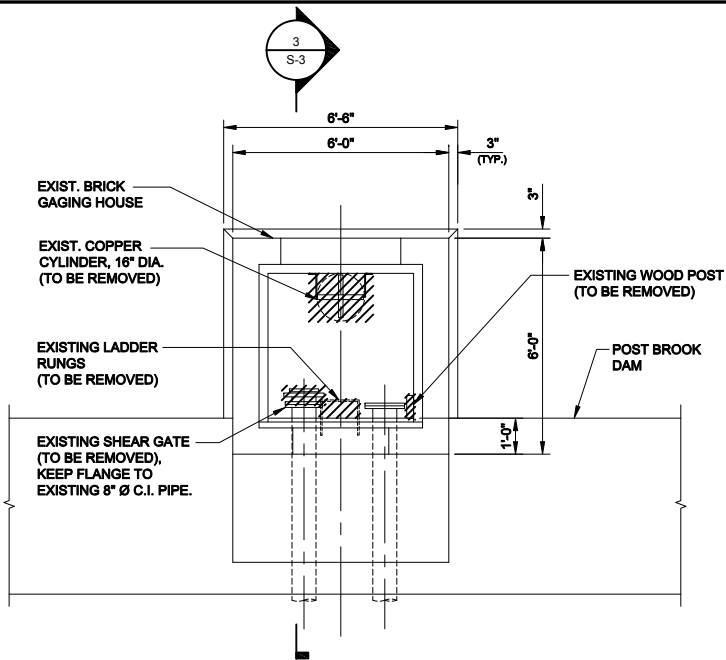
NOTES & DETAILS

FILE NO.

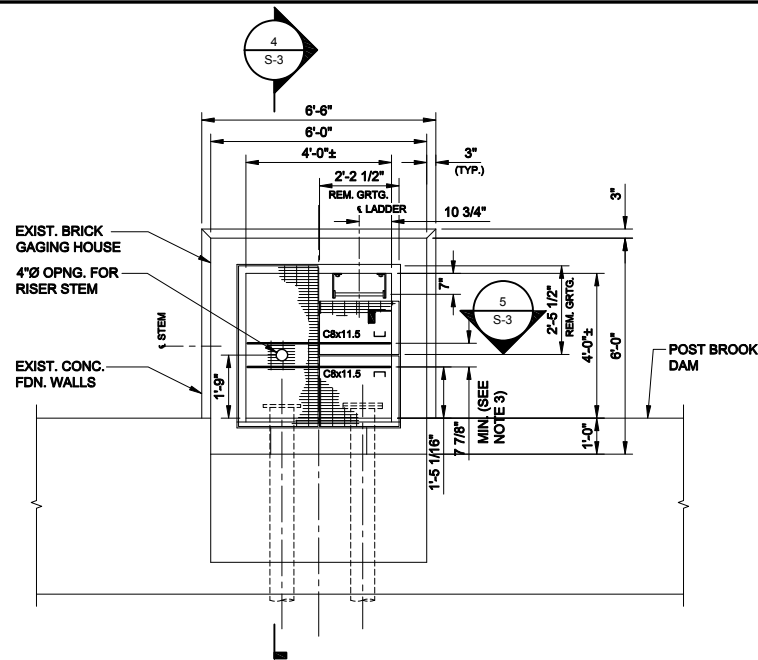
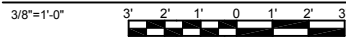
13200.51052 -PB-S02

DATE

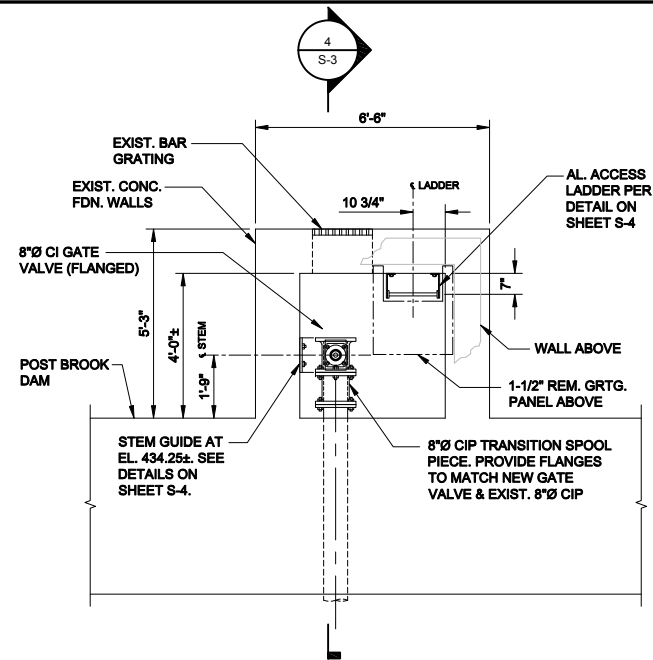
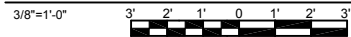
04/10/2015



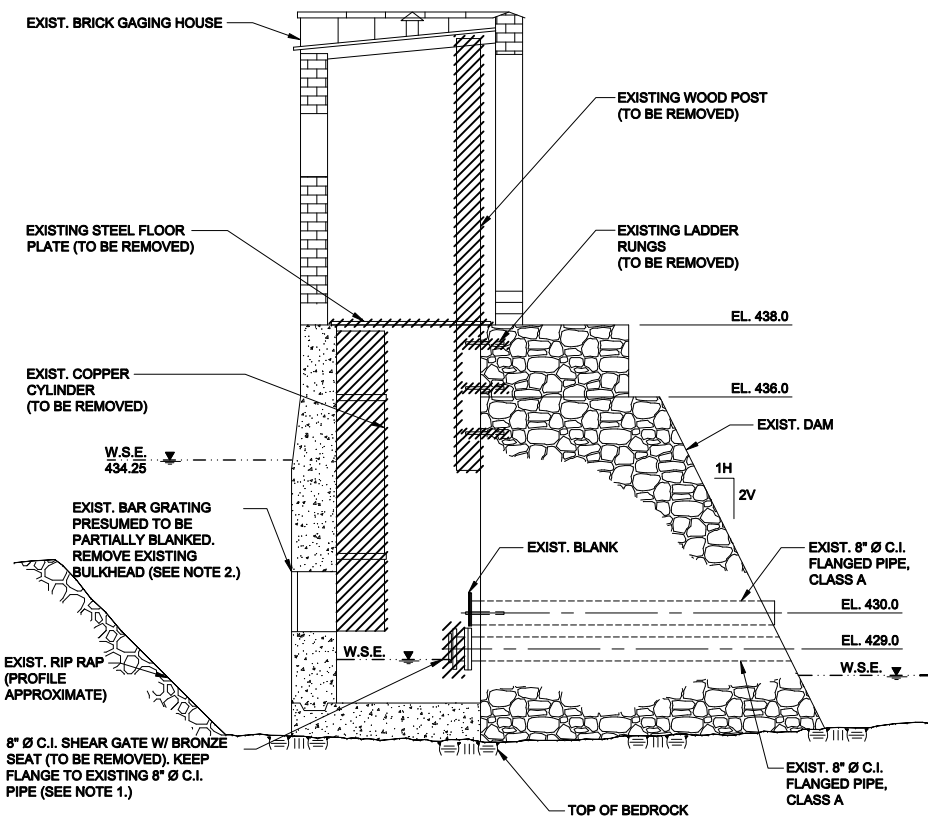
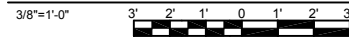
PARTIAL DEMOLITION PLAN @ EL. 443.0



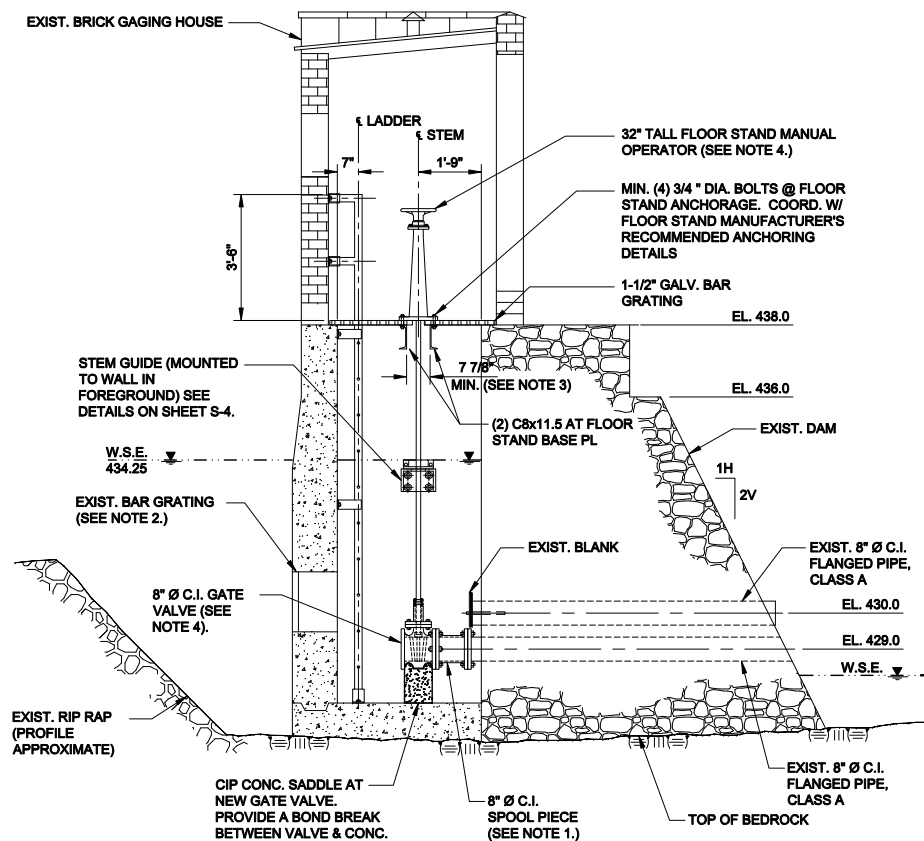
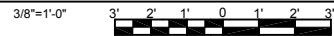
PARTIAL PLAN @ EL. 438.5



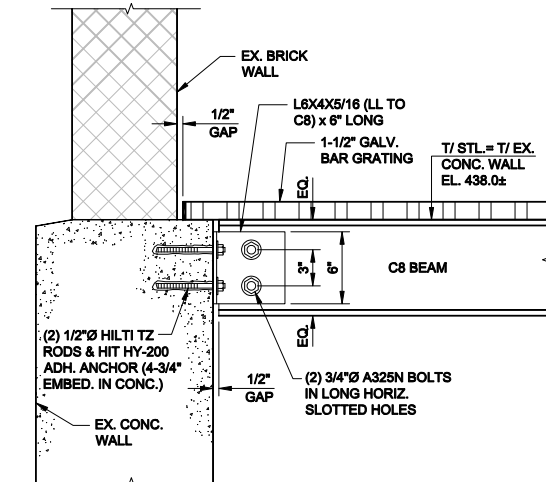
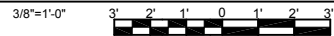
PARTIAL PLAN @ EL. 429.5



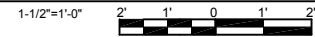
3 DEMOLITION SECTION



4 SECTION



5 SECTION



NOTES:

- CONTRACTOR SHALL FIELD MEASURE THE EXISTING PIPE FLANGE SIZE, THICKNESS & BOLT PATTERN. CREATE A TEMPLATE OF THESE EXISTING CONDITIONS TO FABRICATE THE NEW FLANGE FOR THE TRANSITION SPOOL PIECE.
- THE EXACT CONDITIONS & GEOMETRY OF THE EXISTING BAR GRATING IS UNKNOWN AT THIS TIME. FOR BIDDING PURPOSE, IT SHALL BE ASSUMED THAT THE GRATING IS TO REMAIN. ALSO, IT APPEARS THAT THE BAR GRATING IS PARTIALLY BLOCKED BY A BULKHEAD OF UNKNOWN COMPOSITION. THE BULKHEAD SHALL BE REMOVED. AN ALLOWANCE SHALL BE PROVIDED FOR THE BAR GRATING REMOVAL & REPLACEMENT IF THE EXISTING GRATING IS NOT IN SUITABLE CONDITION.
- COORDINATE BEAM LOCATIONS AND SPACING WITH THE FLOOR STAND LOCATION AND ANCHOR BOLT SPACING AND ARRANGEMENT.
- GATE VALVES ARE TO BE FLANGED DUCTILE IRON, RESILIENT WEDGE, NON-RISING STEM TYPE CONFORMING TO AWWA C509 AND NSF/ANSI 372. CONTRACTOR TO PROVIDE NIBCO MODEL F619RW-ES (NIBCO # NHACD5L) AS MANUFACTURED BY NIBCO, INC (OR APPROVED EQUAL). GATE VALVE SHALL COME WITH STEM EXTENSION(S) AND HANDWHEEL TYPE FLOOR STAND OPERATOR.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE.

IN CHARGE OF	RRB								
DESIGNED BY	MAD								
CHECKED BY	SHS	0	05/05/2015	ISSUED FOR CONSTRUCTION				RRB	
DRAWN BY	MK	A	04/10/2015	ISSUED FOR CLIENT REVIEW				RRB	
		NO.	DATE	REVISION				INT.	



NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION

IMPROVEMENTS TO POST BROOK DAM

WANAUKE, NEW JERSEY

STRUCTURAL

POST BROOK DAM IMPROVEMENTS

OUTLET WORKS DEMOLITION & REPAIRS PLANS & SECTIONS

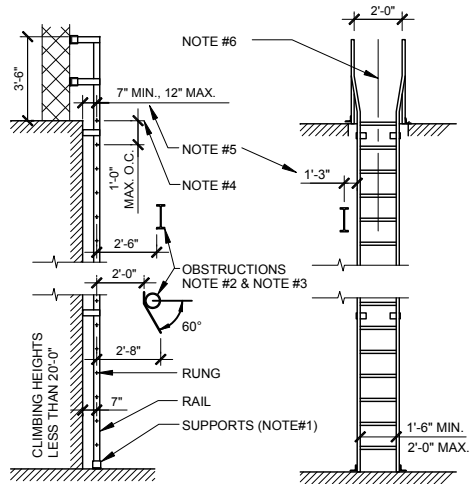
FILE NO.

13200.51052 -PB-S03

DATE

04/10/2015

S-3

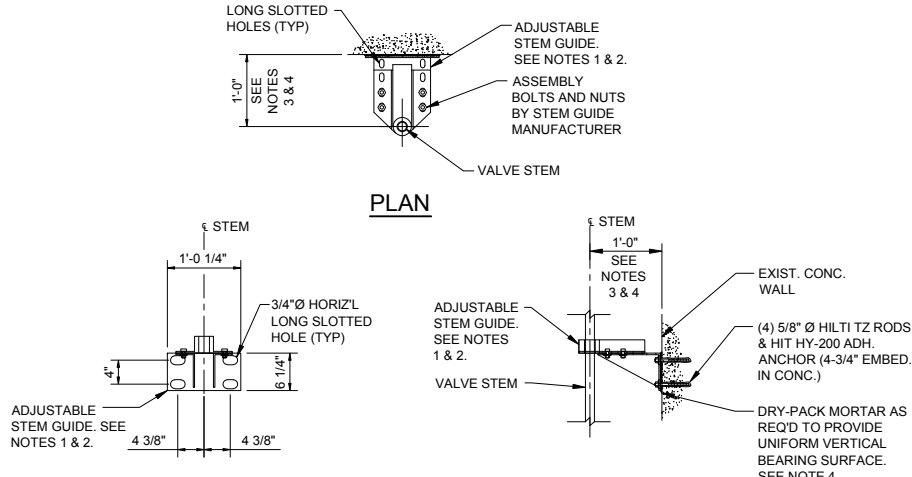


GENERAL LADDER DETAILS

SCALE: 1/4" = 1'-0"

DETAIL NOTES:

- SUPPORTS SHALL BE AT TOP & BOT. AND AT 10'-0" O.C. MAX. W/ S.S. ANCHORS. DESIGN EA. SUPPORT TO RESIST SHEAR & PULLOUT OF A 500 LB. APPLIED LOAD.
- VERT. LADDERS WITHOUT CAGES OR WELLS SHALL HAVE A MIN. PERPENDICULAR DISTANCE OF 2'-6" FROM CENTERLINE OF RUNGS TO THE EDGE OF THE NEAREST PERMANENT OBJECT. DISTANCE OF 3'-0" FOR PITCHED LADDERS. DISTANCE MAY BE REDUCED BY 6" IF A 1/16" DEFLECTOR PLATE IS PROVIDED.
- MINIMUM DISTANCE TO THE NEAREST PERMANENT OBJECT ON EACH SIDE OF THE LADDER CENTERLINE SHALL BE 1'-3". MIN. DISTANCE FROM CENTERLINE OF RUNGS TO NEAREST PERMANENT OBJECT ON BACKSIDE OF LADDER SHALL BE 7".
- TOP RUNG SHALL BE LEVEL WITH ACCESS/EGRESS LEVEL OR LANDING PLATFORM. RUNGS SHALL BE AT 1'-0" O.C. MAX. & UNIFORM THROUGHOUT.
- BILCO LADDER-UP SAFETY POST (OR EQUIVALENT) IS REQ'D. WHERE 3'-6" EXTENSION OF RAILS IS NOT PRACTICAL. (IE: AT HATCHES)
- PITCH OF LADDERS SHALL RANGE FROM 90 DEG. (VERT.) TO 75 DEG. FROM HORIZ.
- ALL LADDERS SHALL BE DESIGNED BY MANUFACTURER TO MEET O.S.H.A.



PLAN

FRONT ELEVATION

SIDE ELEVATION

STEM GUIDE DETAILS

SCALE: NO SCALE

DETAIL NOTES:

- STEM GUIDE SHALL BE CAST-IRON ADJUSTABLE TYPE WITH TWO PART DURABLE EPOXY COATING. METAL ACCESSORIES AND FASTENERS SHALL BE IN ACCORDANCE WITH SPECIFICATION 05500 "METAL FABRICATIONS".
- STEM GUIDE SHALL BE SMALL STEM GUIDE (MODEL NO: A-25680S) AS MANUFACTURED BY PENN-TROY MANUFACTURING, INC. OR APPROVED EQUAL.
- CONTRACTOR SHALL CONFIRM AND FIELD VERIFY ACTUAL STEM CENTERLINE OFFSET FROM EXISTING CONCRETE WALL, AND COORDINATE THIS DATA WITH STEM GUIDE MANUFACTURER.
- STEM GUIDE SHALL BE INSTALLED TRUE TO THE VALVE STEM ALIGNMENT SUCH THAT THE STEM GUIDE DOES NOT IMPEDE OR ADVERSELY AFFECT THE VALVE STEM OR VALVE OPERATION.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR TO DETERMINE THE ACTUAL SCALE.

IN CHARGE OF	RRB								
DESIGNED BY	MAD								
CHECKED BY	SHS	0	05/05/2015	ISSUED FOR CONSTRUCTION	RRB				
DRAWN BY	MK	A	04/10/2015	ISSUED FOR CLIENT REVIEW	RRB				
		NO.	DATE	REVISION	INT.				



NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
IMPROVEMENTS TO
POST BROOK DAM
WANAUKE, NEW JERSEY

STRUCTURAL
POST BROOK DAM IMPROVEMENTS
MISCELLANEOUS STRUCTURAL
SECTIONS & DETAILS

FILE NO.	13200.51052 -PB-S04
DATE	04/10/2015

CONTRACT #2099

ATTACHMENT #1

ACCESS APPROVAL

Pages (1) One

ACCESS APPROVAL FORM TO COMMISSION FACILITIES



COMPLETE ALL SECTIONS

PLEASE PRINT LEGIBLY

1. Name of Individual Entering Premises: _____
 - a. Company Name: _____
 - b. Date of Arrival: _____
 - c. Time of Arrival: _____
 - d. Your Contact Info: Phone: _____ Fax: _____ Email: _____
2. **Purpose:**
 - a. Meeting: () Interview: () Pre-bid/Pre-Proposal Meeting: () Bid Opening: ()
Bid/RFP # & Title: _____
Meeting Scheduled With: _____
Visiting which Commission Facility: _____
 - b. Delivery: () Routine -or- () Special
Purpose of Delivery: _____
Contact Person at NJDWSC: _____
Type: _____ Package: _____ Chemical: _____ Other: _____
Hazardous Materials () (Attach MSDS Sheets)
Other Materials Delivered or Transported to Commission Property (List Below):

3. Vehicle Make: _____ Year: _____ Color: _____ Lic. Plate #: _____
4. Emergency Contact Number of Your Firm: _____ Name: _____
Tele #: _____

Email completed Access Approval Form & Photo ID to security@njdwsc.com 24 hours prior to arrival time. For any questions, please call (973) 831-6200. A new Access Approval Form is required for each and every visit.

Approved by Commission: _____ Date: _____

Note: ***Prior to any and all contractors starting work on the property, they are to meet with a Safety Officer for site orientation and safety awareness training. This must be done for each employee and all sub-contractors.***

ATTACHMENT #2

**VENDOR CERTIFICATION & DISCLOSURE OF POLITICAL
CONTRIBUTIONS DISCLOSURE FORMS**

Pages (7) Seven

INFORMATION AND INSTRUCTIONS

For Completing the “Two-Year Vendor Certification and Disclosure of Political Contributions” Chapter 51 Form

Background Information

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 (“Chapter 51”).

On September 24, 2008, Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey’s efforts to protect the integrity of procurement decisions and increase the public’s confidence in government. The Executive Order builds upon the provisions of Chapter 51.

Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor’s ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. **Please note that it is the vendor’s responsibility to file new forms with the State should these changes occur.**

State Agency Instructions: Prior to the awarding of a contract, the State Agency should first use NJSTART (<https://www.njstart.gov/bso/>) to check the status of a vendor’s Chapter 51 certification before contacting the Review Unit’s mailbox at CD134@treas.nj.gov. If the State Agency does not find any Chapter 51 Certification information in NJSTART and/or the vendor is not registered in NJSTART, then the State Agency should send an e-mail to CD134@treas.nj.gov to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

Instructions for Completing the Form

Part 1: BUSINESS ENTITY INFORMATION

Business Name – Enter the full legal name of the vendor, including trade name if applicable.

Address, City, State, Zip and Phone Number -- Enter the vendor's street address, city, state, zip code and telephone number.

Vendor Email – Enter the vendor’s primary email address.

Vendor FEIN – Please enter the vendor's Federal Employment Identification Number.

Business Type - Check the appropriate box that represents the vendor's type of business formation.

Listing of officers, shareholders, partners or members - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Part 2: DISCLOSURE OF CONTRIBUTIONS

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

Name of Recipient - Enter the full legal name of the recipient.

Address of Recipient - Enter the recipient's street address.

Date of Contribution - Indicate the date the contribution was given.

Amount of Contribution - Enter the dollar amount of the contribution.

Type of Contribution - Select the type of contribution from the examples given.

Contributor's Name - Enter the full name of the contributor.

Relationship of the Contributor to the Vendor - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

NOTE: If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary.

Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box must be checked if there are no contributions to report.**

Part 3: CERTIFICATION

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity. **(No additional Certification and Disclosure forms are required if BOX A is checked.)**

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity with the exception of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. **(Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)**

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. **(Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)**

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

Read the five statements of certification prior to signing.

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

State Agency Procedure for Submitting Form(s)

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: cd134@treas.nj.gov or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

Business Entity Procedure for Submitting Form(s)

The business entity should return this form to the contracting State Agency.

The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Questions & Information

Questions regarding Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at: <https://www.state.nj.us/treas/purchase/eo134questions.shtml>.

Reference materials and forms are posted on the Political Contributions Compliance website at: <http://www.state.nj.us/treasury/purchase/execorder134.shtml>.



State of New Jersey
Department of the Treasury

Division of Purchase and Property

Two-Year Chapter 51/Executive Order 117 Vendor Certification and
Disclosure of Political Contributions

FOR STATE USE ONLY

Solicitation, RFP, or Contract No. _____ Award Amount _____

Description of Services _____

State Agency Name _____ Contact Person _____

Phone Number _____ Contact Email _____

☐ Check if the Contract / Agreement is Being Funded Using FHWA Funds

**Please check if requesting
recertification ☐**

Part 1: Business Entity Information

Full Legal Business Name _____
(Including trade name if applicable)

Address _____

City _____ State _____ Zip _____ Phone _____

Vendor Email _____ Vendor FEIN (SS# if sole proprietor/natural person) _____

**Check off the business type and list below the required information for the type of business selected.
MUST BE COMPLETED IN FULL**

- ☐ Corporation: LIST ALL OFFICERS and any 10% and greater shareholder (If the corporation only has one officer, please write "sole officer" after the officer's name.)
- ☐ Professional Corporation: LIST ALL OFFICERS and ALL SHAREHOLDERS "sole officer" after the officer's name.)
- ☐ Partnership: LIST ALL PARTNERS with any equity interest
- ☐ Limited Liability Company: LIST ALL MEMBERS with any equity interest
- ☐ Sole Proprietor

Note: "Officers" means President, Vice President with senior management responsibility, Secretary, Treasurer, Chief Executive Officer or Chief Financial Officer of a corporation, or any person routinely performing such functions for a corporation.

Also Note: "N/A will not be accepted as a valid response. Where applicable, indicate "None."

All Officers of a Corporation or PC

**10% and greater shareholders of a corporation
or all shareholders of a PC**

All Equity partners of a Partnership

All Equity members of a LLC

If you need additional space for listing of Officers, Shareholders, Partners or Members, please attach separate page.

Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.

1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. 19:44A-3(n)

2. Report below all contributions solicited or made during the 5 ½ years immediately preceding the commencement of negotiations or submission of a proposal to any:

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate
State Political Party Committee
County Political Party Committee

3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:

Municipal Political Party Committee
Legislative Leadership Committee

Full Legal Name of Recipient _____

Address of Recipient _____

Date of Contribution _____ Amount of Contribution _____

Type of Contribution (i.e. currency, check, loan, in-kind) _____

Contributor Name _____

Relationship of Contributor to the Vendor _____

If this form is not being completed electronically, please attach additional contributions on separate page.

Click the "Add a Contribution" tab to enter additional contributions.

Remove Contribution

Add a Contribution

☐ **Check this box only if no political contributions have been solicited or made by the business entity or any person or entity whose contributions are attributable to the business entity.**

Part 3: Certification (Check one box only)

- (A) ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**.
- (B) ☐ I am certifying on behalf of the business entity and all individuals and/or entities whose contributions are attributable to the business entity as listed on Page 1 under **Part 1: Vendor Information**, except for the individuals and/or entities who are submitting separate Certification and Disclosure forms which are included with this submittal.
- (C) ☐ I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.
- (D) ☐ I am certifying as an individual or entity whose contributions are attributable to the business entity.

I hereby certify as follows:

1. **I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.**
2. **All reportable contributions made by or attributable to the business entity have been listed above.**

3. The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:

- a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
- (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; OR
 - (ii) Any State, County or Municipal political party committee; OR
 - (iii) Any Legislative Leadership committee.
- b) During the term of office of the current Governor or Lieutenant Governor to:
- (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
- (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.

4. During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:

- (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; OR
- (b) Any State, County or Municipal political party committee; OR
- (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

5. During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.

I certify that the foregoing statements in Parts 1, 2 and 3 are true. I am aware that if any of the statements are willfully false, I may be subject to punishment.

Signed Name _____ Print Name _____

Title/Position _____ Date _____

Procedure for Submitting Form(s)

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it -

- Is approaching its two-year certification expiration date and wishes to renew certification;
- Had a change in its ownership structure; OR
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Forms should be submitted either electronically to: cd134@treas.nj.gov , or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.

ATTACHMENT #3

**CONFIDENTIALITY &
NON-DISCLOSURE AGREEMENT**

Pages (5) Five

COMMISSIONERS
HOWARD L. BURRELL
 CHAIRMAN
 GLENWOOD, NJ
CHARLES P. SHOTMEYER
 VICE CHAIRMAN
 FRANKLIN LAKES, NJ
ALAN S. ASHKINAZE
 ORADELL, NJ
JEROME P. AMEDEO
 GREEN BROOK, NJ
DONALD C. KUSER
 WAYNE, NJ
ROBERT C. GAROFALO
 BRIELLE, NJ
JAMES L. CASSELLA
 EAST RUTHERFORD, NJ



ONE F.A. ORECHIO DRIVE
 WANAUKE, NJ 07465
 973-835-3600 FAX: 973-835-6701
 E-Mail: commissionoutreach@njdwsc.com

TIMOTHY J. EUSTACE
 EXECUTIVE DIRECTOR
WILLIAM SCHAFFNER
 CHIEF FINANCIAL OFFICER
KIM DIAMOND
 COMMISSION SECRETARY

CONFIDENTIALITY AND NONDISCLOSURE AGREEMENT

THIS CONFIDENTIALITY AND NONDISCLOSURE AGREEMENT (the “Agreement”) is made and entered into as of this ____ day of _____, 2022 by and between:

THE NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION (hereinafter, the “Commission”), located at One F.A. Orechio Drive, Wanaque, New Jersey 07465; and

_____, and its affiliates and subsidiaries (hereinafter, “_____”), with a primary place of business located at _____ (and, together with the Commission, the “parties”).

WITNESSETH

WHEREAS, pursuant to N.J.S.A. 58:5-1 et seq., the Commission is a public body corporate duly organized and existing under and by virtue of the laws of the State of New Jersey, exercising public and essential governmental functions and providing for the public health and welfare, and is engaged in developing raw water sources, storing water and distributing a reliable supply of potable water to its participating municipalities; and

WHEREAS, the Commission fulfills a vital role in maintaining, overseeing, and securing the operation of the largest regional water supply in the State of New Jersey, the safety and security of said operation constituting a critical Homeland Security concern; and

WHEREAS, in order to facilitate the possibility of entering into a contract for goods and services, and in particular, the procurement process pertaining to **CONTRACT #2099 POST BROOK DAM IMPROVEMENT PROJECT** Commission-Owned Facilities, and if entered into, the execution of such business relationship, the Commission may disclose certain non-public or proprietary information to _____ (or the “Receiving Party”) and its representatives; and

WHEREAS, the Commission wishes to preserve the confidentiality and prevent the unauthorized disclosure and use of any such non-public or proprietary information disclosed to the Receiving Party and its representatives.

NOW THEREFORE, in consideration of the mutual promises, covenants, representations and warranties made in this Agreement, the receipt and sufficiency of which are hereby acknowledged by the parties, intending to be legally bound, hereby agree as follows:

1. "Information" means all non-public or proprietary information of the Commission disclosed in connection with this Agreement and shall include, but not be limited to, information regarding the Commission or its related entities' assets, liabilities, financial and other conditions, insurance, reinsurance, employees, consultants, operations, facilities, prospects, business plans, customer lists, or security arrangements. Information also includes any documents prepared by the Receiving Party that through the use of non-public proprietary Information that was provided to the Receiving Party by the Commission.
2. As a condition to receiving the Information which the Commission may furnish to the Receiving Party and its representatives or to which the Receiving Party and its representatives are afforded access, directly or indirectly, the Receiving Party and its representatives shall take all reasonable measures to avoid disclosure, dissemination or unauthorized use of Information, including, at a minimum, those measures that the Receiving Party takes to protect its own confidential information of a similar nature (provided that such measures are consistent with at least a reasonable degree of care).
3. Information does not include information that:
 - a. Has been or becomes published or is now or in the future publicly available without breach of this Agreement or breach of a similar agreement by a third party or through no wrongful act of the receiving party or its representatives; or
 - b. Is known to the Receiving Party prior to the time such information was acquired from the Commission under this Agreement as evidenced by the Receiving Party's contemporaneous written records; or
 - c. Is independently developed and prepared by the Receiving Party not in reliance upon or reflecting any Information disclosed pursuant to this Agreement; or
 - d. Subsequent to disclosure, is lawfully received from a third party having rights therein without restriction (to the best of the Receiving Party's knowledge) on the right of such third party or the Receiving Party to disseminate the information and without notice of any restriction against its further disclosure.
4. Information shall not, without the prior written consent of the Commission, be disclosed to any person or entity other than the Receiving Party's and its representatives' employees (including outside legal counsel, actuaries and accountants) who need to know the Information and in those instances only to the extent of such need. The Receiving Party agrees to keep all Information confidential, and further agrees to use Information solely for the evaluation stated above, and for no other purpose. The Receiving Party agrees that it and its representatives' employees (including outside legal counsel, actuaries and accountants) shall be informed of the terms of this Agreement.

5. All Information shall remain the exclusive property of the Commission, and the Receiving Party shall have no rights, by license or otherwise, to use Information except as expressly provided herein.
6. The Receiving Party agrees on its own behalf and on behalf of its representatives and/or assigns to return to the Commission or destroy, and verify in writing such destruction, all written, tangible or otherwise accessible material in any form (including electronic media such as computer diskettes, CD-ROM, electronic copies or any material resident in the hard or external drive of any computer) containing or reflecting any Information (including all copies, summaries, excerpts, extracts, notes or other reproductions) promptly at the request of the Commission or within sixty (60) days of the termination or conclusion of the parties' business or contractual relationship. All information retained by the Receiving Party pursuant to this Section 6 shall remain subject to the confidentiality and nondisclosure obligations of this Agreement. Notwithstanding anything to the contrary in this Agreement, the Receiving Party may retain one copy of Information that has become part of a file that the Receiving Party, in its reasonable judgment, is required to retain and/or make available for examination by government regulatory or investigatory agencies, or retain and/or produce by an order of a court or insurance regulatory agency.
7. Nothing in this Agreement shall impose any obligation upon either party to consummate a transaction, to enter into any discussion or negotiations with respect thereto, or to take any other action not expressly agreed to herein.
8. In the event that the Receiving Party receives a request to disclose all or any part of the Information as part of a governmental investigation or under the terms of a subpoena or order issued by a court or governmental body, the Receiving Party will take all reasonable steps to notify the Commission promptly in writing of such request in order to allow the Commission an opportunity to resist or narrow such request and will reasonably cooperate, at the Commission's expense, with the Commission and its representatives in connection with the Commission's efforts to resist or narrow such request. In the event that the Commission elects to waive the provisions of this Section 8 or is otherwise unsuccessful in resisting such request, the Receiving Party shall only disclose the Information that it determines it is legally required to disclose after consultation with competent counsel.
9. Except as required by applicable law or court or arbitral order, neither party shall in any way or in any form disclose (except as necessary to such party's outside legal counsel, actuaries and accountants), publicize or advertise in any manner the discussions or negotiations concerning the business purpose underlying this Agreement, or the status of any such discussions or negotiations without the consent of the other party.
10. This Agreement shall be deemed to be a contract made under the laws of the State of New Jersey and for all purposes shall be construed in accordance with the laws thereof. The parties agree that any and all disputes between the parties under or relating to the terms and conditions of this Agreement shall be fully and completely adjudicated in the courts of the State of New Jersey.

11. Any provision of this Agreement which may be prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof or affecting the validity or enforceability of such provision in any other jurisdiction.
12. Neither this Agreement nor any rights or obligations hereunder may be assigned by either party hereto without the prior written consent of the other party, and such consent shall not be unreasonably withheld, delayed or conditioned. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns. No permitted assignment shall relieve a party of its obligations hereunder with respect to Information disclosed prior to the assignment. Any assignment in violation of this Paragraph Thirteen (12) shall be deemed null and void.
13. No amendment to any provision of this Agreement shall be binding and enforceable unless in writing and signed by both of the parties and specifically referencing this Agreement.
14. This Agreement shall continue to be binding after the conclusion of the business or contractual relationship between the parties absent prior written consent of both parties.
15. This Agreement shall not be interpreted in a manner that would violate any applicable canons of ethics or codes of professional responsibility. Nothing in this Agreement shall prohibit or interfere with the ability of counsel for any party to represent any individual, corporation, or other entity adverse to any party or its affiliate(s) in connection with any other matters.
16. Each of the parties acknowledges and agrees that remedies at law may be inadequate to protect the Commission against any actual or threatened breach of this Agreement by the Receiving Party or its representatives, and, without prejudice to any other rights and remedies otherwise available to the Commission (including, without limitation, monetary damages), the Receiving Party agrees to the granting of specific performance and injunctive or other equitable relief in the Commission's favor without proof of actual damages and each of the parties further agrees to waive, and to use all reasonable efforts to cause its representatives to waive, any requirement for the securing or posting of any bond in connection with any such remedy. Nothing in this Agreement shall be deemed or construed to limit or prevent the Commission from bringing a claim for damages as a result of any actual or threatened breach of this Agreement by the Receiving Party or its representatives.
17. Each of the parties agrees that no failure or delay by the Commission in exercising any right or remedy hereunder will operate as a waiver thereof, nor will any single or partial exercise thereof preclude any other or further exercise of any right or remedy hereunder.
18. This Agreement was entered into solely to benefit the parties and no other person or entity shall have enforceable rights and remedies hereunder or hereby.

19. This Agreement may be executed in one or more counterparts (including via facsimile), each of which shall be deemed an original but all of which together shall constitute one in the same instrument.
20. This Agreement sets forth the entire understanding between the parties concerning the subject matters of the foregoing recitals and paragraphs.

IN WITNESS HEREOF, the parties have caused this Agreement to be executed by their authorized representatives on the date first written.

(CONTRACTOR)

**NORTH JERSEY DISTRICT
WATER SUPPLY COMMISSION**

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

ATTACHMENT #4

DISCLOSURE OF INVESTMENT IN IRAN

Pages (1) One

**STATE OF NEW JERSEY -- DIVISION OF PURCHASE AND PROPERTY
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN**

Quote Number: _____ **Bidder/Offeror:** _____

PART 1: CERTIFICATION

BIDDERS MUST COMPLETE PART 1 BY CHECKING EITHER BOX.

FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE.

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 below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, 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 Division's website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Bidders must review this list prior to completing the below certification. **Failure to complete the certification will render a bidder's proposal non-responsive.** If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and 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

PLEASE CHECK THE APPROPRIATE BOX:

☐ I certify, pursuant to Public Law 2012, c. 25, that neither the bidder listed above nor any of the bidder's parents, subsidiaries, or affiliates is listed on the N.J. Department of the Treasury's list of entities determined to be engaged in prohibited 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. **I will skip Part 2 and sign and complete the Certification below.**

OR

☐ I am unable to certify as above because the bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. PLEASE PROVIDE THOROUGH ANSWERS TO EACH QUESTION. IF YOU NEED TO MAKE ADDITIONAL ENTRIES, CLICK THE "ADD AN ADDITIONAL ACTIVITIES ENTRY" BUTTON.

Name _____	Relationship to Bidder/Offeror _____
Description of Activities _____ _____	
Duration of Engagement _____	Anticipated Cessation Date _____
Bidder/Offeror Contact Name _____	Contact Phone Number _____

ADD AN ADDITIONAL ACTIVITIES ENTRY

Certification: I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto 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 State of New Jersey is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the State to notify the State 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, and 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 State of New Jersey and that the State at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print): _____	Signature: _____
Title: _____	Date: _____

ATTACHMENT #5

**CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES
IN RUSSIA OR BELARUS PURSUANT TO P.L.2033, c.3**

Pages (1) One



**CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES
IN RUSSIA OR BELARUS PURSUANT TO P.L.2022, c.3**

CONTRACT / BID SOLICITATION TITLE _____

CONTRACT / BID SOLICITATION No. _____

CHECK THE APPROPRIATE BOX

I, the undersigned, am authorized by the person or entity seeking to enter into or renew the contract identified above, to certify that the Vendor/Bidder is not engaged in prohibited activities in Russia or Belarus as such term is defined in [P.L.2022, c.3](#),¹ section 1.e, except as permitted by federal law.

I understand that if this statement is willfully false, I may be subject to penalty, as set forth in P.L.2022, c.3, section 1.d.

OR

I, the undersigned am unable to certify above because the person or entity seeking to enter into or renew the contract identified above, or one of its parents, subsidiaries, or affiliates may have engaged in prohibited activities in Russia or Belarus. A detailed, accurate and precise description of the activities is provided below.

Failure to provide such description will result in the Quote being rendered as non-responsive, and the Department/Division will not be permitted to contract with such person or entity, and if a Quote is accepted or contract is entered into without delivery of the certification, appropriate penalties, fines and/or sanctions will be assessed as provided by law.

Description of Prohibited Activity

Attach Additional Sheets If Necessary.

If you certify that the bidder is engaged in activities prohibited by P.L. 2022, c. 3, the bidder shall have 90 days to cease engaging in any prohibited activities and on or before the 90th day after this certification, shall provide an updated certification. If the bidder does not provide the updated certification or at that time cannot certify on behalf of the entity that it is not engaged in prohibited activities, the State shall not award the business entity any contracts, renew any contracts, and shall be required to terminate any contract(s) the business entity holds with the State that were issued on or after the effective date of P.L. 2022, c. 3.

Signature of Authorized Representative

Date

Print Name and Title of Authorized Representative

Vendor Name

¹ Engaged in prohibited activities in Russia or Belarus" means (1) companies in which the Government of Russia or Belarus has any direct equity share; (2) having any business operations commencing after the effective date of this act that involve contracts with or the provision of goods or services to the Government of Russia or Belarus; (3) being headquartered in Russia or having its principal place of business in Russia or Belarus, or (4) supporting, assisting or facilitating the Government of Russia or Belarus in their campaigns to invade the sovereign country of Ukraine, either through in-kind support or for profit.

