



**CONTRACT #2087**

**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, Exhibit A, Technical Specifications, Exhibit B Drawings,  
Certification & Disclosure Form, Access Approval Form  
Covid 19 Visitor Questionnaire  
Confidentiality and Non-Disclosure Agreement  
Disclosure of Investment Activities in Iran

**CLARIFIER REHABILITATION, BASINS 1 – 4**

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  
December 2021

ALL DOCUMENTS CONTAINED HEREIN SHALL BE CONSIDERED PART OF THIS CONTRACT

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## **CONTRACT #2087**

### **NOTICE TO BIDDERS**

The **NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION** (the "Commission") is Soliciting proposals from General Contractors as it pertains to rehabilitation of their existing mixing and sedimentation basins (1 through 4) including flocculators, sludge collectors, valves, actuators, underwater lighting, concrete modifications, etc. as further detailed in accordance with the technical specifications summary of work.

The project will be conducted under a single prime contract.

Sealed bids must be received before **1:30 PM WEDNESDAY, MARCH 2, 2022** 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 #2087 CLARIFIER REHABILITATION, BASINS 1 - 4**

Bid Specifications are obtainable beginning **TUESDAY, DECEMBER 28, 2021** through emailing Margaret M. Maddalena, the Commission's Contract Administrator, via email at [mmaddalena@njdwsc.com](mailto:mmaddalena@njdwsc.com). All bids must be made on the blank forms supplied by the Commission.

A **non-mandatory pre-bid meeting** will be held at the Wanaque Treatment Plant located at One F.A. Orechio Drive, Wanaque, New Jersey 07465 in the Filter Building 2nd Floor Conference Room at **11:00 a.m. on Thursday, January 13, 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 will be practicing Social Distancing 6 ft. apart and require all respondents to wear a face mask.

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

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. The Selected Contractor shall be licensed in the State of New Jersey.

All bids must be made on the blank forms supplied by the Commission

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,

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### NOTICE TO BIDDERS

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 and Covid - 19 Visitor Questionnaire 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 and Covid -19 Visitor Questionnaire Forms** must be submitted to Security for every visit to the Commission. **Access Approval and Covid – 19 Visitor Questionnaire 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.

**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:

<b>CONTENTS:</b>	<b>SEALED PUBLIC BID</b>
<b>BID NUMBER:</b>	<b>#2087</b>
<b>BID TITLE:</b>	<b>CLARIFIER REHABILITATION, BASINS 1 – 4</b>
<b>BID TIME AND DATE:</b>	<b><u>1:30 P.M. – WEDNESDAY, MARCH 2, 2022</u></b>
<b>QUESTION CUT OFF DATE:</b>	<b><u>THURSDAY, JANUARY 20 2022</u></b>

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### NOTICE TO BIDDERS

**BIDS FORWARDED VIA OVERNIGHT SERVICES SHALL INDICATE THAT A SEALED BID CONTAINED THEREIN AND IDENTIFY CONTRACT #2087, 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](mailto: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 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.

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

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**NOTICE TO BIDDERS**

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.**

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**DR. HOWARD L. BURRELL**  
Chairman

ATTEST: **KIM DIAMOND**  
Commission Secretary

**BID #2087**

**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: #2087**

**BID TITLE: CLARIFIER REHABILITATION, BASINS 1 – 4**

**BID TIME AND DATE: 1:30 P.M. on WEDNESDAY, MARCH 2, 2022**

**QUESTION CUT OFF DATE: THURSDAY, JANUARY 20, 2022**

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

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### **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](mailto: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.

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### **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.



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### **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.

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### **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](mailto:mmaddalena@njdwsc.com). **Requests for interpretations received later than THURSDAY, JANUARY 20, 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 Specifications. In the event no notices, revisions, or addenda to the bid advertisement, Technical

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### **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

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### 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

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### **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 #2087**

### **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

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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 7:00 a.m. to 5:00 p.m., Monday through Friday, non-holiday periods.

#### **Time for Completing Work:**

The Contractor shall achieve Substantial Completion within **Six Hundred and Seventy (670) Calendar Days** of the issuance of the Notice to Proceed by the Commission, and shall achieve Final Completion within **Seven Hundred and Thirty (730) Calendar Days** from the issuance of the Notice to Proceed by the Commission.

#### **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 and Fifty Dollars (\$250.00) per calendar day**, commencing on the 1st day of failure to achieve Substantial Completion (i.e., upon the 671st calendar day) **and/or Five Hundred Dollars (\$500.00) per calendar day**, commencing on the 1st day of failure to achieve Final Completion (i.e., the 731<sup>st</sup> calendar day), 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 herein and in the **BID** for completing the work.

The Commission may, in its sole discretion, review any purported reasons for delay and

## CONTRACT #2087

### **INFORMATION FOR BIDDERS**

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.

#### **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



## CONTRACT #2087

### INFORMATION FOR BIDDERS

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 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.

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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 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 Contracting Agency 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 Contracting Agency 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 Contracting Agency 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](http://www.state.nj.us/treasury/revenue/busregcert.html).

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- 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.

### **Public Works Contractor Registration Act:**

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/lasse/lspubcon.html](http://www.state.nj.us/labor/lasse/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;

## **CONTRACT #2087**

### **INFORMATION FOR BIDDERS**

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 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

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### **INFORMATION FOR BIDDERS**

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, 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.

#### **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

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<https://nj.gov/labor/equalpay/equalpay.html>.

#### **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 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.

## **CONTRACT #2087**

### **INFORMATION FOR BIDDERS**

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](http://lwd.dol.state.nj.us/labor/wagehour/wagerate/pwr_construction.html).

The Contractor is hereby 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.

**CONTRACT #2087**

**TO: THE NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION**

**FOR: CONTRACT #2087 CLARIFIER REHABILITATION, BASINS 1 – 4**

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 and Plans, 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 Specifications, and that he will accept in full payment therefore the following sum, to wit:

**FOR THE CLARIFIER REHABILITATION, BASINS 1 – 4** the North Jersey District Water Supply Commission, including labor, equipment, materials and warranty and all work described in the Technical Specifications for the lump sum price of

dollars and \_\_\_\_\_ cents (\$\_\_\_\_\_)



**CONTRACT #2087**

**UNIT PRICING FOR THE FOLLOWING ITEMS LISTED BELOW:**

**Sludge/anthracite removal - \$ \_\_\_\_\_ /Cubic Yard (CY)**

**Price: \_\_\_\_\_ dollars and**  
**\_\_\_\_\_ cents**

**Concrete Spall Repair - \$ \_\_\_\_\_ /Square Foot (SF)**

**Price: \_\_\_\_\_ dollars and**  
**\_\_\_\_\_ cents**

**Concrete Crack Repair - \$ \_\_\_\_\_ /Linear Foot (LF)**

**Price: \_\_\_\_\_ dollars and**  
**\_\_\_\_\_ cents**

**AWARD WILL BE BASED ON THE FOLLOWING FORMULA WITH ESTIMATED QUANTITIES.**

**Base Bid + 6000CY \* \$/CY + 4000SF \* \$/SF + 1600LF \* \$/LF**

**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.

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

**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

**CONTRACT #2087**

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 #2087**

**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 five (5) references.

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.

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**WITNESS**

---

**NAME OF COMPANY**

---

**ADDRESS**

---

**DATE**

BY: \_\_\_\_\_  
SIGNATURE

---

PRINT NAME AND TITLE

**CONTRACT #2087**

**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:

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BY: \_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINT NAME AND TITLE

\_\_\_\_\_  
WITNESS

\_\_\_\_\_  
COMPANY NAME

\_\_\_\_\_  
DATE

\_\_\_\_\_  
ADDRESS

## CONTRACT #2087

### **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-waiveable. 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 #2087

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 \_\_\_\_\_ 2022.

Notary Public of the State of \_\_\_\_\_.

My Commission expires \_\_\_\_\_, \_\_\_\_\_.

Affix notary stamp or print name below signature.

\_\_\_\_\_  
NOTARY'S SIGNATURE

**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:**

	<b><u>NAME</u></b>	<b><u>HOME ADDRESS</u></b>	<b><u>TITLE</u></b>	<b><u>% OF OWNERSHIP</u></b>
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 #2087**

**BIDDER DISCLOSURE STATEMENT**

	<b><u>NAME</u></b>	<b><u>HOME ADDRESS</u></b>	<b><u>TITLE</u></b>	<b><u>% OF OWNERSHIP</u></b>
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-Two.

\_\_\_\_\_  
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 #20867**  
**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

**(CONTRACTOR)**

BY: \_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINT NAME AND TITLE

**CONTRACT #2087**

**EXECUTION OF CONTRACT**

**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 CLARIFIER REHABILITATION, BASINS 1 – 4** the North Jersey District Water Supply Commission, including labor, equipment, materials and warranty and all work described in the Technical Specifications, for the lump sum price of

\_\_\_\_\_ dollars and \_\_\_\_\_ cents (\$\_\_\_\_\_)

**UNIT PRICING FOR THE FOLLOWING ITEMS LISTED BELOW:**

**Sludge/anthracite removal - \$ \_\_\_\_\_ /Cubic Yard (CY)**

**Price: \_\_\_\_\_ dollars and**

**\_\_\_\_\_ cents**

**CONTRACT #2087**

**EXECUTION OF CONTRACT**

**Concrete Spall Repair - \$ \_\_\_\_\_ /Square Foot (SF)**

**Price: \_\_\_\_\_ dollars and**  
**\_\_\_\_\_ cents**

**Concrete Crack Repair - \$ \_\_\_\_\_ /Linear Foot (LF)**

**Price: \_\_\_\_\_ dollars and**  
**\_\_\_\_\_ cents**

**AWARD WILL BE BASED ON THE FOLLOWING FORMULA WITH ESTIMATED QUANTITIES**

**Base Bid + 6000CY \* \$/CY + 4000SF \* \$/SF + 1600LF \* \$/LF**

**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 necessary shop drawings, machinery, tools, apparatus and other means of construction and all material and labor called for by the said Contract and specifications for the work, necessary to complete the work in the manner and within the time set forth in said Contract and specifications.

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

#### **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 #2087** (including any addendums/Clarifications) and all sheets, forms or documents attached to the Bid Specifications or hereto.
- Engineer:** Commission's Engineering Staff.
- Specifications:** the Technical Specifications, (Exhibit A), and Drawings (Exhibit B) included at the end of this Contract, incorporated herein by reference.
- Proposal:** the proposal submitted by the Contractor, dated \_\_\_\_\_, 2022, 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. 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 with prior approval or consent of the Engineer, it must, if required by the Engineer, be 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



## **CONTRACT #2087**

### **GENERAL CONDITIONS**

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) necessary and proper for safety in accordance with the specifications contained herein and labeled "**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.
- 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

## CONTRACT #2087

### GENERAL CONDITIONS

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 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. The Contractor shall achieve Substantial Completion within **Six Hundred and Seventy (670) Calendar Days** of the issuance of the Notice to Proceed by the Commission, and shall achieve Final Completion within **Seven Hundred and Thirty (730) Calendar Days** from the issuance of the Notice to Proceed by the Commission.

## CONTRACT #2087

### GENERAL CONDITIONS

- B. Working hours shall be between **7:00 a.m. to 5:00 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. **LIQUATED 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 and Fifty Dollars (\$250.00) per calendar day**, commencing on the 1st day of failure to achieve Substantial Completion (i.e., upon the 671st calendar day) **and/or Five Hundred Dollars (\$500.00) per calendar day**, commencing on the 1st day of failure to achieve Final Completion (i.e., the 731<sup>st</sup> calendar day), 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 herein and 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

## CONTRACT #2087

### GENERAL CONDITIONS

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
\$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:

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

\$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 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.

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

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 Commissioners, their 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 agents and employees to observe 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

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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.
- 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 Project 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.

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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.
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 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 these 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



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bond or other type of bid security.

#### B. Partial Payment:

1. Prior to the start of the Work, the Contractor shall submit a project schedule to the Engineer which shall be sufficiently detailed to permit the Engineer, in his sole discretion, to determine when the Work is fifty percent (50%) complete. Partial payment is not guaranteed, but may be approved at the sole discretion of the Project Engineer and approval by the Board of Commissioners, in accordance with the Commission's standard payment process.
2. No claim by the Contractor for additional payment based on any error in any periodic estimate will be recognized.
3. 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.
4. No payment voucher shall protect the Contractor, and no claims shall be 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.
5. 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.

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6. Errors in any monthly measurements or bill, on being discovered, will be rectified by the Engineer in subsequent measurements and bills.
7. 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.
8. 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, BOND’S, MAINTENANCE 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 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.

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- 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 **two percent (2%)** 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:**

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.

#### **Article XVIII - AFFIRMATIVE ACTION:**

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.

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The Successful Bidder 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 Successful Bidder's compliance with the regulations. The Successful Bidder 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.

**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;

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

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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 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;

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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 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

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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 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):**

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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.

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



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specifications, the Commission shall continue to make payments in accordance with this Agreement.

**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 nondiscoverable 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.

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

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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.

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

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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](http://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 Contracting Agency 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 Contracting Agency 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 Contracting Agency 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

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### **GENERAL CONDITIONS**

[www.state.nj.us/treasury/revenue/busregcert.html](http://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/lasse/lspubcon.html](http://www.state.nj.us/labor/lasse/lspubcon.html). N.J.S.A. 34:11-56.55 specifically prohibits 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, 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

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

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 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.

### **Article – XXVII 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. §121 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

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the owner, or if the owners 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, 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.

### **Article XXVIII – 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.

## CONTRACT #2087

### GENERAL CONDITIONS

#### 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 – 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 XXXI – 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.**

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 and Covid -19 Visitor Questionnaire**” (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

## CONTRACT #2087

### GENERAL CONDITIONS

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-24)** 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 XXXII – 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 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 payment cycle, provided this exception has been defined in the bid specifications and contract documents."



## **CONTRACT #2087**

### **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 XXXIII – 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 #2087

### **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 XXXIV – 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 Commission**. 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.

#### **Article XXXV– APPLICABLE LAW:**

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

## **CONTRACT #2087**

### **GENERAL CONDITIONS**

#### **Article XXXVI – TERMINATION:**

This Agreement 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 Bridge Services rendered up to the date of the Contractor's receipt of written notice of termination.

#### **Article XXXVII – 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 XXXVIII– NON-WAIVER:**

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

#### **Article XXXIX– COUNTERPARTS:**

This Agreement 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 #2087**

**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 \_\_\_\_\_ in the year of our Lord, Two Thousand and Twenty-Two, 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 #2087

CERTIFICATE OF ACKNOWLEDGMENT  
FOR CONTRACTOR (CORPORATION)

STATE OF                                }  
  } S.S.  
COUNTY OF                           }

**BE IT REMEMBERED**, that on this \_\_\_\_\_ day of \_\_\_\_\_, in the year of our Lord, Two Thousand and Twenty Two 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

\* \_\_\_\_\_  
WITNESS' SIGNATURE

SWORN AND SUBSCRIBED TO BEFORE

\_\_\_\_\_  
TYPED SIGNATURE

ME THIS \_\_\_\_\_ DAY OF

\_\_\_\_\_, 2022.

\_\_\_\_\_  
TITLE

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

CONTRACT #2086

CERTIFICATE OF ACKNOWLEDGEMENT  
FOR CONTRACTOR (INDIVIDUAL)

STATE OF                                }  
  S.S.  
COUNTY OF                        }

**BE IT REMEMBERED**, that on this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord, Two Thousand and Twenty Two 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

\_\_\_\_\_ 2022.

CERTIFICATE OF ACKNOWLEDGEMENT  
FOR COMMISSION

STATE OF                                }  
  S.S.  
COUNTY OF                        }

**BE IT REMEMBERED**, that on this \_\_\_\_\_ day of \_\_\_\_\_ in the year of our Lord, Two Thousand and Two 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

\_\_\_\_\_ 2022

CONTRACT #2087

**EXHIBIT “A”**

**TECHNICAL SPECIFICATIONS**



**CONTRACT #2087**

**EXHIBIT “B”**

**DRAWINGS**



NORTH JERSEY DISTRICT WATER SUPPLY COMISSION  
CLARIFIER REHABILITATION, BASINS 1-4  
WANAQUE TOWNSHIP, PASSAIC COUNTY, NEW JERSEY  
ISSUED FOR BID

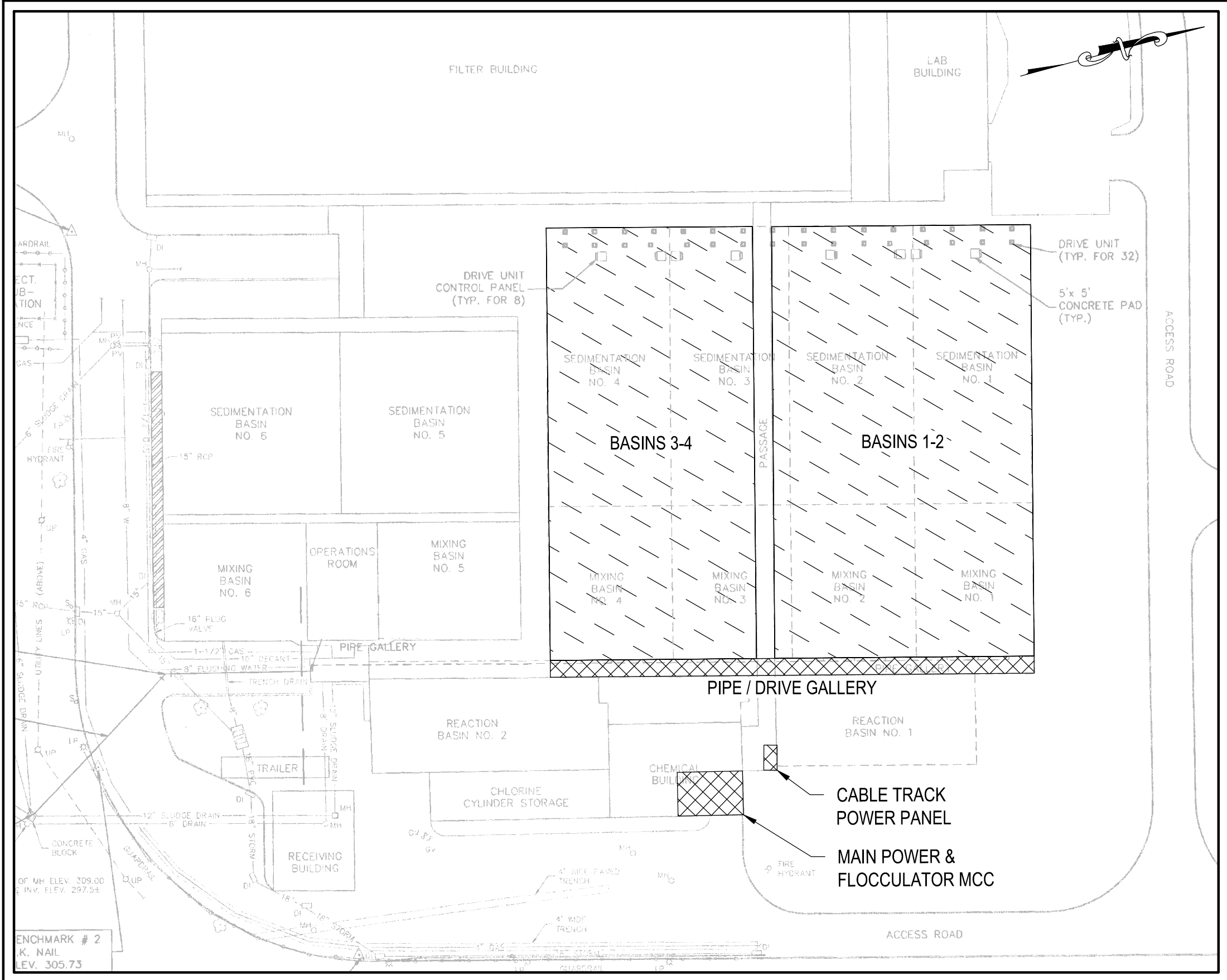
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SITE LOCATION MAP

(1" = 500'±)



WORK LOCATION MAP

(1" = 60'±)

PREPARED BY:  
JACOBS Engineering Group Inc.  
412 MOUNT KEMBLE AVENUE  
MORRISTOWN, NEW JERSEY 07960  
SEPTEMBER 2021

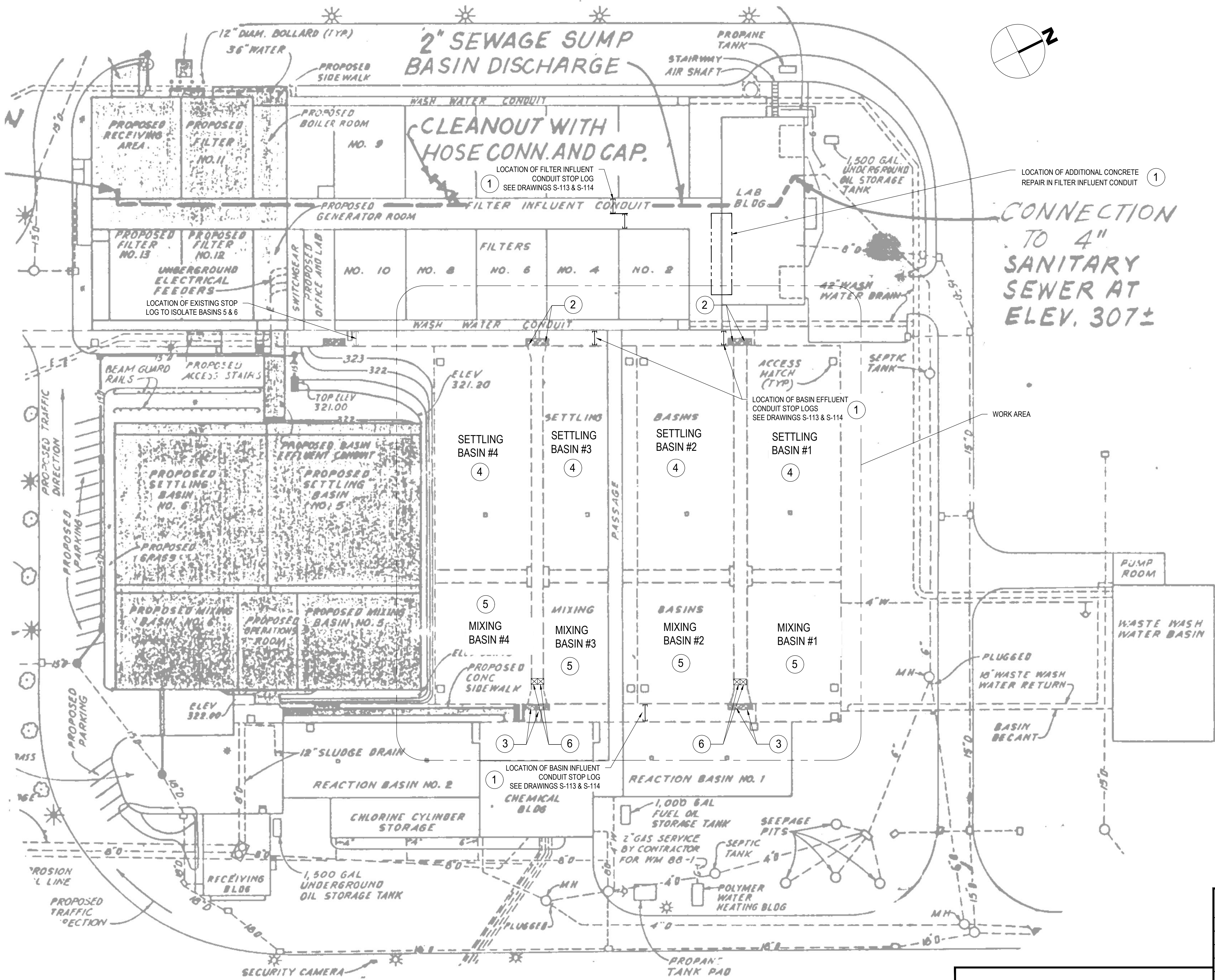
Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION GENERAL BASINS 1-4 COVER SHEET	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			G-001	





CONSTRUCTION PHASING GUIDELINES:

1. INSTALL NEW STOP LOGS. ONCE STOP LOGS ARE INSTALLED, CONTRACTOR SHALL INSPECT CONDUIT CONCRETE WHERE INDICATED. REPAIR CONCRETE AS NECESSARY PER INSPECTION REPORT IN ACCORDANCE WITH DRAWING S-110. OWNER WILL TAKE 2 BASINS OFFLINE AT A TIME DURING STOP LOG INSTALLATION AND CONCRETE INSPECTION.
2. DEMOLISH EXISTING AND INSTALL NEW EFFLUENT VALVES (1 PER BASIN) BEFORE CONDUCTING ANY WORK INSIDE THE SETTLING OR MIXING BASINS. OWNER WILL TAKE 2 BASINS OFFLINE AT A TIME DURING EFFLUENT VALVE INSTALLATION. CONTRACTOR MAY REQUIRE ADDITIONAL TEMPORARY STOP LOGS OR BYPASS PUMPING TO CONDUCT THIS WORK.
3. THE OWNER WILL MAKE ONE BASIN AVAILABLE AT A TIME FOR CONSTRUCTION, ONCE THE EFFLUENT VALVE HAS BEEN REPLACED. THE BASIN WILL NEED TO BE ISOLATED USING METAL PLATES OR BULKHEADS AND DRAINED FOR REPLACEMENT OF THE INFLUENT VALVE. BASIN MUST BE FULLY STARTED AND TURNED OVER TO THE OWNER BEFORE STARTING WORK ON THE NEXT BASIN.
4. CONTRACTOR WILL BE PERMITTED TO WORK IN ONE SETTLING BASIN AT A TIME. SETTLING BASINS ARE BELOW GRADE AND HAVE 2 LEVELS. SETTLING BASIN ACCESS FOR INSTALLATION AND REMOVAL OF EQUIPMENT IS AVAILABLE THROUGH 3'X3' ACCESS HATCHES AND NEW WATERTIGHT DOORS INSTALLED UNDER THIS CONTRACT. SEE SPECIFICATIONS AND DRAWINGS. MAJOR WORK TO BE CONDUCTED IN THE SETTLING BASINS IS AS FOLLOWS:
  - DEMOLITION OF EXISTING SLUDGE COLLECTORS AND INSTALLATION OF NEW HOSELESS CABLE VAC SLUDGE COLLECTION SYSTEM ALONG WITH ASSOCIATED PIPING AND VALVES. CABLE DRIVES AND CONTROLS ARE LOCATED OUTDOORS, ABOVE GRADE.
  - DEMOLITION OF EXISTING AND INSTALLATION OF NEW WASH DOWN MONITORS AND HOSE CONNECTIONS
  - DEMOLITION OF EXISTING AND INSTALLATION OF NEW BAFFLE WALLS
  - INSTALLATION OF NEW TURBIDITY MEASURING INSTRUMENTS IN EFFLUENT CHANNEL
  - NEW WATER TIGHT ACCESS DOORS WILL BE INSTALLED IN THE PIPE GALLERY
5. CONTRACTOR WILL BE PERMITTED TO WORK IN ONE MIXING BASIN AT A TIME CONCURRENT WITH THE ASSOCIATED SETTLING BASIN. MIXING BASINS ARE BELOW GRADE. ACCESS FOR INSTALLATION AND REMOVAL OF EQUIPMENT IS AVAILABLE THROUGH 3'X3' ACCESS HATCHES. SEE SPECIFICATIONS AND DRAWINGS. MAJOR WORK TO BE CONDUCTED IN THE MIXING BASINS IS AS FOLLOWS:
  - DEMOLITION OF EXISTING AND INSTALLATION OF NEW HORIZONTAL PADDLE FLOCCULATORS. DRIVES ARE LOCATED IN GALLERY
  - DEMOLITION OF EXISTING AND INSTALLATION OF NEW BAFFLE WALLS
  - BLOCK INFLUENT CHANNEL AND PROVIDE NEW INFLUENT OPENING IN BASIN TO CHANGE FLOW PATH
6. DEMOLISH EXISTING AND INSTALL NEW INFLUENT VALVES (1 PER BASIN). VALVES ARE LOCATED IN INFLUENT CHANNEL.

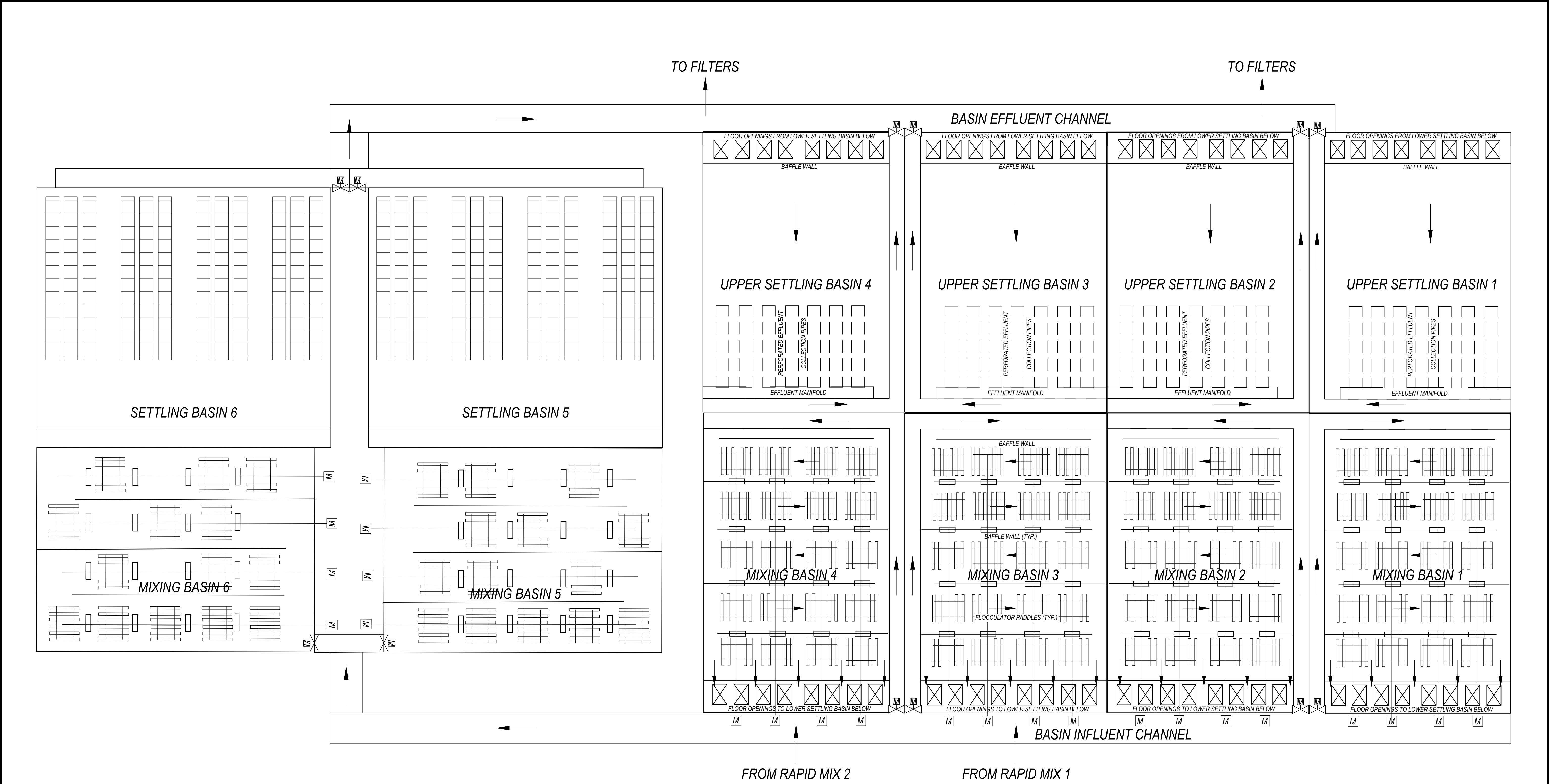
NOTES:

1. CONSTRUCTION PHASING PRESENTED ON THIS SHEET IS ONLY A GUIDE FOR BIDDING PURPOSES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER, PHASING, BASIN AVAILABILITY FOR CONSTRUCTION AND PLANT SHUTDOWNS ARE AT THE OWNER'S DISCRETION.
3. CONSTRUCTION SEQUENCING IS NOT COMPREHENSIVE. CONTRACTOR SHALL SUBMIT DETAILED SEQUENCING AND SCHEDULING DOCUMENTATION THROUGH SHOP DRAWINGS. NOT ALL REQUIRED WORK IS INCLUDED HEREIN. CONTRACTOR SHALL PROVIDE ALL WORK AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS.
4. WORK INCLUDED ON THIS DRAWING IS PROCESS RELATED. COORDINATE WITH OTHER DISCIPLINES TO DETERMINE ENTIRE SCOPE OF WORK AND WHEN DEVELOPING DETAILED SEQUENCING PLANS.
5. CONTRACTOR MUST ALLOW A MINIMUM OF 3 WEEKS FOR STARTUP AND TESTING FOR EACH BASIN. ONCE WORK HAS COMMENCED ON A BASIN, THE CONTRACTOR WILL NOT BE PERMITTED TO START WORK ON THE NEXT BASIN UNTIL STARTUP AND TESTING HAS BEEN APPROVED.

REVISIONS			CLARIFIER SYSTEM REHABILITATION GENERAL BASINS 1-4 CONSTRUCTION PHASING	
0	06/04/2021	100% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	07/28/2021	100% REVIEW		
2	09/24/2021	ISSUED FOR BID	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
3				
4			DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			G-002	

Jacobs

JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

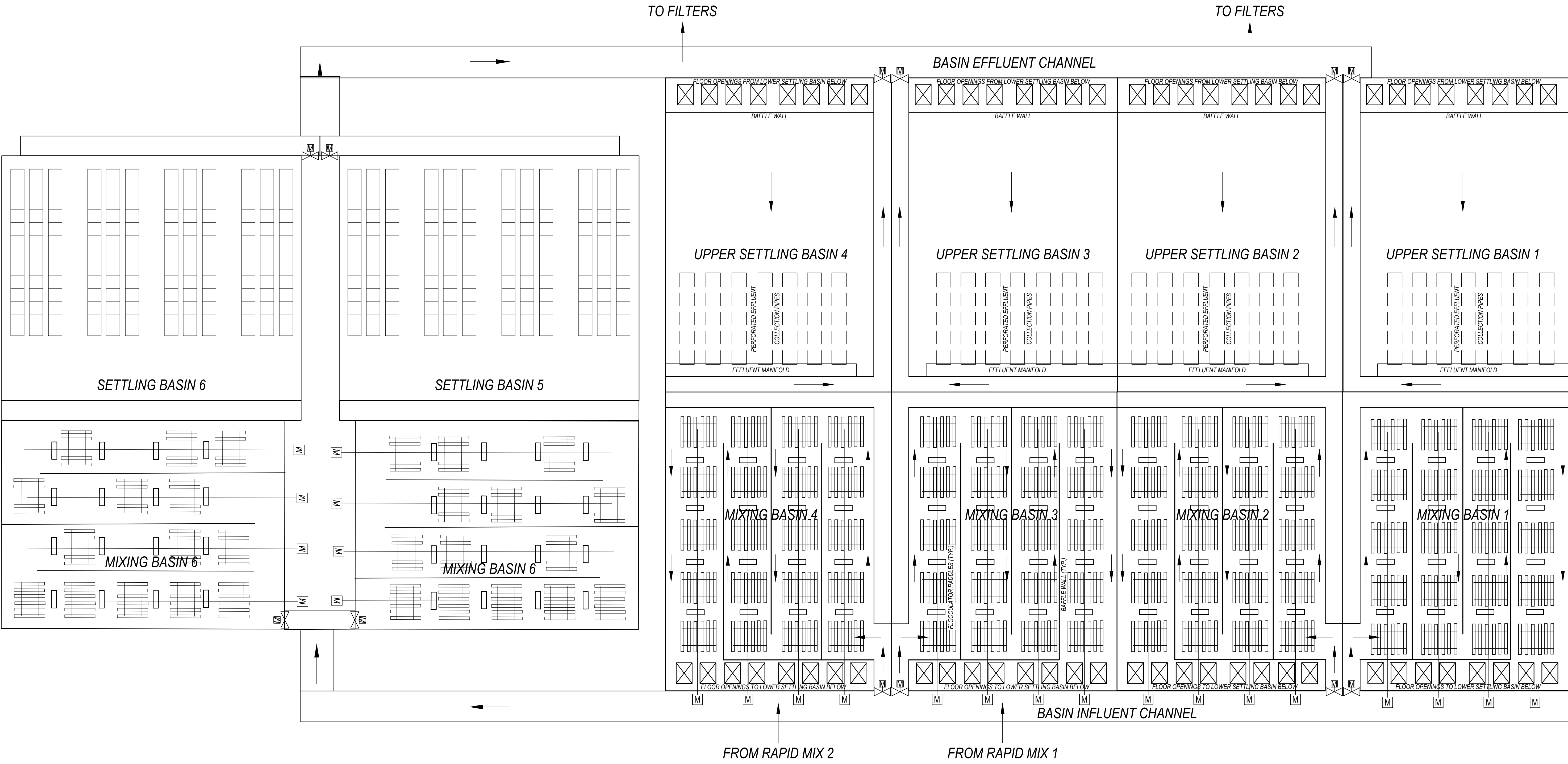


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NJPE LICENSE NO. 24GE04377400

REVISIONS		
0	12/07/2020	30% REVIEW
1	03/15/2021	80% REVIEW
2	04/02/2021	ISSUED FOR NJDEP PERMIT
3	06/04/2021	100% REVIEW
4	09/24/2021	ISSUED FOR BID
5		
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CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 EXISTING BASIN FLOW DIAGRAM		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDCA 246A27990200		
DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	DATE 09/24/21 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		R-001





JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			
0	12/07/2020	30% REVIEW	
1	03/15/2021	80% REVIEW	
2	04/02/2021	ISSUED FOR NJDEP PERMIT	
3	06/04/2021	100% REVIEW	
4	09/24/2021	ISSUED FOR BID	
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CLARIFIER SYSTEM REHABILITATION  
PROCESS  
BASINS 1-4  
PROPOSED BASIN FLOW DIAGRAM

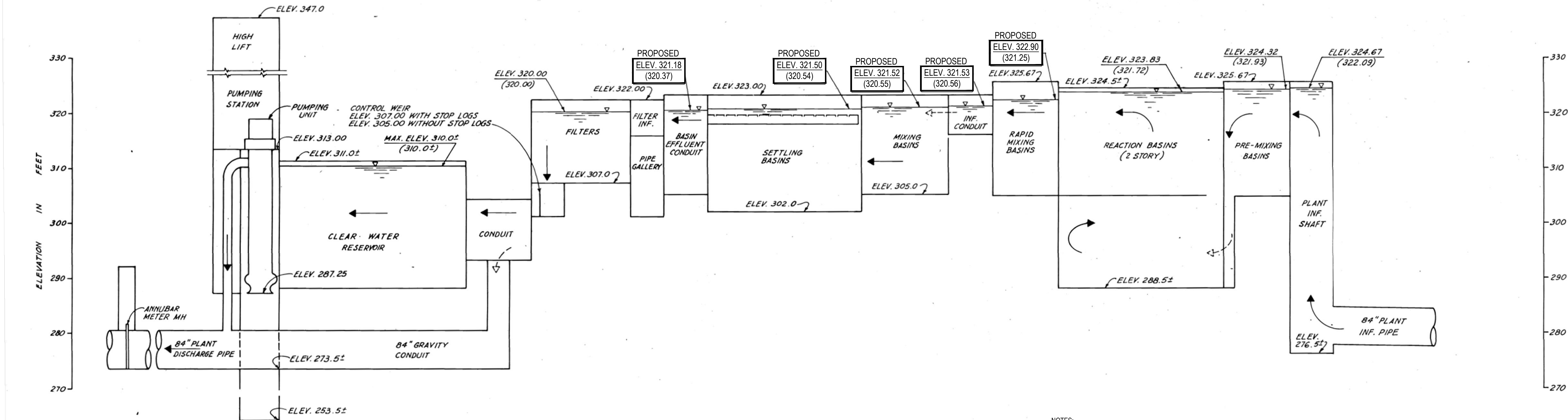
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJDCA 246A27990200

DRAWN BY JJW  
PROJECT ENG'R JJW  
APPROVED JNB  
DATE 09/24/21  
PROJECT E6X94500  
USE DIMENSIONS ONLY  
SCALE AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

R-002

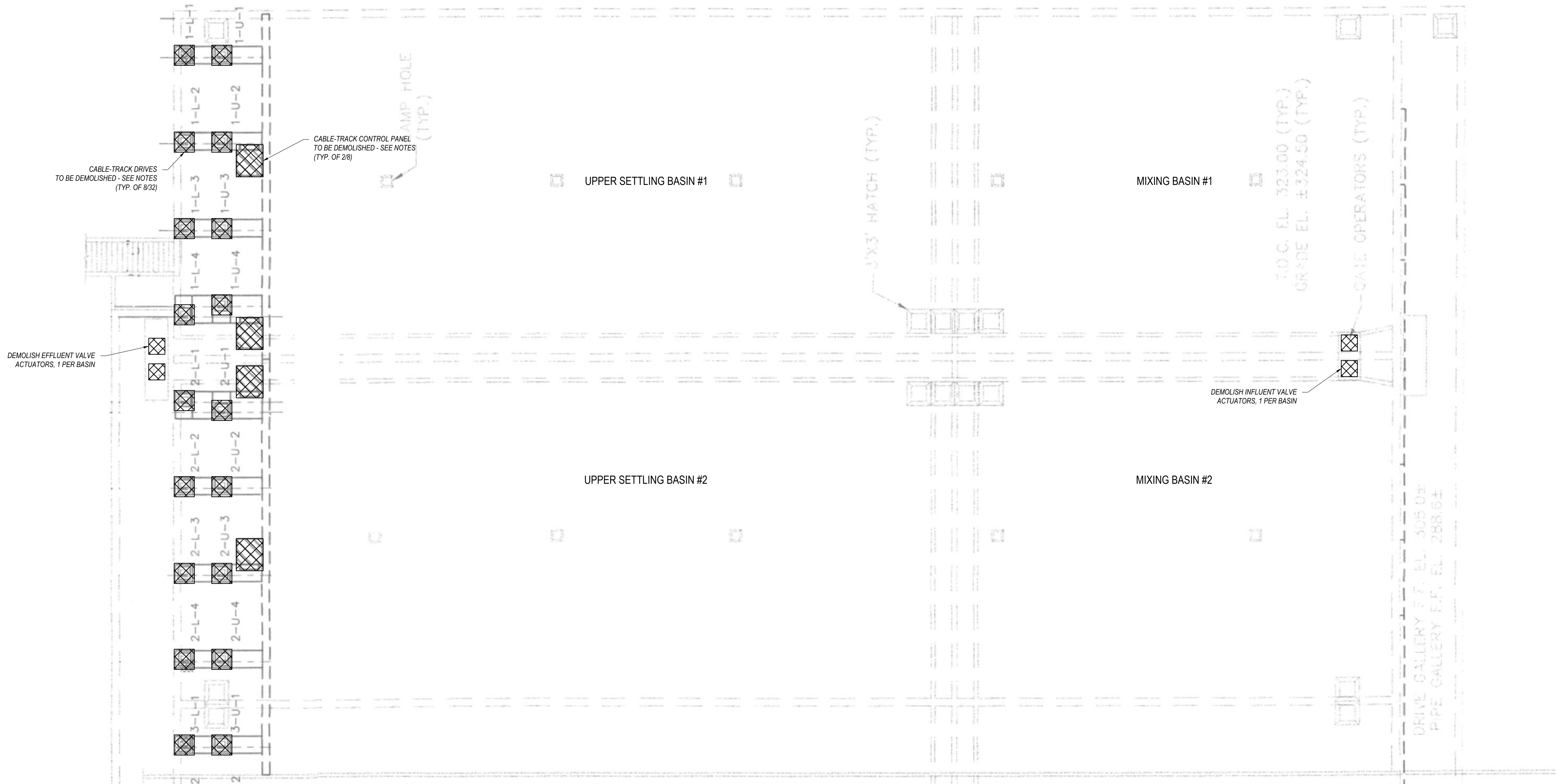
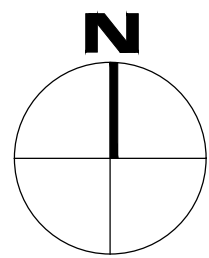


- NOTES:
- ELEV. 320.43 INDICATES WATER ELEV. FOR A FLOW OF 210 MGD (MAX CAPACITY) WITH BASINS 1 TO 6 IN SERVICE.
  - ELEV. (320.04) INDICATES WATER ELEV. FOR A FLOW OF 140 MGD (DESIGN CAPACITY) WITH BASINS 1 TO 6 IN SERVICE.
  - TO OBTAIN APPROXIMATE ELEVATIONS RELATIVE TO THE VERTICAL DATUM NAVD 1988, THE HISTORICAL RECORD DRAWING ELEVATIONS IN NGVD 1929 SHOULD BE REDUCED BY 0.98-FT, WHICH INCLUDES 0.81-FT TO CONVERT FROM NGVD 1929 TO NAVD 1988 AND A 0.17-FT DIFFERENCE DETERMINED BY 2018 FIELD INVESTIGATIONS.

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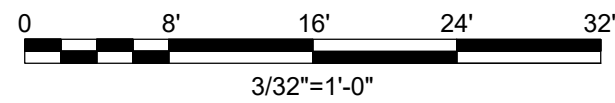
JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 HYDRAULIC PROFILE	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% REVIEW		
2	04/02/2021	ISSUED FOR NJDEP PERMIT	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
3	06/04/2021	100% REVIEW		
4	07/28/2021	100% REVIEW	DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
5	09/24/2021	ISSUED FOR BID		
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			R-003	



DEMOLITION NOTES:

1. DEMOLISH CABLE TRACK DRIVES, ANCHOR BOLTS, CABLES AND COVERS; REPAIR ANY DAMAGE TO CONCRETE EQUIPMENT PAD.
2. DEMOLISH CABLE TRACK DRIVE EXPOSED CONDUIT AND WIRE BACK TO CONTROL PANEL.
3. DEMOLISH CONTROL PANEL 120V CONTROL WIRING AND CONDUIT AND 480V POWER WIRING AND CONDUIT BACK TO NEAREST JUNCTION BOXES.
4. ALL DIMENSIONS AND EQUIPMENT SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
5. ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.



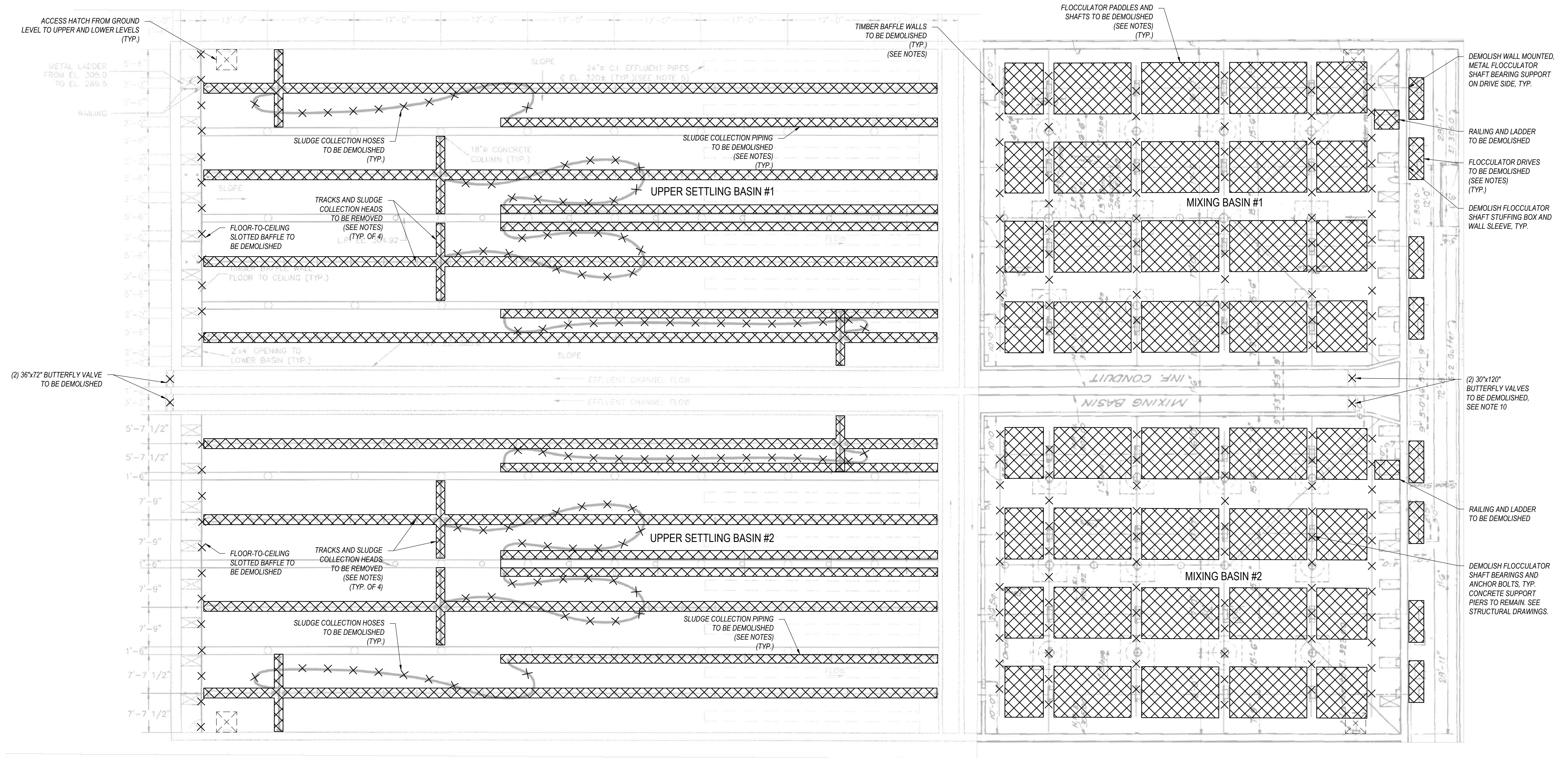
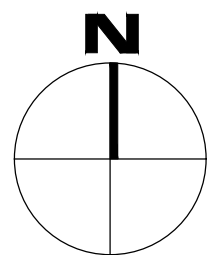
Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

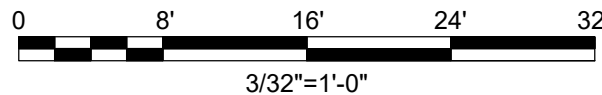
REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 DEMOLITION PLAN – GROUND LEVEL	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
2	04/02/2021	ISSUED FOR NJDEP PERMIT	DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
3	06/04/2021	100% REVIEW	DATE 09/24/21 PROJECT E6X94500	
4	09/24/2021	ISSUED FOR BID	USE DIMENSIONS ONLY SCALE AS NOTED	
5			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
6			R-101	
7				
8				





DEMOLITION NOTES:

- DEMOLITION OF TRACKS SHALL INCLUDE ALL CABLES AND PULLEYS.
- DEMOLITION OF SLUDGE COLLECTION PIPING SHALL INCLUDE EXISTING PIPE HANGERS, SUPPORTS, ETC.
- DEMOLITION OF TIMBER BAFFLE WALLS SHALL INCLUDE ALL MOUNTING BRACKETS, HARDWARE, ETC.
- DEMOLITION OF FLOCCULATOR PADDLES AND SHAFTS SHALL INCLUDE ALL BEARINGS AND SUPPORTS AT AND THROUGH BASIN AND BAFFLE WALLS. CONCRETE PIERS TO REMAIN.
- DEMOLITION OF FLOCCULATOR DRIVES SHALL INCLUDE MOTORS, BEARINGS, CHAINS & SPROCKETS, CHAIN GUARDS AND HOUSEKEEPING PADS. HOUSEKEEPING PADS SHALL BE DEMOLISHED TO FLOOR LEVEL.
- DEMOLISH POLYMER PIPING, DIFFUSERS AND SUPPORTS, NOT SHOWN. SEE DRAWING R-104.
- ALL DIMENSIONS AND EQUIPMENT SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
- NJDWSC TO REMOVE SLUDGE AND ANTHRACITE FROM UPPER / LOWER SETTLING BASINS. CONTRACTOR TO REMOVE SLUDGE AND ANTHRACITE FROM MIXING BASIN. DISPOSAL OF MATERIAL WILL BE ON SITE.
- ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.
- DEMOLISH EXISTING VALVE, RISER STEM, ACTUATOR, CHANNEL MOUNTED WALL THIMBLES, GROUT INFILL AND THIMBLE ANCHOR BOLTS. REPAIR CHANNEL AS NECESSARY TO INSTALL NEW CHANNEL MOUNTED THIMBLES. SEE DETAILS ON R-105.
- ACCESS TO THE MIXING / SETTLING BASINS AND REMOVAL OF EQUIPMENT MUST BE MADE THROUGH EXISTING 3'-0" x 3'-0" ACCESS HATCHES. CONTRACTOR MUST FIELD VERIFY ACTUAL INTERIOR HATCH DIMENSIONS.



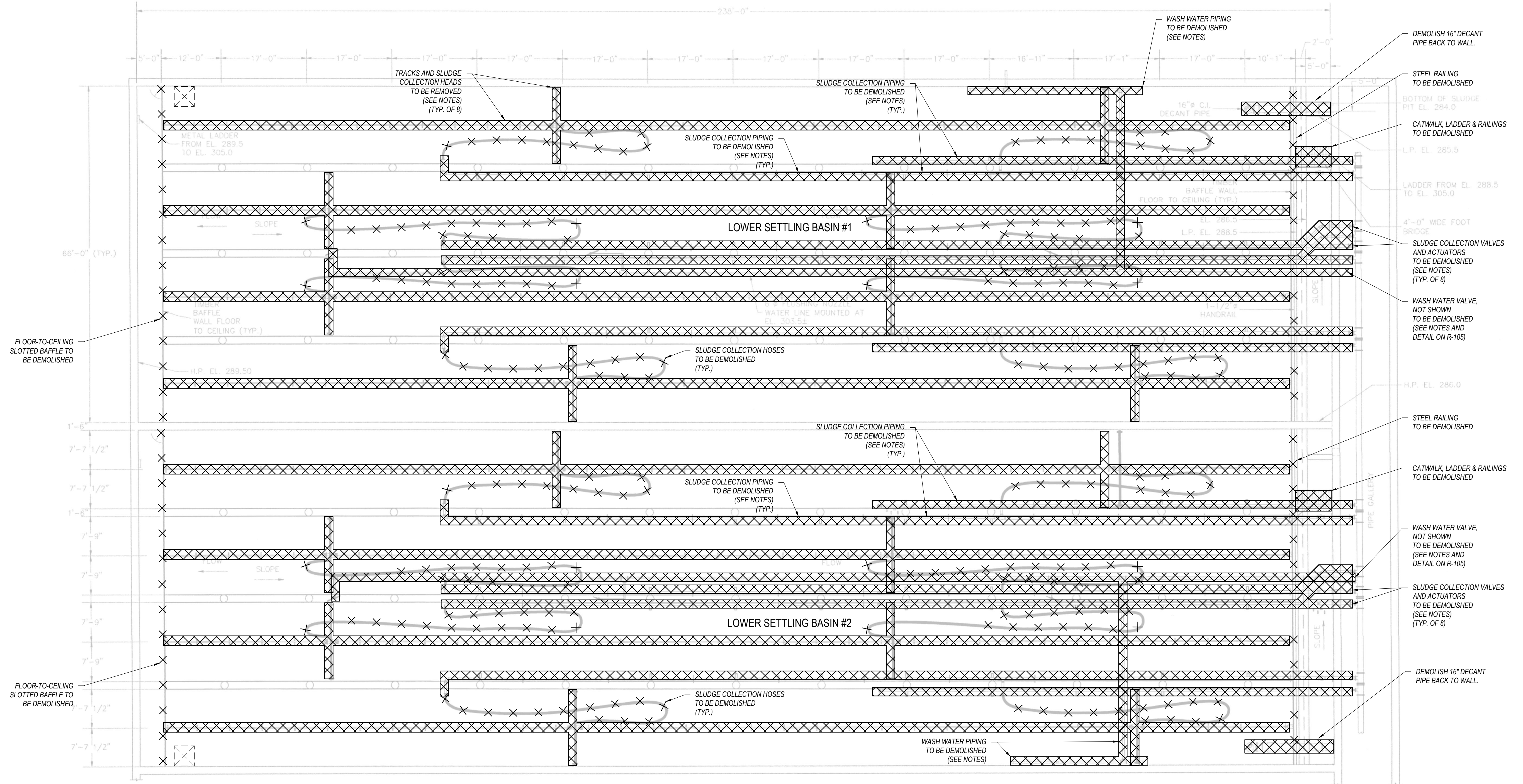
**Jacobs**

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 DEMOLITION PLAN - UPPER LEVEL	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% REVIEW		
2	04/02/2021	ISSUED FOR NJDEP PERMIT	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	06/04/2021	100% REVIEW		
4	09/24/2021	ISSUED FOR BID	DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			R-102	



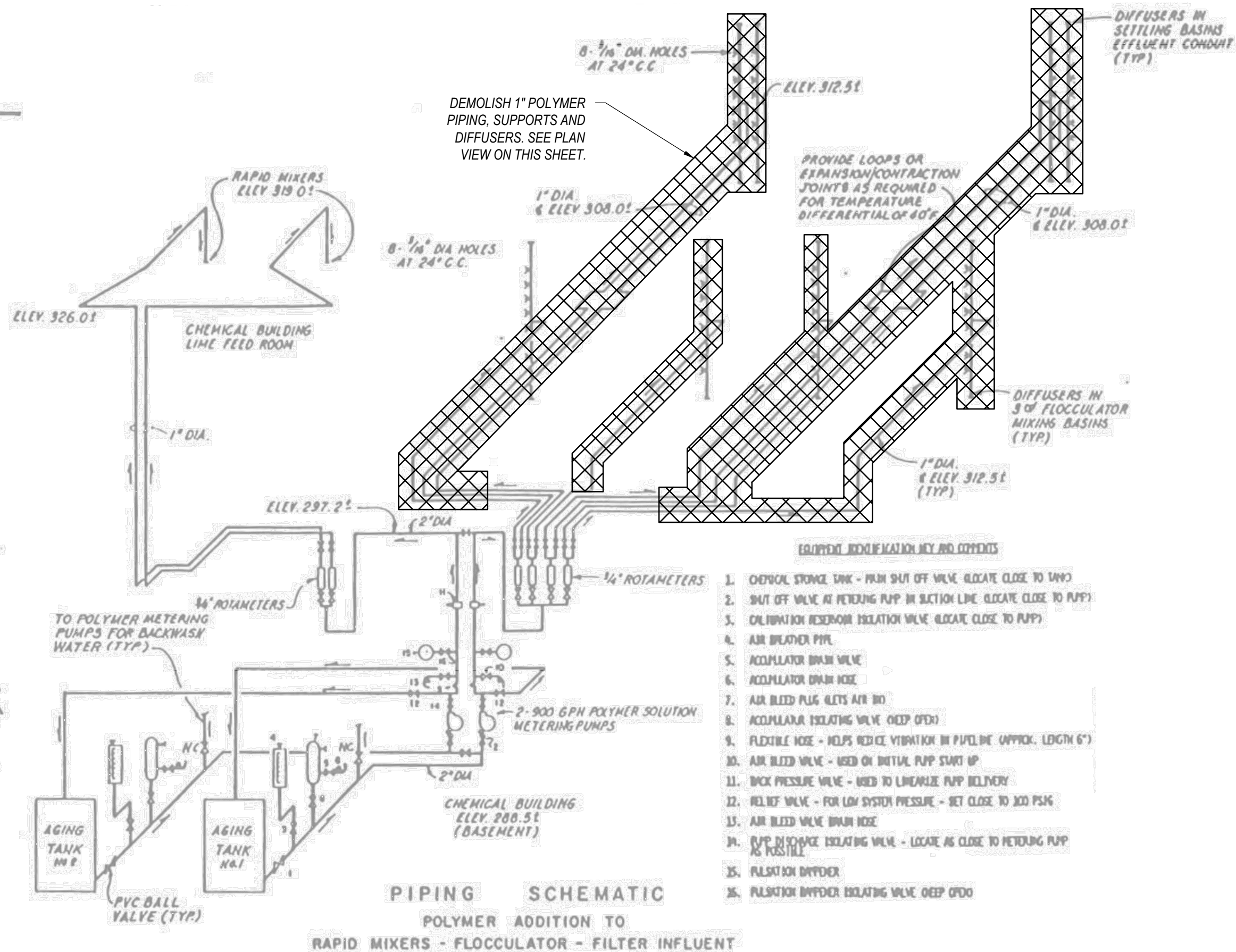
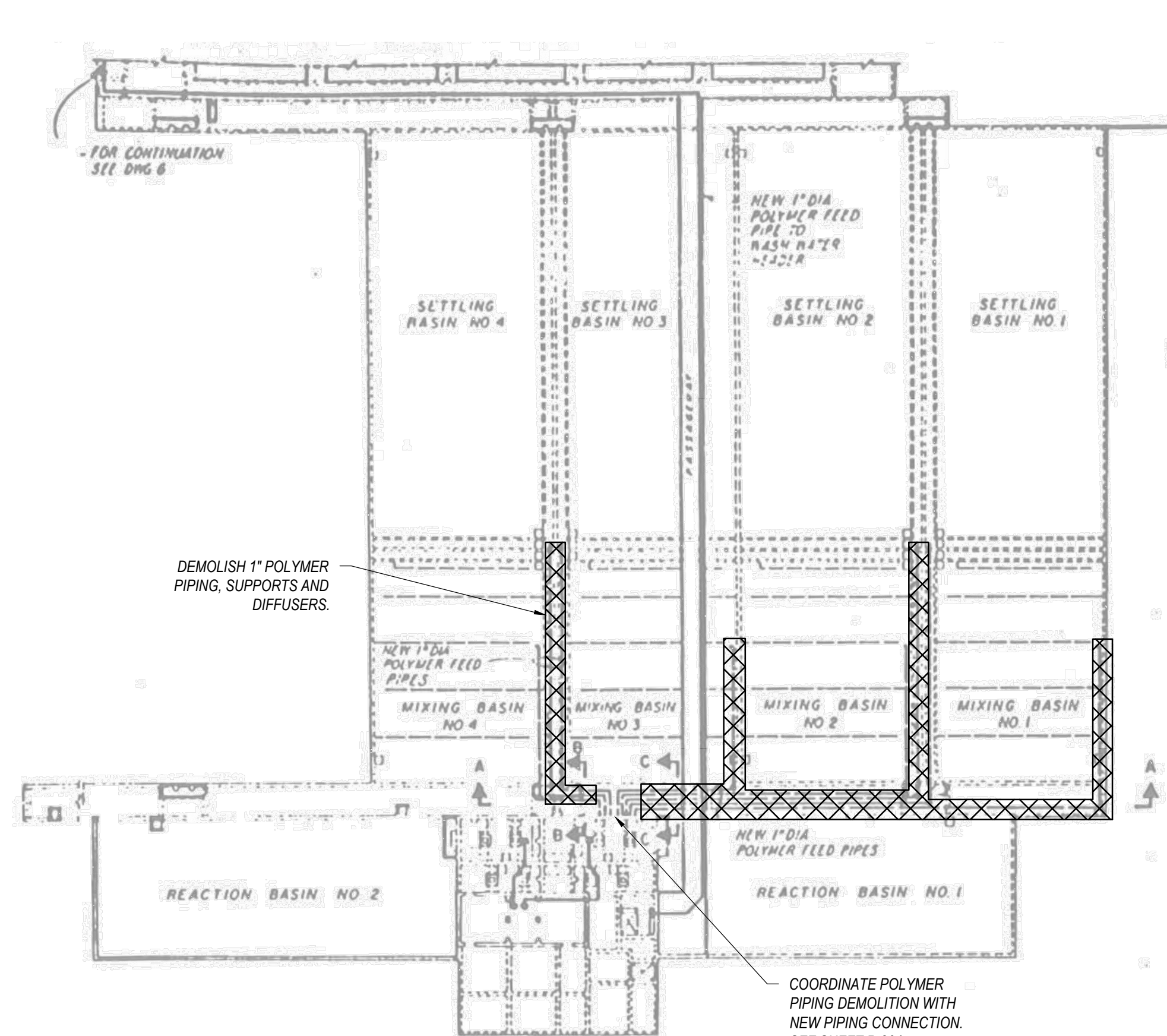
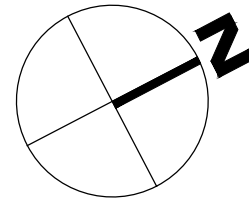


1. DEMOLITION OF TRACKS SHALL INCLUDE ALL CABLES AND PULLEYS.
2. DEMOLITION OF SLUDGE COLLECTION AND WASH WATER PIPING SHALL INCLUDE EXISTING PIPE HANGERS, SUPPORTS, WALL SLEEVES, LINK-SEALS, ETC.
3. DEMOLITION OF VALVES SHALL INCLUDE REMOVAL OF ACTUATORS AND WIRING TO NEAREST PULL BOX. A TEMPORARY BLIND FLANGE WITH GASKET AND HARDWARE SHALL BE PLACED ON OPEN TEE BRANCH.
4. DEMOLISH POLYMER PIPING, DIFFUSERS AND SUPPORTS, NOT SHOWN. SEE DRAWING R-104.
5. ALL DIMENSIONS AND EQUIPMENT SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
6. NJWSC TO REMOVE SLUDGE AND ANTHRACITE FROM UPPER / LOWER SETTLING BASINS. CONTRACTOR TO REMOVE SLUDGE AND ANTHRACITE FROM MIXING BASIN. DISPOSAL OF MATERIAL WILL BE ON SITE.
7. ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.
8. ACCESS TO THE MIXING / SETTLING BASIN AND REMOVAL OF EQUIPMENT MUST BE MADE THROUGH EXISTING 3'-0" x 3'-0" ACCESS HATCHES. CONTRACTOR MUST FIELD VERIFY ACTUAL INTERIOR HATCH DIMENSIONS.

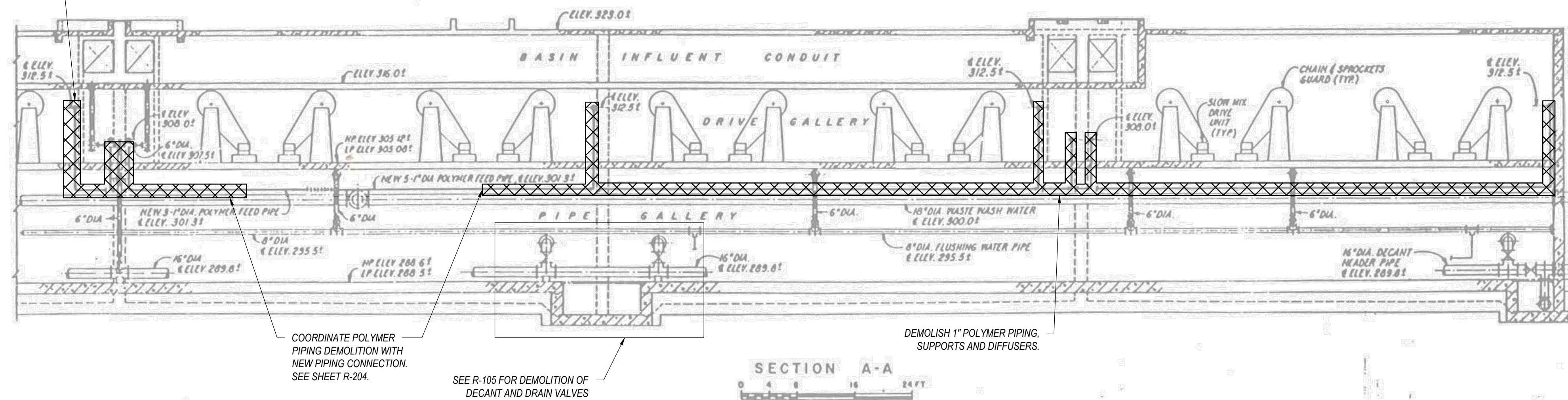


REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 DEMOLITION PLAN – LOWER LEVEL		
0	12/07/2020	30% REVIEW			
1	03/15/2021	80% REVIEW			
2	04/02/2021	ISSUED FOR NUDEP PERMIT			
3	06/04/2021	100% REVIEW			
4	09/24/2021	ISSUED FOR BID	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
5					
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			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC 246A27990200		
			DRAWN BY JJW PROJECT ENGR JJW APPROVED JNB	DATE 09/24/21 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		R-103





REPAIR WALL PENETRATIONS IN MIXING BASINS (TYP. OF 4)



#### DEMOLITION NOTES:

- ALL DIMENSIONS AND EQUIPMENT SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
- ONLY POLYMER PIPING DEMOLITION SHOWN ON THIS DRAWING. COORDINATE WORK WITH OTHER DEMOLITION DRAWINGS.

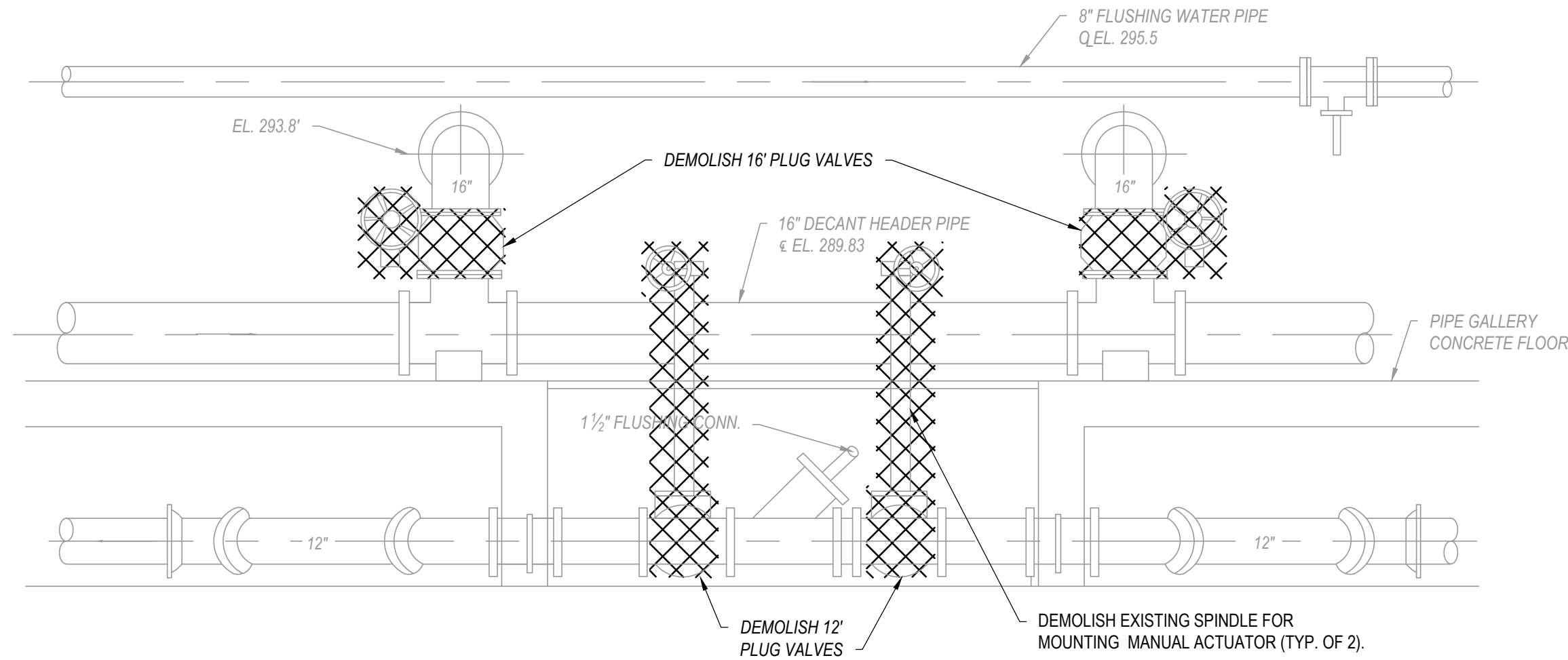
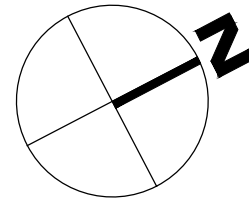
**Jacobs**

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NJPE LICENSE NO. 24GE04377400

REVISIONS	
0	03/15/2021 BOX REVIEW
1	04/02/2021 ISSUED FOR NJDEP PERMIT
2	06/04/2021 100% REVIEW
3	09/24/2021 ISSUED FOR BID
4	
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CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 POLYMER PIPING AND VALVE DEMOLITION	
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	DATE 09/24/21 PROJECT E6X94500 USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	R-104

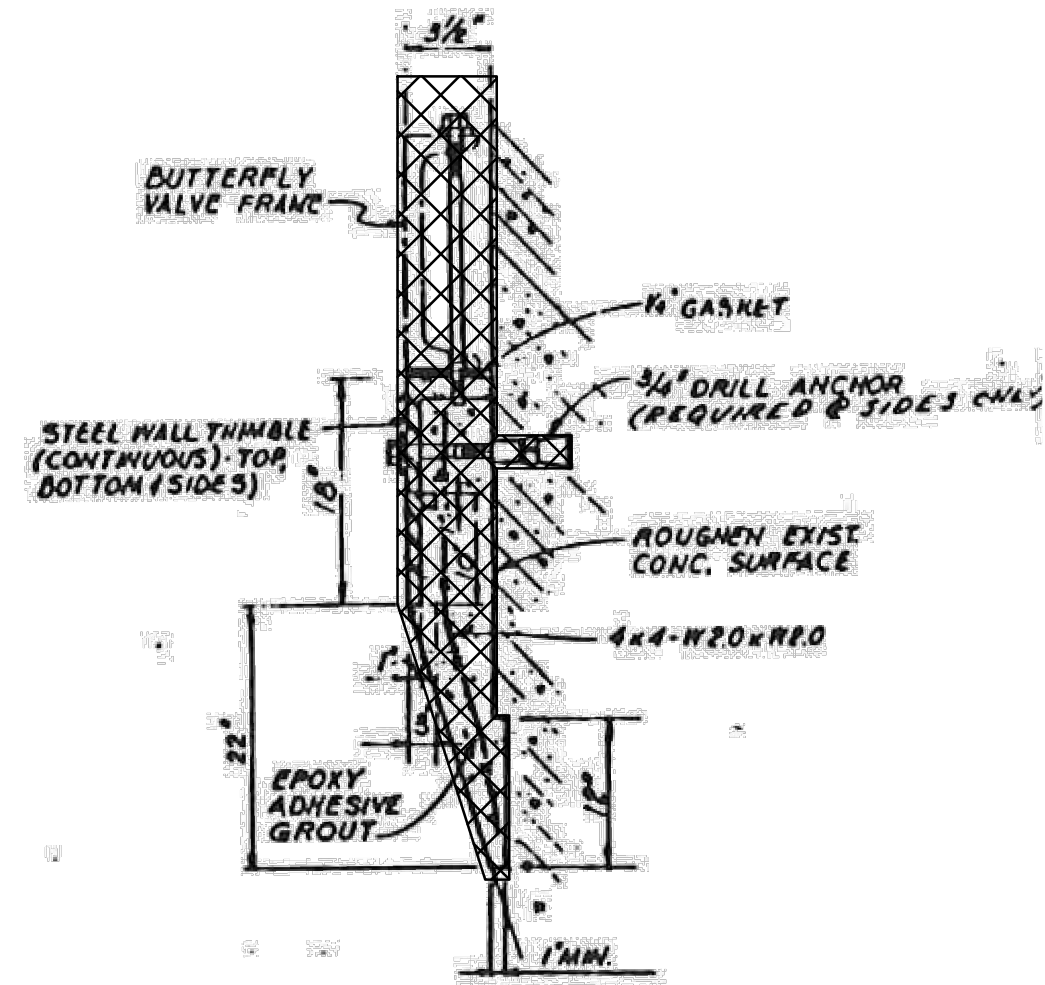




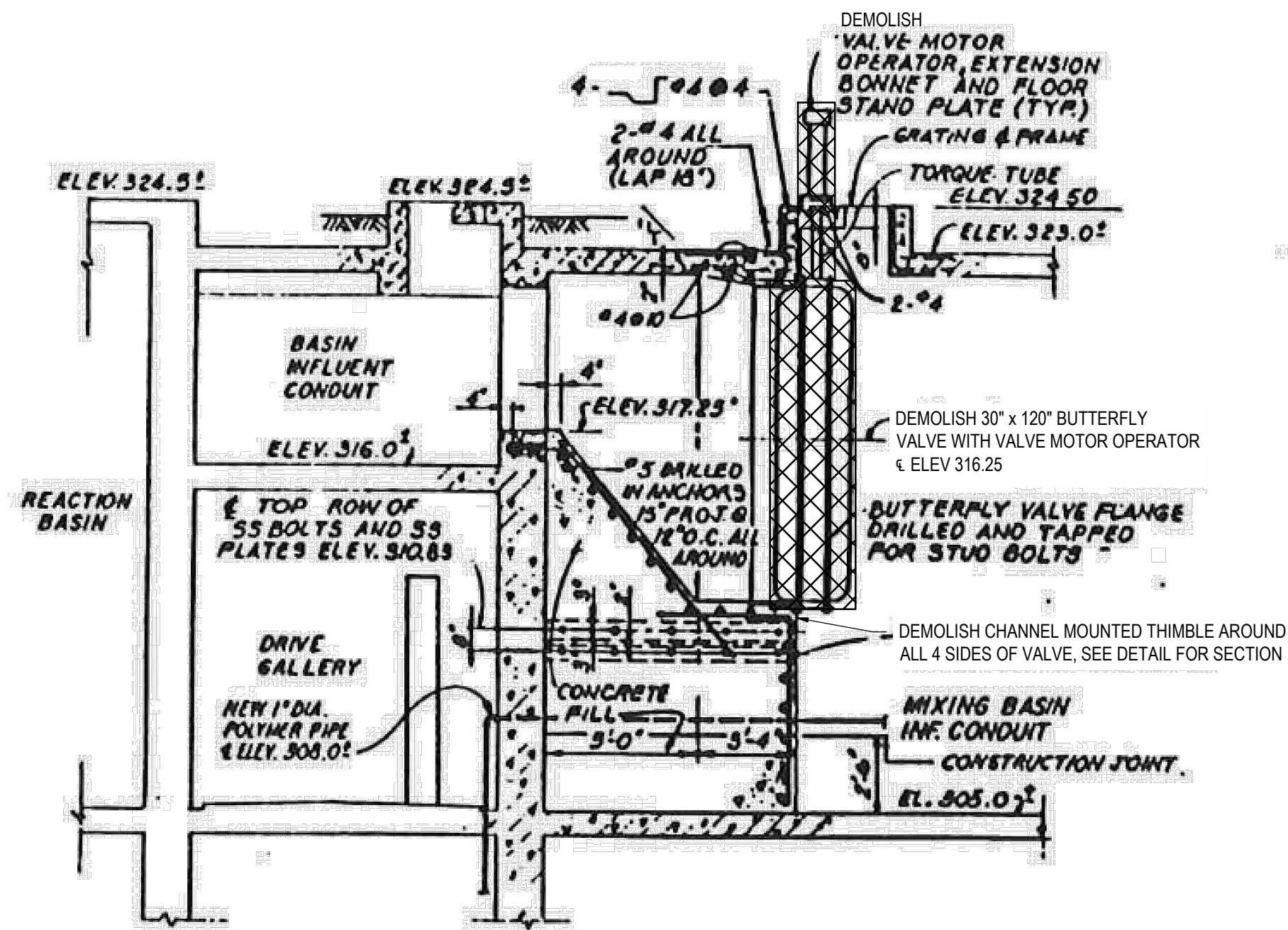
DEMOLITION NOTES:

- ALL DIMENSIONS, ELEVATIONS, PIPING AND EQUIPMENT SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
- DEMOLISH DECANT AND DRAIN VALVES FOR ALL 4 BASINS. DRAWINGS ONLY SHOW VALVES FOR BASINS 2 AND 3. BASINS 1 AND 4 ARE SIMILAR.

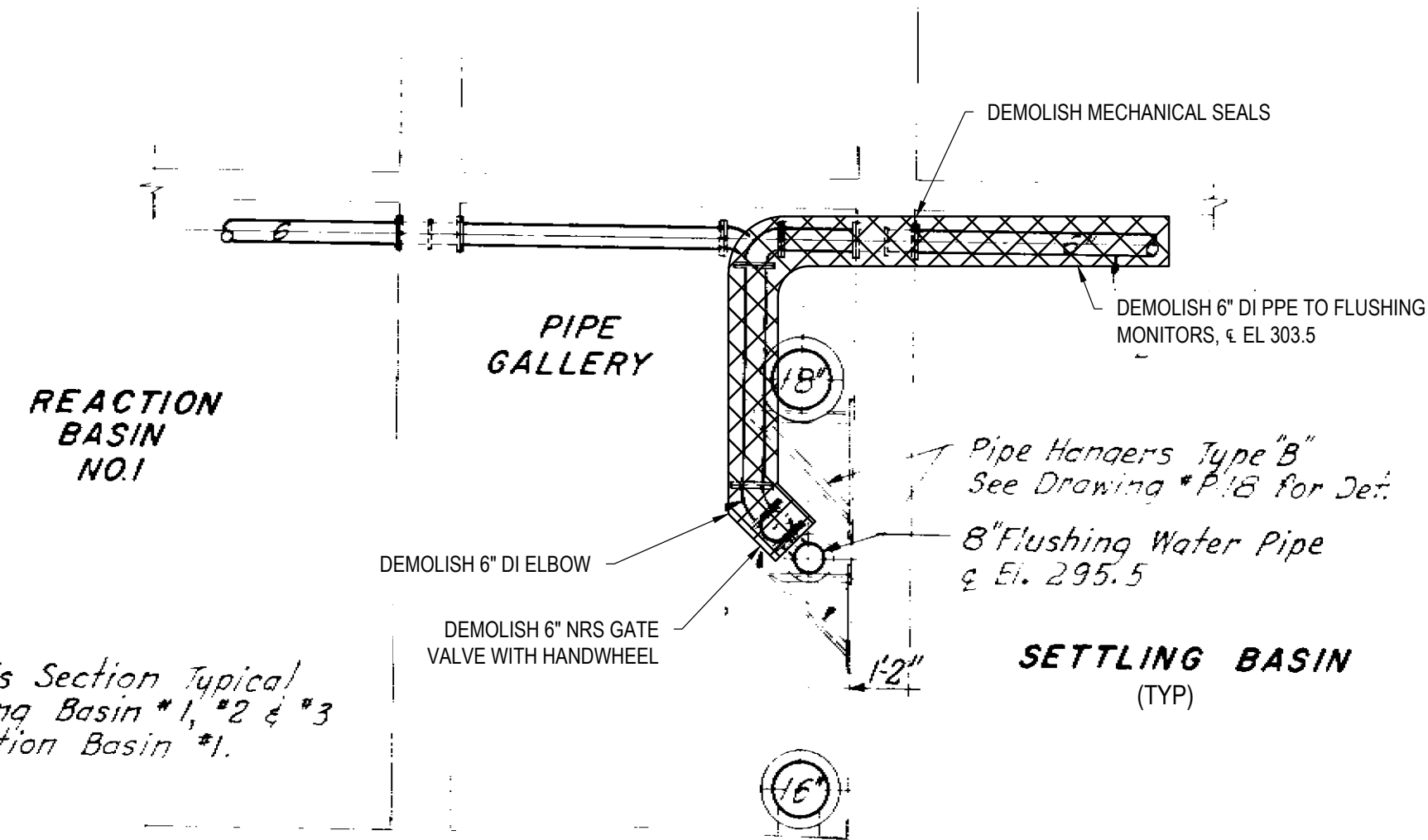
DECANT AND DRAIN VALVE DEMOLITION  
N.T.S.



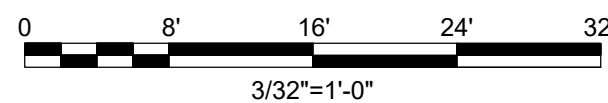
CHANNEL MOUNTED THIMBLE DEMOLITION DETAIL  
N.T.S.



INFLUENT RECTANGULAR BUTTERFLY VALVE DEMOLITION  
N.T.S.



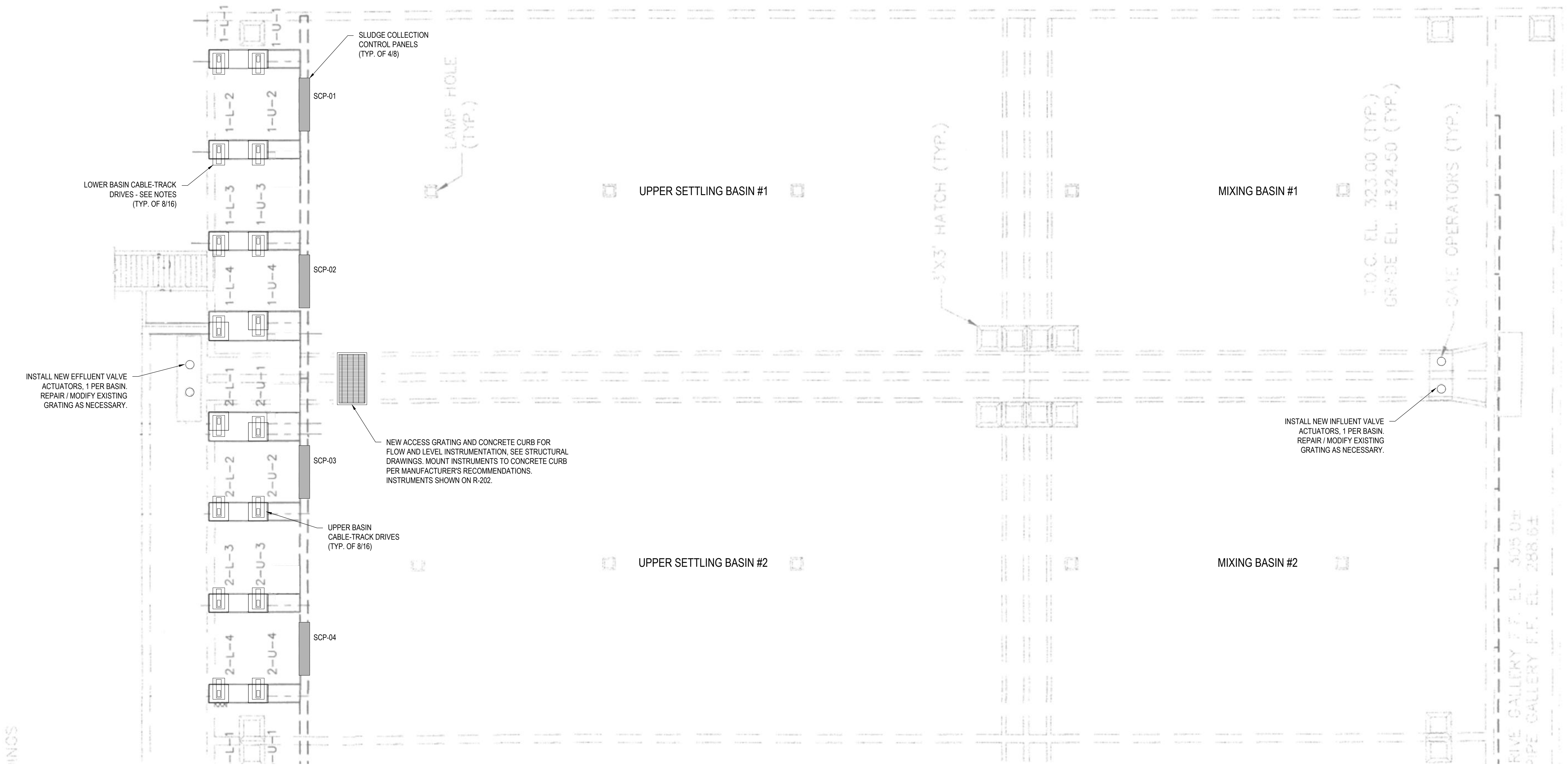
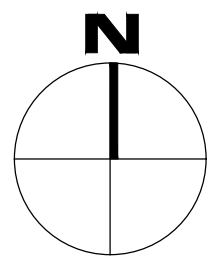
WASH WATER VALVE DEMOLITION  
N.T.S.



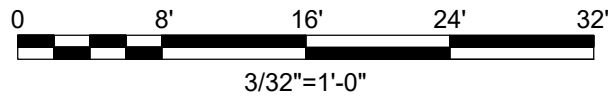
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NJPE LICENSE NO. 24GE04377400

REVISIONS		DECANT AND DRAIN VALVE DEMOLITION PROCESS BASINS 1-4 VALVE DEMOLITION	
0	03/15/2021	BOX REVIEW	
1	04/02/2021	ISSUED FOR NJDEP PERMIT	
2	06/04/2021	100% REVIEW	
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4			
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		NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
		JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
		DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	DATE 09/24/21 PROJECT E6X94500 USE DIMENSIONS ONLY SCALE AS NOTED
		USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	R-105



- NOTES:
- ALL DIMENSIONS EXISTING EQUIPMENT, CONCRETE EQUIPMENT PADS, SUPPORTS, ETC. SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
  - COORDINATE WITH EQUIPMENT MANUFACTURERS TO PROVIDE EQUIPMENT THAT WILL FIT IN EXISTING SPACE.
  - ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.
  - SEE STRUCTURAL DRAWINGS FOR MODIFICATIONS TO CABLE-TRACK DRIVE CONCRETE EQUIPMENT PADS.

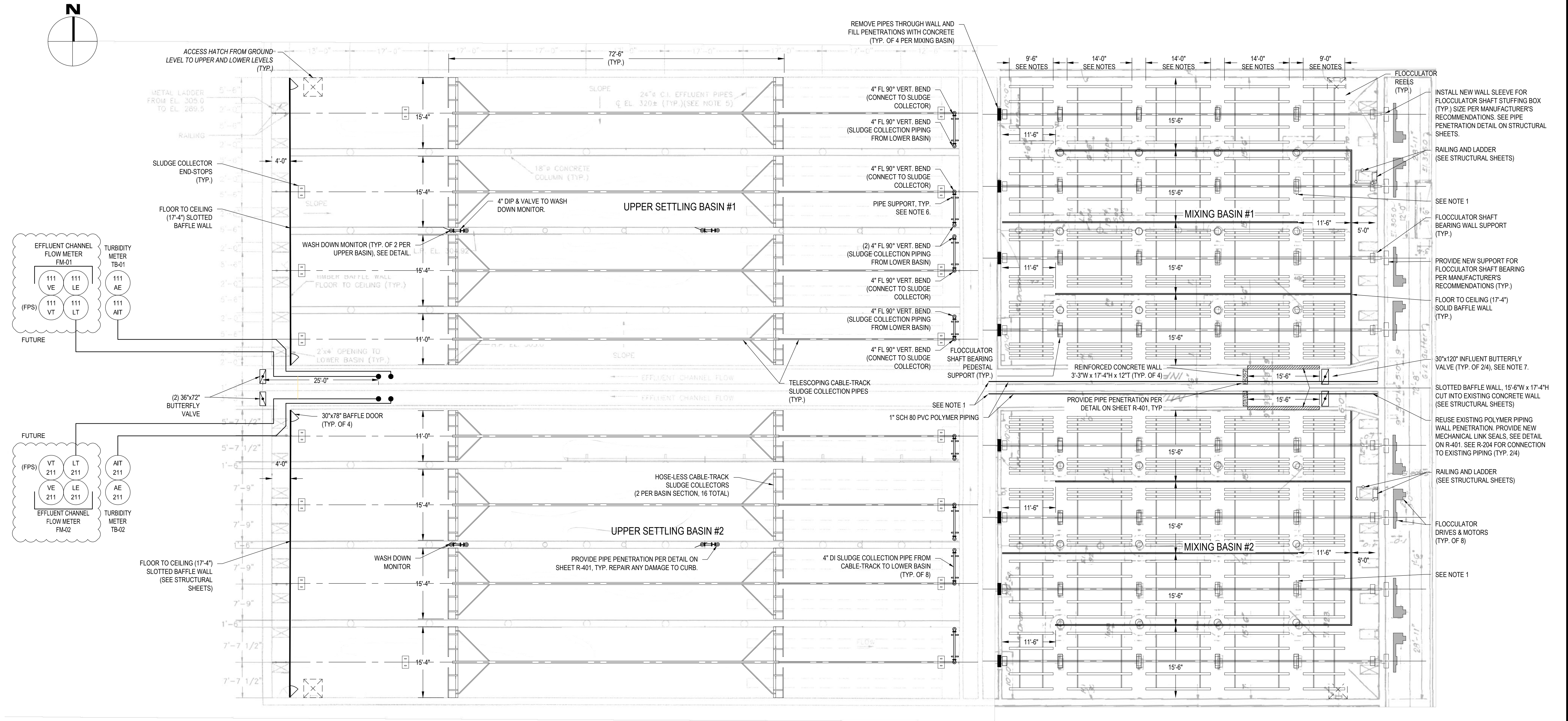


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NJPE LICENSE NO. 24GE04377400

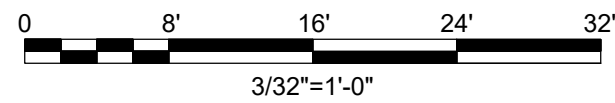
REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 MECHANICAL PLAN – GROUND LEVEL	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
2	04/02/2021	ISSUED FOR NJDEP PERMIT	DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
3	06/04/2021	100% REVIEW	DATE 09/24/21 PROJECT E6X94500	
4	09/24/2021	ISSUED FOR BID	USE DIMENSIONS ONLY SCALE AS NOTED	
5			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
6			R-201	
7				
8				





NOTES:

- POLYMER DIFFUSER, SEE DETAIL ON SHEET R-401. SEE DRAWING R-204 FOR CONNECTION TO EXISTING POLYMER PIPING.
- ALL DIMENSIONS, EXISTING EQUIPMENT, CONCRETE EQUIPMENT PADS, SUPPORTS, ETC. SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
- COORDINATE WITH EQUIPMENT MANUFACTURERS TO PROVIDE EQUIPMENT THAT WILL FIT IN EXISTING SPACE.
- ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.
- MAXIMUM ALLOWABLE FLOCCULATOR PADDLE DIMENSIONS SHOWN. CONTRACTOR SHALL FIELD VERIFY CLEARANCES. SEE NOTE 2 ABOVE. COORDINATE PADDLE SIZING WITH MANUFACTURER. SEE SPECIFICATION.
- PROVIDE AT LEAST 2 PIPE SUPPORTS ON EACH SLUDGE PIPE. SEE WALL MOUNTED PIPE SUPPORT DETAIL. SUPPORTS SHALL BE DESIGNED PER SECTION 40 05 15. CONTRACTOR SHALL COORDINATE WITH SLUDGE COLLECTION SYSTEM MANUFACTURER TO ENSURE SUPPORTS DO NOT CONFLICT WITH COLLECTION SYSTEM OPERATION.
- INSTALL NEW WALL THIMBLES PER VALVE MANUFACTURER'S INSTRUCTIONS. SEE WALL THIMBLE DETAIL.
- ACCESS TO THE MIXING / SETTLING BASINS AND INSTALLATION OF EQUIPMENT MUST BE MADE THROUGH EXISTING 3'-0" x 3'-0" ACCESS HATCHES OR WATERTIGHT DOOR INSTALLED IN PIPE GALLERY UNDER THIS CONTRACT. CONTRACTOR MUST FIELD VERIFY ACTUAL INTERIOR HATCH DIMENSIONS.



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NJPE LICENSE NO. 24GE04377400

REVISIONS

0	12/07/2020	30% REVIEW
1	03/15/2021	80% REVIEW
2	04/02/2021	ISSUED FOR NJDEP PERMIT
3	06/04/2021	100% REVIEW
4	09/24/2021	ISSUED FOR BID
5		
6		
7		
8		

CLARIFIER SYSTEM REHABILITATION  
PROCESS  
BASINS 1-4  
MECHANICAL PLAN - UPPER LEVEL

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJPCA 246A27990200

DRAWN BY JJW  
PROJECT ENG'R JJW  
APPROVED JNB

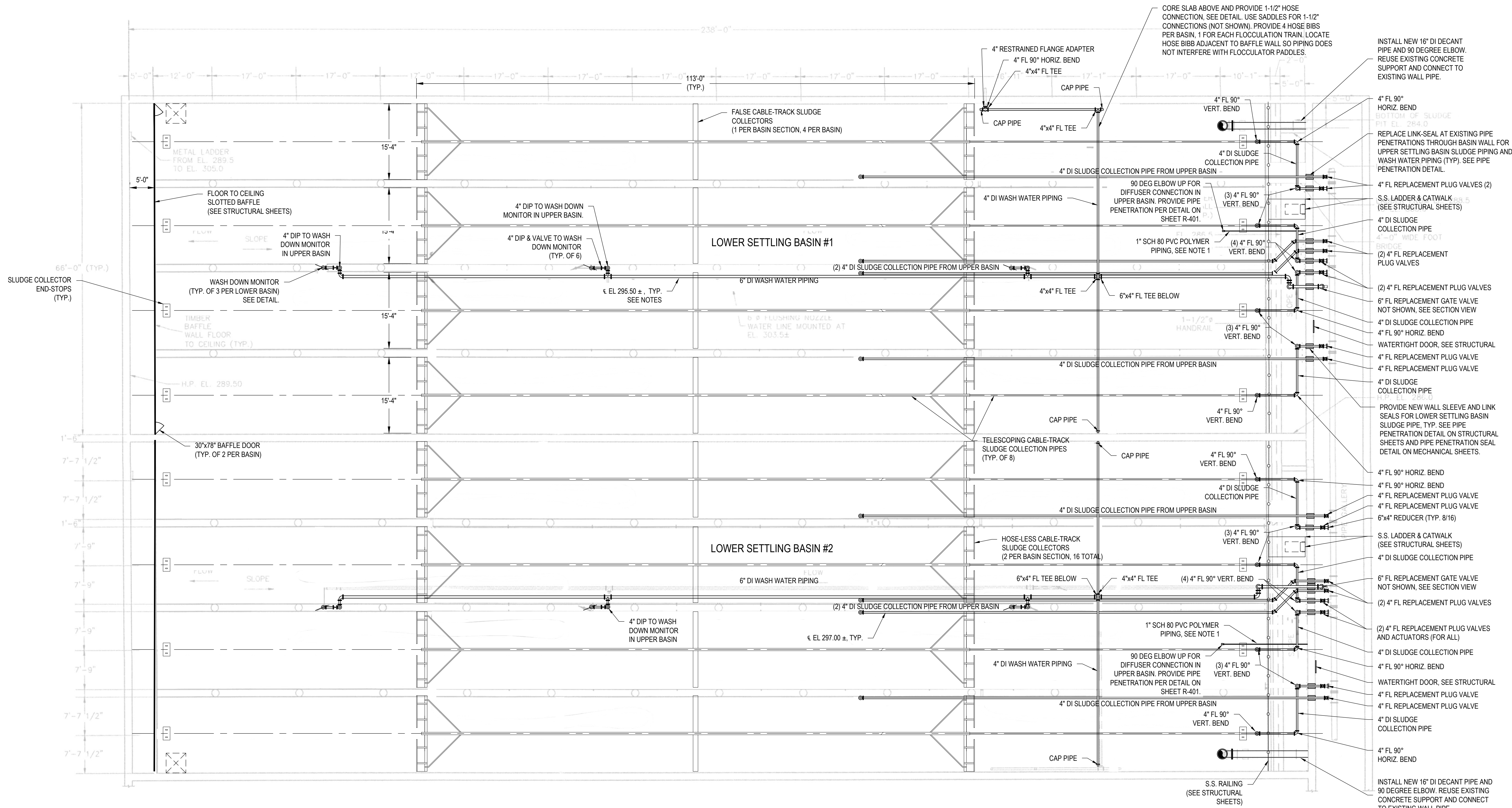
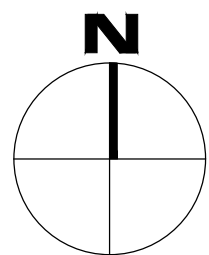
DATE 09/24/21  
PROJECT E6X94500

USE DIMENSIONS ONLY  
SCALE AS NOTED

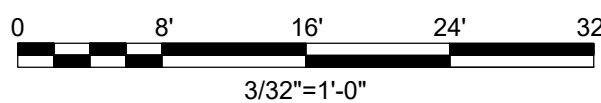
USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

R-202





- NOTES:
- SEE DRAWING R-204 FOR CONNECTION TO EXISTING POLYMER PIPING.
  - ALL DIMENSIONS, EXISTING EQUIPMENT, CONCRETE EQUIPMENT PADS, SUPPORTS, ETC. SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
  - COORDINATE WITH EQUIPMENT MANUFACTURERS TO PROVIDE EQUIPMENT THAT WILL FIT IN EXISTING SPACE.
  - ONLY MIXING AND SETTLING BASINS 1 AND 2 ARE SHOWN. WORK TO BE CONDUCTED ON BASINS 3 AND 4 IS SIMILAR.
  - ACCESS TO THE MIXING / SETTLING BASINS AND INSTALLATION OF EQUIPMENT MUST BE MADE THROUGH EXISTING 3'-0" x 3'-0" ACCESS HATCHES OR WATERTIGHT DOORS INSTALLED IN PIPE GALLERY UNDER THIS CONTRACT. CONTRACTOR MUST FIELD VERIFY ACTUAL INTERIOR HATCH DIMENSIONS.
  - SUPPORT 6" WASH WATER PIPING OFF CONCRETE COLUMNS APPROXIMATELY 10' ABOVE BASIN FLOOR. PROVIDE SUPPORT CALCULATIONS AND SUBMITTALS PER SECTION 40.04.15. PROVIDE AT LEAST 1 HANGER SUPPORT BETWEEN COLUMNS.



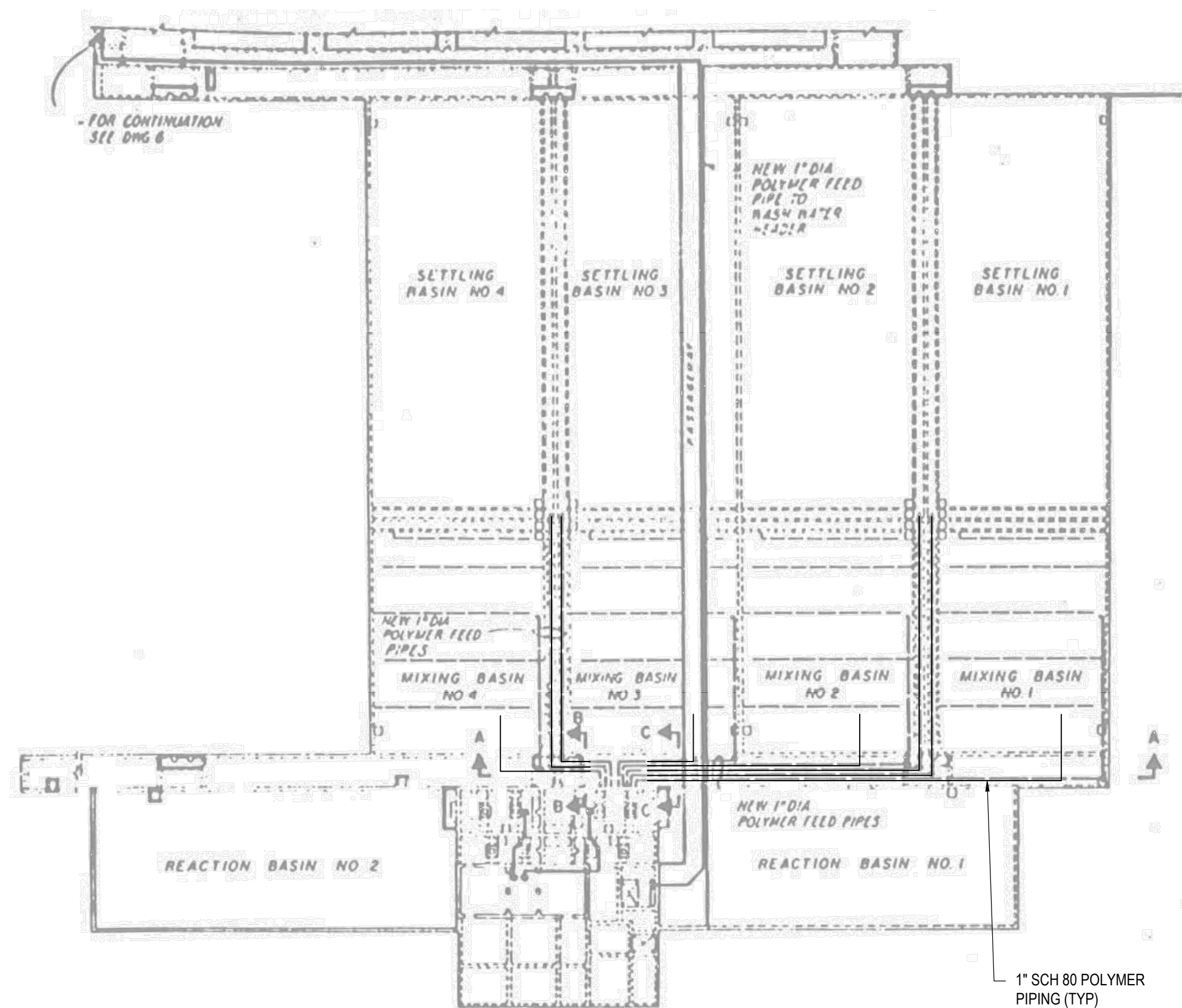
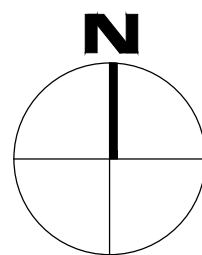
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NJPE LICENSE NO. 24GE04377400

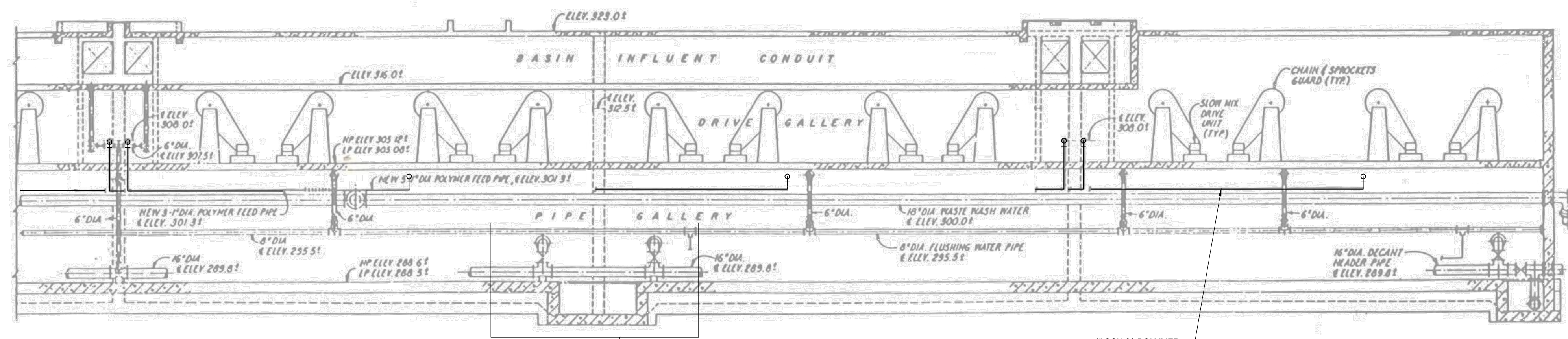
REVISIONS		
0	12/07/2020	30% REVIEW
1	03/15/2021	80% REVIEW
2	04/02/2021	ISSUED FOR NJDEP PERMIT
3	06/04/2021	100% REVIEW
4	09/24/2021	ISSUED FOR BID
5		
6		
7		
8		

CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 MECHANICAL PLAN - LOWER LEVEL		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200		
DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	DATE 09/24/21 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		R-203

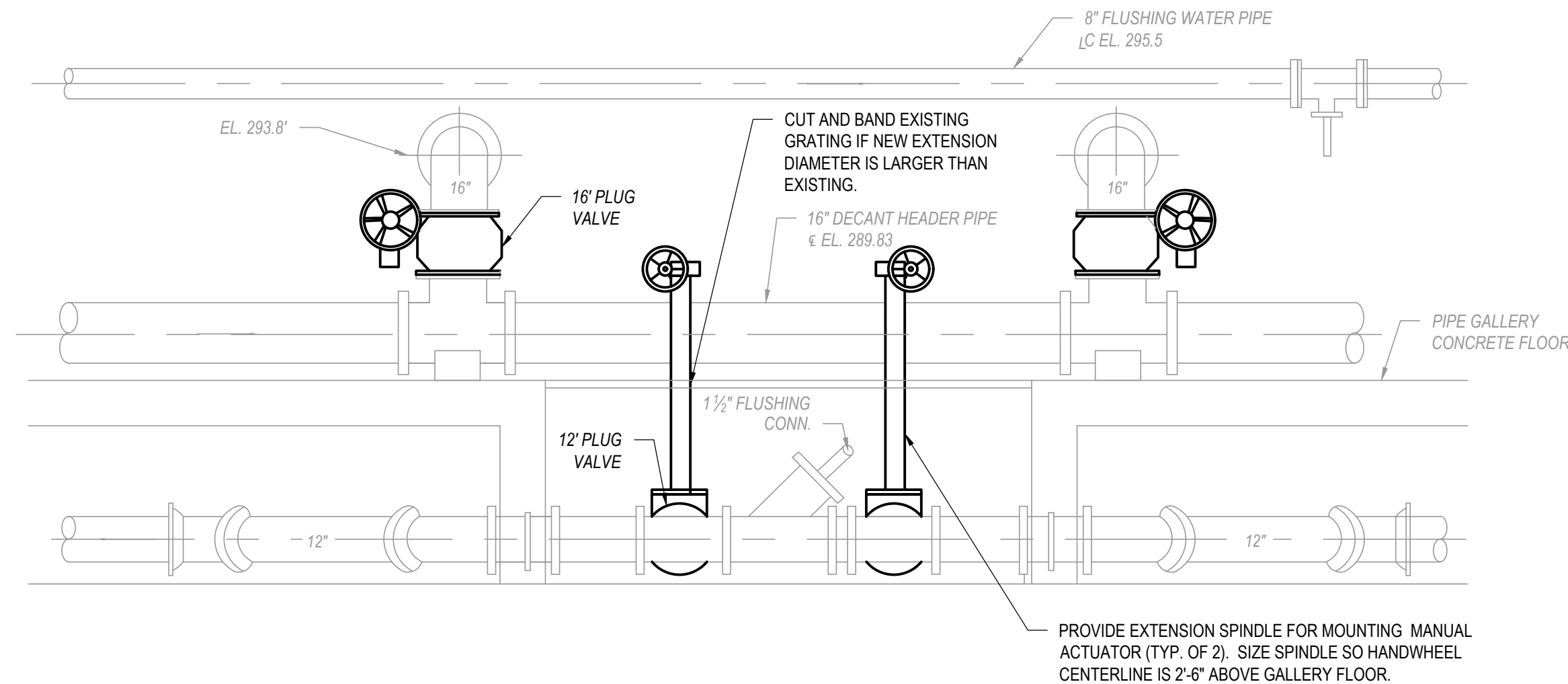




PLAN



SECTION A-A



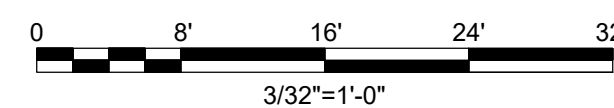
DECANT AND DRAIN VALVE SECTION

NOTES:

- ALL DIMENSIONS, EXISTING EQUIPMENT, CONCRETE EQUIPMENT PADS, SUPPORTS, ETC. SHOWN ARE BASED ON REFERENCE DRAWINGS. ACTUAL CONDITIONS MAY VARY. CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS.
- ONLY POLYMER PIPING IS SHOWN ON THIS DRAWING. SEE R-201 AND R-202 FOR MORE DETAILS.
- REPLACE DECANT AND DRAIN VALVES FOR ALL 4 BASINS. DRAWINGS ONLY SHOW VALVES FOR BASINS 2 AND 3. BASINS 1 AND 4 ARE SIMILAR.

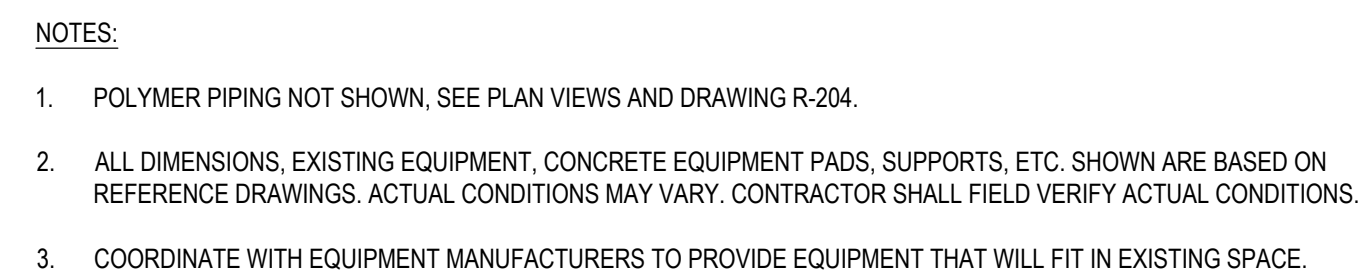
Jacobs

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NJPE LICENSE NO. 24GE04377400



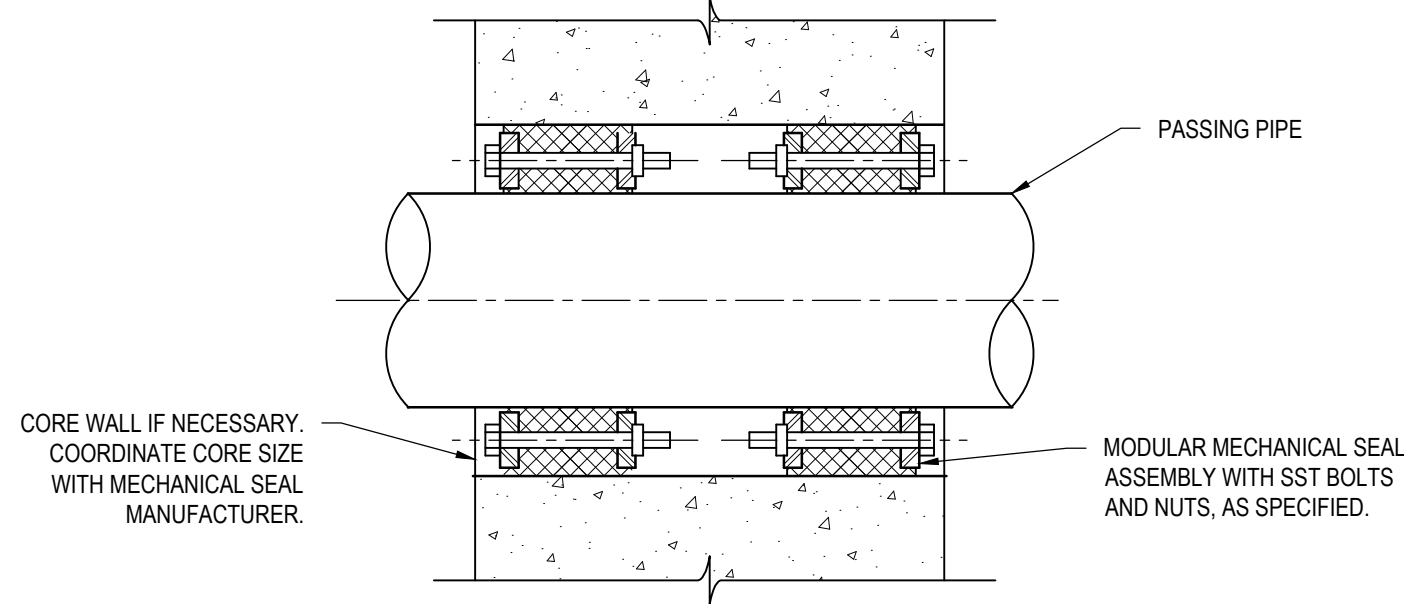
REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 POLYMER PIPING AND VALVE REPLACEMENT	
0	03/15/2021	80% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	04/02/2021	ISSUED FOR NJDEP PERMIT	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
2	06/04/2021	100% REVIEW	DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
3	09/24/2021	ISSUED FOR BID	DATE 09/24/21 PROJECT E6X94500	
4			USE DIMENSIONS ONLY SCALE AS NOTED	
5			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
6			R-204	
7				
8				





REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 MIXING & SETTLING BASINS SECTION										
0	12/07/2020	30% REVIEW											
1	03/15/2021	80% REVIEW											
2	04/02/2021	ISSUED FOR NJDEP PERMIT	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT										
3	06/04/2021	100% REVIEW											
4	09/24/2021	ISSUED FOR BID											
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC A 246A27990200										
6													
7													
8													
			DRAWN BY JJW PROJECT ENGR JJW APPROVED JNB			DATE 09/24/21 PROJECT E6X94500			USE DIMENSIONS ONLY SCALE AS NOTED				
						USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES				R-301			

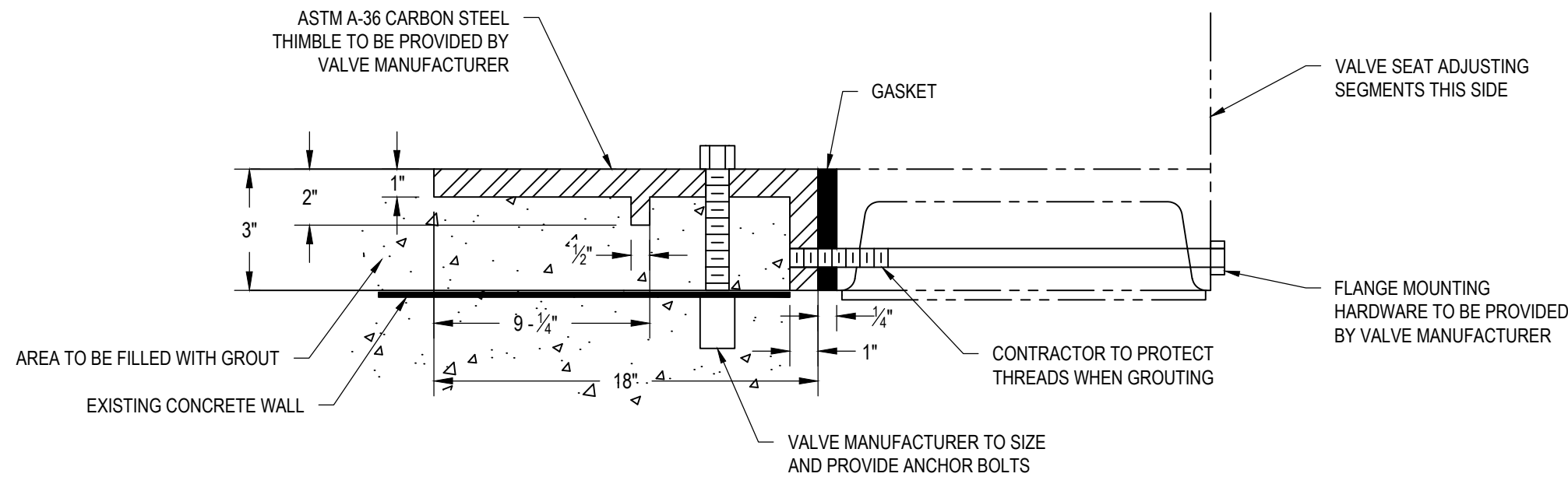




PIPE PENETRATION SEAL DETAIL  
N.T.S.

NOTES:

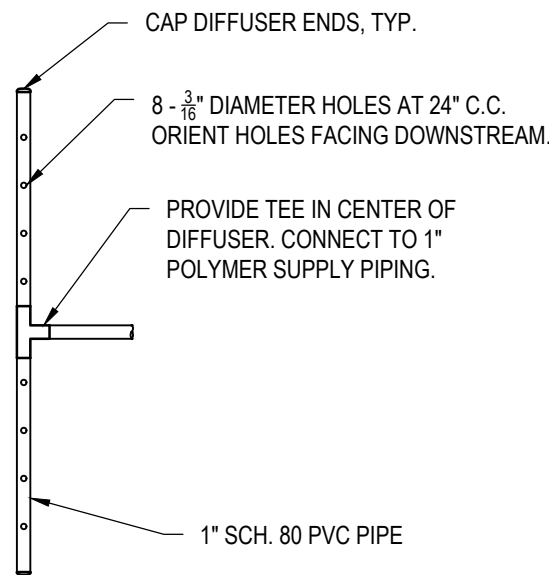
1. PROVIDE SIMILAR FLOOR PENETRATION WHERE CALLED OUT ON DRAWINGS. ONLY 1 MECHANICAL SEAL IS REQUIRED FOR FLOOR PENETRATIONS. .



WALL THIMBLE DETAIL  
N.T.S.

NOTES:

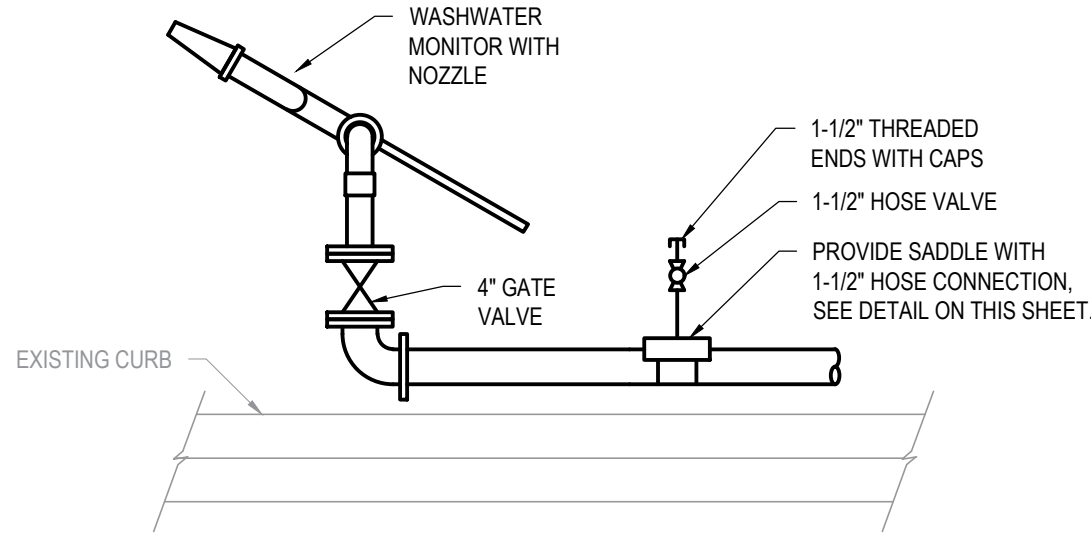
1. VALVE MANUFACTURER TO PROVIDE CHANNEL MOUNTED THIMBLE AND INSTALLATION DETAILS. DIMENSIONS OR INSTALLATION REQUIREMENTS MAY VARY FROM WHAT IS SHOWN.
2. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND COORDINATE WITH VALVE MANUFACTURER FOR INSTALLATION REQUIREMENTS.
3. TYPICAL SECTION THROUGH THIMBLE AND VALVE MOUNTING FLANGE. THIMBLE TO BE MOUNTED ON CHANNEL WALLS, FLOOR AND TOP SLAB SIMILAR TO EXISTING, SEE DEMOLITION DRAWING. THIMBLE ANCHOR BOLT AND FLANGE MOUNTING BOLT SPACING TO BE PER VALVE MANUFACTURER'S RECOMMENDATIONS.



POLYMER DIFFUSER DETAIL  
N.T.S.

NOTES:

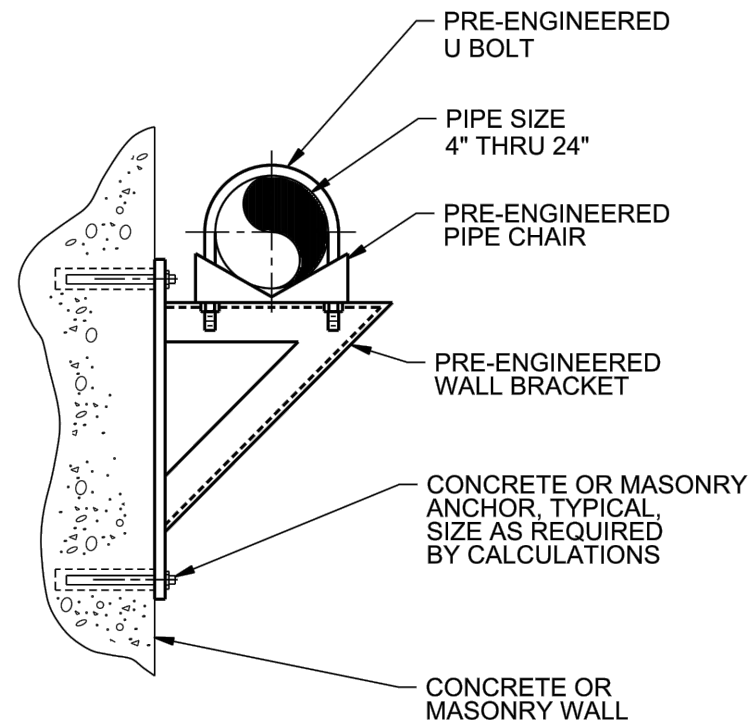
1. CONTRACTOR TO SUPPORT DIFFUSER AND ASSOCIATED POLYMER PIPING, SEE SPECIFICATIONS.
2. DIFFUSER TO BE MOUNTED VERTICALLY IN EFFLUENT CHANNEL AND MIXING BASINS AS SHOWN ON DRAWINGS.



WASH DOWN MONITOR DETAIL  
N.T.S.

NOTES:

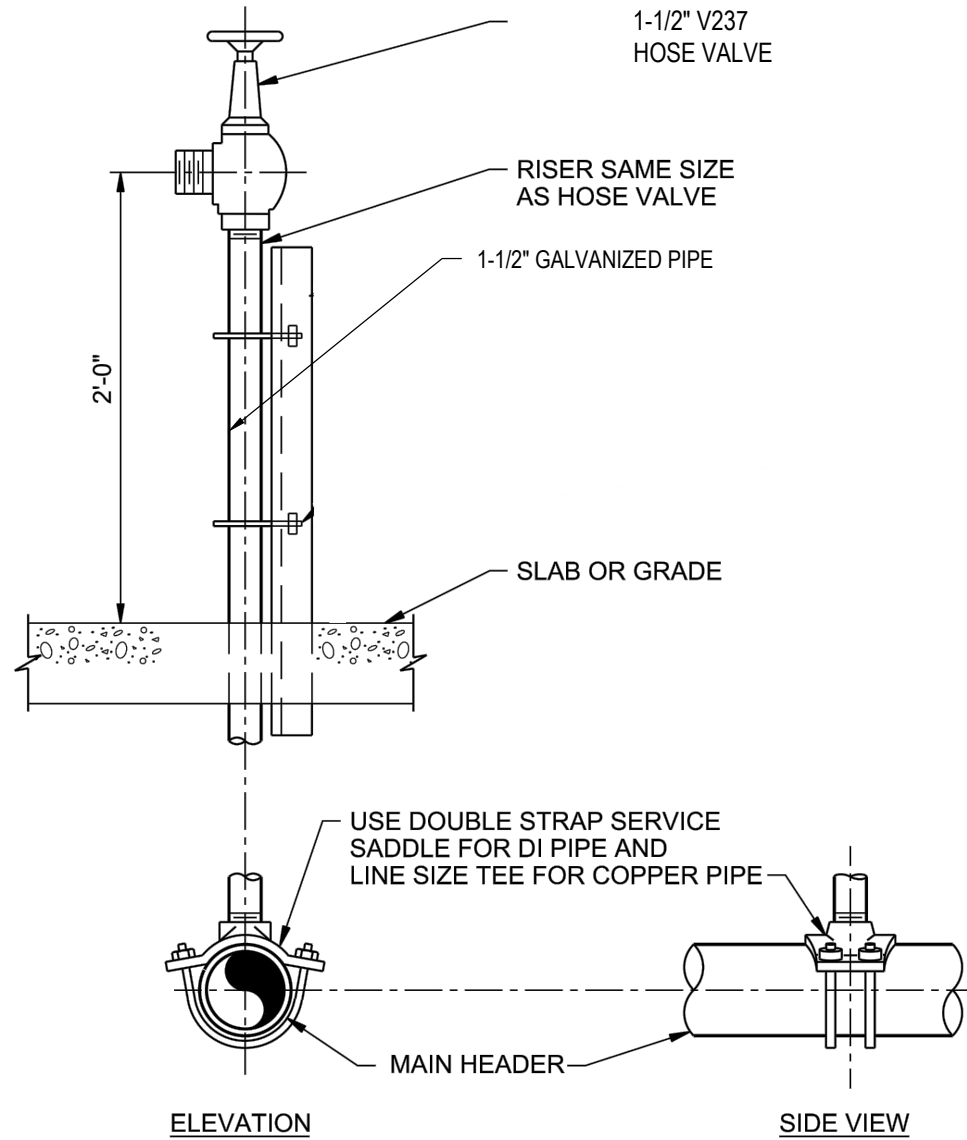
1. SUPPORT WASH WATER MONITOR AND PIPING PER SECTION 40 05 15. COORDINATE WITH SLUDGE COLLECTOR MANUFACTURER TO ENSURE PIPING AND SUPPORTS DO NOT INTERFERE WITH OPERATION OF EQUIPMENT.
2. PROVIDE ONE 1-1/2\"/>



WALL MOUNTED PIPE SUPPORT DETAIL  
N.T.S.

NOTES:

1. WALL BRACKET SHALL BE MEDIUM HEAVY DUTY AS REQUIRED BY CALCULATIONS.
2. SUBMIT FINAL DESIGN AND CALCULATIONS FOR SUPPORT AND ANCHORAGE AS SPECIFIED.



HOSE VALVE DETAIL  
N.T.S.

NOTES:

1. PROVIDE SUPPORTS PER SECTION 40 05 15
2. MAIN HEADER MAY OR MAY NOT BE BELOW CONCRETE SLAB AS SHOWN.

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JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 MECHANICAL DETAILS	
0	03/15/2021	80% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	04/02/2021	ISSUED FOR NJDEP PERMIT		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY JJW PROJECT ENG'R JJW APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	R-401

PIPING SPECIFICATIONS																
PIPING SERVICE	RATING		TEST		IDENTIFICATION		PIPE			FITTINGS			GASKETS	BOLTS	FLANGES	NOTES
	MAX. OPER. PRESS. PSIG	MAX. OPER. TEMP. °F	TEST PRESS. PSIG	TYPE	FIELD COLOR	LETTER COLOR	DIAMETER	SCH. OR TYPE	DESCRIPTION	DIAMETER	RATING OR SCH.	DESCRIPTION				
WATER ABOVEGROUND	100	225	150	H	BLUE (SEE NOTES)	WHITE	4" AND LARGER	CLASS 350	FLANGED END DUCTILE IRON, AWWA C115/C110	4" AND LARGER	350 PSIG	TWO PIECE DUCTILE IRON HOUSING SUITABLE FOR POTABLE WATER, AWWA C115/C110	NEOPRENE FULL FACE	SS GRADE 8	150 LB	FLANGED CONNECTIONS OF DISSIMILAR METALS SHALL UTILIZE DIELECTRIC FLANGE ISOLATION GASKET/HARDWARE KIT.
							½" AND LARGER	SCH. 40	THREADED GALVANIZED STEEL, ASTM A733, ANSI/ASME B1.20.1, ASTM A53	½" AND LARGER	150 PSIG	TWO PIECE STEEL HOUSING SUITABLE FOR POTABLE WATER, ANSI/ASME B1.20.1, ANSI/ASME B16.3, ASTM A197	NEOPRENE FULL FACE	SS GRADE 8	150	DUCTILE IRON PIPE SHALL BE PAINTED BLUE PER FACILITY PAINT STANDARD. SUBMIT PAINT SAMPLE FOR COLOR MATCHING.  PRESSURE GAUGES SHALL BE PER SECTION 409100.
POLYMER	100	100	150	H			1"	SCH. 80	SOCKET WELD SCH 80 PVC PIPE	1"	150 PSIG	SOCKET WELD, SCH. 80 PVC	N/A	N/A	N/A	

ABBREVIATIONS FOR PIPING SPECIFICATIONS ONLY

ABS	ABSOLUTE	CS	CARBON STEEL	H	HYDROSTATIC TEST	RW	RAW WATER
ALST	ALLOY STEEL	DI	DUCTILE IRON	IS	INTEGRAL SEAT	SCS	SEAMLESS CARBON STEEL
AN	ANGLE VALVE	DIS	DEIONIZED WATER SUPPLY	LP	LUBRICATED PLUG	SCH	SCHEDULE
AP	ALL PURPOSE JACKET	DV	DIAPHRAGM VALVE	LB	POUND	SCRD	SCREWED
AW	ACID WASTE	ERW	ELECTRIC RESISTANCE WELD	MI	MALLEABLE IRON	SJ	SOLDER JOINT
BD	BANDED	°F	DEGREE FAHRENHEIT	MJ	MECHANICAL JOINT	SL	SLUDGE
BE	BEVELLED ENDS	FF	FLAT FACE	NPTF	NATIONAL PIPE TAPER, FEMALE	SO	SLIP-ON
BF	BUTTERFLY VALVE	FGLASS	FIBERGLASS	NPTM	NATIONAL PIPE TAPER, MALE	SS	STAINLESS STEEL
BS	BELL AND SPIGOT	FIG. NO.	FIGURE NUMBER	OS & Y	OUTSIDE SCREW AND YOKE	ST	STEAM TRAP
BV	BALL VALVE	FLG	FLANGE	P	PNEUMATIC TEST	STD	STANDARD
BW	BUTT WELD	FS	FORGED STEEL	PE	PLAIN ENDS	STR	STRAINER
CAF	COMPRESSED ASBESTOS FIBER	PV	FOOT VALVE	PJ	PUSH JOINT	SW	SCREENED WATER
CI	CAST IRON	GA	GATE VALVE	PVC	POLYVINYL CHLORIDE	THK	THICK
CK	CHECK VALVE	GALV.	GALVANIZED	PSI	POUNDS PER SQUARE INCH	TIG	TUNGSTEN INERT GAS
CL	CLASS	G.E.	GROOVED END	PSIA	POUNDS PER SQUARE INCH ABSOLUTE	U.L.	UNDERWRITERS LABORATORY
CLV	STRAIGHTWAY VALVE	GL	GLOBE VALVE	PSIG	POUNDS PER SQUARE INCH GAUGE	UB	UNION BONNET
CPR	COPPER	GR	GRADE	RF	RAISED FACE	VIC	VICTAULIC
CR	CHROMIUM SS			RS	RIISING STEM	WN	WELDING NECK
				RJF	RING JOINT FACING		

NOTES FOR PIPING SPECIFICATIONS:

ALL MAKE / MODEL OF MATERIALS IDENTIFIED ARE INTENDED TO ESTABLISH PERFORMANCE CRITERIA FOR SAID MATERIALS. ALL INDICATIONS OF MAKE / MODEL SHOULD BE ASSUMED TO BE FOLLOWED BY "OR EQUAL."

THESE SPECIFICATIONS ARE GENERAL AND CONTAIN ITEMS NOT SHOWN ON THE DWGS. DETAIL SPECIFICATIONS ARE INCLUDED IN THE TECHNICAL SPECIFICATIONS.

ALL VALVES SHALL BE LOCKABLE PER OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS (OSHA) STANDARD 1910.147. DETAILED VALVE SPECIFICATIONS ARE INCLUDED IN THE TECHNICAL SPECIFICATIONS.

SCREWED VALVES OR FITTINGS INSTALLED IN A SERVICE NORMALLY USING WELDED FITTINGS MUST BE SEAL WELDED. PARTS WHICH MAY BE DAMAGED BY WELDING (SEALS, PACKING, ETC.) MUST BE REMOVED BEFORE WELDING AND REPLACED AFTER THE WELDED PART IS COOLED.

VALVE SCHEDULE 2 INCHES AND LARGER						
DESCRIPTION	VALVE TYPE	SIZE (IN.)	SERVICE TYPE	FLUID	PIPING MATERIAL	SPECIFICATION SECTION
BALL VALVE	BALL	2"	SW	WATER	GALVANIZED	40 27 02
GATE VALVE	GATE	4", 6"	SW	WATER	DI	40 27 02
PLUG VALVE	ECCENTRIC PLUG	4", 12", 16"	SW, SL	WATER, SLUDGE	DI	40 27 02
BUTTERFLY VALVE	BUTTERFLY	30"x120", 36"x72"	SW	WATER	DI	40 27 02

WATER QUALITY / FLOW METERS				
EQUIPMENT NO.	LOCATION	MANUFACTURER	MODEL	SPECIFICATION SECTION
TB-01	BASIN #1 EFFLUENT CHANNEL	HACH	SOLITAX SC	40 91 00
TB-02	BASIN #2 EFFLUENT CHANNEL	HACH	SOLITAX SC	40 91 00
TB-03	BASIN #3 EFFLUENT CHANNEL	HACH	SOLITAX SC	40 91 00
TB-04	BASIN #4 EFFLUENT CHANNEL	HACH	SOLITAX SC	40 91 00

CABLE-TRACK SLUDGE COLLECTORS									
EQUIPMENT NO.	LOCATION	CONTROL PANEL	DESIGN BASIS MANUFACTURER / MODEL	APPROXIMATE CARRIER LENGTH	FALSE COLLECTOR AT MIDSPAN	SPECIFICATION SECTION	MOTOR		
							HP	RPM	ELEC.
CT-101	LOWER SETTLING BASIN #01	SCP-01	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-102	LOWER SETTLING BASIN #01	SCP-01	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-103	LOWER SETTLING BASIN #01	SCP-02	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-104	LOWER SETTLING BASIN #01	SCP-02	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-105	UPPER SETTLING BASIN #01	SCP-01	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-106	UPPER SETTLING BASIN #01	SCP-01	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-107	UPPER SETTLING BASIN #01	SCP-02	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-108	UPPER SETTLING BASIN #01	SCP-02	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-201	LOWER SETTLING BASIN #02	SCP-03	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-202	LOWER SETTLING BASIN #02	SCP-03	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-203	LOWER SETTLING BASIN #02	SCP-04	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-204	LOWER SETTLING BASIN #02	SCP-04	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-205	UPPER SETTLING BASIN #02	SCP-03	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-206	UPPER SETTLING BASIN #02	SCP-03	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-207	UPPER SETTLING BASIN #02	SCP-04	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-208	UPPER SETTLING BASIN #02	SCP-04	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-301	LOWER SETTLING BASIN #03	SCP-05	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-302	LOWER SETTLING BASIN #03	SCP-05	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-303	LOWER SETTLING BASIN #03	SCP-06	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-304	LOWER SETTLING BASIN #03	SCP-06	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-305	UPPER SETTLING BASIN #03	SCP-05	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-306	UPPER SETTLING BASIN #03	SCP-05	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-307	UPPER SETTLING BASIN #03	SCP-06	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-308	UPPER SETTLING BASIN #03	SCP-06	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-401	LOWER SETTLING BASIN #04	SCP-07	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-402	LOWER SETTLING BASIN #04	SCP-07	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-403	LOWER SETTLING BASIN #04	SCP-08	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-404	LOWER SETTLING BASIN #04	SCP-08	MRI / HOSELESS CABLE-VAC	113' - 0"	YES	44 42 24.05	0.25	1800	460
CT-405	UPPER SETTLING BASIN #04	SCP-07	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-406	UPPER SETTLING BASIN #04	SCP-07	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-407	UPPER SETTLING BASIN #04	SCP-08	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460
CT-408	UPPER SETTLING BASIN #04	SCP-08	MRI / HOSELESS CABLE-VAC	72' - 6"	NO	44 42 24.05	0.25	1800	460

FLOCCULATORS									
EQUIPMENT NO.	LOCATION	DESIGN BASIS MANUFACTURER / MODEL	REEL DIAMETER	NO. OF FLOCCULATORS	SPECIFICATION SECTION	MOTOR			
						HP	VFD	RPM	ELEC.
FLC-101	MIXING BASIN #01	JMS / Mega-FLOC	12'-6"	5	44 44 36	7.5	YES	1800	480
FLC-102	MIXING BASIN #01	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-103	MIXING BASIN #01	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-104	MIXING BASIN #01	JMS / Mega-FLOC	12'-6"	5	44 44 36	3	YES	1800	480
FLC-201	MIXING BASIN #02	JMS / Mega-FLOC	12'-6"	5	44 44 36	7.5	YES	1800	480
FLC-202	MIXING BASIN #02	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-203	MIXING BASIN #02	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-204	MIXING BASIN #02	JMS / Mega-FLOC	12'-6"	5	44 44 36	3	YES	1800	480
FLC-301	MIXING BASIN #03	JMS / Mega-FLOC	12'-6"	5	44 44 36	7.5	YES	1800	480
FLC-302	MIXING BASIN #03	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-303	MIXING BASIN #03	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-304	MIXING BASIN #03	JMS / Mega-FLOC	12'-6"	5	44 44 36	3	YES	1800	480
FLC-401	MIXING BASIN #04	JMS / Mega-FLOC	12'-6"	5	44 44 36	7.5	YES	1800	480
FLC-402	MIXING BASIN #04	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-403	MIXING BASIN #04	JMS / Mega-FLOC	12'-6"	5	44 44 36	5	YES	1800	480
FLC-404	MIXING BASIN #04	JMS / Mega-FLOC	12'-6"	5	44 44 36	-- 3 --	YES	1800	480



JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS

0

12/07/2020

30% REVIEW

1

03/15/2021

80% REVIEW

2

04/02/2021

ISSUED FOR NJDEP PERMIT

3

06/04/2021

100% REVIEW

4

09/24/2021

ISSUED FOR BID

5

6

7

8

CLARIFIER SYSTEM REHABILITATION  
PROCESS  
BASINS 1–4  
SCHEDULES

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJPCA 246A27990200

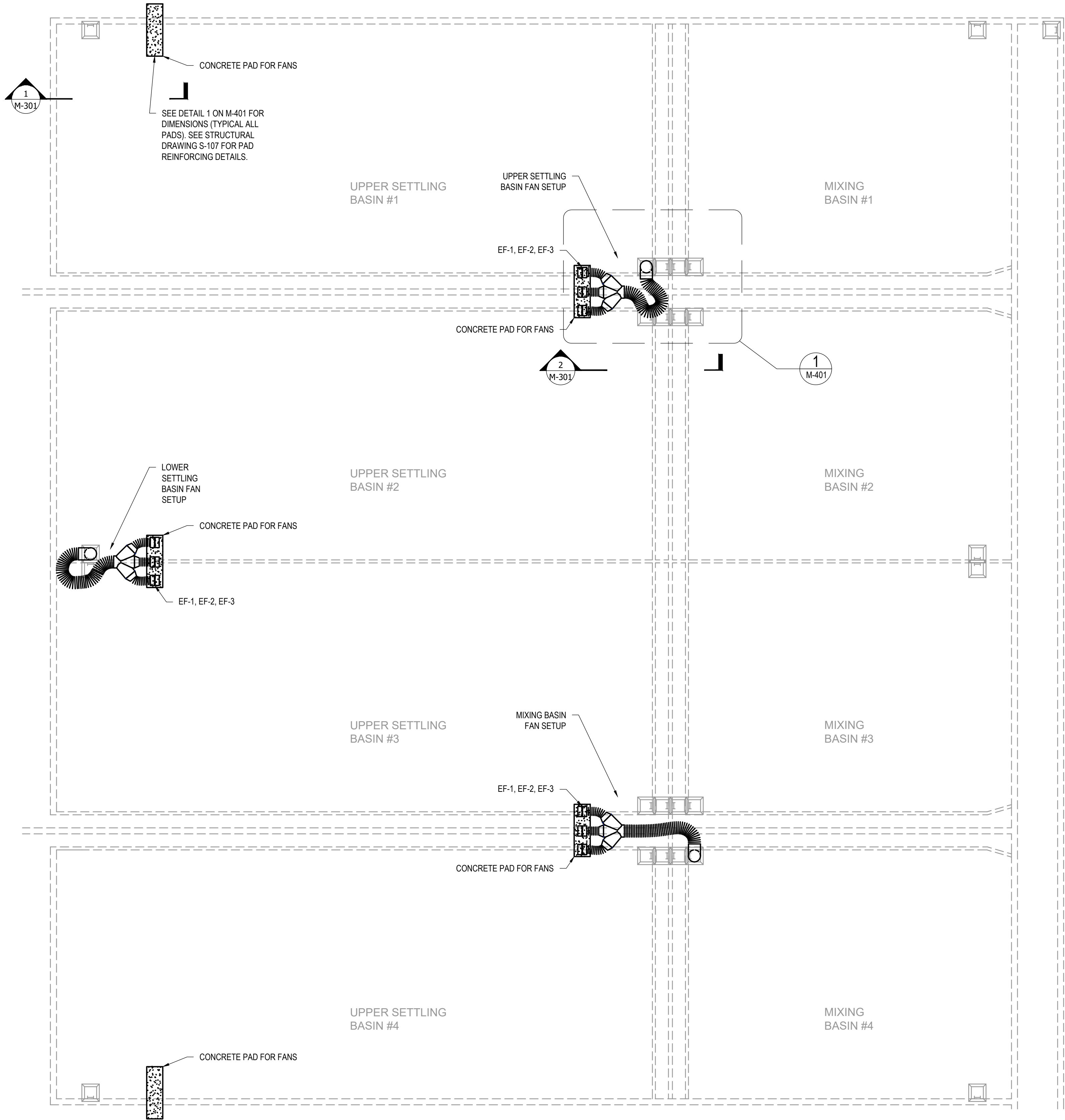
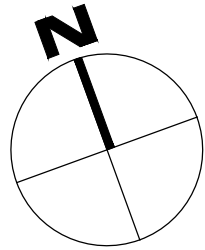
DRAWN BY JJW  
PROJECT ENG'R JJW  
APPROVED JNB

DATE 09/24/21  
PROJECT E6X94500

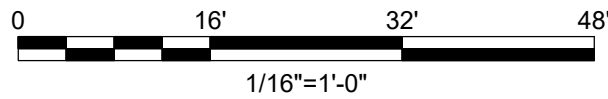
USE DIMENSIONS ONLY  
SCALE AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

R–501



OVERALL MECHANICAL PLAN - GRADE  
SCALE: 1/16"=1'-0"

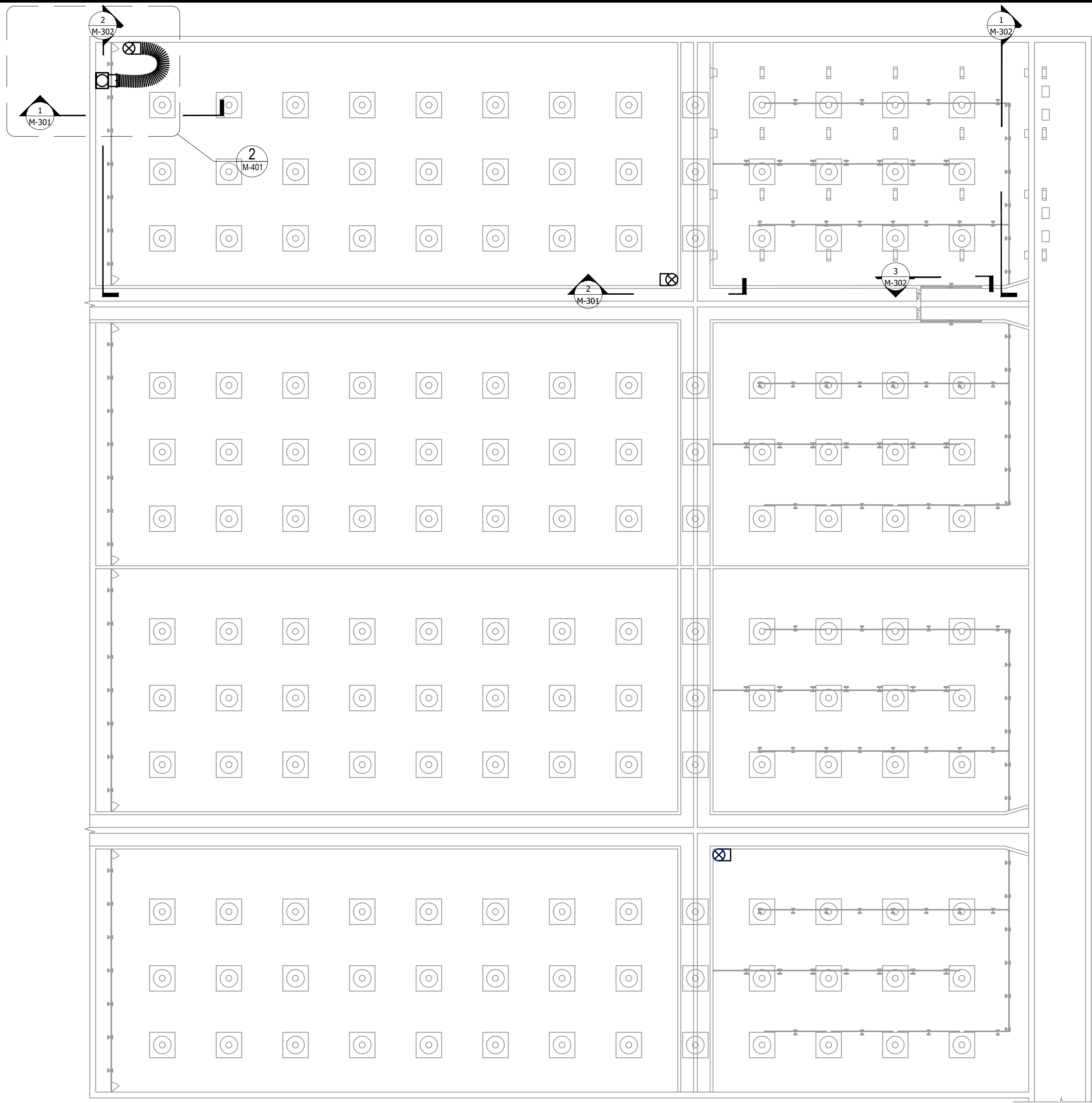
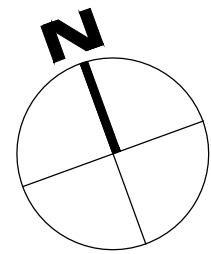


Jacobs

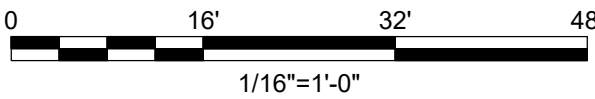
JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 OVERALL PLAN - GRADE	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB	
5				
6			DATE 09/24/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	

M-101



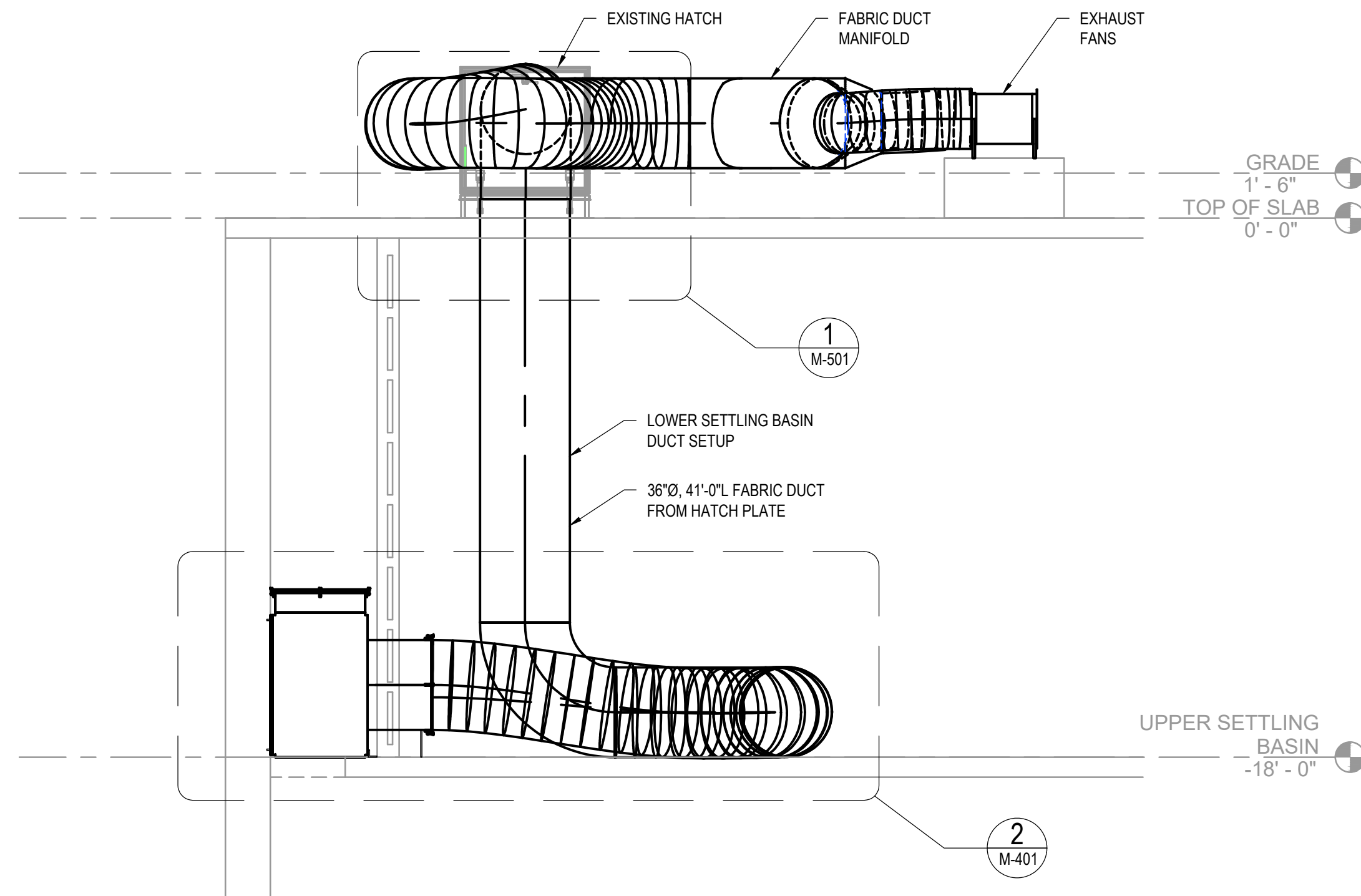
OVERALL MECHANICAL PLAN - UPPER SETTLING BASIN  
SCALE: 1/16"=1'-0"



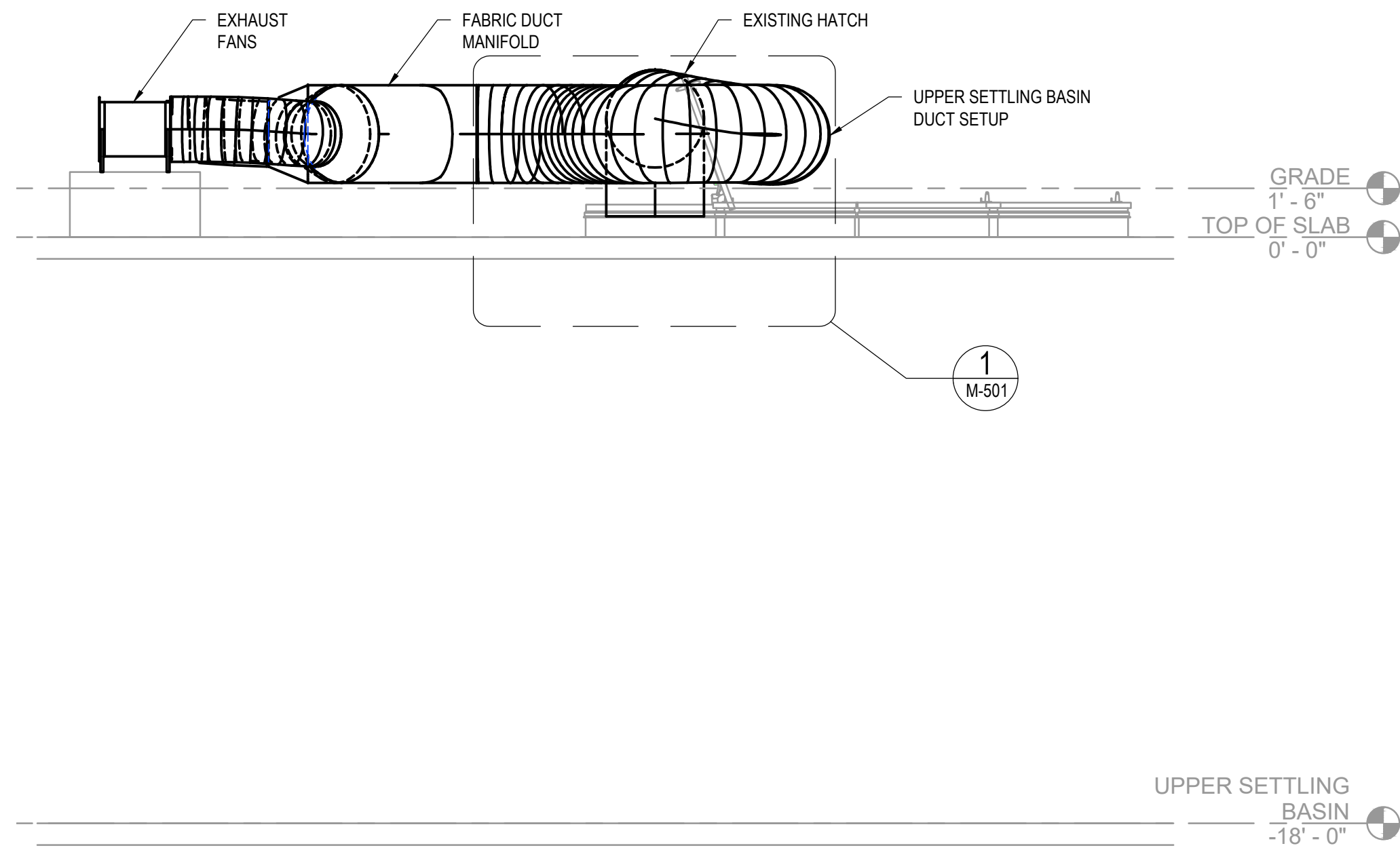
JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 OVERALL PLAN - UPPER SETTLING BASIN	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
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3				
4			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB	
5				
6			DATE 09/24/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			M-102	

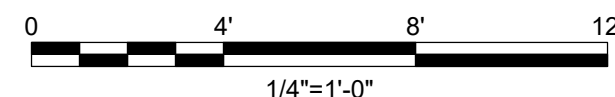




1 SECTION  
SCALE: 1/4"=1'-0"



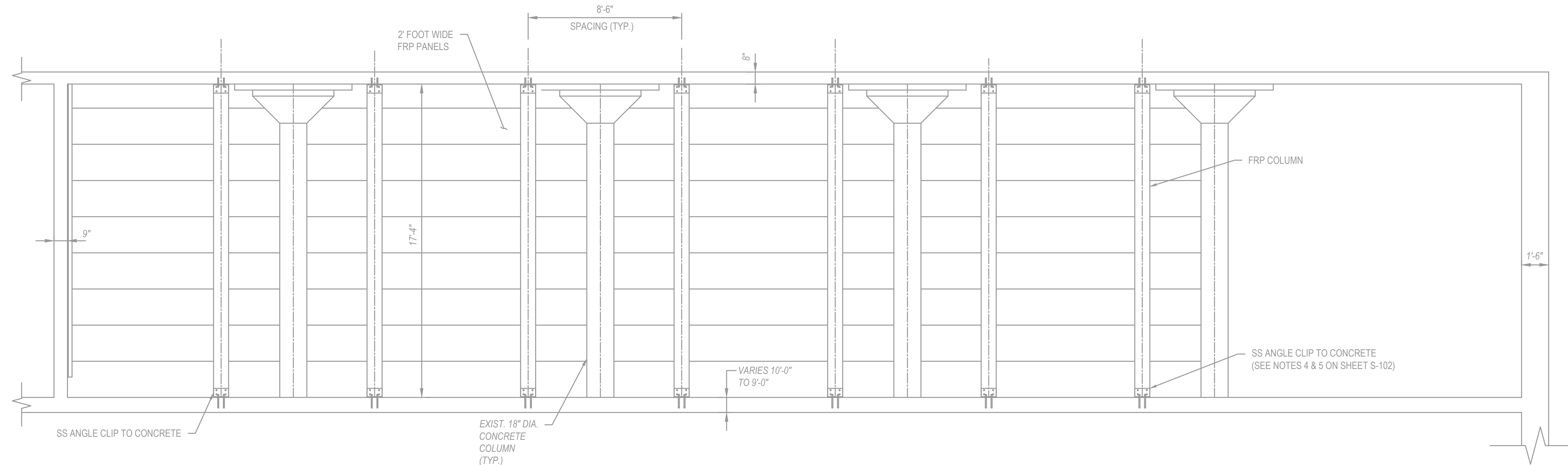
2 SECTION  
SCALE: 1/4"=1'-0"



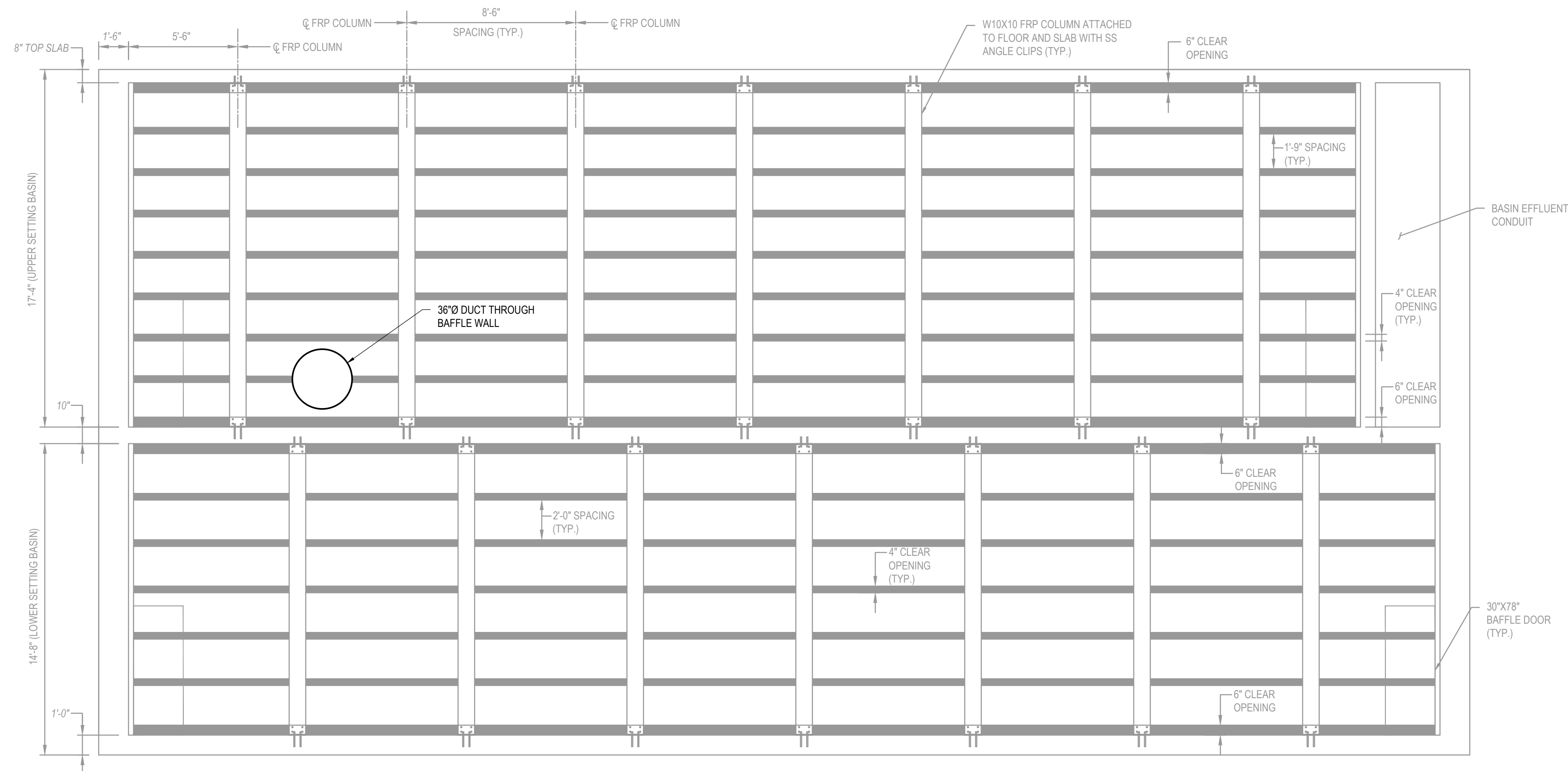
**Jacobs**

JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

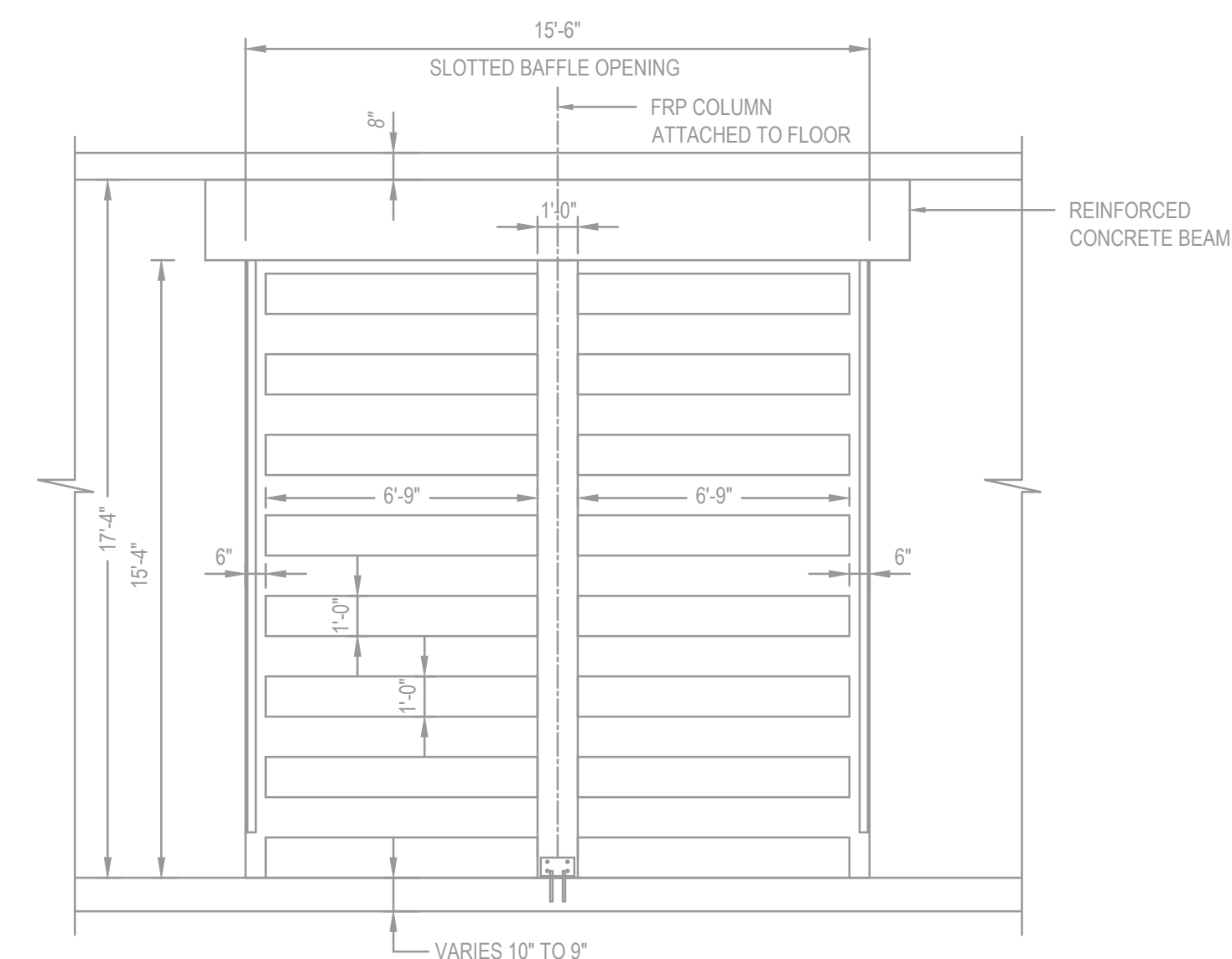
REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 SECTIONS		
0	06/04/2021	100% DESIGN SUBMISSION			
1	09/24/2021	ISSUED FOR BID			
2					
3			NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
4					
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200		
6					
7					
8					
			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB		
			DATE 09/24/2021 PROJECT E6X94500 USE DIMENSIONS ONLY SCALE AS NOTED		
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		M-301



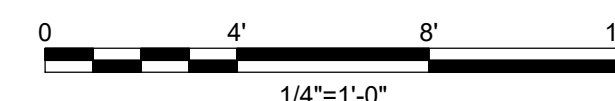
1 MIXING BASIN SOLID BAFFLE WALL SECTION (FOR REFERENCE)  
SCALE: 1/4"=1'-0"



2 UPPER AND LOWER SETTLING BASIN WEST SLOTTED BAFFLE WALL SECTION  
SCALE: 1/4"=1'-0"



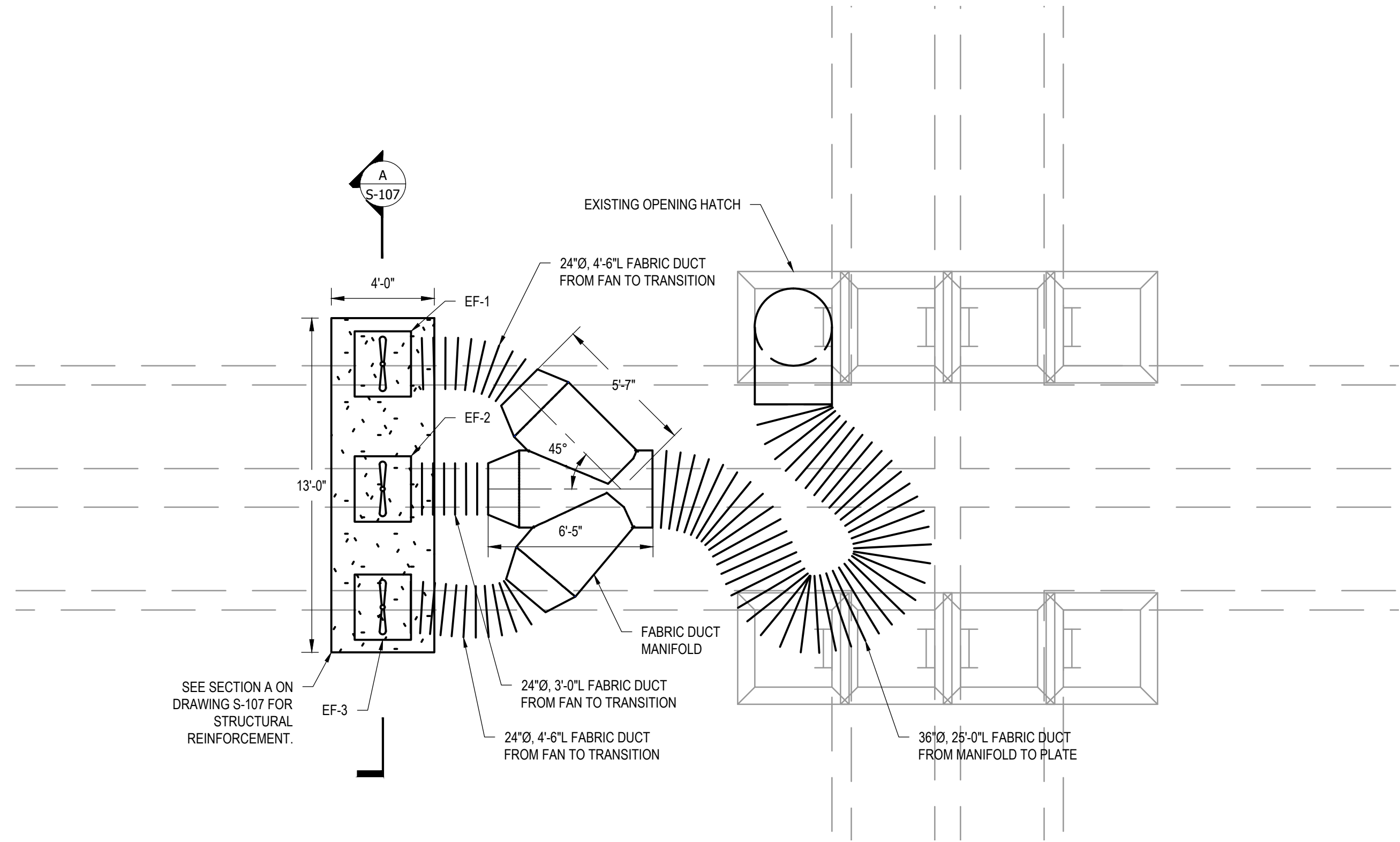
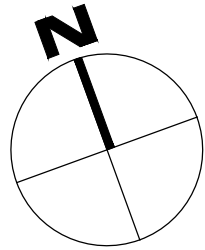
3 INLET SLOTTED BAFFLE WALL SECTION (FOR REFERENCE)  
SCALE: 1/4"=1'-0"



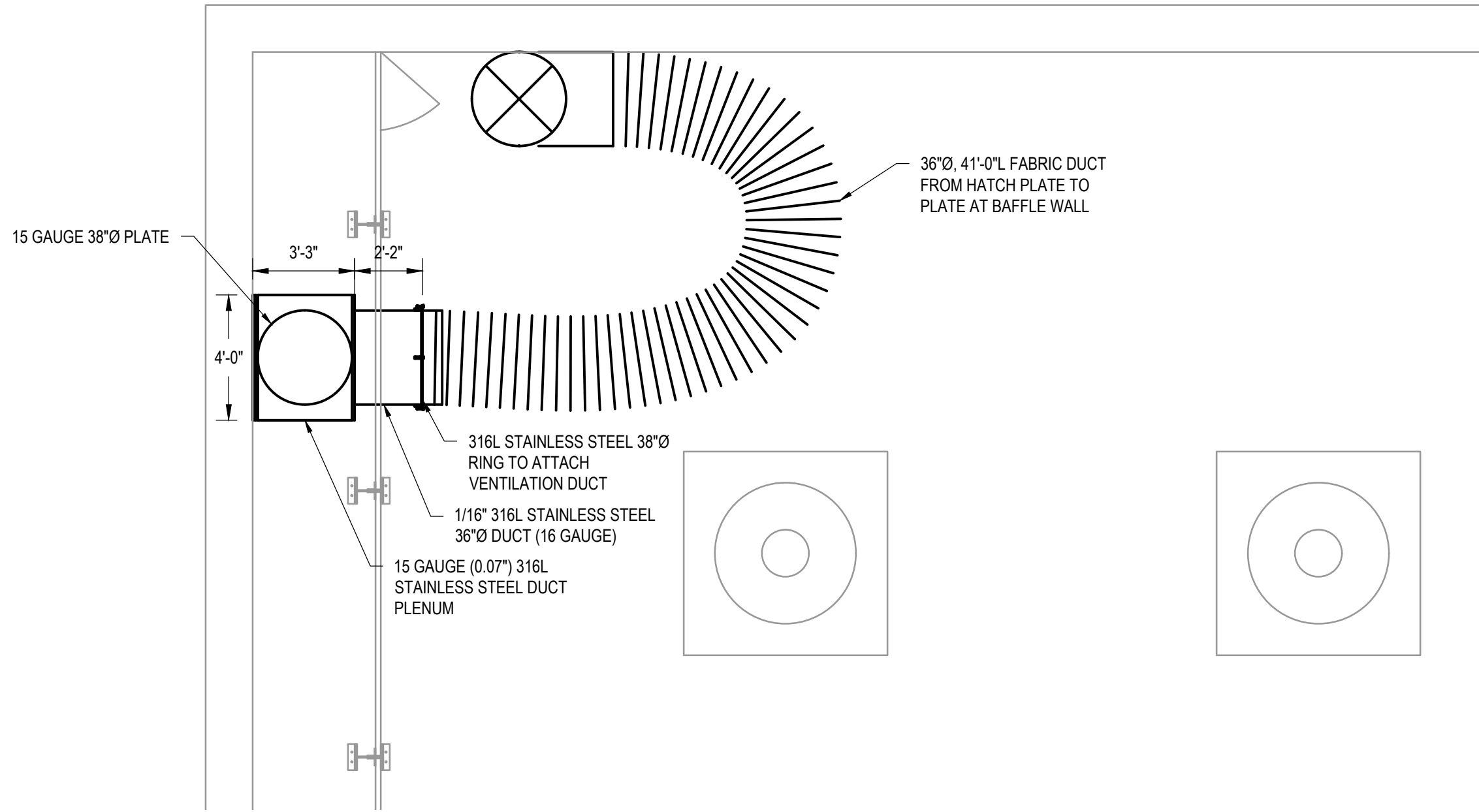
**Jacobs**

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NJPE LICENSE NO. 24GE04377400

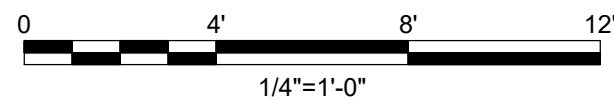
REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 BAFFLE WALL SECTIONS	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB	
5				
6			DATE 09/24/2021 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	M-302



1 ENLARGED MECHANICAL PLAN - GRADE  
SCALE: 1/4"=1'-0"



2 ENLARGED MECHANICAL PLAN - UPPER SETTLING BASIN  
SCALE: 1/4"=1'-0"



Jacobs

JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS		
0	06/04/2021	100% DESIGN SUBMISSION
1	09/24/2021	ISSUED FOR BID
2		
3		
4		
5		
6		
7		
8		

CLARIFIER SYSTEM REHABILITATION  
MECHANICAL  
BASINS 1-4  
ENLARGED PLANS

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJPCA 246A27990200

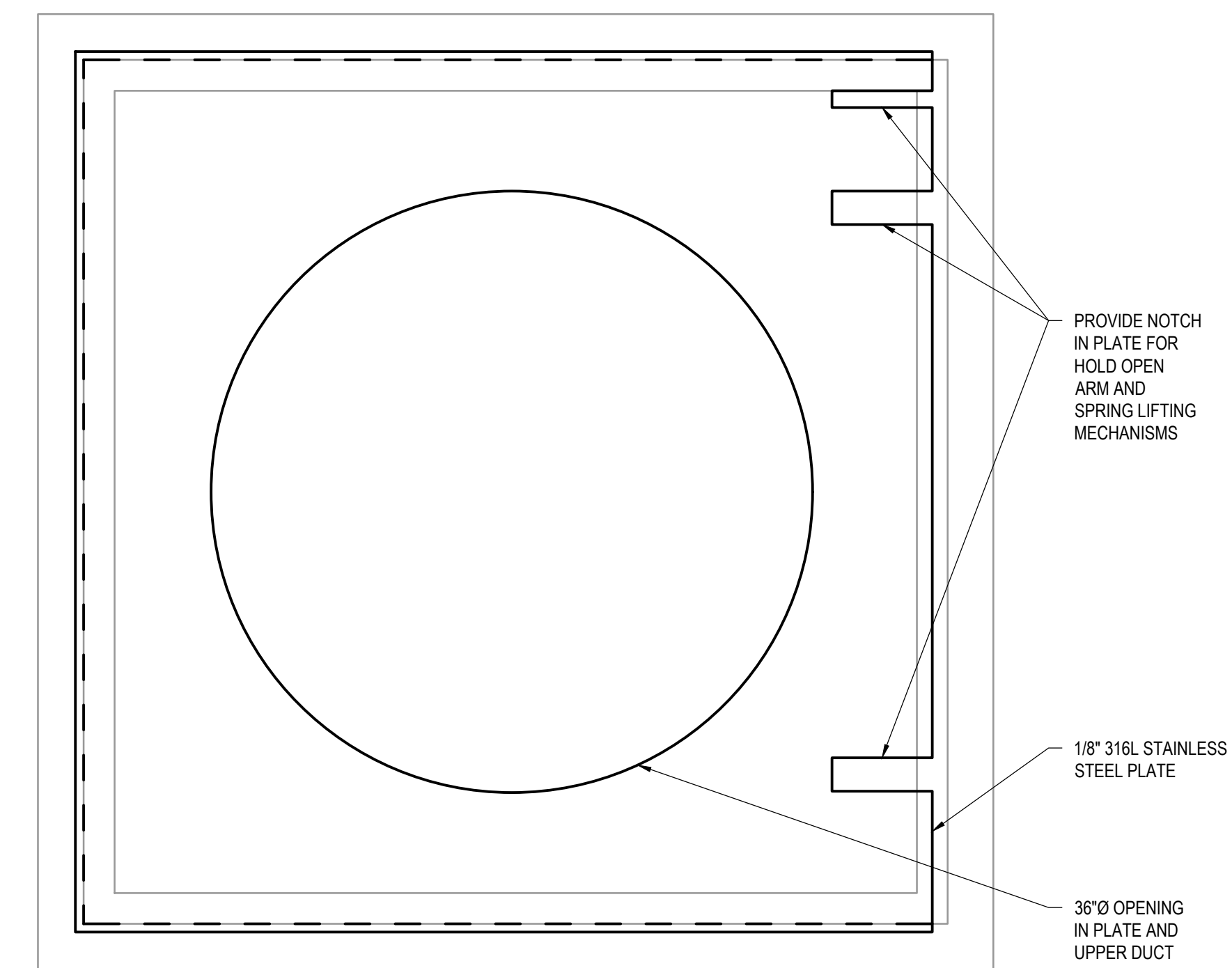
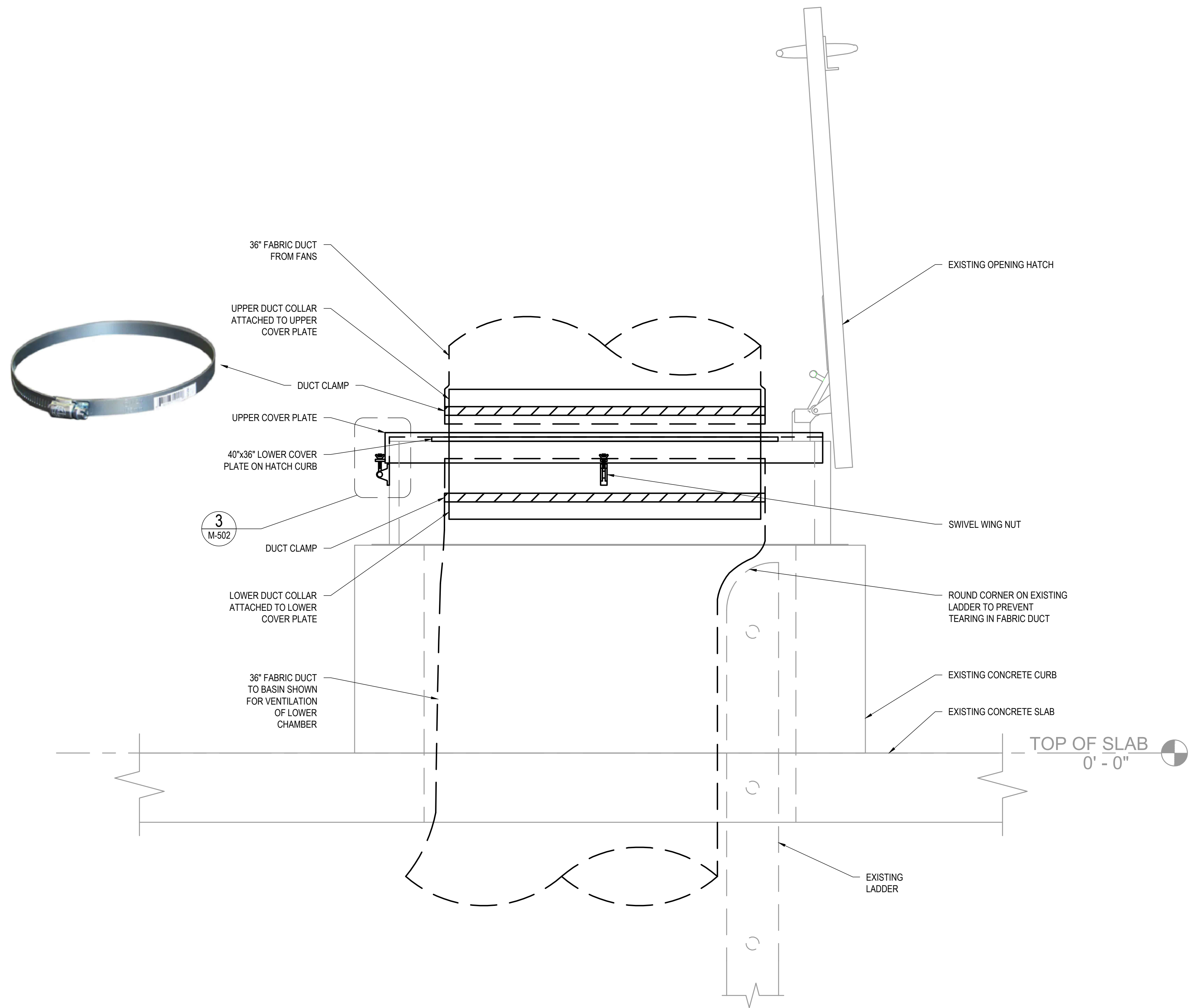
DRAWN BY SM  
PROJECT ENG'R RK  
APPROVED JNB

DATE 09/24/2021  
PROJECT E6X94500

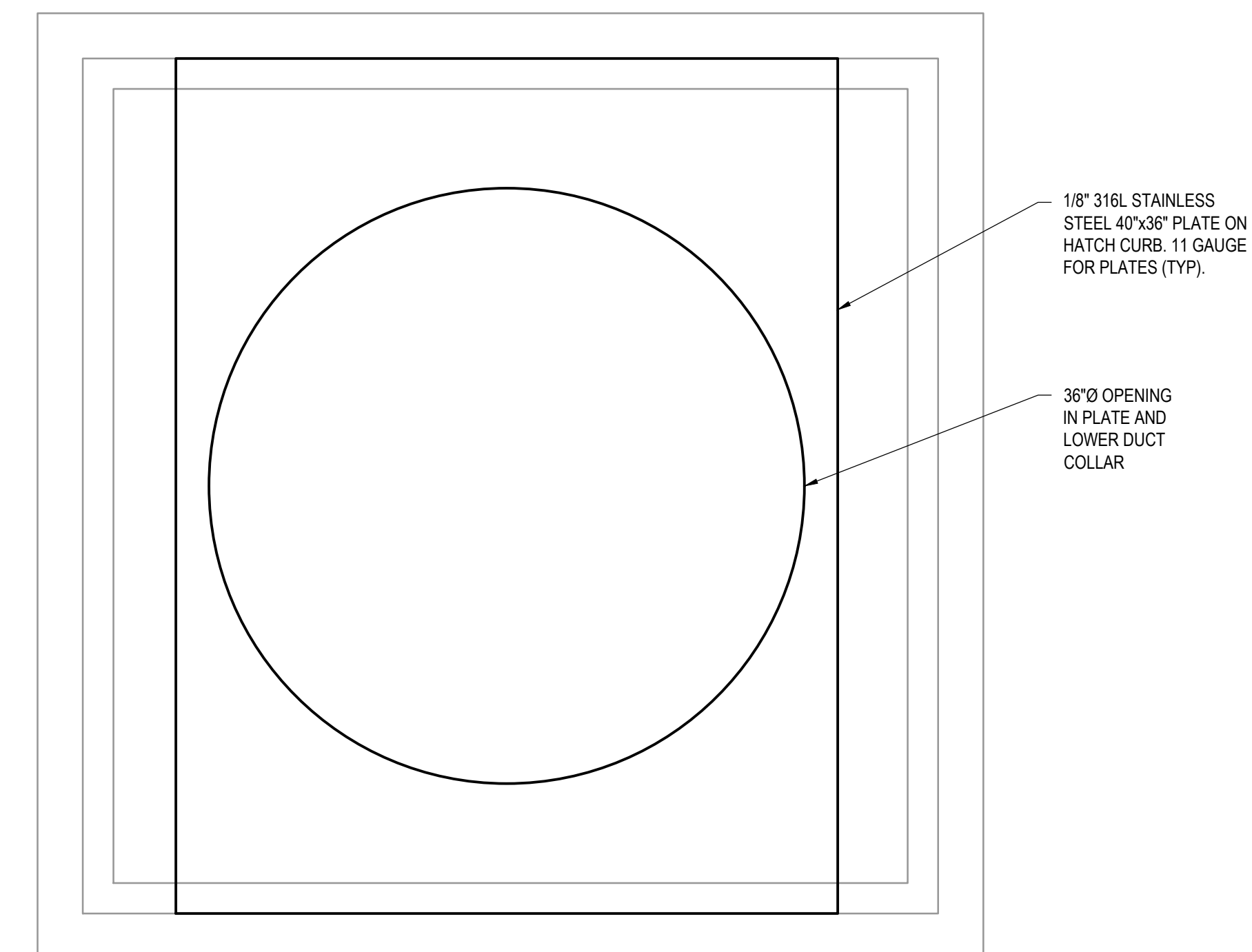
USE DIMENSIONS ONLY  
SCALE AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

M-401



UPPER COVER PLATE



LOWER COVER PLATE

1 DUCT CONNECTION TO PLATES AT HATCH OPENING DETAIL  
SCALE: 1-1/2"=1'-0"

0 3" 6" 9" 1' 2'  
1 1/2"=1'-0"

**Jacobs**

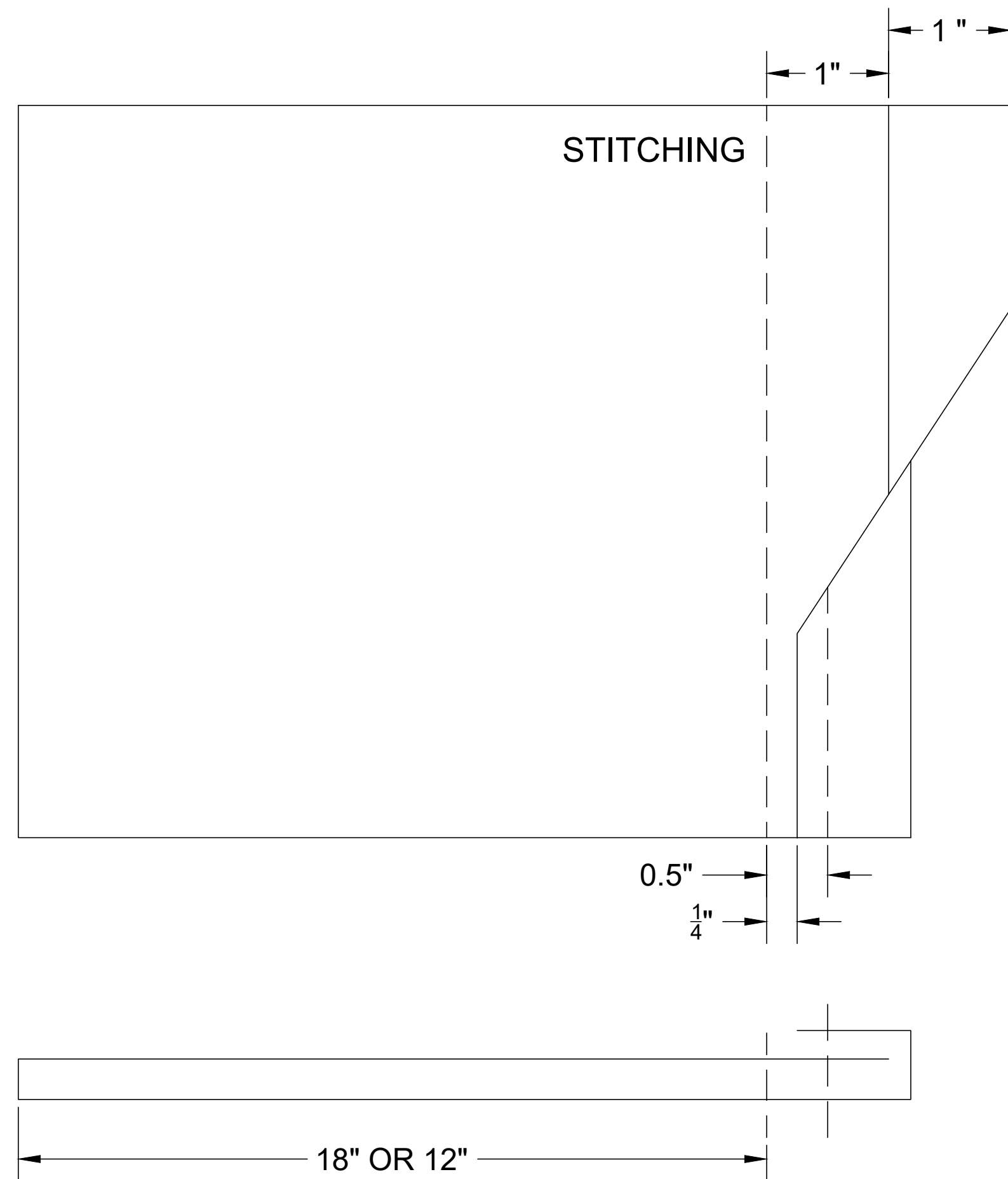
JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 DETAILS	
NO.	DATE	DESCRIPTION		
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC 246A27990200	
3				
4			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB	
5				
6			DATE 09/24/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	

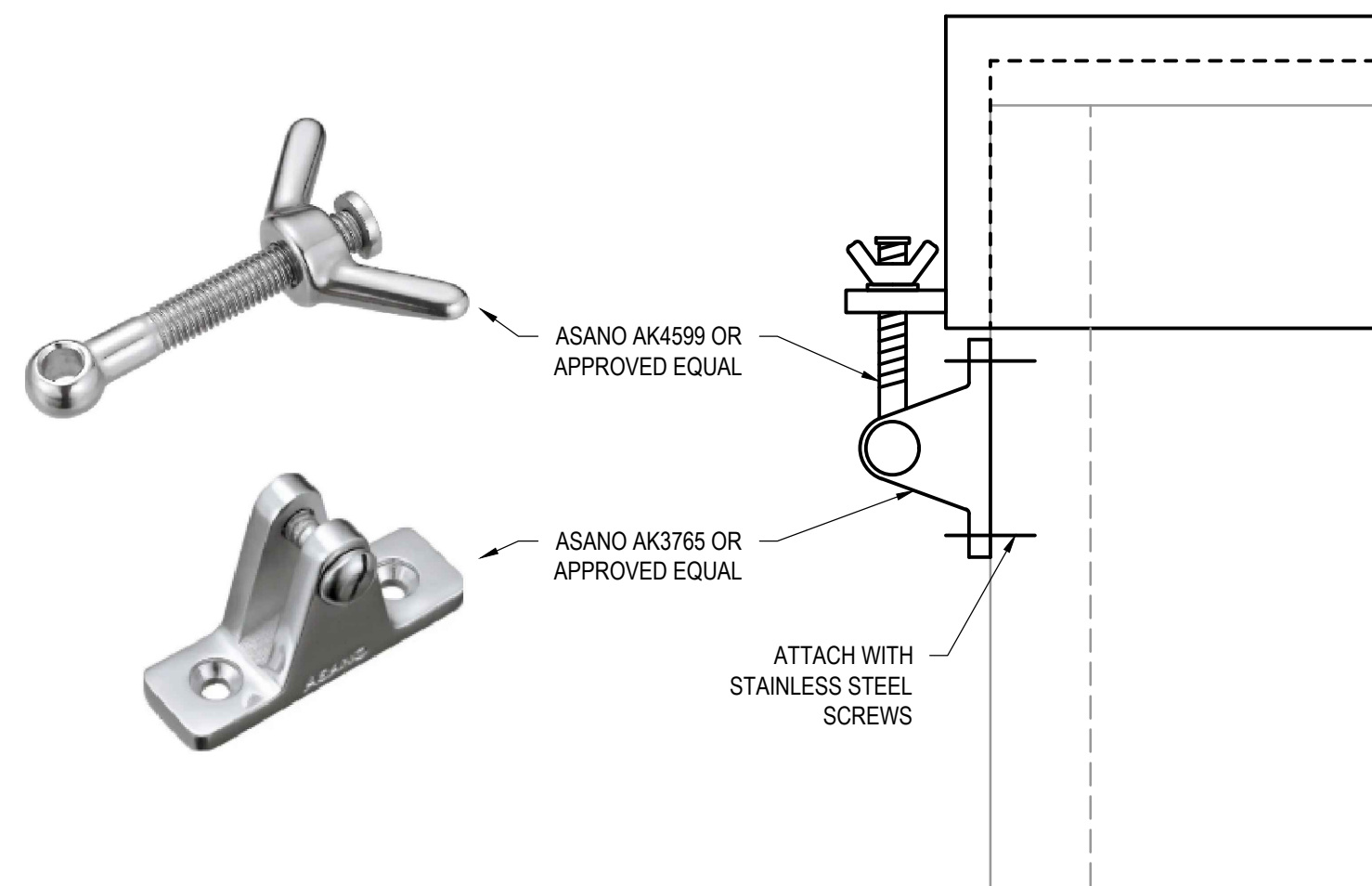
M-501



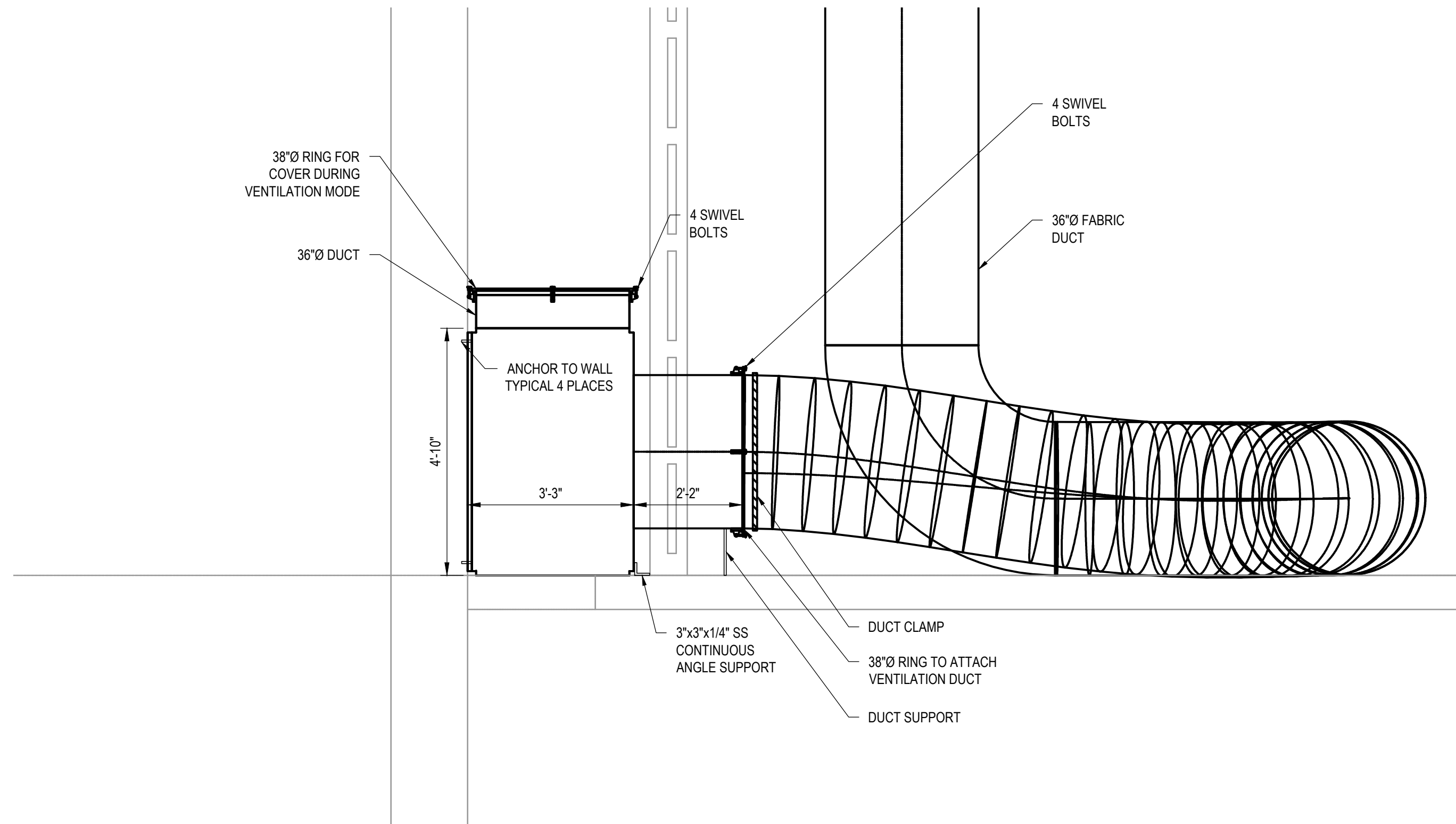


- NOTES:
- ALL SEAMS ARE DOUBLE STITCHED.

1 SEAM STITCHING DETAIL  
SCALE: 1'-0"=1'-0"



3 SWIVEL BOLT DETAIL  
SCALE: 6"=1'-0"



2 DUCT CONNECTION TO PLATES AT BAFFLE WALL DETAIL  
SCALE: 1/2"=1'-0"

- FABRIC DUCTWORK NOTES:
- PROVIDE ENNIS 1974 417 OR EQUAL 18 OZ/SY HEAVY-DUTY WATERPROOF FABRIC DUCT WITH UV PROTECTIVE COATING (TYPICAL ALL DUCTWORK).
  - PROVIDE 650 SF OF FABRIC FOR DUCTWORK.

FAN SCHEDULE																	
TAG	LOCATION	PERFORMANCE DATA			CONSTRUCTION DATA			MOTOR DATA							BASIS OF DESIGN (OR EQUAL)		REMARKS
		CFM	ESP (IN WG)	FAN RPM	TYPE		DRIVE	HP	MAX RPM	V	PH	HZ	WATTS	FLA	MANUFACTURER	MODEL	
EF-1	CONCRETE PAD AT GRADE	8,680	1.00	1750	AXIAL	INLINE	DIRECT	3	1725	460	3	60	-	-	CANARM HVAC	DDA24T30300BM	SEE NOTES 1-6
EF-2	CONCRETE PAD AT GRADE	8,680	1.00	1750	AXIAL	INLINE	DIRECT	3	1725	460	3	60	-	-	CANARM HVAC	DDA24T30300BM	SEE NOTES 1-6
EF-3	CONCRETE PAD AT GRADE	8,680	1.00	1750	AXIAL	INLINE	DIRECT	3	1725	460	3	60	-	-	CANARM HVAC	DDA24T30300BM	SEE NOTES 1-6

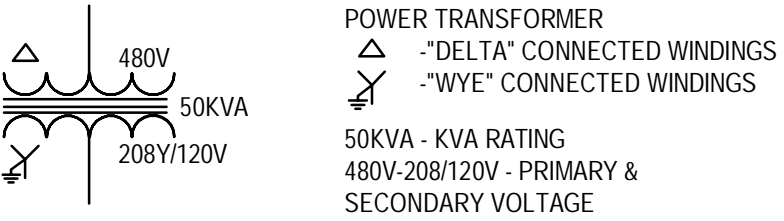
- NOTES:
- TOTAL OF 6 FANS.
  - PROVIDE MOTOR STARTER WITH EACH FAN.
  - FANS ARE PLUG IN - SEE ELECTRICAL FOR PLUG/OUTLET REQUIREMENTS.
  - PROVIDE WITH CORROSIVE RESISTANT PAINTED SURFACE FOR EXTERIOR USE.
  - ALL HARDWARE SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.
  - PROVIDE FANS WITH MANUFACTURER INSTALLED INLET GUARDS AND SUPPORT LEGS ON VIBRATION ISOLATORS.

Jacobs

JOSEPH N. BONGIOVANNI, PE  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION MECHANICAL BASINS 1-4 DETAILS AND SCHEDULES	
0	06/04/2021	100% DESIGN SUBMISSION		
1	09/24/2021	ISSUED FOR BID	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
2				
3			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
4				
5			DRAWN BY SM PROJECT ENG'R RK APPROVED JNB	
6				
7			DATE 09/24/2021 PROJECT E6X94500	
8				
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			M-502	

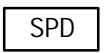
ELECTRICAL LEGEND



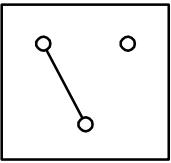
POWER TRANSFORMER  
-DELTA- CONNECTED WINDINGS  
-WYE- CONNECTED WINDINGS  
50KVA - KVA RATING  
480V-208/120V - PRIMARY &  
SECONDARY VOLTAGE



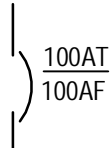
METER WITH CURRENT TRANSFORMER



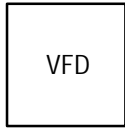
SURGE PROTECTION DEVICE



AUTOMATIC TRANSFER SWITCH,  
3 POLE



LOW VOLTAGE CIRCUIT BREAKER  
3 POLE U.O.N  
100AT - AMPERE TRIP RATING  
100AF - AMPERE FRAME RATING



VARIABLE FREQUENCY DRIVE



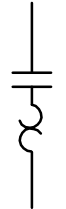
BYPASS CONTACTOR



REDUCED VOLTAGE SOFT STARTER



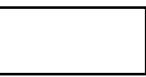
XXX HP RATED MOTOR



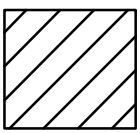
NEMA 1 RATED  
FULL VOLTAGE NON-REVERSING  
STARTER



CLOSED CIRCUIT TELEVISION



ELECTRICAL PANEL



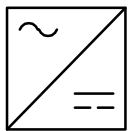
TO BE REMOVED



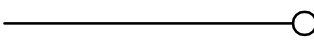
NON-FUSIBLE DISCONNECT SWITCH  
# DENOTES SWITCH RATING



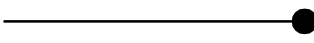
FUSIBLE DISCONNECT SWITCH  
AF DENOTES FUSE RATING  
AS DENOTES SWITCH RATING



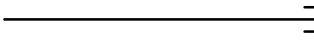
RECTIFIER



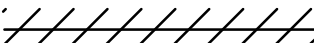
CONDUIT TURNING UP



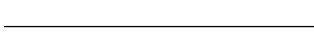
CONDUIT TURNING DOWN



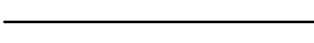
CONDUIT CAPPED



DEVICE EQUIPMENT TO BE DEMOLISHED



EXISTING DEVICE/EQUIPMENT TO REMAIN



NEW DEVICE/EQUIPMENT



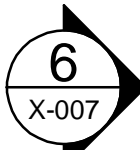
PULL BOX



JUNCTION BOX



MOTION SENSOR



PHOTOGRAPH CALLOUT

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
AHJ	AUTHORITY HAVING JURISDICTION
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BFF	BELOW FINISHED FLOOR
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CA	CABLE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CR	CONTROL RELAY
CU	COPPER
DC	DIRECT CURRENT
DS	DISCONNECT SWITCH
DN	DOWN
ELEC	ELECTRICAL
E	EMPTY
EM	EMERGENCY
ETR	EXISTING TO BE RELOCATED (BY CONTRACTOR)
EX	EXISTING
FBO	FURNISHED BY OTHERS
FDR	FEEDER
FO	FIBER OPTIC
FLR	FLOOR
FU	FUSE
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
G, GND	GROUND
GRC	GALVANIZED RIGID STEEL CONDUIT
HP	HORSE POWER
JB	JUNCTION BOX
JCP&L	JERSEY CENTRAL POWER AND LIGHT
KVA	KILOVOLT AMPERES
KVM	KEYBOARD VIDEO AND MOUSE
KW	KILOWATT
LAN	LOCAL AREA NETWORK
LED	LIGHT EMITTING DIODE
LFMC	LIQUID-TIGHT FLEXIBLE METAL CONDUIT
MTS	MANUAL TRANSFER SWITCH
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MOP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MLO	MAIN LUG ONLY
MSB	MAIN SWITCHBOARD
MT, MTD	MOUNT, MOUNTED
(N)	NEW
N	NEUTRAL
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NJDWSC	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
NTS	NOT TO SCALE
OCF	OVER CURRENT PROTECTION
P	POLE
PCF	POUND PER CUBIC FOOT
PH	PHASE
PDU	POWER DISTRIBUTION UNIT
PNL	PANEL
PVC	POLYVINYL CHLORIDE CONDUIT
QTY	QUANTITY
R	REMOVE
RGS	RIGID GALVANIZED STEEL CONDUIT
RL	RELOCATED (BY CONTRACTOR)
RM	ROOM
RTU	ROOF TOP UNIT
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SF	SQUARE FEET
SP	SPARE
SW	SWITCH
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT AMPERE
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
WP	WEATHERPROOF
XMFR	TRANSFORMER

GENERAL NOTES

- SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES SHOWN ON THIS DRAWING APPLY TO ALL ELECTRICAL DRAWINGS UNDER THIS CONTRACT. THE USE OF "PROVIDE" IN THE DRAWINGS DENOTE TO FURNISH AND INSTALL FOR A COMPLETE AND FUNCTIONAL SYSTEM. REFER TO INDIVIDUAL CONTRACT DRAWINGS FOR ADDITIONAL NOTES.
- COORDINATE WORK SHOWN ON ELECTRICAL DRAWINGS WITH WORK INDICATED ON OTHER CONTRACT DRAWINGS.
- CARRY OUT ALL WORK WITH NO INTERFERENCE TO FACILITY OPERATIONS. ANY INTERRUPTIONS TO FACILITY OPERATIONS SHALL BE AUTHORIZED BY NJDWSC.
- WORK SHALL COMPLY WITH ALL GOVERNING CODES, STANDARDS, AND ADVISORIES INCLUDING ALL UPDATES AND AMENDMENTS.
- ALL NEW MATERIALS AND EQUIPMENT SHALL CONFORM TO UL STANDARDS WHERE SUCH A STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR TYPE OF MATERIAL OR EQUIPMENT IN QUESTION.
- ALL EQUIPMENT AND MATERIALS FURNISHED UNDER THIS CONTRACT SHALL BE FACTORY TESTED. SUBMIT TEST RESULTS TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. AFTER INSTALLATION, FIELD TEST IN ACCORDANCE WITH STANDARDS, CONTRACT SPECIFICATIONS, AND MANUFACTURER'S RECOMMENDATIONS, TO VERIFY PROPER OPERATION TO THE SATISFACTION OF THE ENGINEER.
- RESTORE TO ORIGINAL CONDITION ALL EXISTING SYSTEMS AND AREAS THAT ARE DAMAGED BY WORK UNDER THIS CONTRACT AS THE RESULT OF THE CONTRACTOR'S OPERATION TO THE SATISFACTION OF THE ENGINEER AND AT NO COST TO NJDWSC.
- CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO SHOW THE FULL EXTENT OF EXISTING CONDITIONS, BUT RATHER TO SHOW THE GENERAL ARRANGEMENT AND LOCATION OF THE SYSTEMS. PERFORM FIELD SURVEY NECESSARY TO DETERMINE THE ROUTING AND LOCATION OF RACEWAYS AND EQUIPMENT. NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES IN THE CONTRACT DRAWINGS, SPECIFICATIONS, OF ANY CONDITION THAT WOULD PRECLUDE PERFORMANCE OF THE WORK AS SHOWN. NO CHANGE IN THE CONTRACT DRAWINGS, DETAILS OR DIMENSIONS IS PERMISSIBLE WITHOUT THE APPROVAL OF THE ENGINEER.
- PRIOR TO INSTALLATION, SUBMIT TO THE ENGINEER DIMENSIONED INSTALLATION LAYOUT DRAWINGS FOR APPROVAL. ALL WORK SHALL BE COORDINATED WITH OTHER DISCIPLINES.
- VERIFY BY FIELD MEASUREMENTS ALL DIMENSIONS, ELEVATIONS AND CONDITIONS THAT MAY BE REQUIRED TO LOCATE, ALIGN, DIMENSION AND DETAIL THE CONSTRUCTION. THE FIELD MEASUREMENTS SHALL BE PERFORMED PRIOR TO THE PREPARATION OF SHOP DRAWINGS AND THE MANUFACTURING, FABRICATION AND INSTALLATION OF ALL ITEMS OF CONSTRUCTION. ALL VARIATIONS FROM THE CONTRACT DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE PREPARATION OF SHOP DRAWINGS.
- THE DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE EXISTING CONDITIONS IN EVERY RESPECT. EXACT LOCATIONS AND RELATIONSHIPS ARE TO BE DETERMINED IN THE FIELD. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL FIELD MEASUREMENTS.
- PROVIDE MINIMUM 72 HOURS NOTICE TO NJDWSC BEFORE PROCEEDING WITH ANY WORK THAT AFFECTS EXISTING UTILITIES AND SERVICES.
- THE PHRASES "REMOVE AND REPLACE" OR "REPLACE" SHALL MEAN REMOVE EXISTING CONSTRUCTION AND REPLACE WITH NEW CONSTRUCTION MATERIALS OR EQUIPMENT AS NOTED ON THE DRAWINGS AND/OR SPECIFIED.
- VERIFY THAT FEEDERS/EQUIPMENT TO BE WORKED ON ARE DE-ENERGIZED AND THAT NECESSARY SWITCHES/CIRCUIT BREAKERS HAVE BEEN LOCKED OPEN AND TAGGED-OUT PRIOR TO COMMENCING ANY WORK ON THAT PORTION OF THE SYSTEM. TAKE ALL SAFETY MEASURES INCLUDING DISCHARGING OF CABLE CAPACITANCE AND GROUNDING TO PROTECT AGAINST ANY ELECTRICAL SHOCK.
- PROVIDE JUNCTION AND PULL BOXES AS INDICATED AND WHEREVER NECESSARY TO FACILITATE PULLING AND SPLICING OF WIRE. COORDINATE LOCATIONS WITH OTHER CONTRACT DRAWINGS AND EXISTING CONDITIONS. ALL JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE. FOR SPARE CONDUIT RUNS, PROVIDE PULL BOXES EVERY 100' AND/OR AS INDICATED ON CONTRACT DRAWINGS.
- FOR OUTDOOR RACEWAYS INSTALL CONDUIT EXPANSION FITTINGS TO ALLOW FOR EXPANSION AND CONTRACTION DUE TO CHANGES IN TEMPERATURE. EXPANSION FITTINGS SHALL BE APPLETON TYPE EXLK OR APPROVED EQUAL AND INSTALLED ON STRAIGHT RUNS EXCEEDING 100 FT IN LENGTH.
- PROVIDE NYLON PULL CORD OF NOT LESS THAN 200 POUND TENSILE STRENGTH, IN EACH EMPTY/SPARE CONDUIT RUN OVER 10 FEET LONG. THE NYLON CORD SHALL WITHSTAND THE STRESS NECESSARY TO PULL A MANDREL THROUGH THE CONDUIT SYSTEM. CAP ALL EMPTY/SPARE CONDUITS.
- TAG ALL CIRCUITS IN SPLICE BOXES WITH TAGS SPECIFIED IN CONTRACT SPECIFICATIONS.
- PROVIDE SEPARATE INSULATED GROUND WIRE SIZED IN ACCORDANCE WITH NEC IN ALL CONDUIT RUNS CONTAINING CIRCUITS 120V AND ABOVE.
- ALL ELECTRICAL SYSTEM EQUIPMENT, RACEWAYS, COMPONENTS, ETC. AND THE MEANS OF THEIR ATTACHMENTS AND SUPPORT SHALL BE DESIGNED AND INSTALLED TO RESIST THE EFFECTS OF EARTHQUAKE MOTION DETERMINED IN ACCORDANCE WITH THE LATEST NEW JERSEY STATE BUILDING CODE FOR SEISMIC HAZARD.
- GROUND ALL ELECTRICAL EQUIPMENT AND ENCLOSURES VIA ASSOCIATED EQUIPMENT GROUNDING CONDUCTOR.

GENERAL NOTES

- UPDATE ALL EXISTING PANEL DIRECTORIES AND PANEL NAMEPLATES AFFECTED BY THE WORK OF THIS CONTRACT. LABELS SHALL INDICATE ROOM NUMBERS OR AREA. PROVIDE TYPED SCHEDULES FOR PANELBOARDS INCLUDING REVISION DATE.
- ALL EQUIPMENT NAMEPLATES SHALL BE FABRICATED AND ATTACHED IN ACCORDANCE WITH THE CONTRACT SPECIFICATION.
- FURNISH AND INSTALL WIRING, CONDUITS AND NECESSARY EQUIPMENT/DEVICES AS REQUIRED TO ENSURE A COMPLETE AND FULLY OPERATIONAL HVAC SYSTEM. WIRING BETWEEN HVAC CONTROL PANELS AND FIELD DEVICES SHALL BE IN RIGID GALVANIZED STEEL CONDUITS. FOR SIZE, TYPE AND QUANTITIES OF WIRES/CABLES REFER TO MECHANICAL CONTRACT DRAWINGS AND HVAC CONTROL MANUFACTURER RECOMMENDATIONS.
- UNLESS OTHERWISE NOTED, ALL ITEMS TO BE SECURED SHALL BE FASTENED TO STEEL BY THREADED BEAM CLAMPS WITH LOCKING NUTS. ALL FASTENING HARDWARE SHALL BE STAINLESS STEEL AND SHALL INCLUDE SHAKE PROOF (EXTERNAL STAR) LOCK WASHERS. ALL BOLTS SHALL HAVE LOCK WASHERS ELASTIC STOP NUTS IN ADDITION TO REGULAR NUTS. SCREWS SHALL BE TAMPERPROOF AND BOLT ENDS SHALL BE PEENED.
- OBTAIN THE APPROVAL OF THE ENGINEER PRIOR TO CORING THROUGH WALLS AND FLOOR SLABS.
- ALL CONTROL WIRING SHALL BE INSTALLED IN RGS CONDUITS. CONTROL WIRING SHALL NOT SHARE CONDUITS, PULLBOXES OR JUNCTION BOXES WITH POWER CABLES.
- COMBINE CIRCUITS IN RACEWAYS WHERE PRACTICAL IN ACCORDANCE WITH NEC ARTICLE 310.15(B)(3). DO NOT COMBINE CIRCUITS OF DIFFERENT VOLTAGES. ALTHOUGH CONDUITS INDICATED ARE DIAGRAMMATICAL IN NATURE, THEY SHALL BE FOLLOWED AS CLOSELY AS POSSIBLE. NOT ALL CONDUIT RUNS ARE SHOWN ON DRAWINGS. COORDINATE CONDUIT RUNS WITH THE WORK OF OTHER TRADES AND STRUCTURE. SIMPLIFY INSTALLATION WHEREVER POSSIBLE.
- SUPPORT PANEL, JUNCTION AND PULL BOXES INDEPENDENTLY FROM STRUCTURE WITH NO WEIGHT BEARING ON CONDUITS.
- ALL EXPOSED RGS CONDUIT INSTALLED OUTDOORS SHALL BE PVC COATED. PROVIDE PVC COATED RGS ON CONDUIT UP TO 12" ABOVE FINISHED GRADE.
- SHARING OF NEUTRAL IS NOT PERMITTED

DEMOLITION NOTES

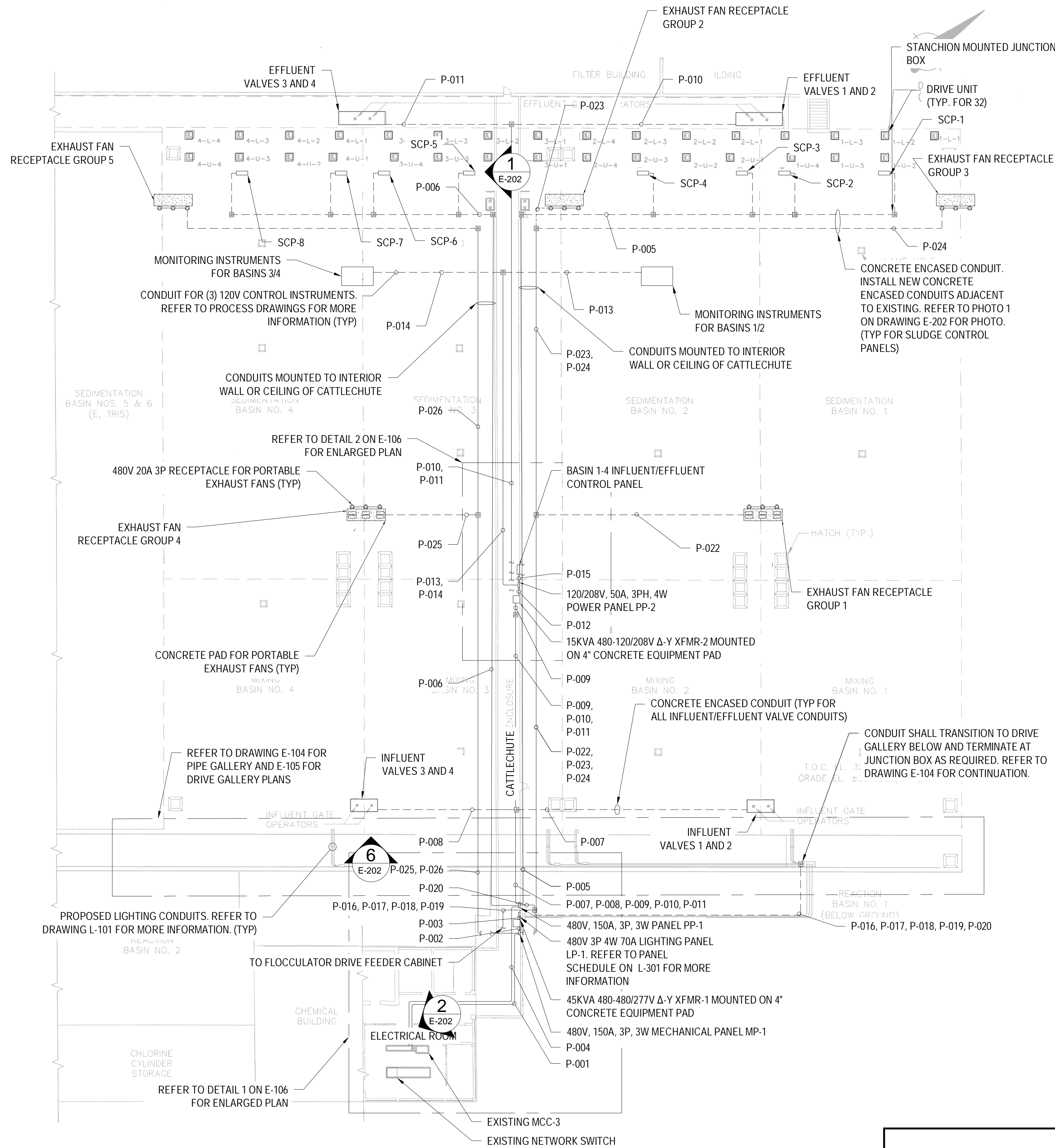
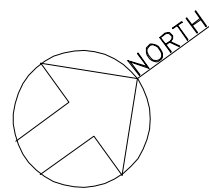
- VERIFY EXISTING CONDITIONS AND COORDINATE DEMOLITION WORK AND REQUIREMENTS WITH ALL PROJECT DOCUMENTS AND TRADES WORKING ON PROJECT.
- NOTIFY THE ENGINEER AND NJDWSC REPRESENTATIVE OF EXISTING CONDITIONS CONFLICTING WITH DEMOLITION WORK.
- LOCATIONS AND QUANTITIES OF DEVICES SHOWN FOR DEMOLITION ARE APPROXIMATE. VERIFY ACTUAL LOCATIONS ON SITE.
- AS PART OF DEMOLITION WORK MODIFY AND/OR REPAIR EXISTING SYSTEMS DISTURBED BY THE DEMOLITION WORK. MAINTAIN CONTINUITY TO OTHER SYSTEMS AND ELECTRICAL COMPONENTS NOT DESIGNATED FOR REMOVAL.
- UNLESS OTHERWISE NOTED "REMOVE" DENOTES TO REMOVE AND DISPOSE ITEMS, EQUIPMENT OR SYSTEMS.
- MAINTAIN OPERATION OF SYSTEMS OUTSIDE DESIGNATED AREA OF SCOPE. IF A SYSTEM OUTAGE MUST OCCUR IN ORDER TO PROCEED WITH WORK, THE OUTAGE MUST BE APPROVED AND SCHEDULED IN ADVANCE WITH THE NJDWSC. THIS OUTAGE MAY NEED TO OCCUR AT NIGHT AND/OR ON WEEKENDS.
- REFERENCE TO "POINT OF ORIGIN" OR "SOURCE" FOR BRANCH CIRCUITS IN ELECTRICAL DEMOLITION NOTES MEANS THE EXISTING BRANCH CIRCUIT, PANEL BOARD CIRCUIT BREAKER OR THE FIRST BRANCH CIRCUIT OUTLET NOT DESIGNATED/REQUIRED FOR REMOVAL.
- REFERENCE TO "BACK TO POINT OF PHASING" FOR BRANCH CIRCUITS IN ELECTRICAL DEMOLITION NOTES MEANS THE EXISTING BRANCH CIRCUIT, PANEL BOARD CIRCUIT BREAKER OR THE FIRST BRANCH CIRCUIT OUTLET NOT DESIGNATED/REQUIRED FOR REMOVAL WITHIN THE CURRENT DEMOLITION PHASE OF WORK.
- COORDINATE DEMOLITION WORK WITH WORK SHOWN ON SCADA AND ARCHITECTURAL DEMOLITION DRAWINGS. NO LAPSE IN ELECTRICAL POWER, LIGHTING, AND LOW VOLTAGE SYSTEMS ARE PERMITTED UNDER THIS CONTRACT. CONTRACTOR SHALL MAKE TEMPORARY SERVICE PROVISIONS AS REQUIRED.

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 LEGEND AND GENERAL NOTES	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID		
4				
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
6				
7				
8				
			DRAWN BY NCP PROJECT ENG'R NCP APPROVED MR	
			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			E-001	



POWER CONDUIT PLAN

3/64" = 1'-0"

1  
E-101

Jacobs

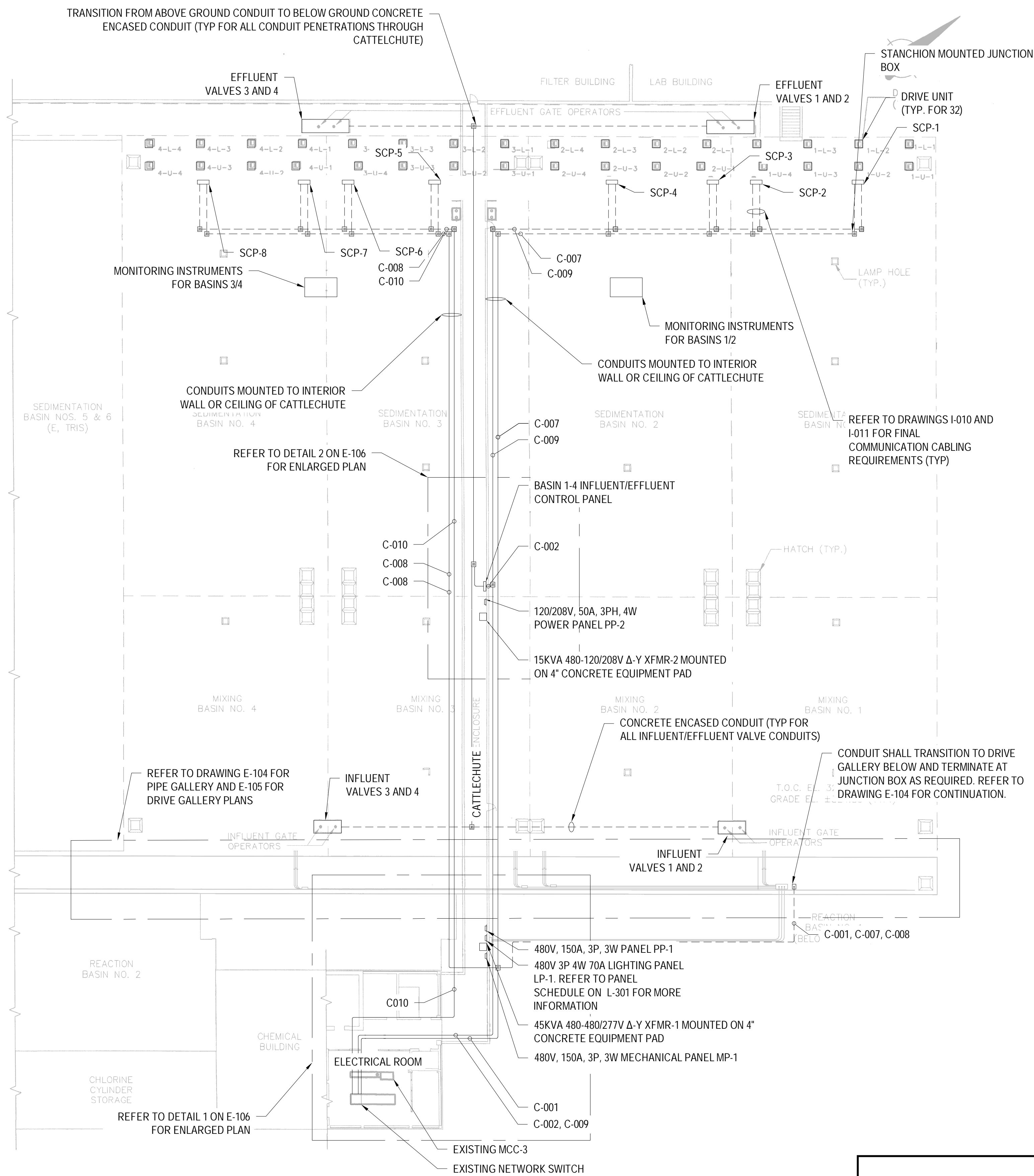
JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

- ELECTRICAL NOTES:
1. NOT ALL CONDUITS SHOWN FOR CLARITY. REFER TO ONE LINE DIAGRAM AND CONDUIT SCHEDULE FOR MORE INFORMATION.
  2. SHARING OF NEUTRALS IS NOT PERMITTED.
  3. ALL FINAL CABLE TERMINATIONS FOR TRANSFORMER LOADS, MOTORIZED EQUIPMENT, AND ALL ELECTRICAL EQUIPMENT SUBJECT TO VIBRATION SHALL USE LIQUID TIGHT FLEXIBLE CONDUIT (LFMC). MAXIMUM LENGTH OF LFMC SHALL BE 36 INCHES.
  4. CONTRACTOR TO PROVIDE PULL BOXES AS NECESSARY FOR CABLE ROUTING. CONDUIT RUN NOT TO EXCEED MORE THAN 360 DEGREES PER NEC STANDARDS.
  5. COMMUNICATION CONDUIT/CABLING ROUTING IS SHOWN DIAGRAMMATICALLY. REFER TO DRAWING I-010 FOR COMMUNICATION DIAGRAM AND CABLE REQUIREMENTS.
  6. ONLY ONE BASIN SHALL BE WORKED ON AT A TIME. ALL OTHER BASINS MUST REMAIN OPERATIONAL DURING CONSTRUCTION.

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 POWER CONDUIT PLAN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			E-101	





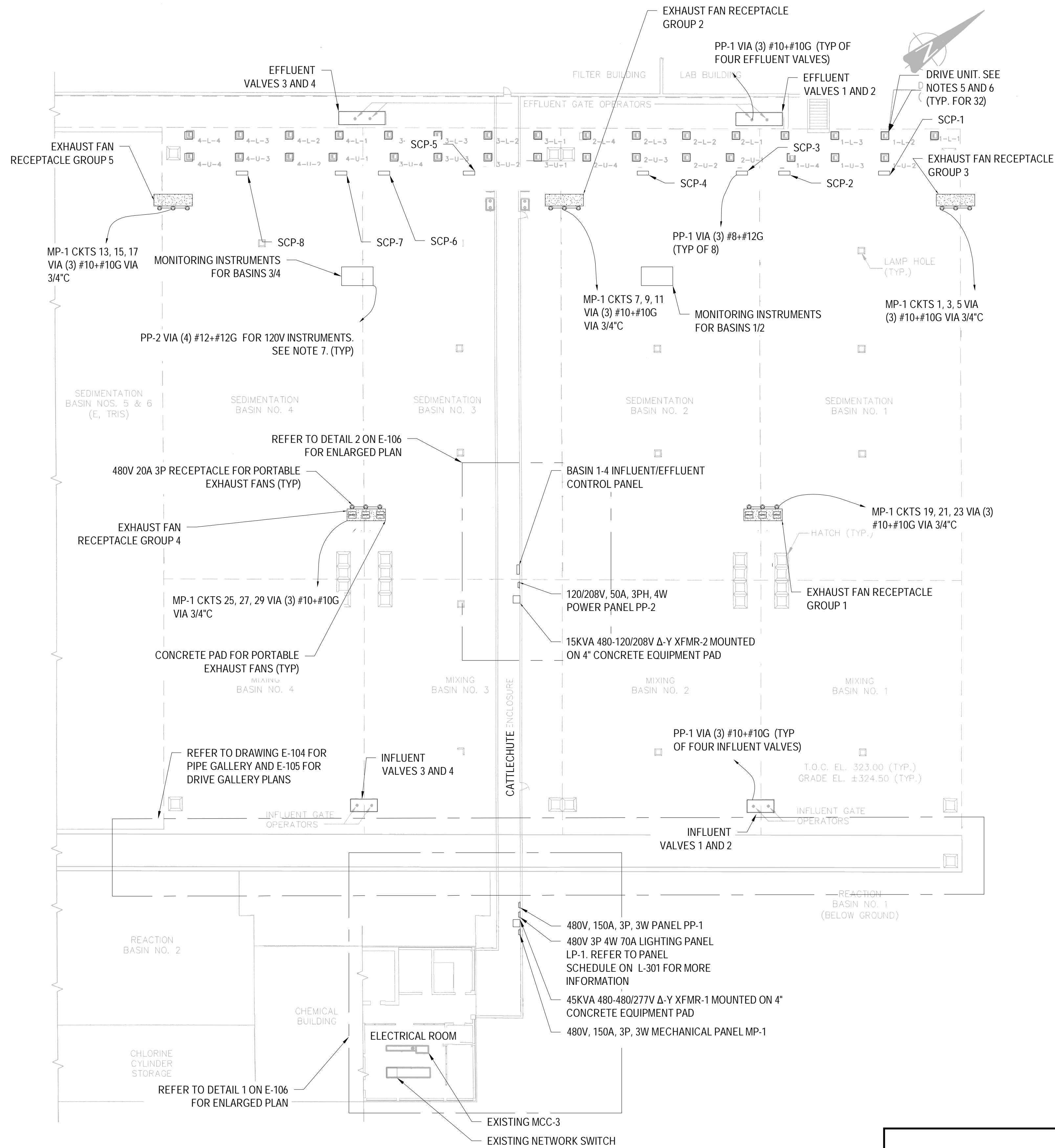
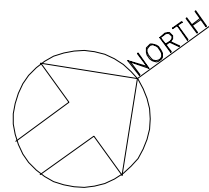
COMMUNICATION CONDUIT PLAN

3/64" = 1'-0" 0' 4' 8' 16' 32'

1  
E-102

**JOSEPH N. BONGIOVANNI, PE**  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 COMMUNICATION CONDUIT PLAN		
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
1	03/17/2021	80% REVIEW			
2	06/04/2021	100% REVIEW			
3	09/24/2021	ISSUED FOR BID			
4			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200		
5					
6					
7					
8					
			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR		
			DATE 06/04/2021 PROJECT E6X94500		USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		E-102



- ELECTRICAL NOTES:
1. REFER TO DRAWING E-501 FOR ELECTRICAL ONE LINE DIAGRAM.
  2. SHARING OF NEUTRALS IS NOT PERMITTED.
  3. ALL FINAL CABLE TERMINATIONS FOR TRANSFORMER LOADS, MOTORIZED EQUIPMENT, AND ALL ELECTRICAL EQUIPMENT SUBJECT TO VIBRATION SHALL USE LIQUID TIGHT FLEXIBLE CONDUIT (LFMC), MAXIMUM LENGTH OF LFMC SHALL BE 36 INCHES.
  4. CONTRACTOR TO PROVIDE PULL BOXES AS NECESSARY FOR CABLE ROUTING. CONDUIT RUN NOT TO EXCEED MORE THAN 360 DEGREES PER NEC STANDARDS.
  5. EACH DRIVE UNIT SHALL BE POWERED FROM ITS ASSOCIATED SLUDGE COLLECTOR PANEL VIA 3-#12-#12G IN EXISTING CONDUIT. IF CONDUITS CANNOT BE REUSED DUE TO THEIR CONDITION FURNISH AND INSTALL NEW CONDUIT TO THE DRIVE UNITS. REFER TO DRAWING I-010 AND I-011 FOR NETWORK DIAGRAM THAT SHOWS THE DRIVE UNIT ASSOCIATIONS.
  6. COMMUNICATION CABLES FOR THE DRIVE UNITS SHALL BE INSTALLED IN EXISTING DRIVE UNIT CONDUITS. IF CONDUITS CANNOT BE REUSED DUE TO THEIR CONDITION FURNISH AND INSTALL NEW CONDUIT TO THE DRIVE UNITS. REFER TO DRAWINGS I-010 AND I-011 FOR CABLE REQUIREMENTS TO EACH DRIVE UNIT.
  7. PROVIDE LOW VOLTAGE POWER AND COMMUNICATION CABLING AS NECESSARY FROM FLOWCERT MONITOR TO FLOW SENSORS. REFER TO PROCESS DRAWINGS FOR MORE INFORMATION ON MONITORING INSTRUMENTS.
  8. REFER TO DRAWINGS E-101 AND E-102 FOR POWER AND COMMUNICATION CONDUIT ROUTING. REFER TO DRAWING E-503 FOR CABLE AND CONDUIT SCHEDULES.

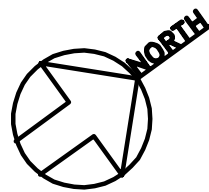
SITE POWER PLAN 1  
3/64" = 1'-0" E-103

Jacobs

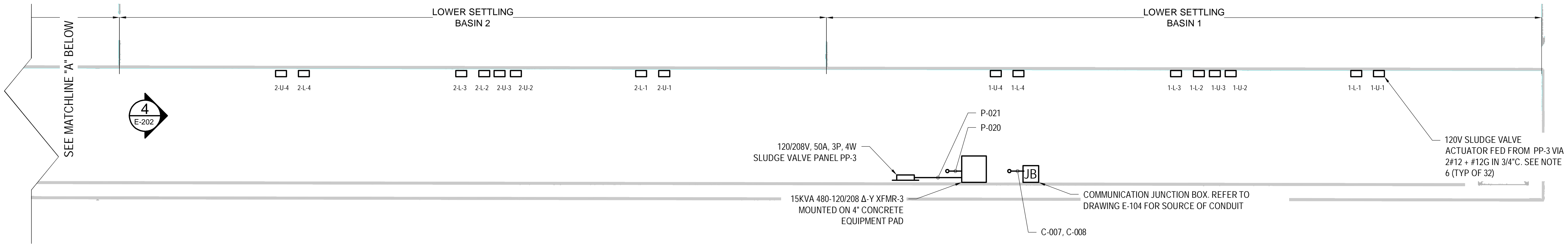
JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL POWER PLAN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID		
4			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
5				
6				
7				
8			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	E-103



- ELECTRICAL NOTES:
1. REFER TO DRAWING E-501 FOR ELECTRICAL ONE LINE DIAGRAM.
  2. SHARING OF NEUTRALS IS NOT PERMITTED.
  3. ALL FINAL CABLE TERMINATIONS FOR TRANSFORMER LOADS, MOTORIZED EQUIPMENT, AND ALL ELECTRICAL EQUIPMENT SUBJECT TO VIBRATION SHALL USE LIQUID TIGHT FLEXIBLE CONDUIT (LFMC), MAXIMUM LENGTH OF LFMC SHALL BE 36 INCHES.
  4. CONTRACTOR TO PROVIDE PULL BOXES AS NECESSARY FOR CABLE ROUTING. CONDUIT RUN NOT TO EXCEED MORE THAN 360 DEGREES PER NEC STANDARDS.
  5. NOT ALL CONDUITS ARE SHOWN FOR CLARITY. CONTRACTOR SHALL RUN ALL CONDUITS AS NECESSARY FOR COMPLETE POWER AND COMMUNICATION INSTALLATION.
  6. PROVIDE NECESSARY COMMUNICATION CABLE AND CONDUIT TERMINATIONS AS PER DRAWING I-010, I-011 AND E-503.
  7. ONLY ONE BASIN'S SLUDGE EXISTING VALVE ACTUATORS CAN BE TAKEN OFFLINE AT A TIME. CONTRACTOR SHALL ENSURE CONTINUITY OF COMMUNICATION SIGNALS TO REMAINING DAISY CHAINED SLUDGE VALVES DURING DEMOLITION/CONSTRUCTION.
  8. ALL ELECTRICAL EQUIPMENT IN THE PIPE GALLERY SHALL BE NEMA 4X RATED.



PIPE GALLERY PLAN NORTH

1" = 5'-0"

2.5' 5' 10'

1  
E-104



PIPE GALLERY PLAN SOUTH

1" = 5'-0"

2.5' 5' 10'

1  
E-104

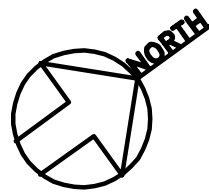
REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL PIPE GALLERY PLAN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			E-104	

Jacobs

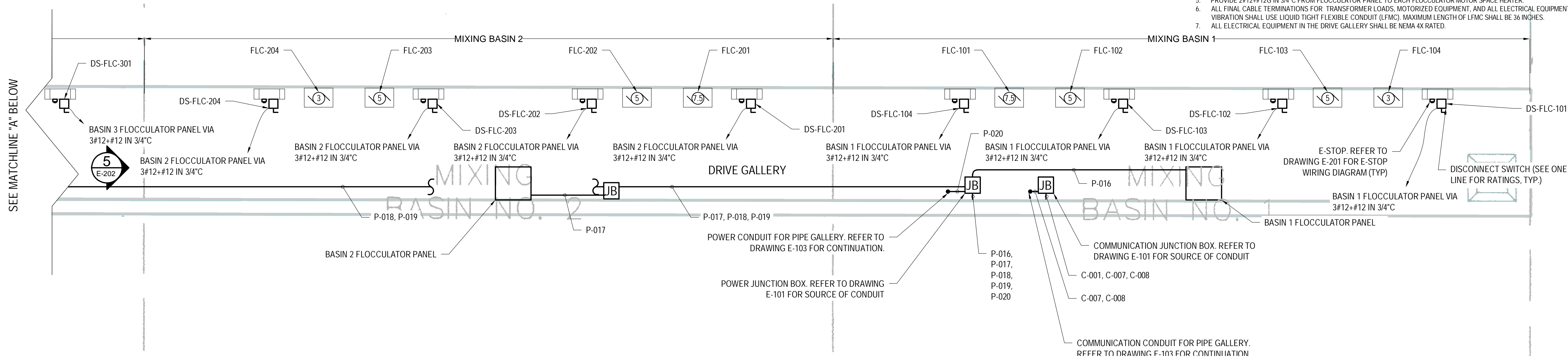
JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400



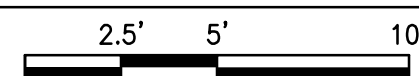


- ELECTRICAL NOTES:
1. EACH BASIN FLOCCULATOR PANEL CONTAINS FOUR VFD'S TO POWER THAT BASIN'S MOTORS. REFER TO DRAWINGS E-501 FOR ELECTRICAL ONE LINE DIAGRAM AND CABLE/CONDUIT SCHEDULE. COMMUNICATION CABLING SHALL BE PROVIDED FOR EACH FLOCCULATOR PANEL AS SHOWN ON DRAWINGS I-010, I-011 AND E-503.
  2. SHARING OF NEUTRALS IS NOT PERMITTED.
  3. CONTRACTOR TO PROVIDE PULL BOXES AS NECESSARY FOR CABLE ROUTING. CONDUIT RUN NOT TO EXCEED MORE THAN 360 DEGREES PER NEC STANDARDS.
  4. NOT ALL CONDUITS ARE SHOWN FOR CLARITY. CONTRACTOR SHALL RUN ALL CONDUITS AS NECESSARY FOR COMPLETE POWER AND COMMUNICATION INSTALLATION.
  5. PROVIDE 2#12+12G IN 3/4"C FROM FLOCCULATOR PANEL TO EACH FLOCCULATOR MOTOR SPACE HEATER.
  6. ALL FINAL CABLE TERMINATIONS FOR TRANSFORMER LOADS, MOTORIZED EQUIPMENT, AND ALL ELECTRICAL EQUIPMENT SUBJECT TO VIBRATION SHALL USE LIQUID TIGHT FLEXIBLE CONDUIT (LFMC). MAXIMUM LENGTH OF LFMC SHALL BE 36 INCHES.
  7. ALL ELECTRICAL EQUIPMENT IN THE DRIVE GALLERY SHALL BE NEMA 4X RATED.

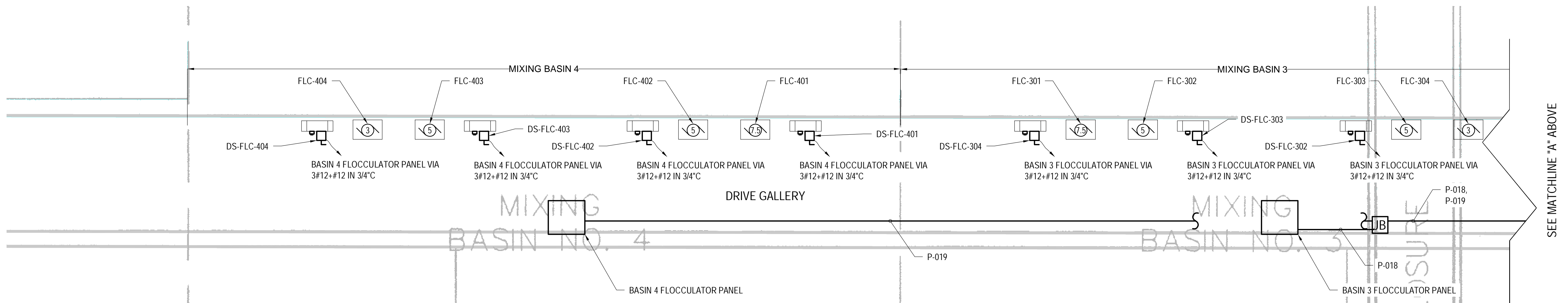


DRIVE GALLERY PLAN NORTH

1" = 5'-0"

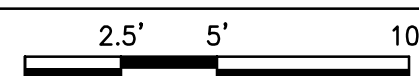


1  
E-105



DRIVE GALLERY PLAN SOUTH

1" = 5'-0"



1  
E-105

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL DRIVE GALLERY PLAN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			E-105	



PROPOSED LIGHTING CONDUITS. REFER TO DRAWING L-101 FOR MORE INFORMATION. (TYP)

C-007  
P-005  
P-007, P-008, P-009, P-010, P-011  
P-022, P-023, P-024

P-025, P-026  
C-008

P-003  
P-016, P-017, P-018, P-019

TO FLOCCULATOR DRIVE FEEDER CABINET

P-002

C-010

P-004

P-001

480V, 150A, 3P, 3W PANEL PP-1

P-020  
P-016, P-017, P-018, P-019, P-020

C-001, C-007, C-008

480V 3P 4W 70A LIGHTING PANEL LP-1. REFER TO PANEL SCHEDULE ON L-301 FOR MORE INFORMATION

45KVA 480-480/277V Δ-Y XFMR-1 MOUNTED ON 4" CONCRETE EQUIPMENT PAD

480V, 150A, 3P, 3W MECHANICAL PANEL MP-1

FILTER BUILDING

EFFLUENT GATE OPERATOR

3-L-1

2-L-4

3-U-1

2-U-4

ELECTRICAL ROOM

EXISTING MCC-3

EXISTING NETWORK SWITCH

PART PLAN A

1" = 5'-0" 2.5' 5' 10'

1  
E-106

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

- ELECTRICAL NOTES:
1. REFER TO DRAWING E-501 FOR ELECTRICAL ONE LINE DIAGRAM.
  2. SHARING OF NEUTRALS IS NOT PERMITTED.
  3. CONTRACTOR TO PROVIDE PULL BOXES AS NECESSARY FOR CABLE ROUTING. CONDUIT RUN NOT TO EXCEED MORE THAN 360 DEGREES PER NEC STANDARDS.
  4. ALL FINAL CABLE TERMINATIONS FOR TRANSFORMER LOADS, MOTORIZED EQUIPMENT, AND ALL ELECTRICAL EQUIPMENT SUBJECT TO VIBRATION SHALL USE LIQUID TIGHT FLEXIBLE CONDUIT (LFMC). MAXIMUM LENGTH OF LFMC SHALL BE 36 INCHES.

P-026

C-010  
P-013,  
P-014

C-008  
P-010,  
P-011

C-009

C-007

JB

JB

JB

JB

BASIN 1-4 INFLUENT/EFFLUENT CONTROL PANEL

C-002

P-015

120/208V, 50A, 3PH, 4W POWER PANEL PP-2

P-022,  
P-023,  
P-024

P-012

15KVA 480-120/208V Δ-Y XFMR-2 MOUNTED ON 4" CONCRETE EQUIPMENT PAD

P-009

C-002, C-009

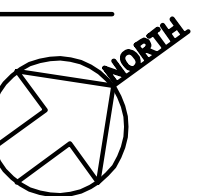
P-009, P-010, P-011

P-005

CATTLECHUTE PART PLAN

2  
E-106

1" = 5'-0" 2.5' 5' 10'



REVISIONS

0	12/07/2020	30% REVIEW
1	03/17/2021	80% REVIEW
2	06/04/2021	100% REVIEW
3	09/24/2021	ISSUED FOR BID
4		
5		
6		
7		
8		

CLARIFIER SYSTEM REHABILITATION  
ELECTRICAL  
BASINS 1-4  
ELECTRICAL PART PLANS

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJDC# 246A27990200

DRAWN BY AM  
PROJECT ENG'R NCP  
APPROVED MR

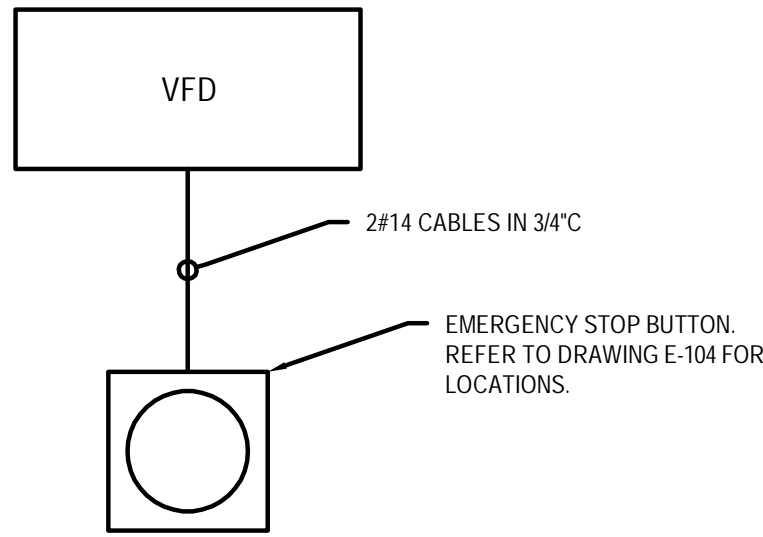
DATE 06/04/2021  
PROJECT E6X94500

USE DIMENSIONS ONLY  
SCALE AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

E-106

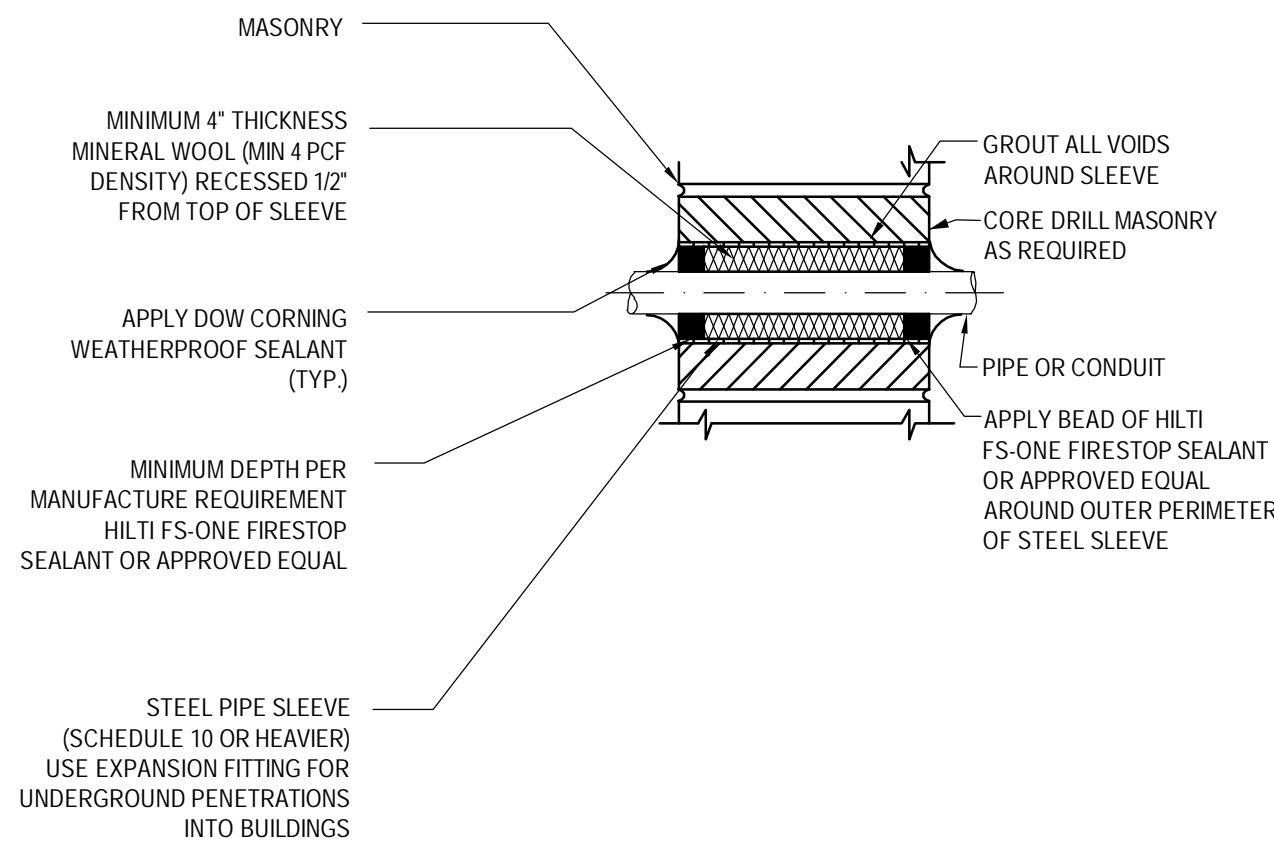




TYPICAL E-STOP WIRING DIAGRAM

1  
E-201

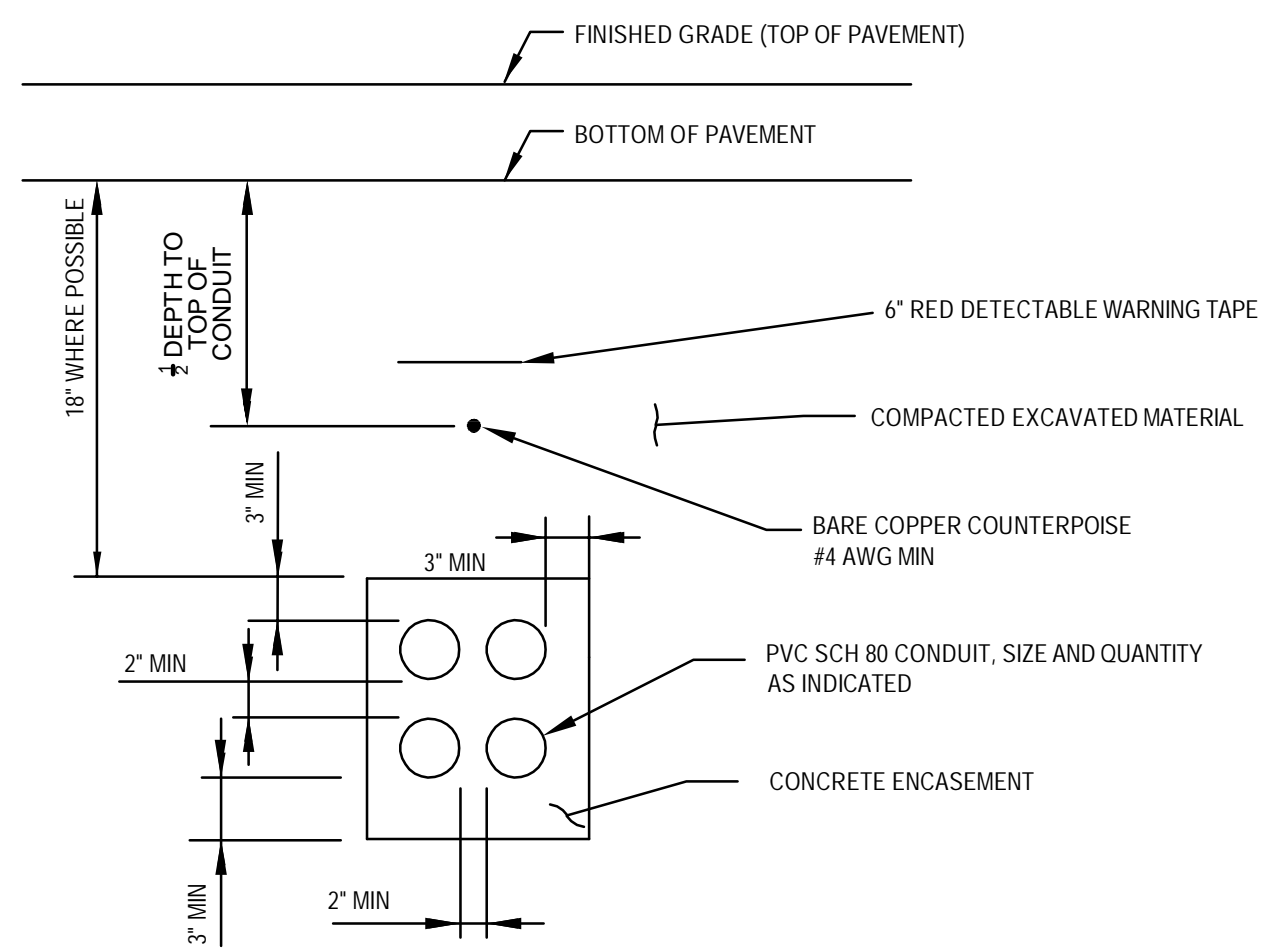
- NOTES:
- E-STOP SHALL BE WIRED SUCH THAT ONLY THE MOTOR ASSOCIATED WITH THAT E-STOP TURNS OFF WHEN THE BUTTON IS PRESSED.



TYPICAL CONDUIT PENETRATION DETAIL IN MASONRY

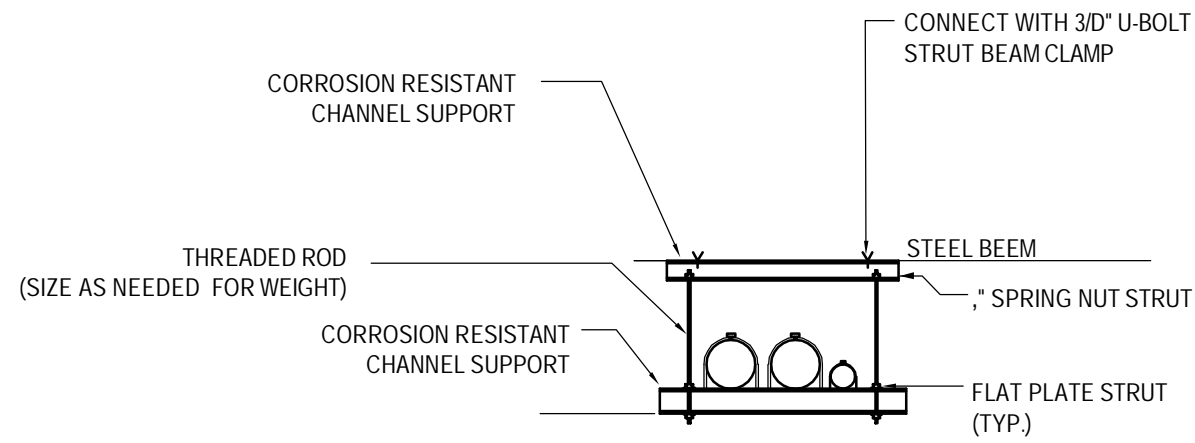
4  
E-201

- NOTES:
- REFER TO PROCESS MECHANICAL DRAWINGS FOR PENETRATION THROUGH CONCRETE.



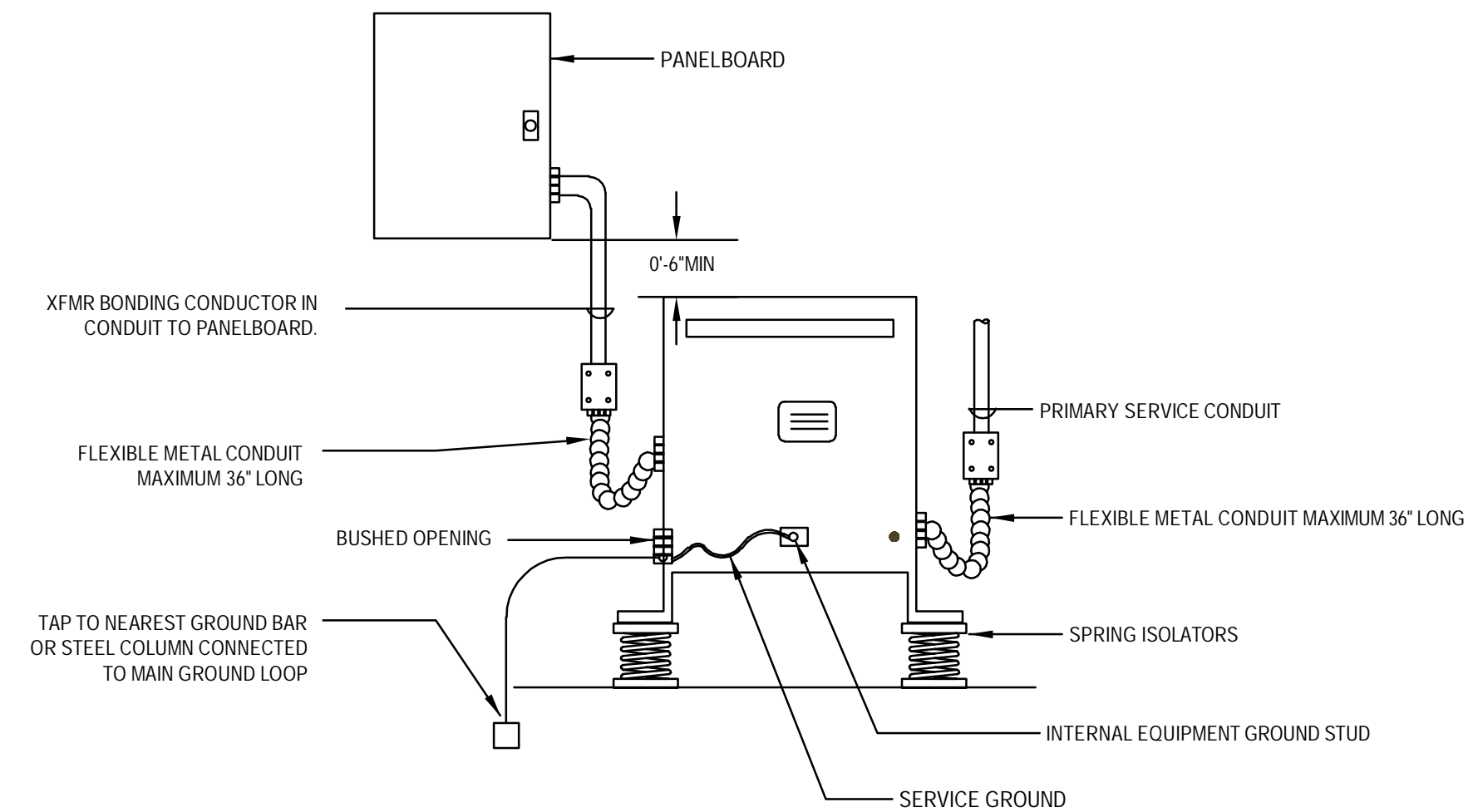
TYPICAL CONDUIT SUPPORT DETAIL

5  
E-201



PANELBOARD GROUNDING DETAIL

3  
E-201



TRANSFORMER CONNECTION DETAIL

6  
E-201

- NOTES:
- PROVIDE A MINIMUM OF 8" CLEARANCE FOR ALL TRANSFORMER 75 KVA AND BELOW. 12" CLEARANCE FOR ALL TRANSFORMERS GREATER THAN 75 KVA TO ALL WALLS AND EQUIPMENT FOR VENTILATION. 3'-1/2" CLEARANCE REQUIRED AT ACCESS FRONT COVER.

DUCT BANK DETAIL

7  
E-201

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL DETAILS	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID		
4				
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
6				
7				
8			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			E-201	





EXISTING CONCRETE  
ENCASED CONDUIT

1  
E-202



EXISTING MCC-3

2  
E-202



PANELS TO BE DEMOLISHED

3  
E-202



PIPE GALLERY

4  
E-202



DRIVE GALLERY

5  
E-202



EXTERIOR GRADE

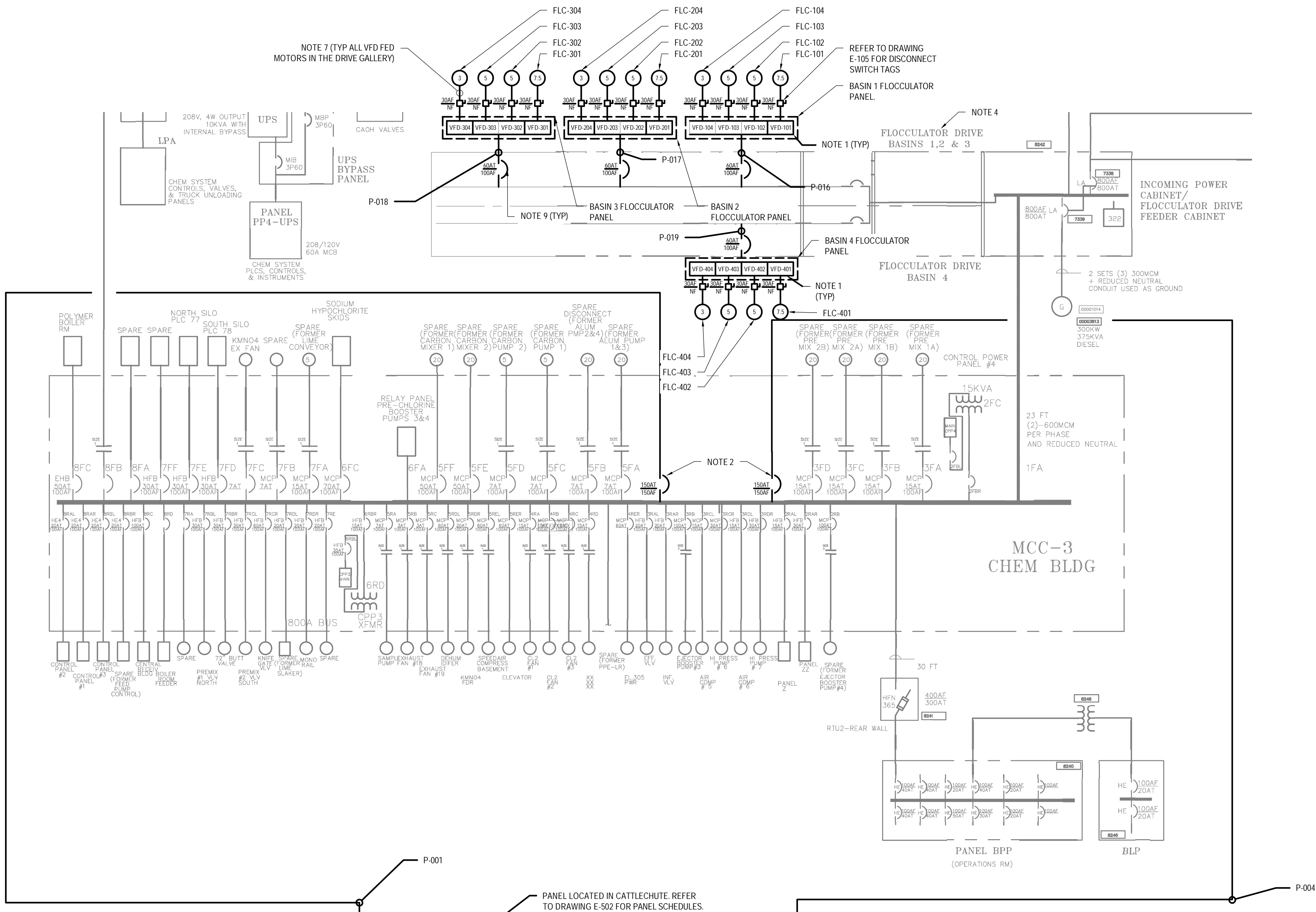
6  
E-202



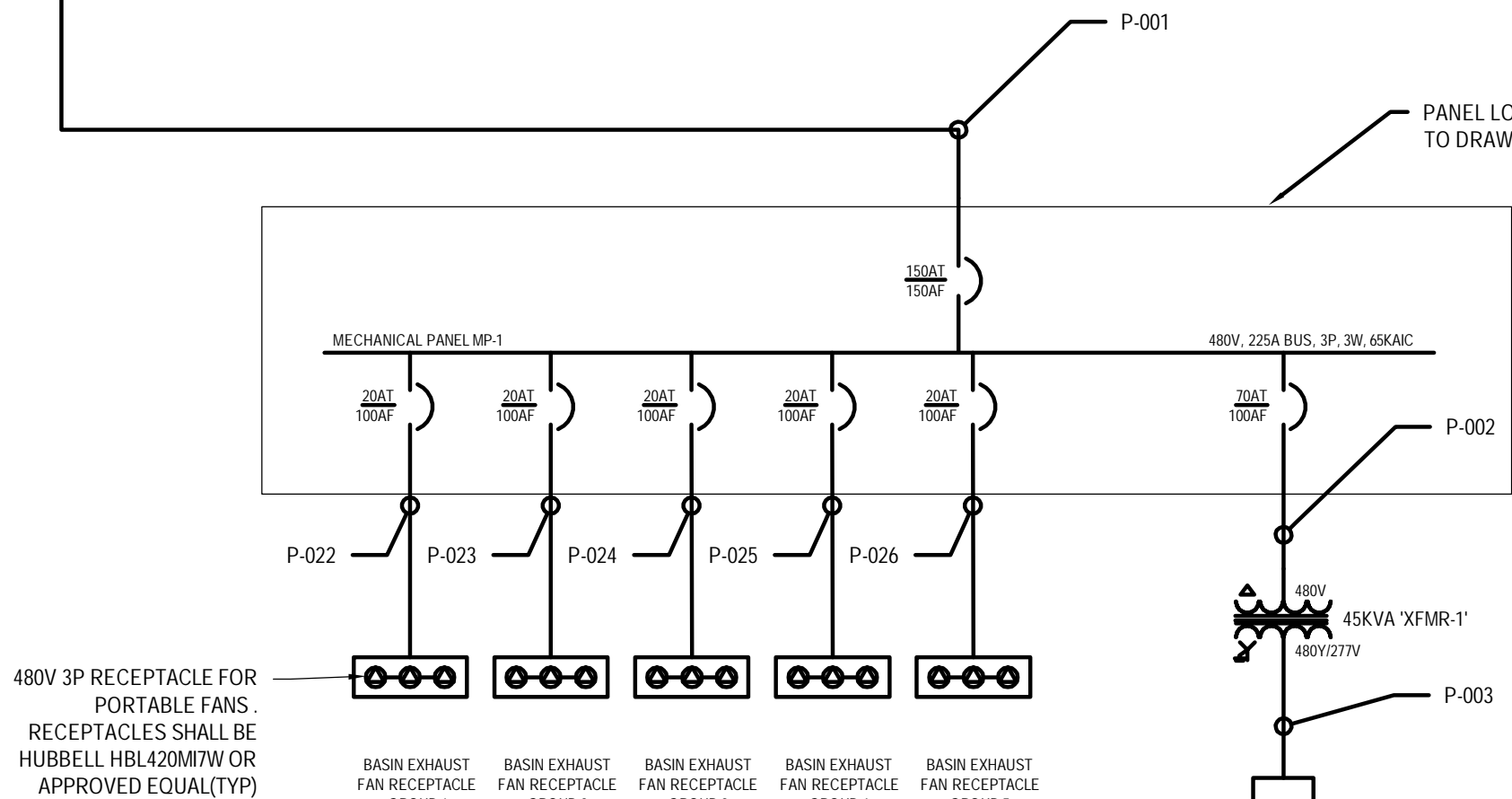
**JOSEPH N. BONGIOVANNI, PE**  
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL PHOTOGRAPHS	
0	12/07/2020	30% REVIEW		
1	03/17/2021	80% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
4				
5			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
6				
7			DATE 06/04/2021 PROJECT E6X94500	
8				
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			E-202	





- ELECTRICAL NOTES:
1. VFDs SHALL BE INTEGRAL TO FLOCCULATOR PANELS PROVIDED BY VENDOR.
  2. NEW CIRCUIT BREAKER TO BE INSTALLED IN EXISTING MCC BUCKET CREATED AFTER DEMOLITION WORK.
  3. NOT USED.
  4. ONLY ONE FLOCCULATOR BASIN MAY BE TAKEN OUT OF SERVICE AT A TIME. ALL OTHERS MUST MAINTAIN OPERATION.
  5. ALL MAIN CIRCUIT BREAKERS ASSOCIATED WITH PANELS, MCCS AND TRANSFORMERS SHALL BE 100% RATED.
  6. SHARING OF NEUTRAL IS NOT PERMITTED.
  7. VFD CONTROLLED MOTORS IN THE DRIVE GALLERY SHALL BE FED VIA 3#12-#12G VFD RATED CABLE IN 1" C.
  8. NOT USED.
  9. NEW CIRCUIT BREAKER TO BE INSTALLED IN SPACE CREATED AFTER DEMOLITION WORK.
  10. COORDINATE INSTALLATION OF NEW EQUIPMENT AND ANY NECESSARY POWER OUTAGES WITH OWNER. WORK INVOLVING EXISTING EQUIPMENT/PANELS MAY NEED TO BE PERFORMED AT OFF HOURS TO MAINTAIN FACILITY OPERATION.
  11. CONTRACTOR SHALL ATTACH HUBBELL HBL420P7W PLUG OR APPROVED EQUAL TO PORTABLE EXHAUST FANS. PLUG CONFIGURATION SHALL MATCH THE CHOSEN RECEPTACLE.
  12. CONTRACTOR SHALL PROVIDE POINT TO POINT DIAGRAM.



ELECTRICAL NOTES:  
1. REFER TO DRAWING L-301 FOR LIGHTING PANEL LP-1 PANEL SCHEDULE.  
2. CONTRACTOR SHALL PROVIDE POINT TO POINT DIAGRAM.

CKT. NO.	BUS AMPS: 225A	PHASE: 3			PANEL: PP-1						FEED: BOTTOM			CKT. NO.
	MAIN DEVICE: 150A	VOLTAGE 480V			NEW PANEL SHEDULE						MOUNTING: SURFACE			
	MINIMUM A.I.C.: 65 KAIC	WIRE: 3									LOCATION: CATTLECHUTE			
	DESCRIPTION	LOAD (VA)			CB (A)	A	B	C	CB (A)	LOAD (VA)			DESCRIPTION	
1	LOWER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	INFLUENT VALVE #2	2
3	COLLECTOR	-	-	-			X			-	305	-		4
5	DRIVE/PANEL #1	-	-	-				X		-	-	305		6
7	LOWER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	INFLUENT VALVE #3	8
9	COLLECTOR	-	-	-			X			-	305	-		10
11	DRIVE/PANEL #2	-	-	-				X		-	-	305		12
13	LOWER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	INFLUENT VALVE #4	14
15	COLLECTOR	-	-	-			X			-	305	-		16
17	DRIVE/PANEL #3	-	-	-				X		-	-	305		18
19	LOWER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	EFFLUENT VALVE #1	20
21	COLLECTOR	-	-	-			X			-	305	-		22
23	DRIVE/PANEL #4	-	-	-				X		-	-	305		24
25	UPPER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	EFFLUENT VALVE #2	26
27	COLLECTOR	-	-	-			X			-	305	-		28
29	DRIVE/PANEL #1	-	-	-				X		-	-	305		30
31	UPPER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	EFFLUENT VALVE #3	32
33	COLLECTOR	-	-	-			X			-	305	-		34
35	DRIVE/PANEL #2	-	-	-				X		-	-	305		36
37	UPPER BASIN SLUDGE	-	-	-	20	X			20	305	-	-	EFFLUENT VALVE #4	38
39	COLLECTOR	-	-	-			X			-	305	-		40
41	DRIVE/PANEL #3	-	-	-				X		-	-	305		42
43	UPPER BASIN SLUDGE	-	-	-	20	X			25	-	-	-	XFMR-3	44
45	COLLECTOR	-	-	-			X			-	-	-		46
47	DRIVE/PANEL #4	-	-	-				X		-	-	-		48
49	XFMR-2	-	-	-	25	X			-	-	-	-		50
51		-	-	-			X		-	-	-	-		52
53		-	-	-				X	-	-	-	-		54
55	INFLUENT VALVE #1	305	-	-	20	X			-	-	-	-		56
57		-	305	-			X		-	-	-	-		58
59		-	-	305				X	-	-	-	-		60

CKT. NO.	BUS AMPS: 225A	MECHANICAL PANEL MP-1										FEED: BOTTOM	CKT. NO.	
	MAIN DEVICE: 150A	NEW PANEL SHEDULE										MOUNTING: SURFACE		
	MINIMUM A.I.C.: 65 KAIC	WIRE: 3	LOCATION: CATTLECHUTE											
	DESCRIPTION	LOAD (VA)		CB (A)	A	B	C	CB (A)	LOAD (VA)			DESCRIPTION		
1	EXHAUST FAN RECEPTACLE GROUP 1	1330	-	-	20	X			70	15000	-	-	XFMR-1	2
3		-	1330	-			X			-	15000	-		4
5		-	-	1330				X		-	-	15000		-
7	EXHAUST FAN RECEPTACLE GROUP 2	1330	-	-	20	X			-	-	-	-	SPACE	8
9		-	1330	-				X	-	-	-	-	SPACE	10
11		-	-	1330					X	-	-	-	-	SPACE
13	EXHAUST FAN RECEPTACLE GROUP 3	1330	-	-	20	X			-	-	-	-	SPACE	14
15		-	1330	-				X	-	-	-	-	SPACE	16
17		-	-	1330					X	-	-	-	-	SPACE
19	EXHAUST FAN RECEPTACLE GROUP 4	1330	-	-	20	X			-	-	-	-	SPACE	20
21		-	1330	-				X	-	-	-	-	SPACE	22
23		-	-	1330					X	-	-	-	-	SPACE
25	EXHAUST FAN RECEPTACLE GROUP 5	1330	-	-	20	X			-	-	-	-	SPACE	26
27		-	1330	-				X	-	-	-	-	SPACE	28
29		-	-	1330					X	-	-	-	-	SPACE
31	SPARE	-	-	-	20	X			-	-	-	-	SPACE	32
33		-	-	-				X	-	-	-	-	SPACE	34
35		-	-	-					X	-	-	-	-	SPACE
37	SPARE	-	-	-	20	X			-	-	-	-	SPACE	38
39		-	-	-				X	-	-	-	-	SPACE	40
41		-	-	-					X	-	-	-	-	SPACE
43	SPARE	-	-	-	20	X			-	-	-	-	SPACE	44
45	SPARE	-	-	-	20		X		-	-	-	-	SPACE	46
47	SPACE	-	-	-	-			X	-	-	-	-	SPACE	48
49	SPACE	-	-	-	-	X			-	-	-	-	SPACE	50
51	SPACE	-	-	-	-		X		-	-	-	-	SPACE	52
53	SPACE	-	-	-	-			X	-	-	-	-	SPACE	54
55	SPACE	-	-	-	-	X			-	-	-	-	SPACE	56
57	SPACE	-	-	-	-		X		-	-	-	-	SPACE	58
59	SPACE	-	-	-	-			X	-	-	-	-	SPACE	60

CKT. NO.	BUS AMPS: 100A		PHASE: 3			POWER PANEL PP-2						FEED: BOTTOM			CKT. NO.
	MAIN DEVICE: 50A		VOLTAGE 120/208V			NEW PANEL SHEDULE						MOUNTING: SURFACE			
	MINIMUM A.I.C.: 65 KAIC		WIRE: 4									LOCATION: CATTLECHUTE			
DESCRIPTION		LOAD (VA)			CB (A)	A	B	C	CB (A)	LOAD (VA)			DESCRIPTION		
1	FLOWMETER FM-01 BASIN 1 (FUTURE)	100	-	-	20	X			20	1000	-	-	BASIN INFLUENT/EFFLUENT	2	
3	FLOWMETER FM-02 BASIN 2 (FUTURE)	-	100	-	20		X			-	1000	-	-	CONTROL PANEL	4
5	FLOWMETER FM-03 BASIN 3 (FUTURE)	-	-	100	20			X		-	-	1000			6
7	FLOWMETER FM-04 BASIN 4 (FUTURE)	100	-	-	20	X			20	-	-	-	SPARE	8	
9	TURBIDITY SENSOR BASIN 1 TB-01	-	100	-	20		X		20	-	-	-	SPARE	10	
11	TURBIDITY SENSOR BASIN 2 TB-02	-	-	100	20			X	20	-	-	-	SPARE	12	
13	TURBIDITY SENSOR BASIN 3 TB-03	100	-	-	20	X			-	-	-	-	SPACE	14	
15	TURBIDITY SENSOR BASIN 4 TB-04	-	100	-	20		X		-	-	-	-	SPACE	16	
17	SPARE	-	-	-	20			X	-	-	-	-	SPACE	18	
19	SPARE	-	-	-	20	X			-	-	-	-	SPACE	20	
21	SPARE	-	-	-	20		X		-	-	-	-	SPACE	22	
23	SPACE	-	-	-	-			X	-	-	-	-	SPACE	24	
25	SPACE	-	-	-	-	X			-	-	-	-	SPACE	26	
27	SPACE	-	-	-	-		X		-	-	-	-	SPACE	28	
29	SPACE	-	-	-	-			X	-	-	-	-	SPACE	30	

NOTES:  
1. FLOWMETERS FOR FUTURE USE AND ARE NOT PART OF THIS CONTRACT. CONTRACTOR TO RUN CABLES AND CONDUIT PER THESE DRAWINGS BUT DO NOT TERMINATE.

BUS AMPS: 50A		PHASE: 3			SLUDGE VALVE PANEL PP-3								FEED: BOTTOM		CKT. NO.
CKT. NO.	MAIN DEVICE: 50A	VOLTAGE 120/208V			NEW PANEL SHEDULE								MOUNTING: SURFACE		
	MINIMUM A.I.C.: 65 KAIC	WIRE: 4											LOCATION: CATTLECHUTE		
	DESCRIPTION	LOAD (VA)			CB (A)	A	B	C	CB (A)	LOAD (VA)			DESCRIPTION		
1	VALVE OPERATOR 1-U-1	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 3-U-1	2	
3	VALVE OPERATOR 1-L-1	-	218	-	20		X		20	-	218	-	VALVE OPERATOR 3-L-1	4	
5	VALVE OPERATOR 1-U-2	-	-	218	20			X	20	-	-	218	VALVE OPERATOR 3-U-2	6	
7	VALVE OPERATOR 1-U-3	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 3-U-3	8	
9	VALVE OPERATOR 1-L-2	-	218	-	20		X		20	-	218	-	VALVE OPERATOR 3-L-2	10	
11	VALVE OPERATOR 1-L-3	-	-	218	20			X	20	-	-	218	VALVE OPERATOR 3-L-3	12	
13	VALVE OPERATOR 1-L-4	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 3-L-4	14	
15	VALVE OPERATOR 1-U-4	-	218	-	20		X		20	-	218	-	VALVE OPERATOR 3-U-4	16	
17	VALVE OPERATOR 2-U-1	-	-	218	20			X	20	-	-	218	VALVE OPERATOR 4-U-1	18	
19	VALVE OPERATOR 2-L-1	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 4-L-1	20	
21	VALVE OPERATOR 2-U-2	-	218	-	20		X		20	-	218	-	VALVE OPERATOR 4-U-2	22	
23	VALVE OPERATOR 2-U-3	-	-	218	20			X	20	-	-	218	VALVE OPERATOR 4-U-3	24	
25	VALVE OPERATOR 2-L-2	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 4-L-2	26	
27	VALVE OPERATOR 2-L-3	-	218	-	20		X		20	-	218	-	VALVE OPERATOR 4-L-3	28	
29	VALVE OPERATOR 2-L-4	-	-	218	20			X	20	-	-	218	VALVE OPERATOR 4-L-4	30	
31	VALVE OPERATOR 2-U-4	218	-	-	20	X			20	218	-	-	VALVE OPERATOR 4-U-4	32	
33	SPARE	-	-	-	20		X		20	-	-	-	SPARE	34	
35	SPARE	-	-	-	20			X	20	-	-	-	SPARE	36	
37	SPACE	-	-	-	20	X			20	-	-	-	SPACE	38	
39	SPACE	-	-	-	20		X		20	-	-	-	SPACE	40	
41	SPACE	-	-	-	20			X	20	-	-	-	SPACE	42	

Jacobs

POWER CABLE/CONDUIT SCHEDULE										
CONDUIT NO.	FROM	TO	CONDUIT			CABLE				REMARKS
			QUANTITY	SIZE	TYPE	NUMBER & SIZE	GROUND SIZE	INSULATION	VOLTS	
P-001	MCC-3	MP-1	1	1-1/12"	SEE NOTE 1	(3) #10 AWG	#6 AWG	XHHW-2	600V	
P-002	MP-1	XFMR-1	1	1"	SEE NOTE 1	(3) - #6 AWG	#8 AWG	XHHW-2	600V	
P-003	XFMR-1	BASIN LIGHTING PANEL LP-1	1	1-1/4"	SEE NOTE 1	(4) - #6 AWG	#8 AWG	XHHW-2	600V	
P-004	MCC-3	PP-1	1	1-1/12"	SEE NOTE 1	(3) #10 AWG	#6 AWG	XHHW-2	600V	
P-005	PP-1	BASINS 1-2 SLUDGE COLLECTOR DRIVE PANELS	1	1-1/12"	SEE NOTE 1	(12) - #8AWG	#12 AWG	XHHW-2	600V	MOUNTED TO EXTERIOR OF CATTLECHUTE-CONDUIT CONTAINS CIRCUITS FOR FOUR SLUDGE COLLECTOR PANELS
P-006	PP-1	BASINS 3-4 SOUTH SLUDGE COLLECTOR DRIVE PANELS	1	1-1/12"	SEE NOTE 1	(12) - #8AWG	#12 AWG	XHHW-2	600V	MOUNTED TO EXTERIOR OF CATTLECHUTE-CONDUIT CONTAINS CIRCUITS FOR FOUR SLUDGE COLLECTOR PANELS
P-007	PP-1	INFLUENT VALVES 1 AND 2	1	1"	SEE NOTE 1	(6) - #10AWG	#10 AWG	XHHW-2	600V	CONDUIT CONTAINS CIRCUITS FOR TWO INFLUENT VALVES
P-008	PP-1	INFLUENT VALVES 3 AND 4	1	1"	SEE NOTE 1	(6) - #10AWG	#10 AWG	XHHW-2	600V	CONDUIT CONTAINS CIRCUITS FOR TWO INFLUENT VALVES
P-009	PP-1	XFMR-2	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-010	PP-1	EFFLUENT VALVES 1 AND 2	1	1-1/12"	SEE NOTE 1	(6) - #10AWG	#10 AWG	XHHW-2	600V	CONDUIT CONTAINS CIRCUITS FOR TWO EFFLUENT VALVES
P-011	PP-1	EFFLUENT VALVES 3 AND 4	1	1"	SEE NOTE 1	(6) - #10AWG	#10 AWG	XHHW-2	600V	CONDUIT CONTAINS CIRCUITS FOR TWO EFFLUENT VALVES
P-012	XFMR-2	PP-2	1	1"	SEE NOTE 1	(4) #6 AWG	#10 AWG	XHHW-2	600V	
P-013	PP-2	EFFLUENT VALVES 1 AND 2 INSTRUMENTS	1	3/4"	SEE NOTE 1	(6) #12 AWG	#12 AWG	XHHW-2	600V	
P-014	PP-2	EFFLUENT VALVES 3 AND 4 INSTRUMENTS	1	3/4"	SEE NOTE 1	(6) #12 AWG	#12 AWG	XHHW-2	600V	
P-015	PP-2	BASINS 1-4 INFLUENT/EFFLUENT CONTROL PANEL	1	3/4"	SEE NOTE 1	(3) #12 AWG	#12 AWG	XHHW-2	600V	
P-016	FLOCCULATOR DRIVE FEEDER CABINET	BASIN 1 FLOCCULATOR PANEL	1	1"	SEE NOTE 1	(3) #4 AWG	#8 AWG	XHHW-2	600V	
P-017	FLOCCULATOR DRIVE FEEDER CABINET	BASIN 2 FLOCCULATOR PANEL	1	1"	SEE NOTE 1	(3) #4 AWG	#8 AWG	XHHW-2	600V	
P-018	FLOCCULATOR DRIVE FEEDER CABINET	BASIN 3 FLOCCULATOR PANEL	1	1"	SEE NOTE 1	(3) #4 AWG	#8 AWG	XHHW-2	600V	
P-019	FLOCCULATOR DRIVE FEEDER CABINET	BASIN 4 FLOCCULATOR PANEL	1	1"	SEE NOTE 1	(3) #4 AWG	#8 AWG	XHHW-2	600V	
P-020	PP-1	XFMR-3	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-021	XFMR-3	PP-3	1	1"	SEE NOTE 1	(4) #6 AWG	#10 AWG	XHHW-2	600V	
P-022	MP-1	EXHAUST FAN RECEPTACLE GROUP 1	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-023	MP-1	EXHAUST FAN RECEPTACLE GROUP 2	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-024	MP-1	EXHAUST FAN RECEPTACLE GROUP 3	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-025	MP-1	EXHAUST FAN RECEPTACLE GROUP 4	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	
P-026	MP-1	EXHAUST FAN RECEPTACLE GROUP 5	1	3/4"	SEE NOTE 1	(3) #10 AWG	#10 AWG	XHHW-2	600V	

- ELECTRICAL NOTES:
- REFER TO SPECIFICATION 260533 PART 2 SECTION 3.1 AND 3.2 FOR CONDUIT TYPE REQUIREMENTS FOR DIFFERENT LOCATIONS.
  - REFER TO DRAWINGS I-010 AND I-011 FOR MORE INFORMATION REGARDING COMMUNICATION CABLING REQUIREMENTS.
  - CONTRACTOR SHALL PROVIDE POINT TO POINT DIAGRAM.

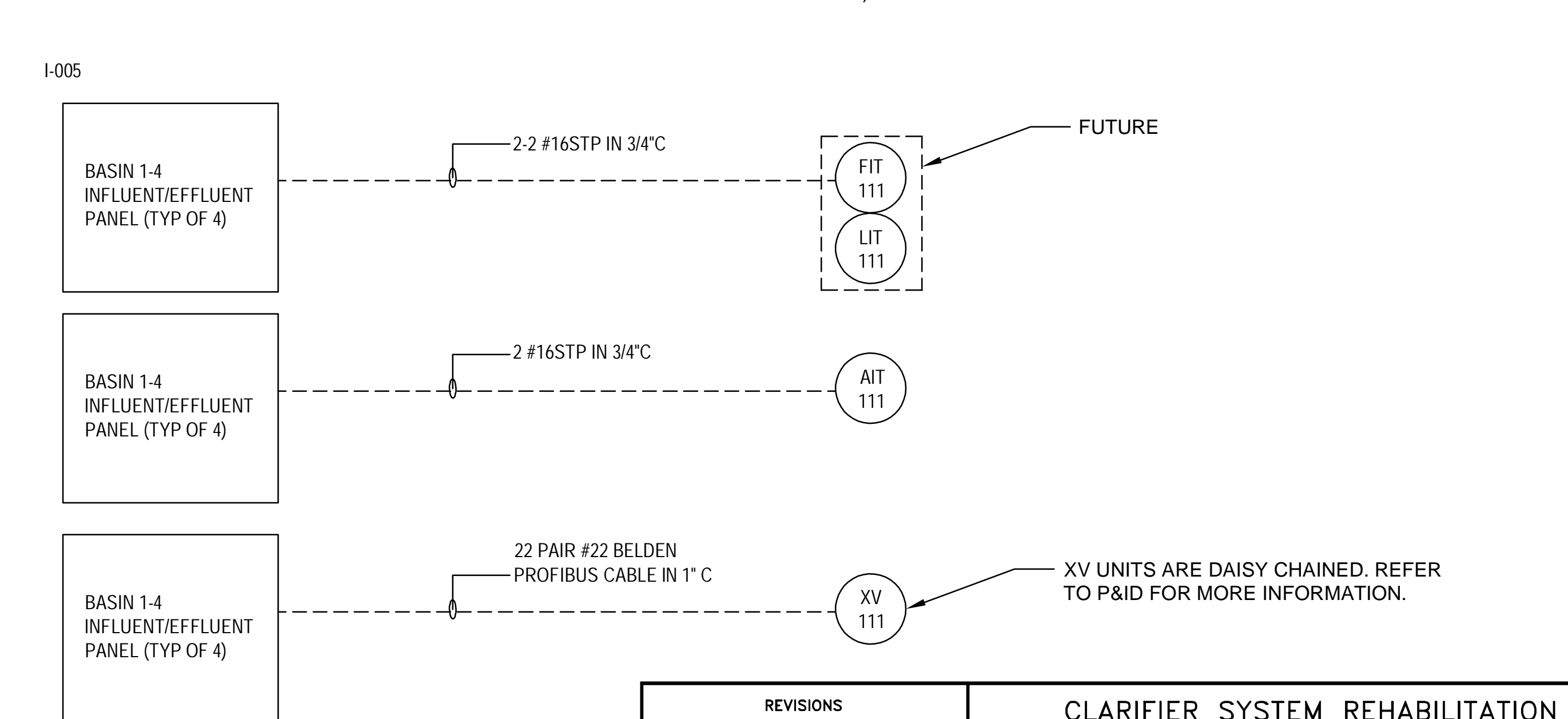
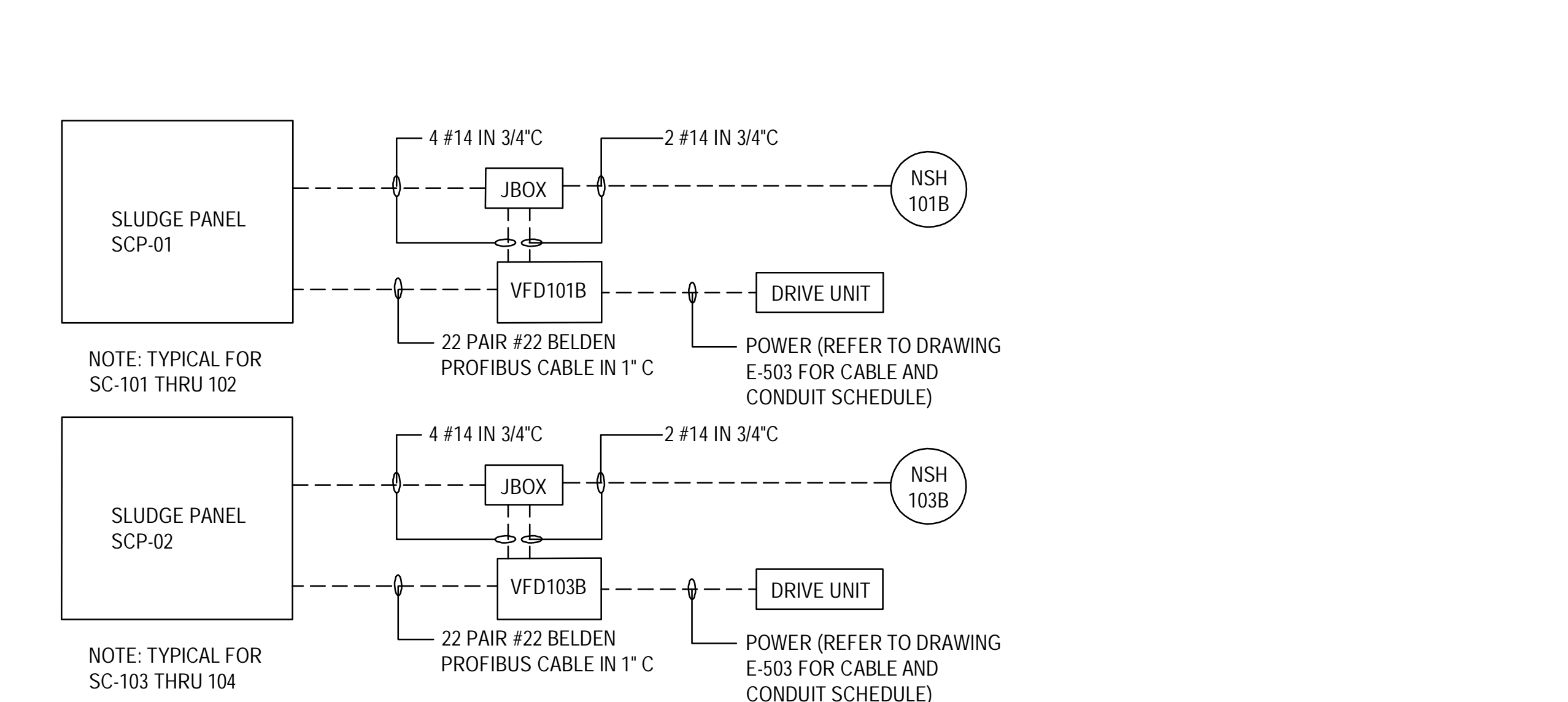
COMMUNICATION CABLE/CONDUIT SCHEDULE									
CONDUIT NO.	FROM	TO	CONDUIT			CABLE			REMARKS
			QUANTITY	SIZE	TYPE	NUMBER & TYPE	INSULATION	VOLTS	
C-001	NETWORK SWITCH	DRIVE GALLERY COMM JUNCTION BOX	1	1"	SEE NOTE 1	(4) 12 STRAND SM FIBER			FOR BASIN FLOCCULATOR PANELS
C-002	NETWORK SWITCH	BASIN INFLUENT/EFFLUENT CONTROL PANEL	1	3/4"	SEE NOTE 1	(1) 12 STRAND SM FIBER			
C-003	BASINS 1-4 INFLUENT/EFFLUENT CONTROL PANEL	EFFLUENT VALVES 1&2	1	3/4"	SEE NOTE 1	(1) PROFIBUS			(1) PROFIBUS CABLE IS DAISY CHAINED TO FEED ALL INFLUENT/EFFLUENT VALVES
C-004	EFFLUENT VALVES 1&2	INFLUENT VALVES 1&2	1	3/4"	SEE NOTE 1	(1) PROFIBUS			(1) PROFIBUS CABLE IS DAISY CHAINED TO FEED ALL INFLUENT/EFFLUENT VALVES
C-005	INFLUENT VALVES 1&2	INFLUENT VALVES 3&4	1	3/4"	SEE NOTE 1	(1) PROFIBUS			(1) PROFIBUS CABLE IS DAISY CHAINED TO FEED ALL INFLUENT/EFFLUENT VALVES
C-006	INFLUENT VALVES 3&4	EFFLUENT VALVES 3&4	1	3/4"	SEE NOTE 1	(1) PROFIBUS			(1) PROFIBUS CABLE IS DAISY CHAINED TO FEED ALL INFLUENT/EFFLUENT VALVES
C-007	BASINS 1-2 SLUDGE COLLECTOR DRIVE PANELS	PIPE GALLERY COMM JUNCTION BOX	4	1"	SEE NOTE 1	(4) PROFIBUS			FOR SLUDGE VALVE ACTUATORS
C-008	BASINS 3-4 SLUDGE COLLECTOR DRIVE PANELS	PIPE GALLERY COMM JUNCTION BOX	4	1"	SEE NOTE 1	(4) PROFIBUS			FOR SLUDGE VALVE ACTUATORS
C-009	NETWORK SWITCH	BASINS 1-2 SLUDGE COLLECTOR DRIVE PANELS	1	1"	SEE NOTE 1	(4) 12 STRAND SM FIBER			
C-010	NETWORK SWITCH	BASINS 3-4 SLUDGE COLLECTOR DRIVE PANELS	1	1"	SEE NOTE 1	(4) 12 STRAND SM FIBER			

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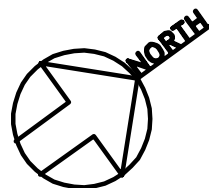
JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

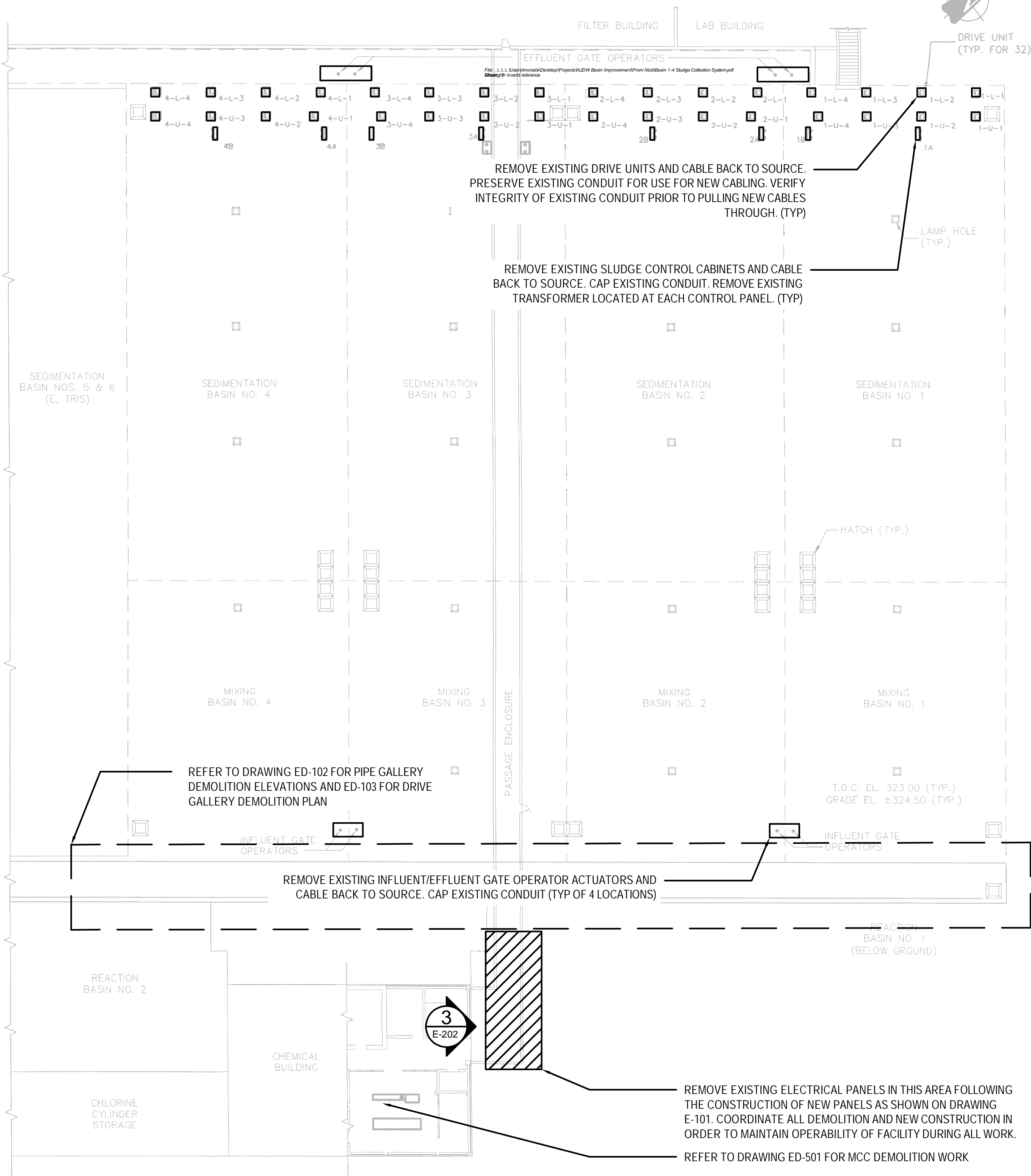
REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1–4 CABLE/CONDUIT SCHEDULES	
0	12/07/2020	30% REVIEW		
1	03/17/2021	80% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDOA 246A27990200	
4				
5			DRAWN BY NCP PROJECT ENG'R NCP APPROVED MR	
6				
7			DATE 09/24/2021 PROJECT E6X94500	
8				
			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	E–503



<div> <div> <div>REVISIONS</div> <div> <div>0</div> <div>06/04/2021</div> <div>100% REVIEW</div> </div> </div> <div> <div>1</div> <div>09/24/2021</div> <div>ISSUED FOR BID</div> </div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> </div>			<div> <div>CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4</div> <div>IC CABLE AND CONDUIT BLOCK DIAGRAM</div> </div>		
			<div>NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT</div>		
			<div>JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC A 246A27990200</div>		
			<div> <div> <div>DRAWN BY AM</div> <div>PROJECT ENG'R NCP</div> <div>APPROVED MR</div> </div> <div> <div>DATE 06/04/2021</div> <div>PROJECT E6K94500</div> </div> <div> <div>USE DIMENSIONS ONLY</div> <div>SCALE AS NOTED</div> </div> </div>		
			<div>USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES</div>		<div>E-504</div>



File: L:\1.1.1.1\Electrical\Drawings\Project\NJDSW Basin Improvement\From Nick\Basin 1-4 Sludge Collection System.pdf  
Drawing ID: 101-101-101-101



ELECTRICAL SITE PLAN (PARTIAL)

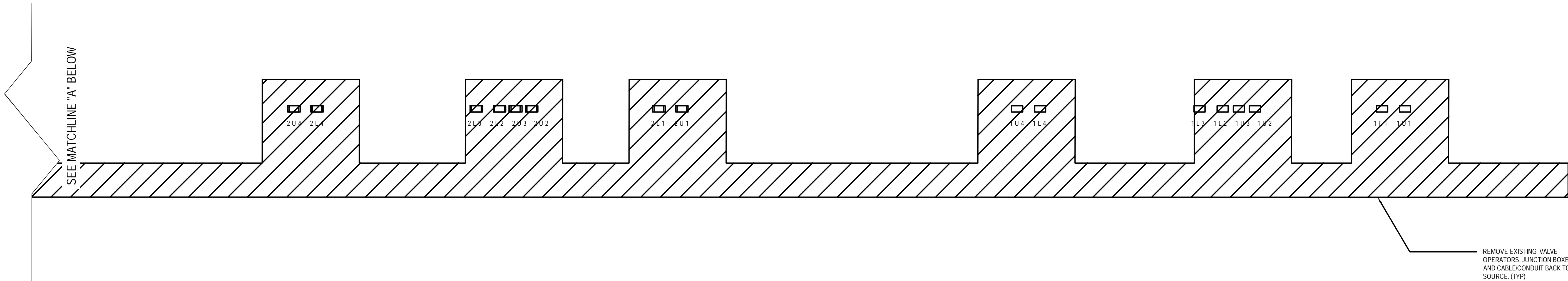
- ELECTRICAL DEMOLITION NOTES:
1. PRIOR TO ANY DEMOLITION WORK ENSURE THAT THE CIRCUITS BEING WORKED ON ARE DE-ENERGIZED.
  2. REMOVE ALL EXISTING EQUIPMENT AND FEEDERS ASSOCIATED WITH THE EXISTING SWITCHGEAR AND DISTRIBUTION INCLUDING DISCONNECT SWITCHES, CONTROL PANELS, JUNCTION BOXES AND ALL INTERCONNECTED CONTROL AND POWER WIRES BETWEEN THE DEVICES. ALL POWER AND CONTROL WIRES SHALL BE REMOVED BACK TO THE SOURCE. EXISTING EXPOSED CONDUIT TO BE REMOVED BACK TO ASSOCIATED WALL OR FLOOR WITH A 4" OFFSET. INTERIOR OF SUCH CONDUITS SHALL BE CLEANED AND CAPPED.
  3. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO BE REMOVED. COORDINATE DISCONNECTION WITH MECHANICAL CONTRACTOR. REMOVE CIRCUITRY (WIRING) AND CONDUIT BACK TO PANEL AND DISCARD, UNLESS IT CAN BE REUSED.
  4. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTIONS TO EXISTING ELECTRICAL SWITCHGEAR AND PANELS TO BE REMOVED. COORDINATE DISCONNECTION WITH EXISTING LOADS. REMOVE EXISTING FEEDER AND BRANCH CIRCUITRY (WIRING) AND CONDUIT TO PANEL AND DISCARD, UNLESS IT CAN BE REUSED. INSTALL NEW ELECTRICAL EQUIPMENT AS SHOWN ON NEW ELECTRICAL LAYOUT DRAWING.

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 DEMOLITION LAYOUT	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			ED-101	

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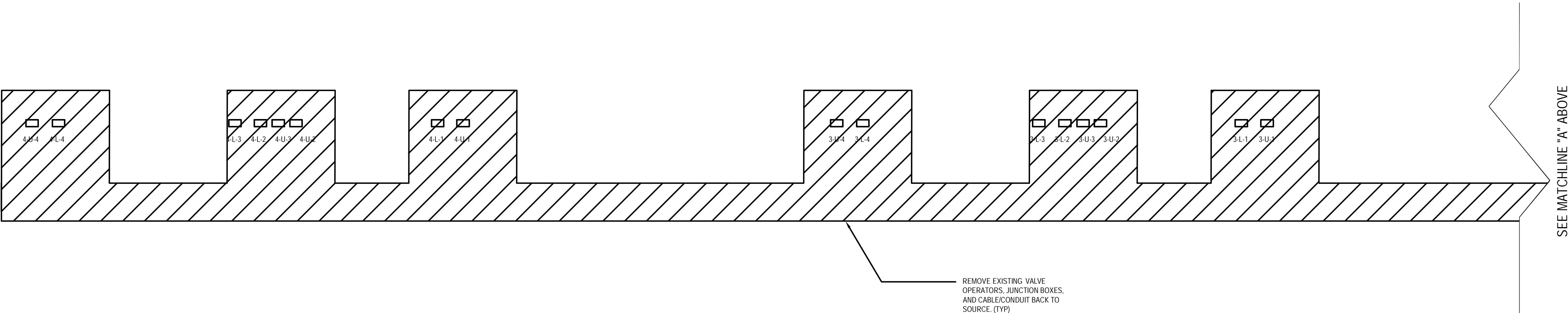
- ELECTRICAL DEMOLITION NOTES:
1. PRIOR TO ANY DEMOLITION WORK ENSURE THAT THE CIRCUITS BEING WORKED ON ARE DE-ENERGIZED .
  2. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO BE REMOVED. COORDINATE DISCONNECTION WITH MECHANICAL CONTRACTOR. REMOVE CIRCUITRY (WIRING) AND CONDUIT BACK TO PANEL AND DISCARD, UNLESS IT CAN BE REUSED.
  3. COORDINATE ALL DEMOLITION WORK WITH NEW WORK TO MAINTAIN CONTINUITY OF SERVICE FOR THE FACILITY. ONLY ONE BASIN AT A TIME CAN BE TAKEN OFFLINE FOR DEMOLITION/NEW CONSTRUCTION.
  4. SLUDGE VALVES ARE DAISY CHAINED TOGETHER. DURING THE REMOVAL AND SUBSEQUENT INSTALLATION OF EACH BASIN'S SLUDGE VALVES BYPASS THE VALVES THAT ARE BEING WORKED ON TO ENSURE THE CONTINUITY OF SERVICE FOR ALL OTHER SLUDGE VALVES.



PIPE GALLERY DEMOLITION ELEVATION NORTH

1  
ED-102

1" = 5'-0" 2.5' 5' 10'



PIPE GALLERY DEMOLITION ELEVATION SOUTH

1  
ED-102

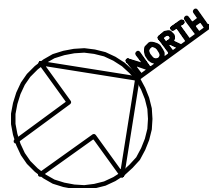
1" = 5'-0" 2.5' 5' 10'

Jacobs

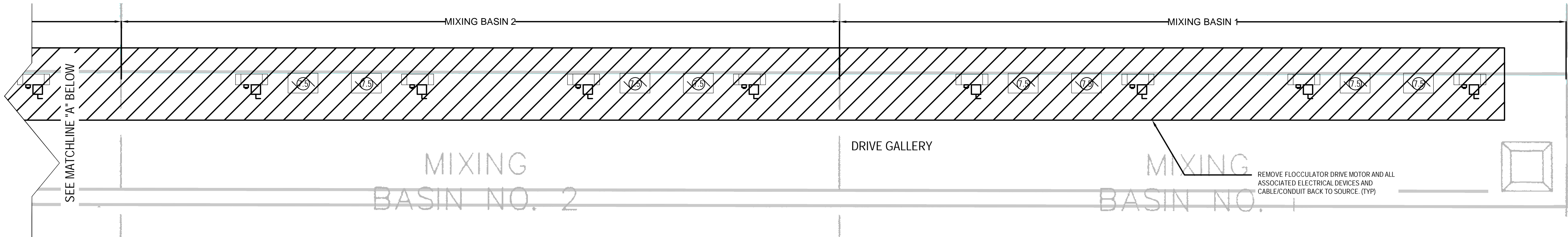
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NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL PIPE GALLERY DEMO ELEVATION	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW		
3	09/24/2021	ISSUED FOR BID		
4				
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
6				
7				
8			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	ED-102





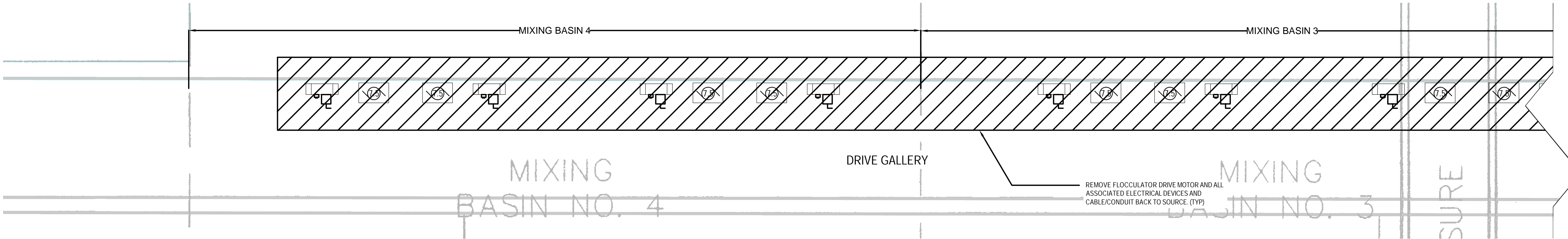
- ELECTRICAL DEMOLITION NOTES:
1. PRIOR TO ANY DEMOLITION WORK ENSURE THAT THE CIRCUITS BEING WORKED ON ARE DE-ENERGIZED .
  2. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO BE REMOVED. COORDINATE DISCONNECTION WITH MECHANICAL CONTRACTOR. REMOVE CIRCUITRY (WIRING) AND CONDUIT BACK TO PANEL AND DISCARD, UNLESS IT CAN BE REUSED.
  3. COORDINATE ALL DEMOLITION WORK WITH NEW WORK TO MAINTAIN CONTINUITY OF SERVICE FOR THE FACILITY. ONLY ONE BASIN AT A TIME CAN BE TAKEN OFFLINE FOR DEMOLITION/NEW CONSTRUCTION.



DRIVE GALLERY DEMOLITION PLAN NORTH

1  
ED-103

1" = 5'-0" 2.5' 5' 10'



DRIVE GALLERY DEMOLITION PLAN SOUTH

1  
ED-103

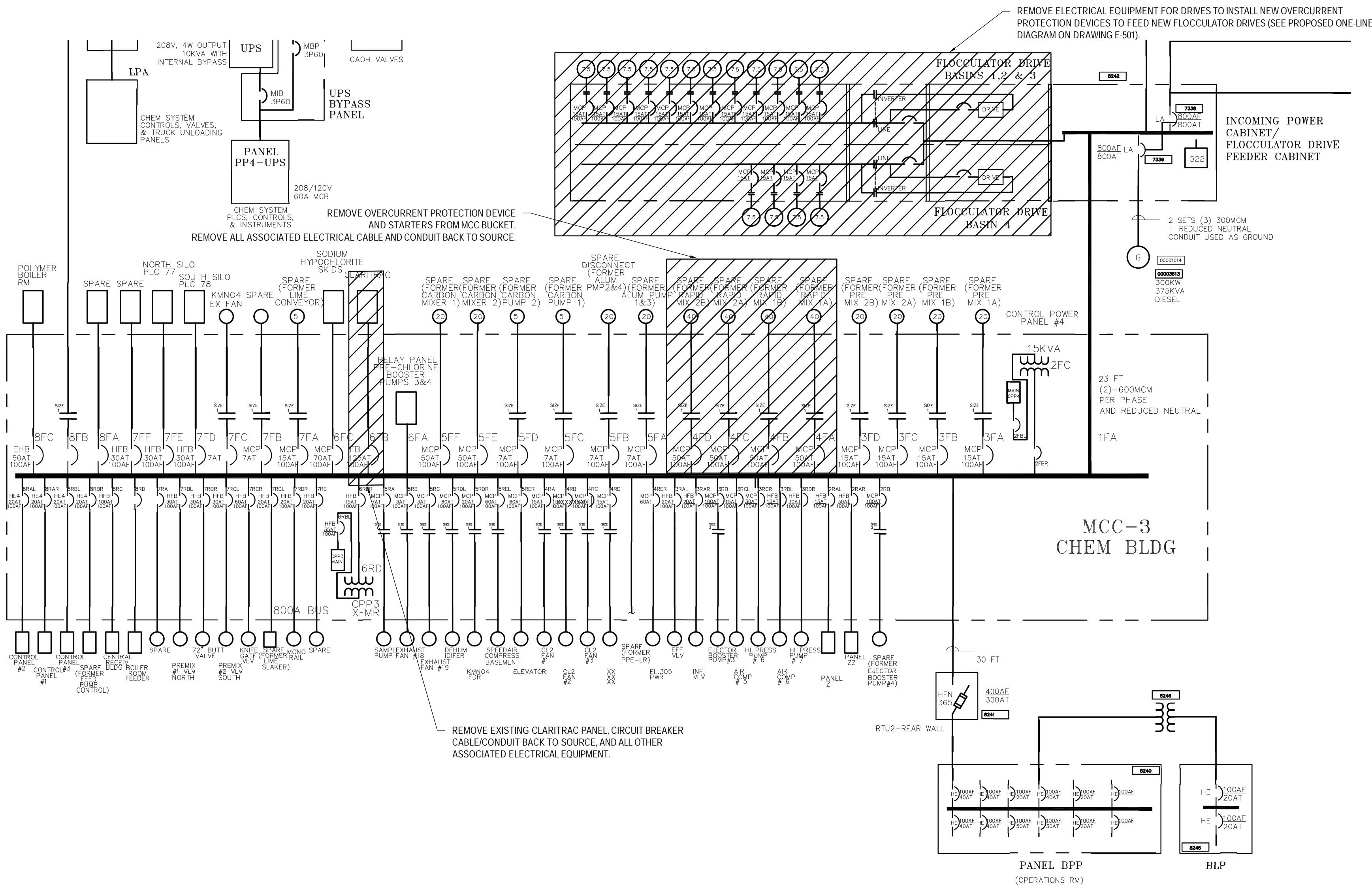
1" = 5'-0" 2.5' 5' 10'

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ELECTRICAL DRIVE GALLERY DEMOLITION PLAN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY AM PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			ED-103	

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400



- ELECTRICAL DEMOLITION NOTES:
1. DISCONNECT AND REMOVE EXISTING ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT WHICH IS TO BE REMOVED. COORDINATE DISCONNECTION WITH MECHANICAL CONTRACTOR. REMOVE CIRCUITRY (WIRING) AND CONDUIT BACK TO MCC AND DISCARD.
  2. COORDINATE ALL DEMOLITION WORK WITH NEW WORK TO MAINTAIN CONTINUITY OF SERVICE FOR THE FACILITY. ONLY ONE BASIN AT A TIME CAN BE TAKEN OFFLINE FOR DEMOLITION/NEW CONSTRUCTION.
  3. COORDINATE DEMOLITION OF EXISTING EQUIPMENT AND ANY NECESSARY POWER OUTAGES WITH OWNER. WORK INVOLVING EXISTING EQUIPMENT/PANELS MAY NEED TO BE PERFORMED AT OFF HOURS TO MAINTAIN FACILITY OPERATION.

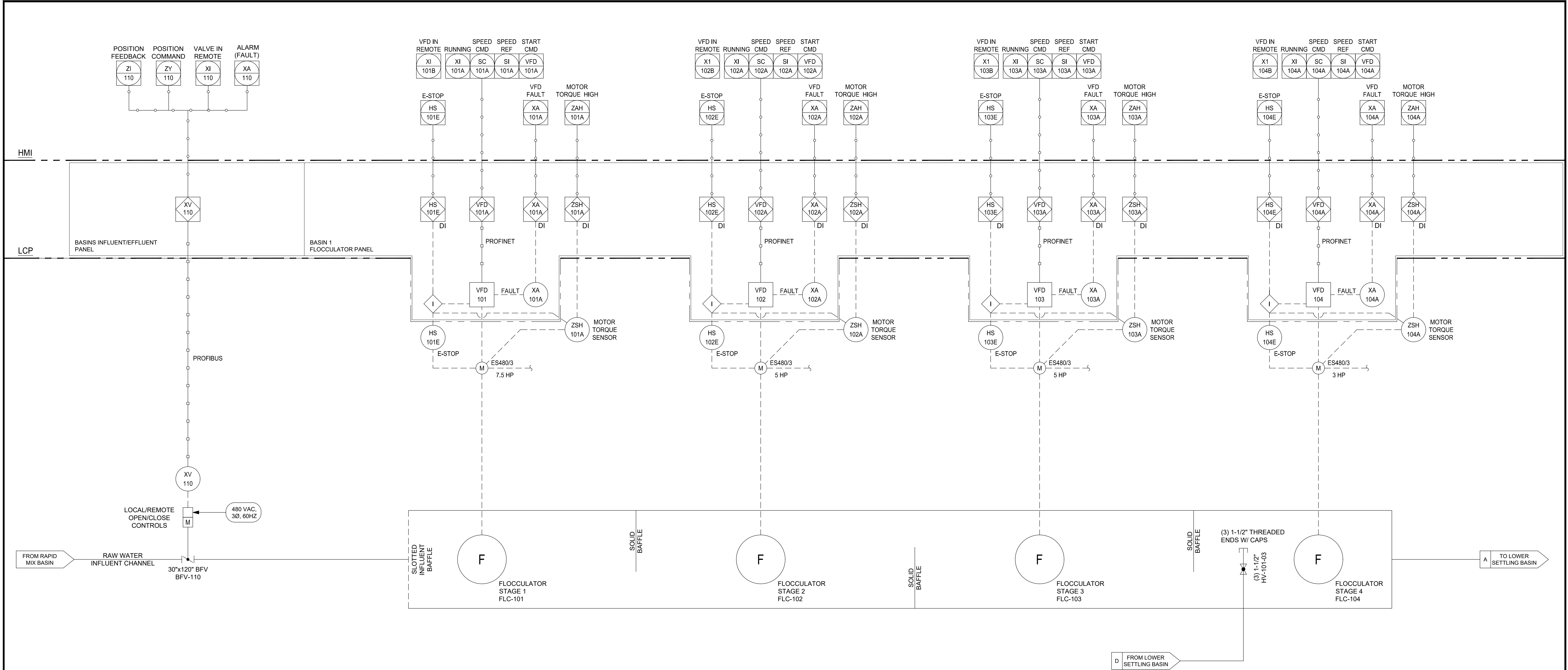
Jacobs

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NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION ELECTRICAL BASINS 1-4 ONE LINE DIAGRAM DEMO	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/17/2021	80% REVIEW		
2	06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200	
3	09/24/2021	ISSUED FOR BID		
4			DRAWN BY NCP PROJECT ENG'R NCP APPROVED MR	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			ED-501	

	LETTERS FOR FUNCTIONAL DESIGNATION PER ISA S5.1				
	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	USER'S CHOICE			CONTROL	
D	USER'S CHOICE	DIFFERENTIAL			
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME, RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	USER'S CHOICE	MOMENTARY			MIDDLE, INTERMEDIATE
N	SEQUENCE STRATEGY		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		
S	SPEED, FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION DIMENSION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	

FACTORY- SUPPLIED CABLE	SKID-WIRED CABLE	REVISIONS		CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 1-4 P&ID – LEGEND				
		0 12/07/2020	30% REVIEW					
		1 03/15/2021	80% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT				
		2 04/02/2021	ISSUED FOR NJDEP PERMIT					
		3 06/04/2021	100% REVIEW	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200				
		4 09/24/2021	ISSUED FOR BID					
		5				DRAWN BY JJW PROJECT ENG'R MAL APPROVED JNB	DATE 09/24/21 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
		6						
7								
8								
JOSEPH N. BONGIOVANNI, PE  NJPE LICENSE NO. 24GE04377400				USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES				
				I-001				

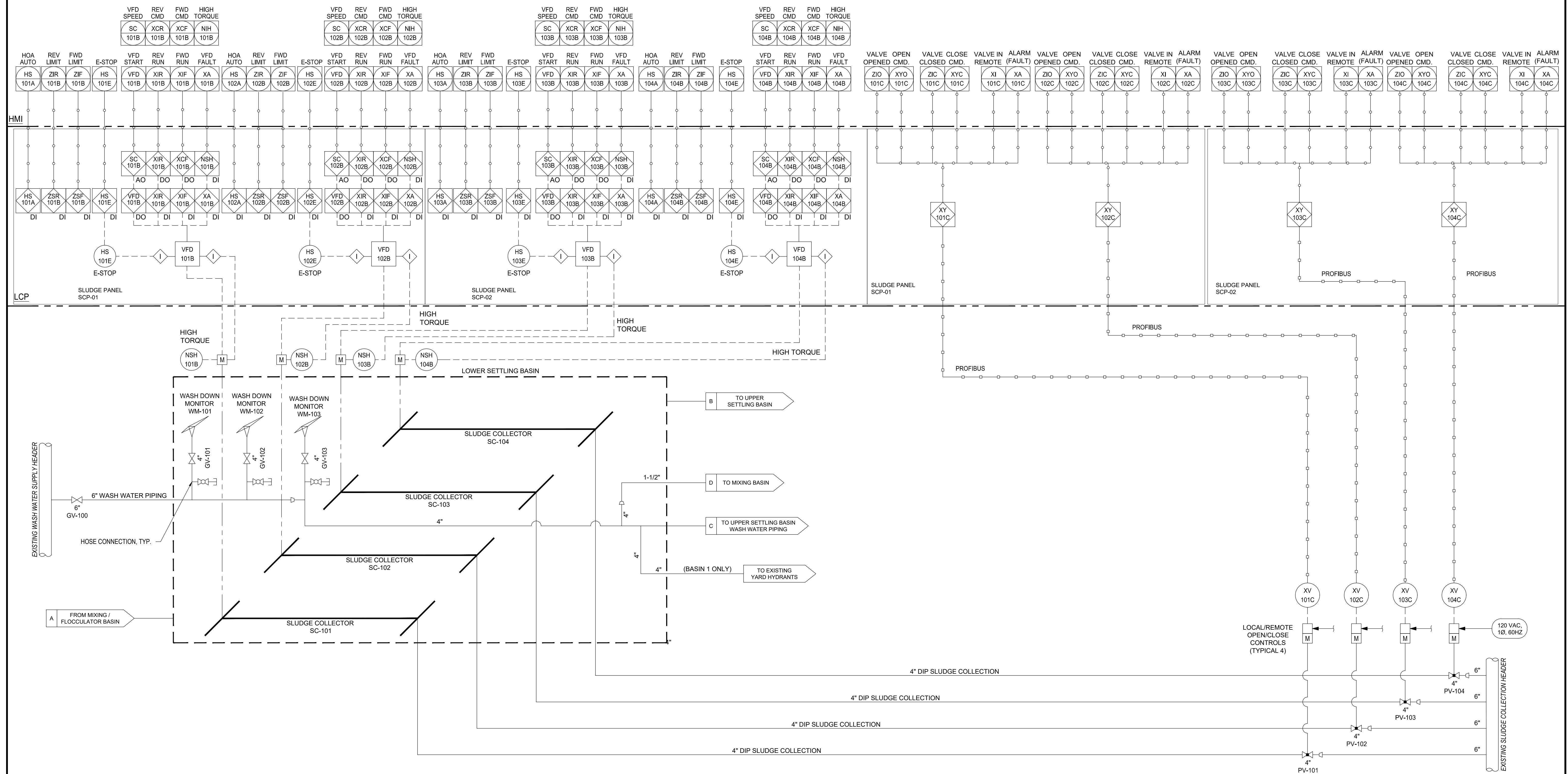


NOTE:  
1. MIXING BASINS AND INFLUENT CHANNELS 2, 3 & 4 NOT SHOWN. TAGGING FOR EACH MIXING BASIN AND INFLUENT CHANNEL WILL BE SIMILAR EXCEPT THE FIRST NUMBER OF EACH TAG WILL CORRESPOND WITH THE BASIN NUMBER.



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REVISIONS			CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 1-4 P&ID – MIXING / FLOCCULATION BASIN	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	03/15/2021	80% DESIGN SUBMISSION		
2	04/02/2021	ISSUED FOR NJDEP PERMIT	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3	06/04/2021	100% REVIEW		
4	09/24/2021	ISSUED FOR BID	DRAWN BY NJE PROJECT ENG'R MAL APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			USE DIMENSIONS ONLY SCALE AS NOTED	
			I-002	



NOTE:

1. LOWER BASINS 2, 3 & 4 NOT SHOWN. TAGGING FOR EACH LOWER BASIN WILL BE SIMILAR EXCEPT THE FIRST NUMBER OF EACH TAG WILL CORRESPOND WITH THE BASIN NUMBER.

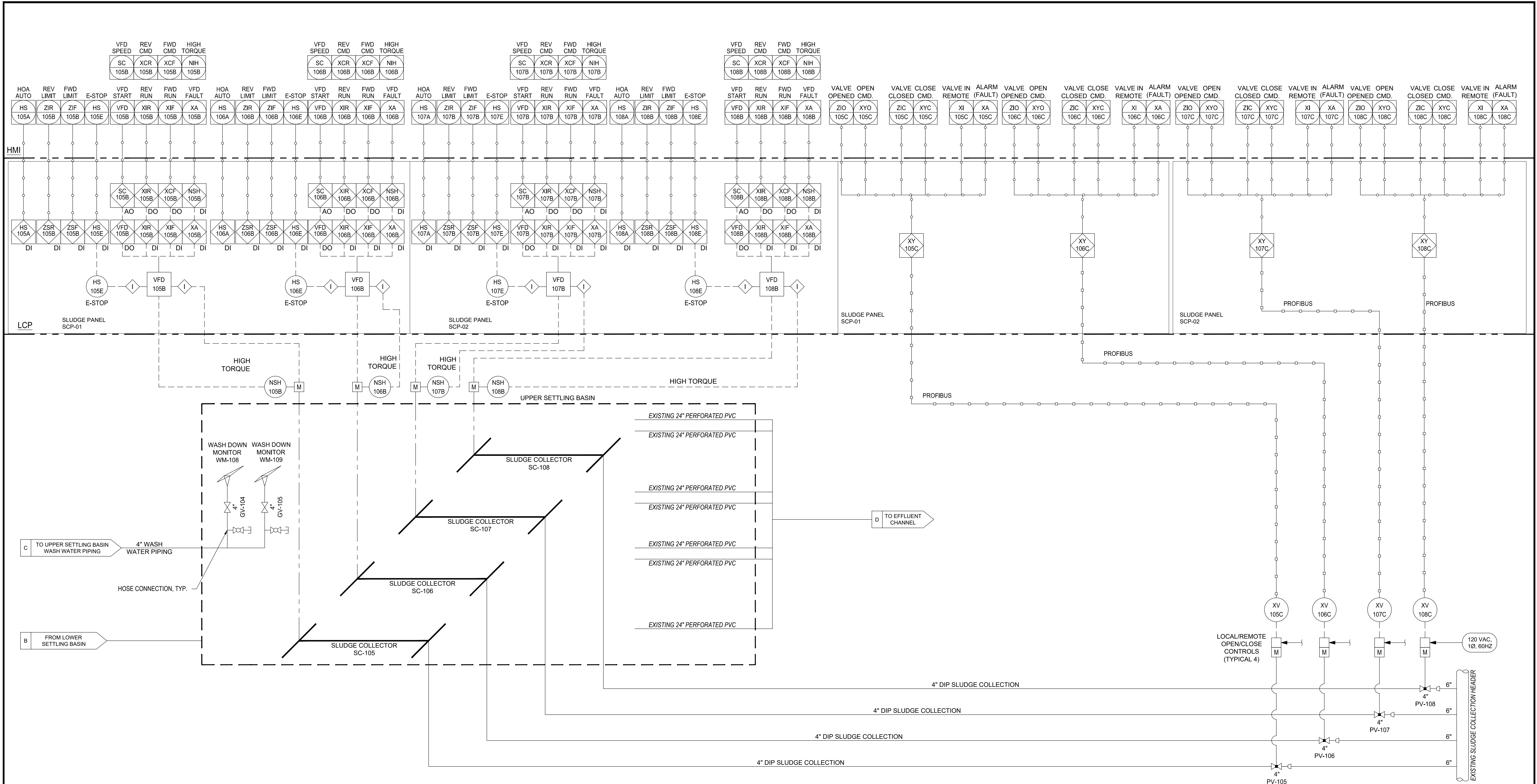
REVISIONS			CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 1-4 P&ID – LOWER SETTLING BASIN		
0	12/07/2020	30% REVIEW			
1	03/15/2021	BOX DESIGN SUBMISSION			
2	04/02/2021	ISSUED FOR NUDEP PERMIT			
3	06/04/2021	100% REVIEW			
4	09/24/2021	ISSUED FOR BID	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDCA 246A27990200		
6			DRAWN BY NJE		
7			PROJECT ENGR MAL		
8			APPROVED JNB		
			DATE 09/24/21		
			PROJECT E6X94500		
			USE DIMENSIONS ONLY		
			SCALE AS NOTED		
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		I-003

# Jacobs

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NOTE:

1. UPPER SETTLING BASINS 2, 3 & 4 NOT SHOWN. TAGGING FOR EACH UPPER SETTLING BASIN WILL BE SIMILAR EXCEPT THE FIRST NUMBER OF EACH TAG WILL CORRESPOND WITH THE BASIN NUMBER.

REVISIONS			
0	12/07/2020	30% REVIEW	
1	03/15/2021	80% DESIGN SUBMISSION	
2	04/02/2021	ISSUED FOR NJDEP PERMIT	
3	06/04/2021	100% REVIEW	
4	09/24/2021	ISSUED FOR BID	
5			
6			
7			
8			

CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 1-4 P&ID – UPPER SETTLING BASIN	
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDCA 246A27990200	
DRAWN BY NJE PROJECT ENG'R MAL APPROVED JNB	DATE 09/24/21 PROJECT E6X94500 USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	I-004

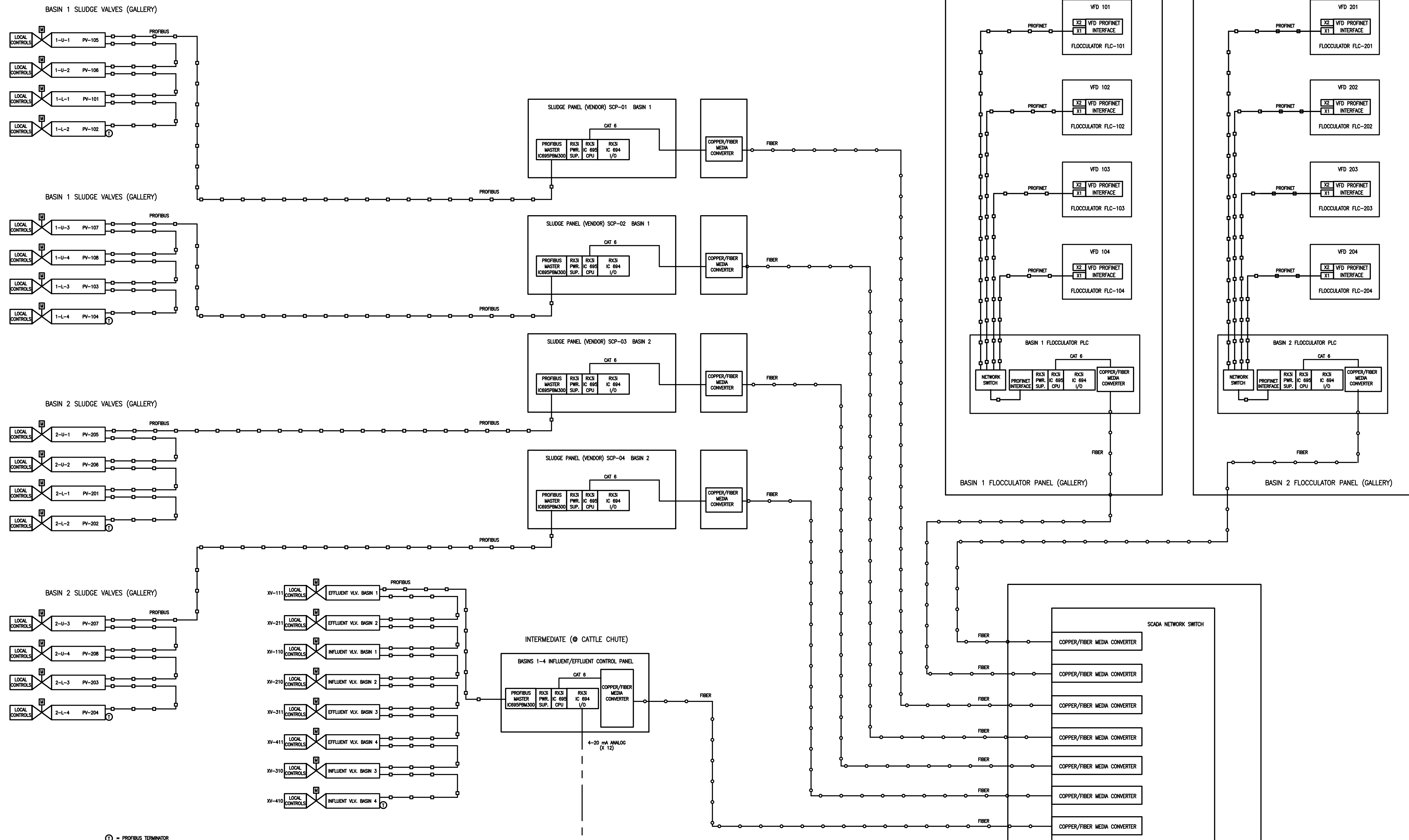
JACOBS

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400







① = PROFIBUS TERMINATOR

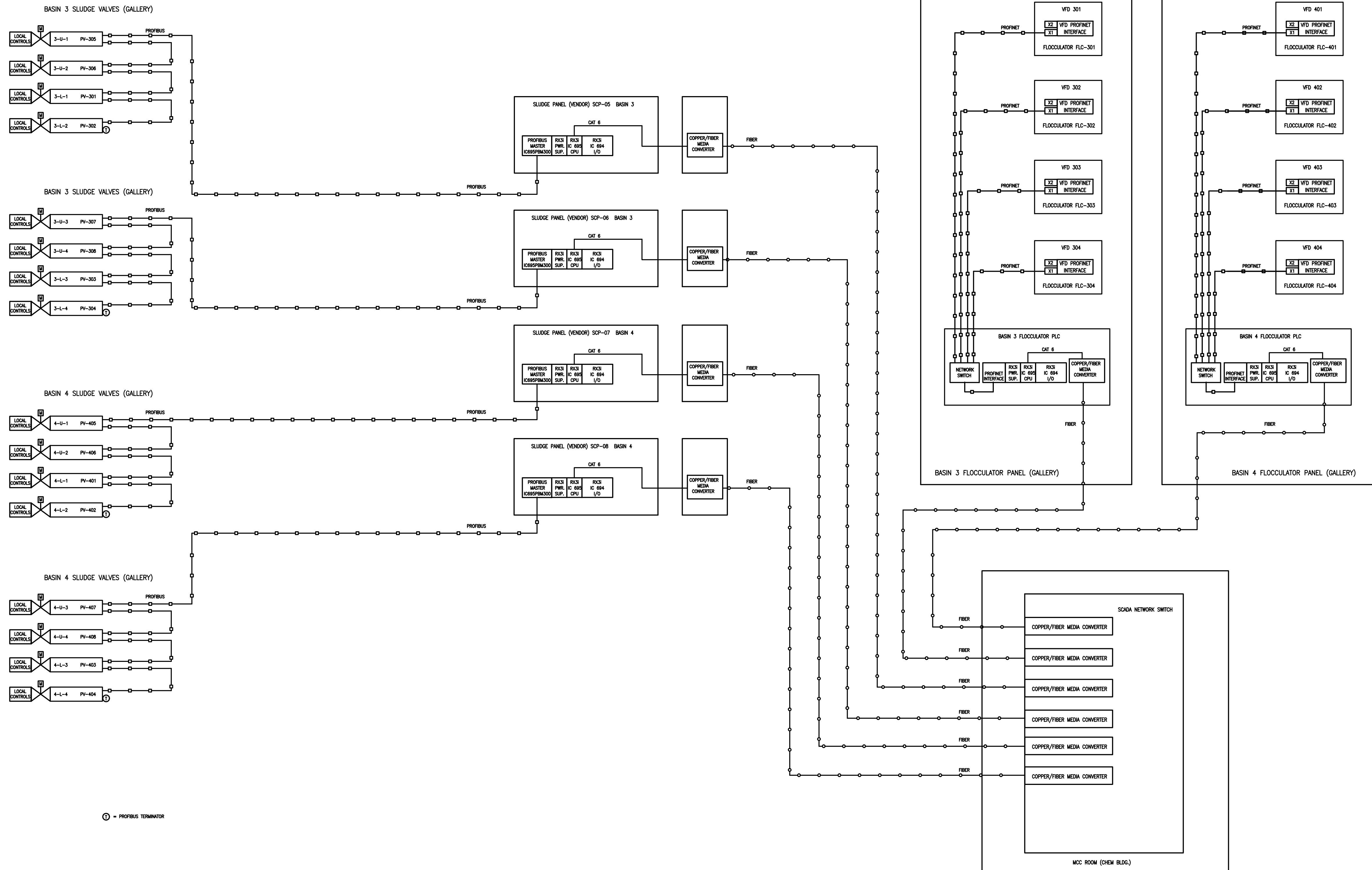
FE/TT-111 (FUTURE)	FLOW VELOCITY BASIN 1	4-20 mA ANALOG	
LE-111 (FUTURE)	FLOW LEVEL BASIN 1	4-20 mA ANALOG	
AT-111	TURBIDITY BASIN 1	4-20 mA ANALOG	
FE/TT-211 (FUTURE)	FLOW VELOCITY BASIN 2	4-20 mA ANALOG	
LE-211 (FUTURE)	FLOW LEVEL BASIN 2	4-20 mA ANALOG	
AT-211	TURBIDITY BASIN 2	4-20 mA ANALOG	
FE/TT-311 (FUTURE)	FLOW VELOCITY BASIN 3	4-20 mA ANALOG	
LE-311 (FUTURE)	FLOW LEVEL BASIN 3	4-20 mA ANALOG	
AT-311	TURBIDITY BASIN 3	4-20 mA ANALOG	
FE/TT-411 (FUTURE)	FLOW VELOCITY BASIN 4	4-20 mA ANALOG	
LE-411 (FUTURE)	FLOW LEVEL BASIN 4	4-20 mA ANALOG	
AT-411	TURBIDITY BASIN 4	4-20 mA ANALOG	

Jacobs

JOSEPH N. BONGIOVANNI, PE

NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 1 AND 2 NETWORK ARCHITECTURE DIAGRAM	
0	03/15/2021	80% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	06/04/2021	100% REVIEW		
2	09/24/2021	ISSUE FOR BID	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY MAL PROJECT ENGR MAL APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE NONE	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			I-010	

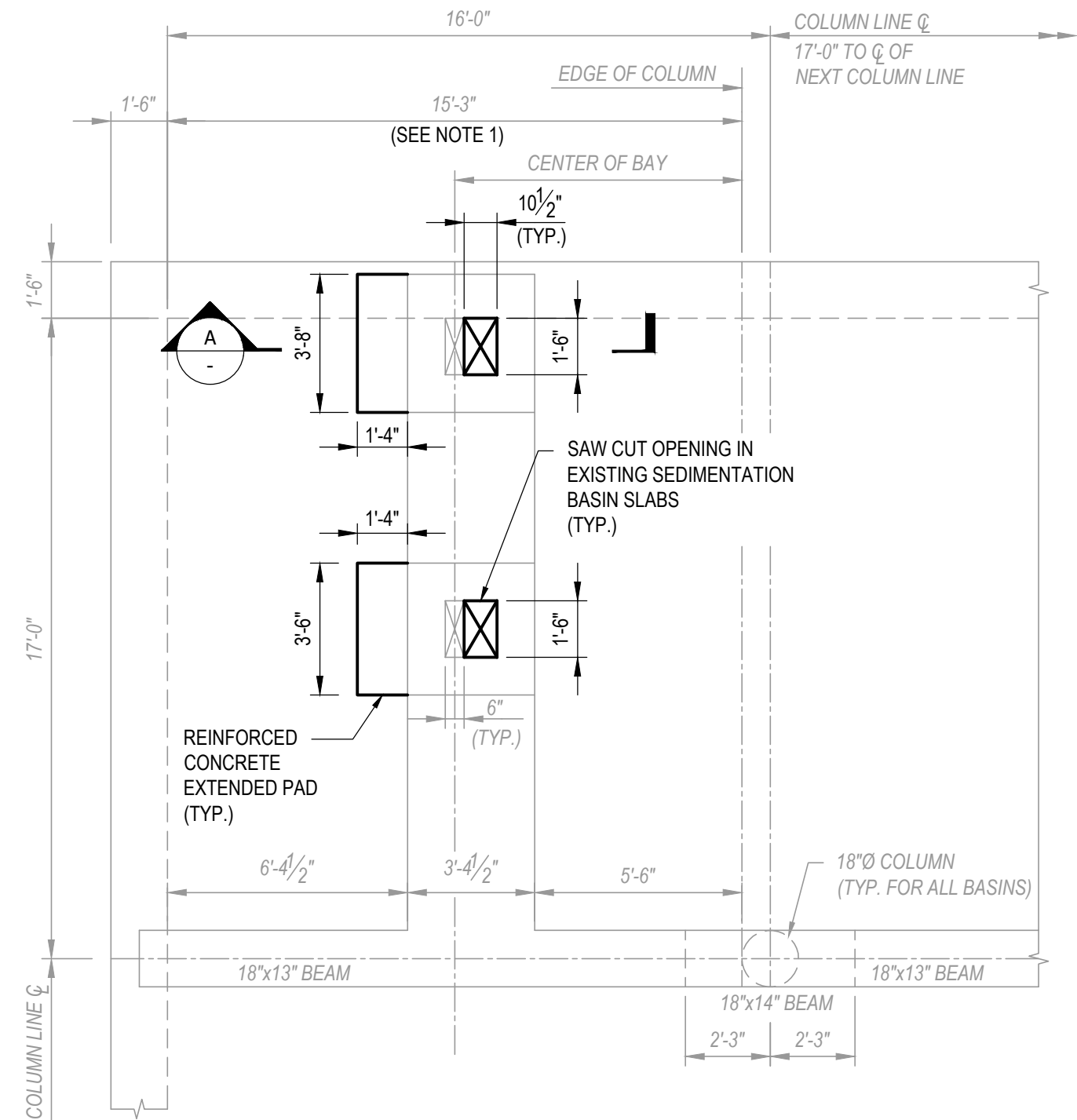
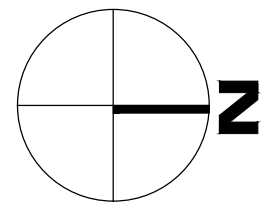


Jacobs

JOSEPH N. BONGIOVANNI, PE

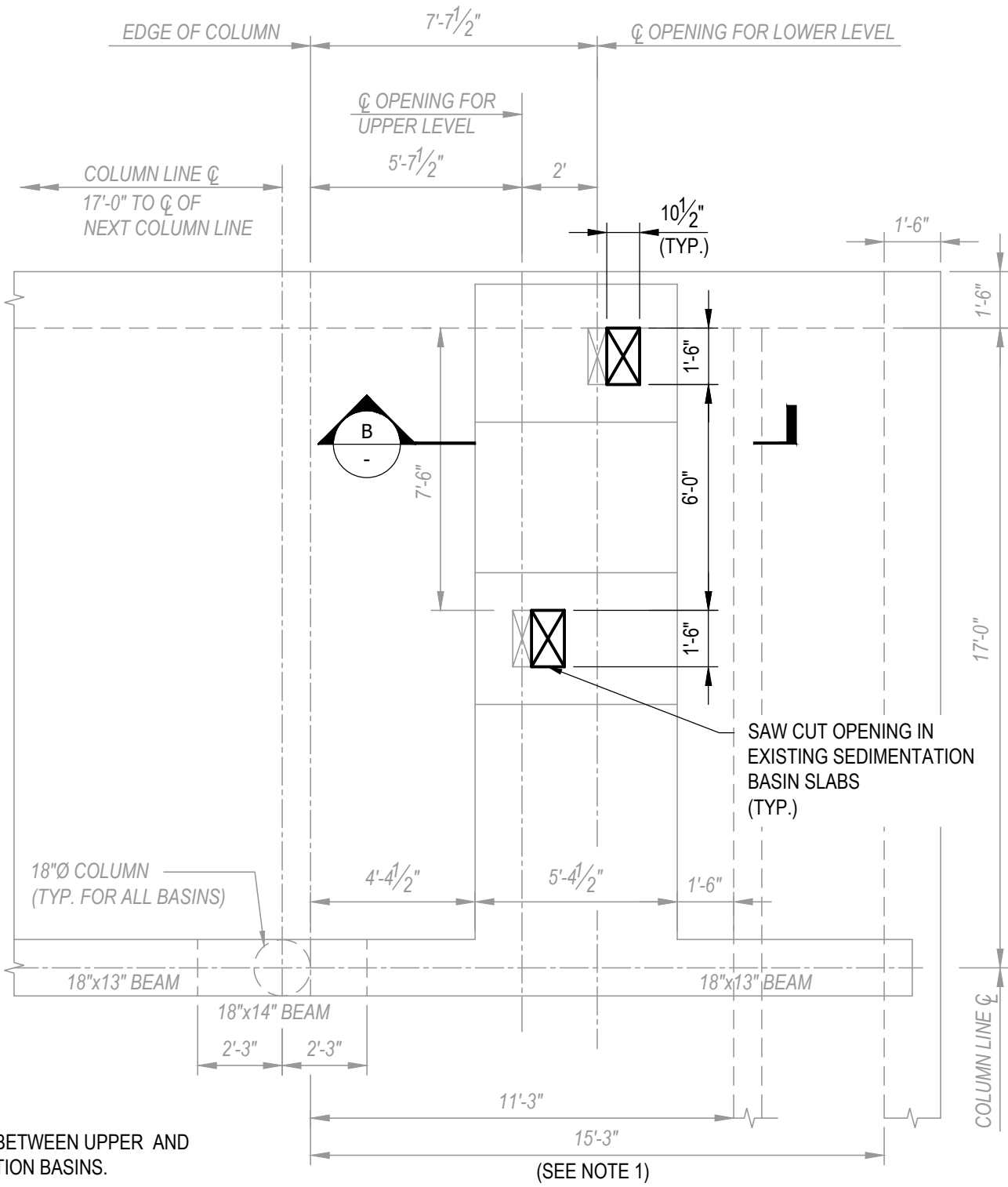
NJPE LICENSE NO. 24GE04377400

REVISIONS			CLARIFIER SYSTEM REHABILITATION INSTRUMENTATION BASINS 3 AND 4 NETWORK ARCHITECTURE DIAGRAM	
0	03/15/2021	80% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	06/04/2021	100% REVIEW		
2	09/24/2021	ISSUE FOR BID	JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY MAL PROJECT ENG'R MAL APPROVED JNB	
5				
6			DATE 09/24/21 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE NONE	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			I-011	



- NOTES:
- BAY WIDTH VARIES BETWEEN UPPER AND LOWER SEDIMENTATION BASINS.
  - TYPICAL FOR 24 DRIVE UNIT LOCATIONS.
  - 1-L-1, 1-L-2, 1-L-3, 1-U-1, 1-U-2, 1-U-3 AND 3-L-1, 3-L-2, 3-L-3, 3-U-1, 3-U-2, 3-U-3 ARE SHOWN. CABLE TRACK TAG NUMBERS FOR BASINS 2 AND 4 ARE MIRRORED.

**PARTIAL PLAN 1**  
SCALE: 1/4"=1'-0"



- NOTES:
- BAY WIDTH VARIES BETWEEN UPPER AND LOWER SEDIMENTATION BASINS.
  - TYPICAL FOR 8 DRIVE UNIT LOCATIONS.
  - 2-L-1, 2-U-1 AND 4-L-1, 4-U-1 ARE SHOWN. CABLE TRACK DRIVE TAG NUMBERS FOR 1-L-4, 1-U-4, 3-L-4 AND 3-U-4 ARE MIRRORED.

**PARTIAL PLAN 2**  
SCALE: 1/4"=1'-0"

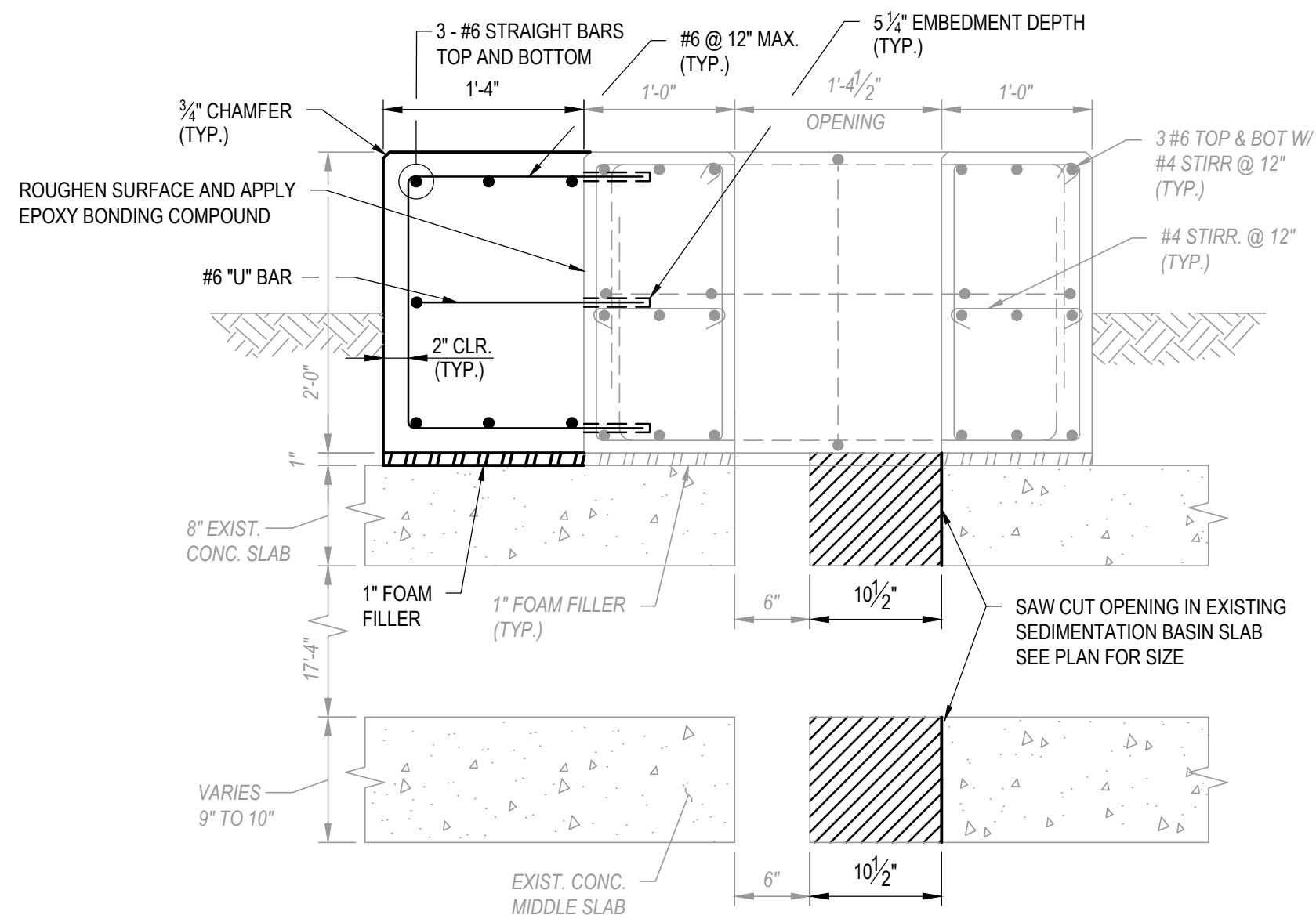
### GENERAL NOTES:

- CABLE TRACK DRIVE UNIT FRAME AND ANCHORAGE TO BE PROVIDED BY THE MANUFACTURER.
- ALL EQUIPMENT PADS, SUPPORTS, AND GEOMETRY SHALL BE CONFIRMED BY THE CONTRACTOR BASED ON FINAL MANUFACTURER SUBMITTAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING DIMENSIONS BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES OR INTERFERENCES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- CONCRETE - F'C = 4,000 PSI @ 28 DAYS.
- UNLESS NOTED OTHERWISE REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM 615 GRADE 60 (FY=60 KSI).
- ROUGHEN TO AN AMPLITUDE OF 1/4" AND CLEAN ALL EXISTING CONCRETE SURFACES WHICH WILL BE IN CONTACT WITH NEW CONCRETE AND COAT WITH SIKADUR 32, HI-MOD EPOXY BONDING COMPOUND BY SIKA CORPORATION (OR APPROVED EQUAL).
- ADJUST REINFORCEMENT BAR SPACING AS NECESSARY TO AVOID POTENTIAL CONFLICTS WITH EXISTING REINFORCEMENT.
- ADHESIVE ANCHOR SYSTEM FOR DOWELS AND ANCHOR BOLTS SHALL BE HILTI HIT-HY 200 (OR APPROVED EQUAL).
- EPOXY GROUT SHALL BE USED IN SUBMERGED AREAS AND NON-SHRINK CEMENTITIOUS GROUT TO BE USED IN DRY AREAS ACCORDING TO SECTION 03 62 00B GROUTING SPECIFICATIONS.
- WELDING INSPECTION SHALL VERIFY THAT ALL WELDS AND WELDING PROCEDURES MEET THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY (AWS) D1.6/D1.6M, STRUCTURAL WELDING CODE - STAINLESS STEEL.
- PIPE RAILINGS, ACCESSORIES, INCLUDING RAILING COMPONENTS, FLANGES, WALL BRACKETS, ANCHOR PLATES SHALL CONFORM TO AISI TYPE 316L, STAINLESS STEEL.
- ACCESS TO INTERIOR BASINS ARE LIMITED TO EXISTING TOPSIDE 3'-0" X 3'-0" ACCESS ROOF HATCHES AS SHOWN ON DRAWINGS, AS WELL AS PROPOSED SUBMARINE DOOR INSTALLATION. CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DELIVERY OF MATERIALS THROUGH LIMITED ACCESS POINTS THROUGHOUT THE FACILITY.

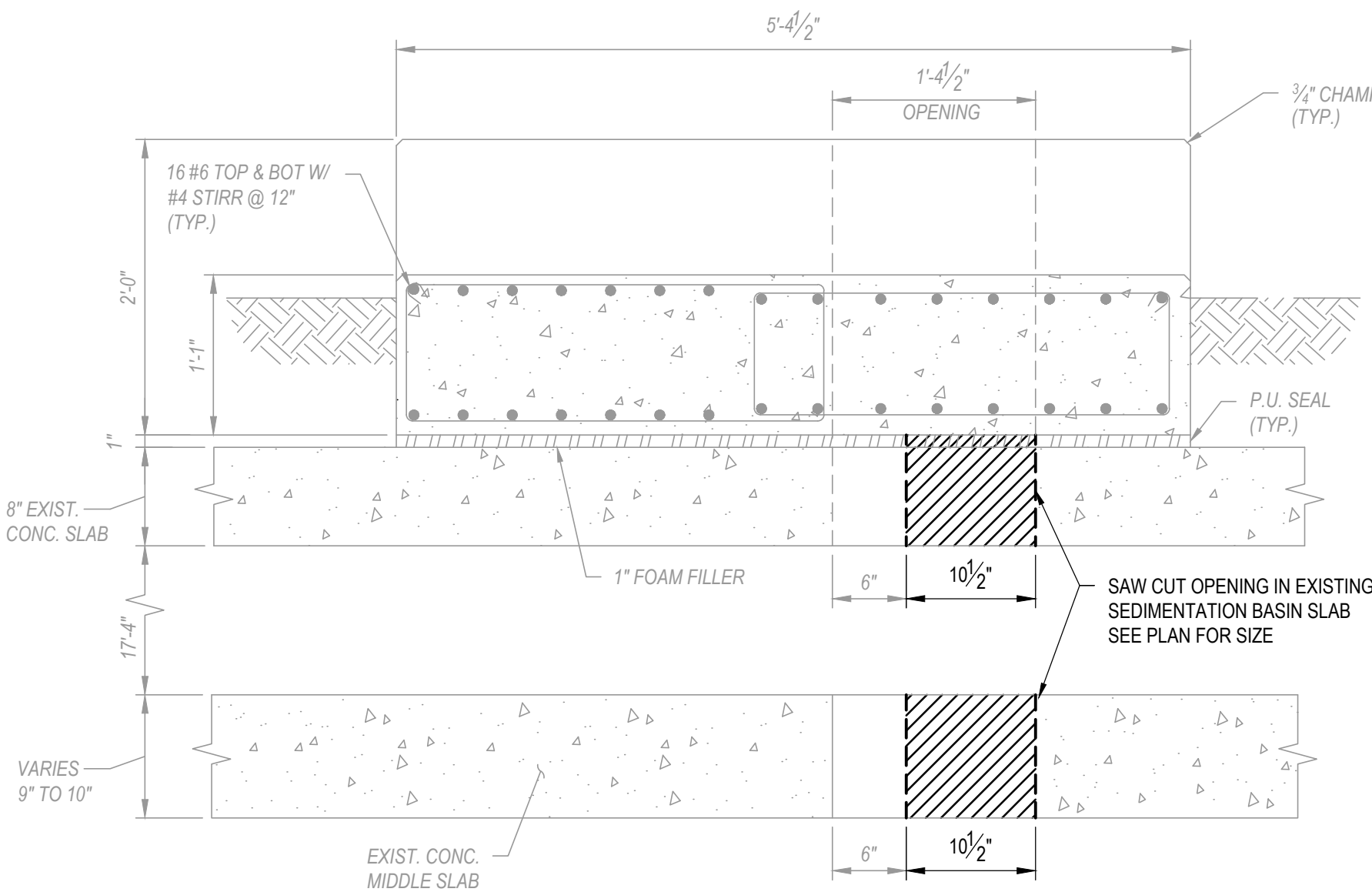
### ABBREVIATIONS:

F.R.P.	FIBER REINFORCED POLYMER
S.S.	STAINLESS STEEL
E.F.	EACH FACE
EXIST.	EXISTING
CONC.	CONCRETE
CLR.	CLEAR
TYP.	TYPICAL
DIA.	DIAMETER
E.P.S.	EXPANDED POLYSTYRENE
REINF.	REINFORCED
O.D.	OUTSIDE DIAMETER

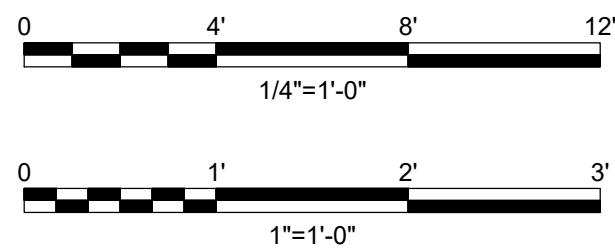
### LEGEND:



**SECTION A**  
SCALE: 1"=1'-0"



**SECTION B**  
SCALE: 1"=1'-0"

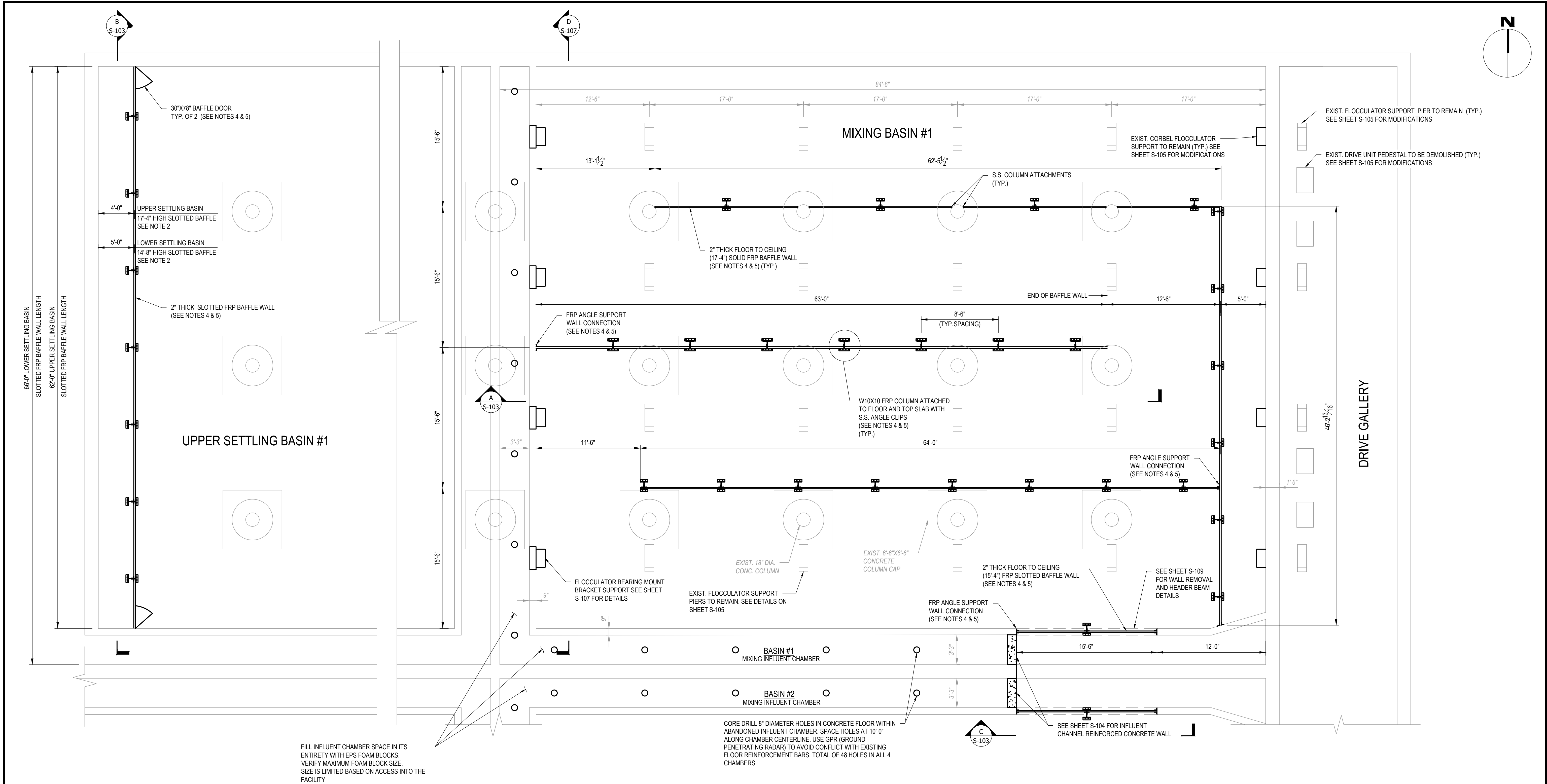


**Jacobs**

**LUIS S. DUARTE, PE**

NJPE LICENSE NO. 24GE04642900

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 CABLE TRACK DRIVE MODIFICATIONS AND GENERAL NOTES	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2				
3				
4				
5				
6				
7				
8			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
DRAWN BY CA PROJECT ENG'R LD APPROVED JNB			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			S-101	

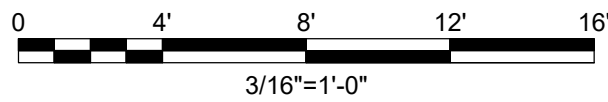


NOTES:

1. BAFFLE WALLS SHOWN FOR MIXING BASIN #1 AND UPPER SETTLING BASIN #1. BASINS 2-4 SIMILAR LAYOUT.
2. SLOTTED BAFFLE WALL IN UPPER SETTLING SHOWN. LOWER SETTLING BASIN SIMILAR.
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BASIN CONDITIONS AND DIMENSIONS PRIOR TO BAFFLE FABRICATION.
4. ALL FRP BAFFLE WALLS, BAFFLE DOORS, SUPPORTS AND CONNECTIONS TO BE DESIGNED BY THE BAFFLE WALL MANUFACTURER.
5. CONTRACTOR TO SUBMIT SIGNED AND SEALED CALCULATIONS AND DRAWINGS OF THE BAFFLE WALL SYSTEM TO THE ENGINEER FOR APPROVAL.

BAFFLE LAYOUT PLAN

SCALE: 3/16"=1'-0"



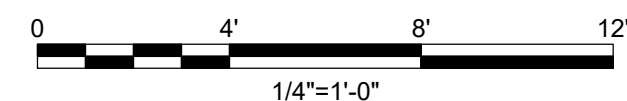
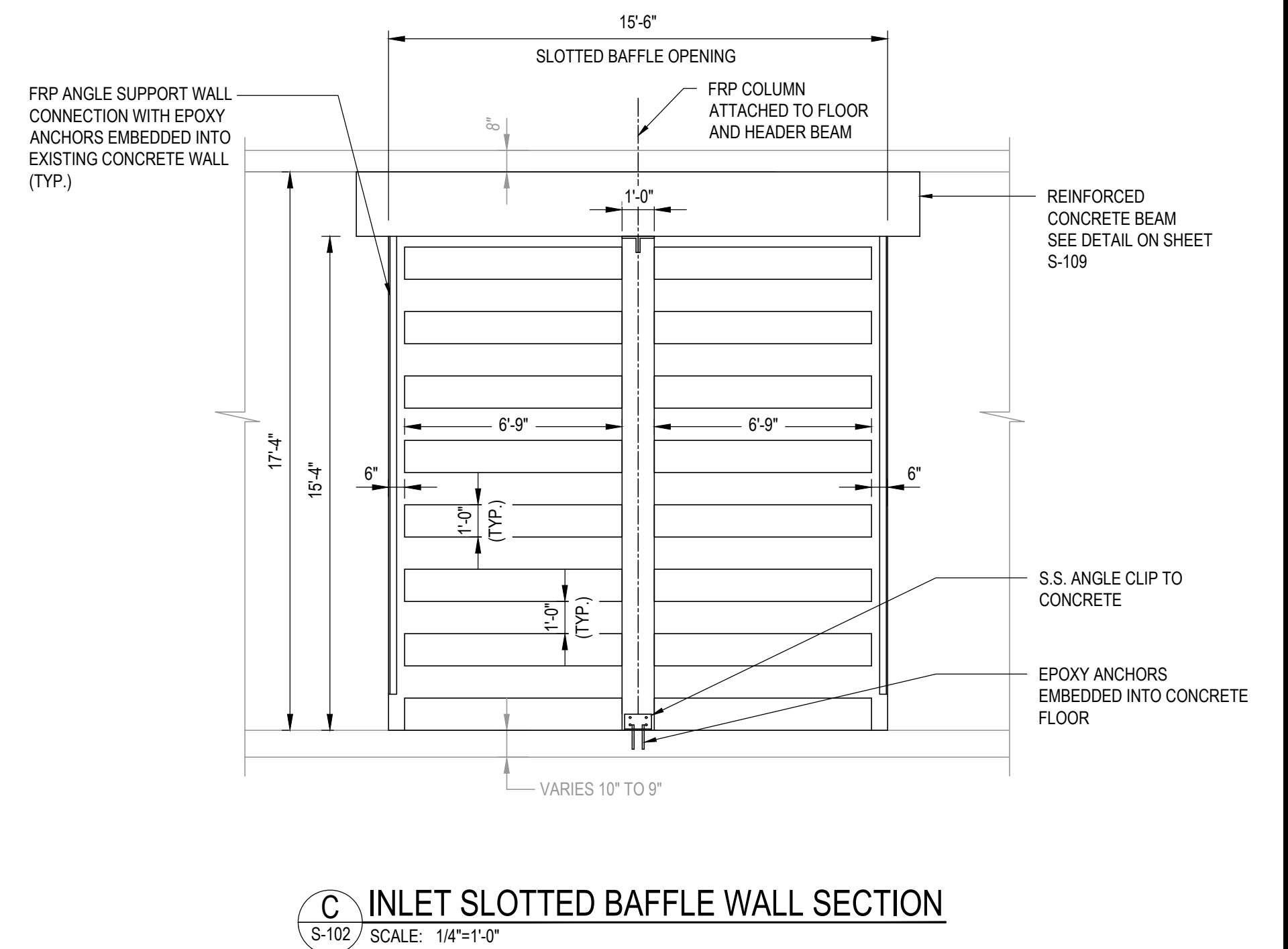
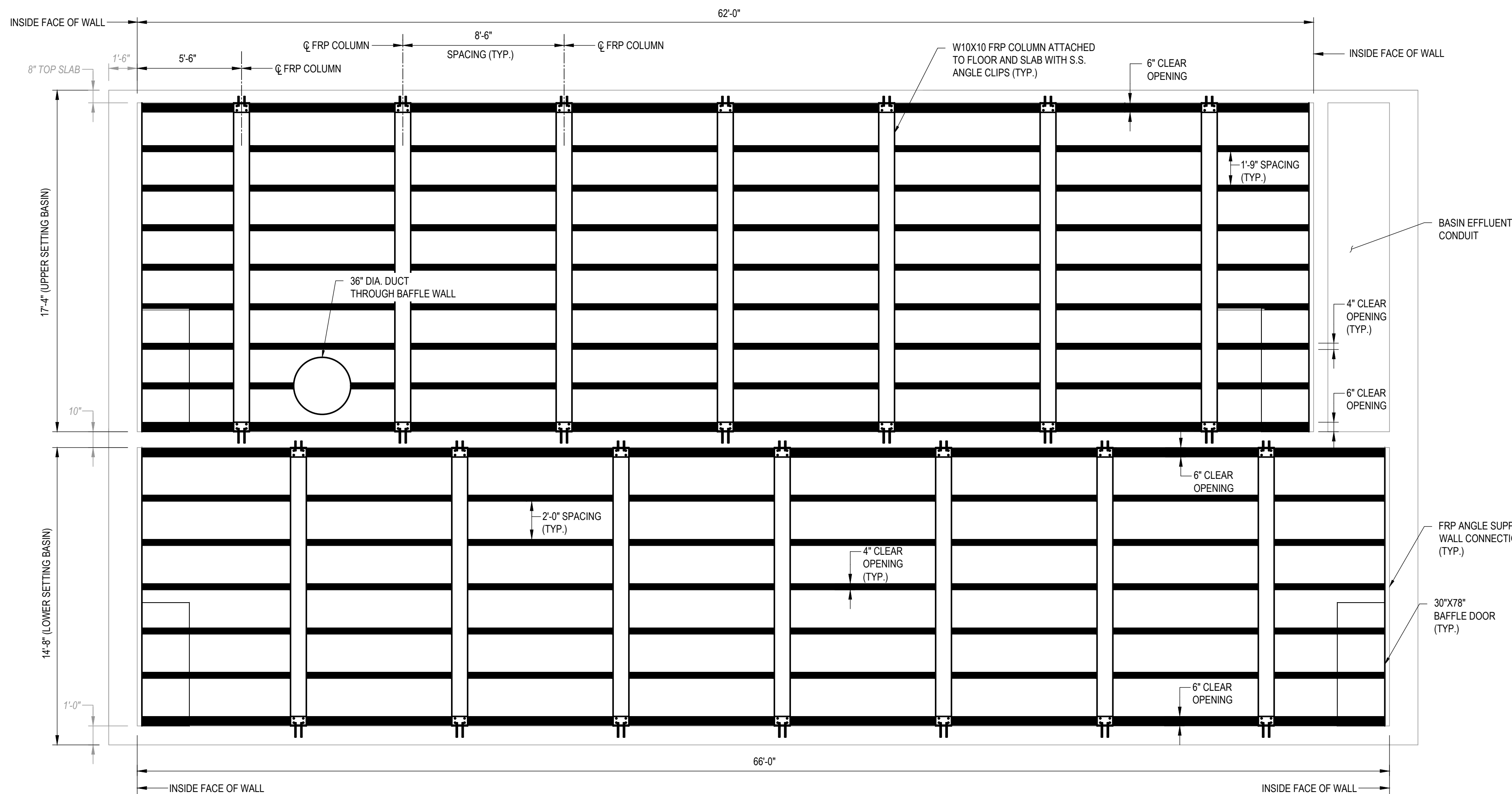
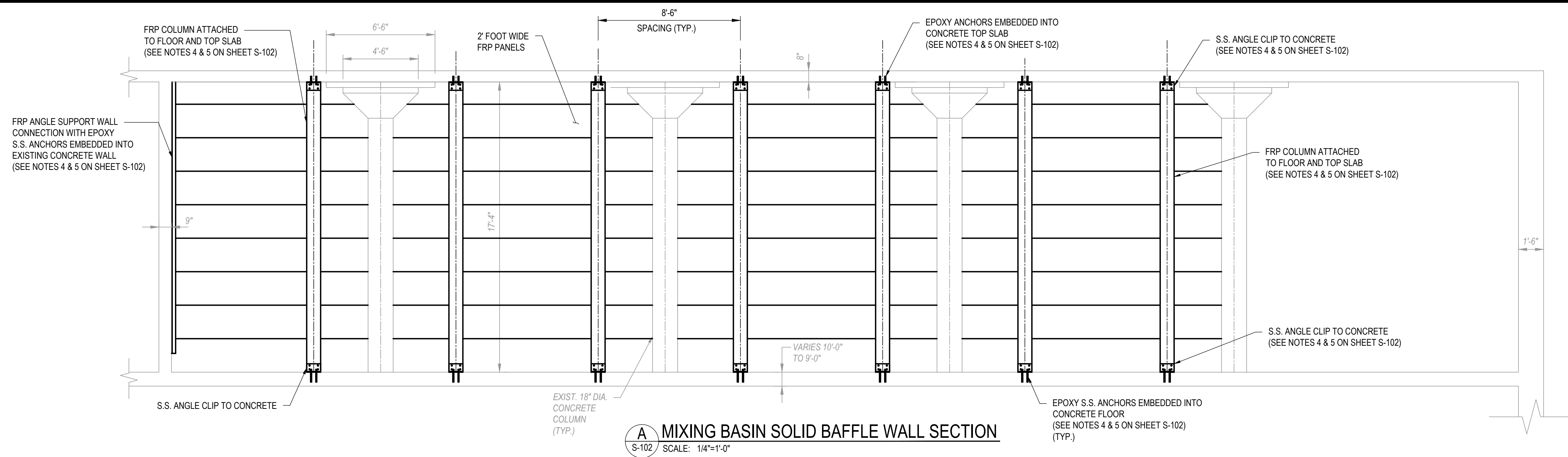
Jacobs

LUIS S. DUARTE, PE

NJPE LICENSE NO. 24GE04642900

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 BAFFLE WALLS-LAYOUT	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200  DRAWN BY CA PROJECT ENG'R LD APPROVED JNB  DATE 06/04/2021 PROJECT E6X94500  USE DIMENSIONS ONLY SCALE AS NOTED	
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USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			S-102	



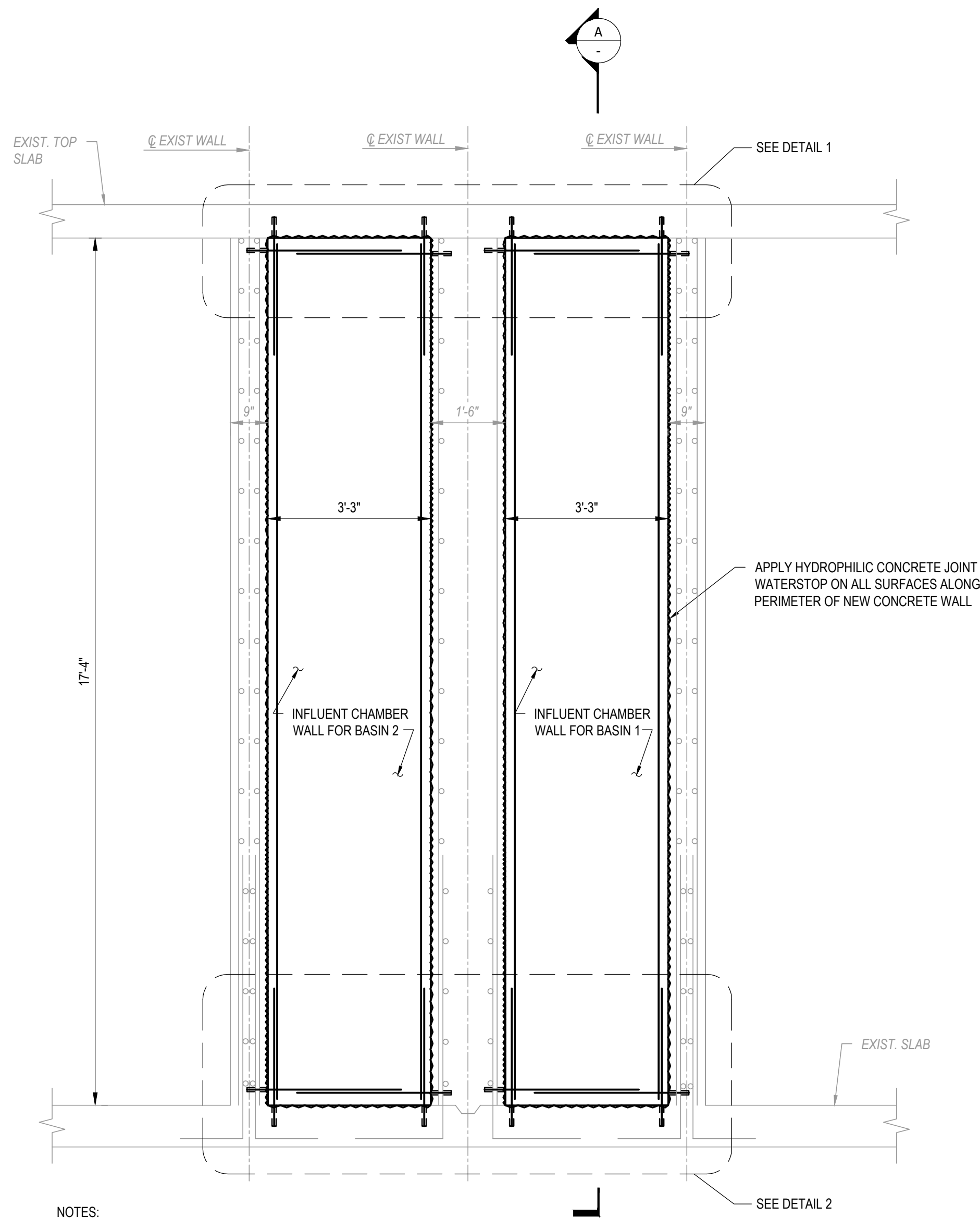


**Jacobs**

**LUIS S. DUARTE, PE**

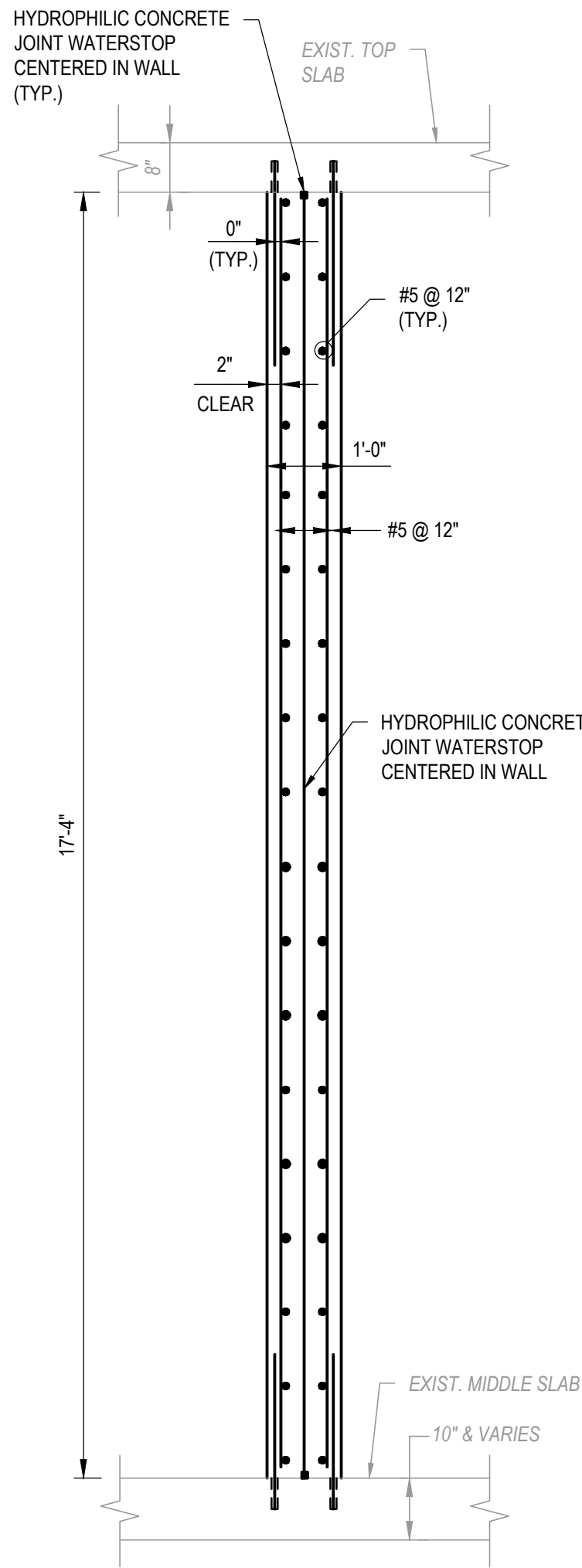
NJPE LICENSE NO. 24GE04642900

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 BAFFLE WALLS-SECTIONS	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY CA PROJECT ENG'R LD APPROVED JNB	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
			USE DIMENSIONS ONLY SCALE AS NOTED	
			S-103	

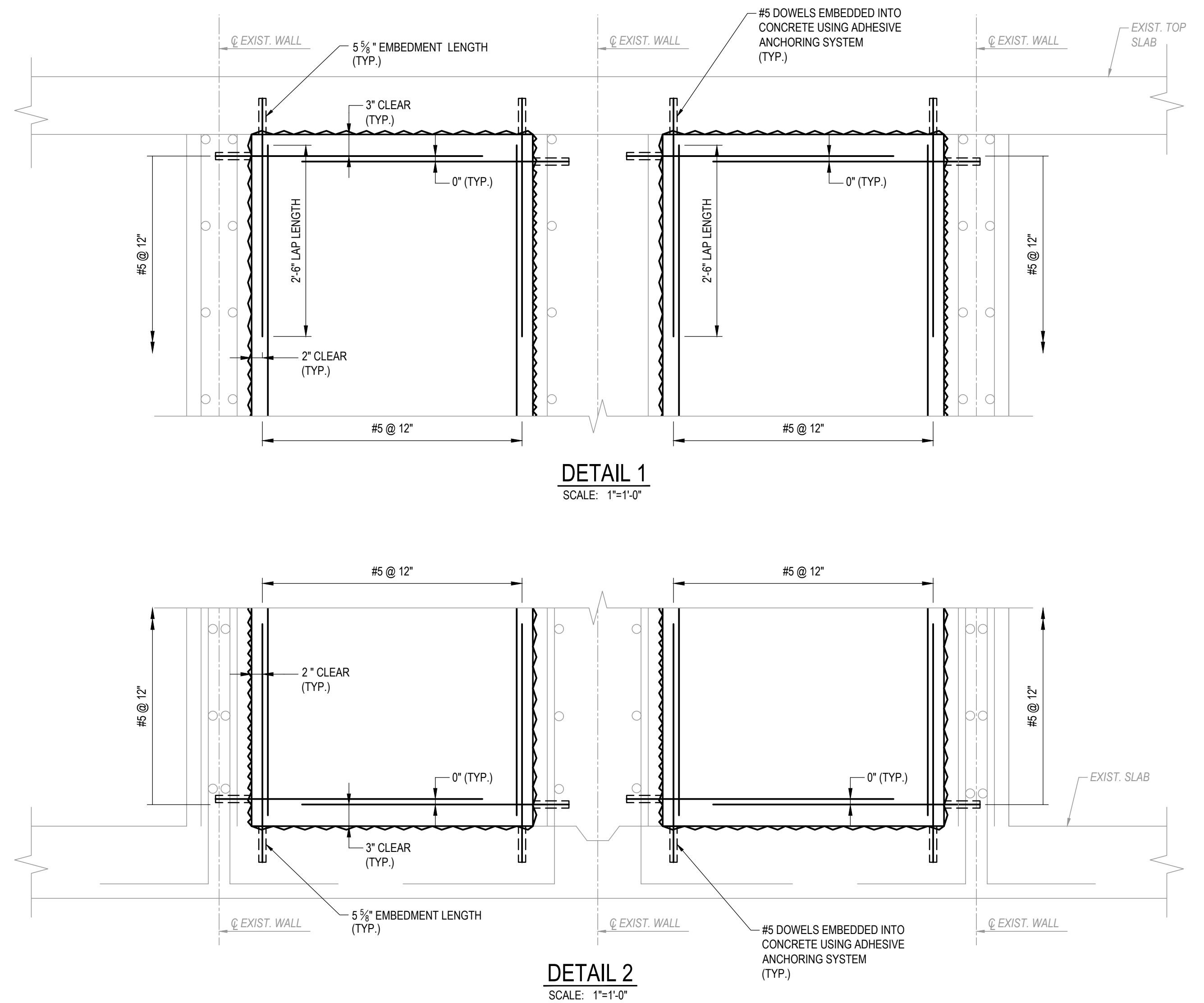


NOTES:  
1. INFLUENT CHANNEL WALL FOR MIXING BASINS 1 AND 2 SHOWN. WALL FOR BASINS 3 AND 4 ARE SIMILAR.

**INFLUENT CHANNEL WALL ELEVATION**  
SCALE: 1/2"=1'-0"



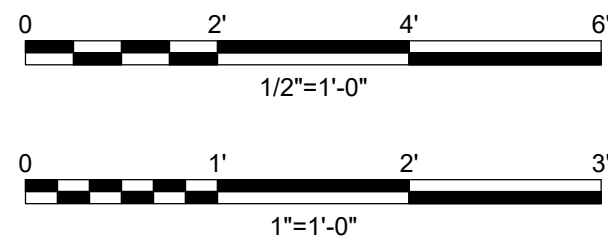
**SECTION A**  
SCALE: 1/2"=1'-0"



**DETAIL 1**  
SCALE: 1"=1'-0"

**DETAIL 2**  
SCALE: 1"=1'-0"

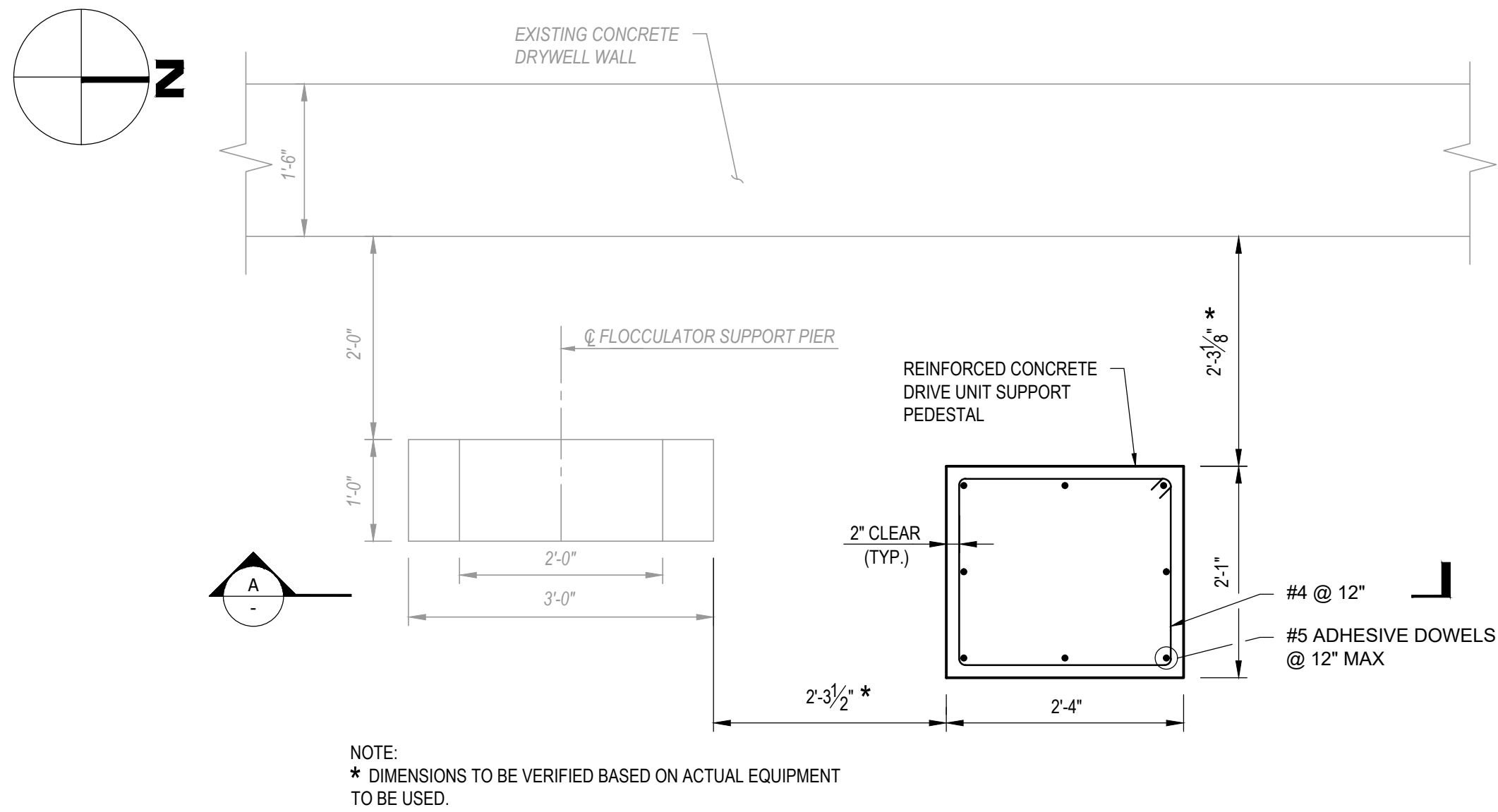
- NOTES:
- APPLICATION OF WATERSTOP ADHESIVE AND INSTALLATION SHALL FOLLOW MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
  - CONTRACTOR SHALL SCAN SURFACES USING A NON-DESTRUCTIVE (NDT) DEVICE TO LOCATE EXISTING REINFORCEMENT TO AVOID DRILLING INTERFERENCE. ADJUST REINFORCEMENT BAR SPACING AS NECESSARY TO AVOID POTENTIAL CONFLICTS WITH EXISTING REBARS. SPACING OF REINFORCEMENT SHALL NOT EXCEED 12 INCHES ON CENTER.
  - ALL REINFORCING STEEL AND DOWELS SHALL BE EPOXY COATED.



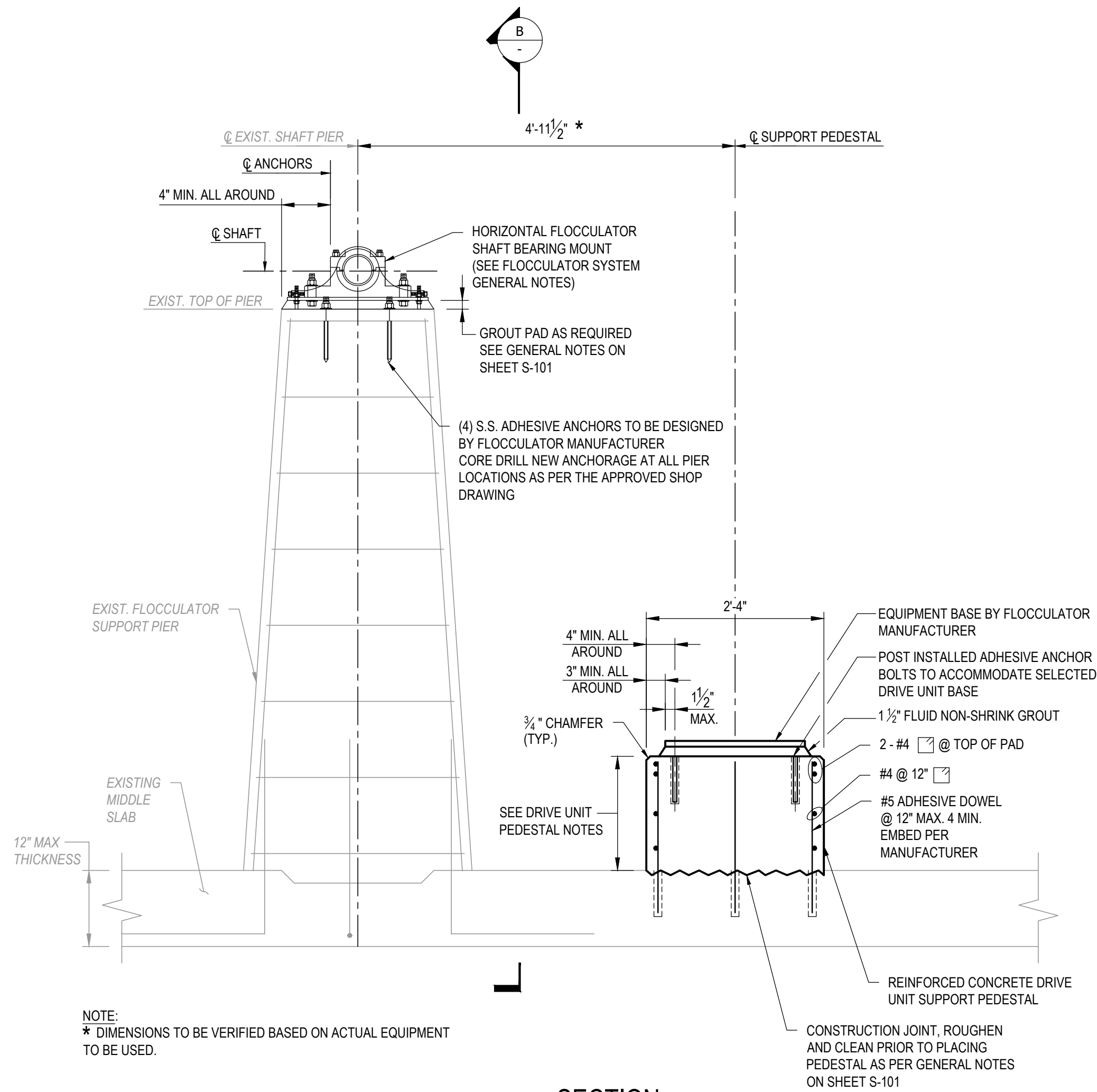
**Jacobs**

**LUIS S. DUARTE, PE**  
NJPE LICENSE NO. 24GE04642900

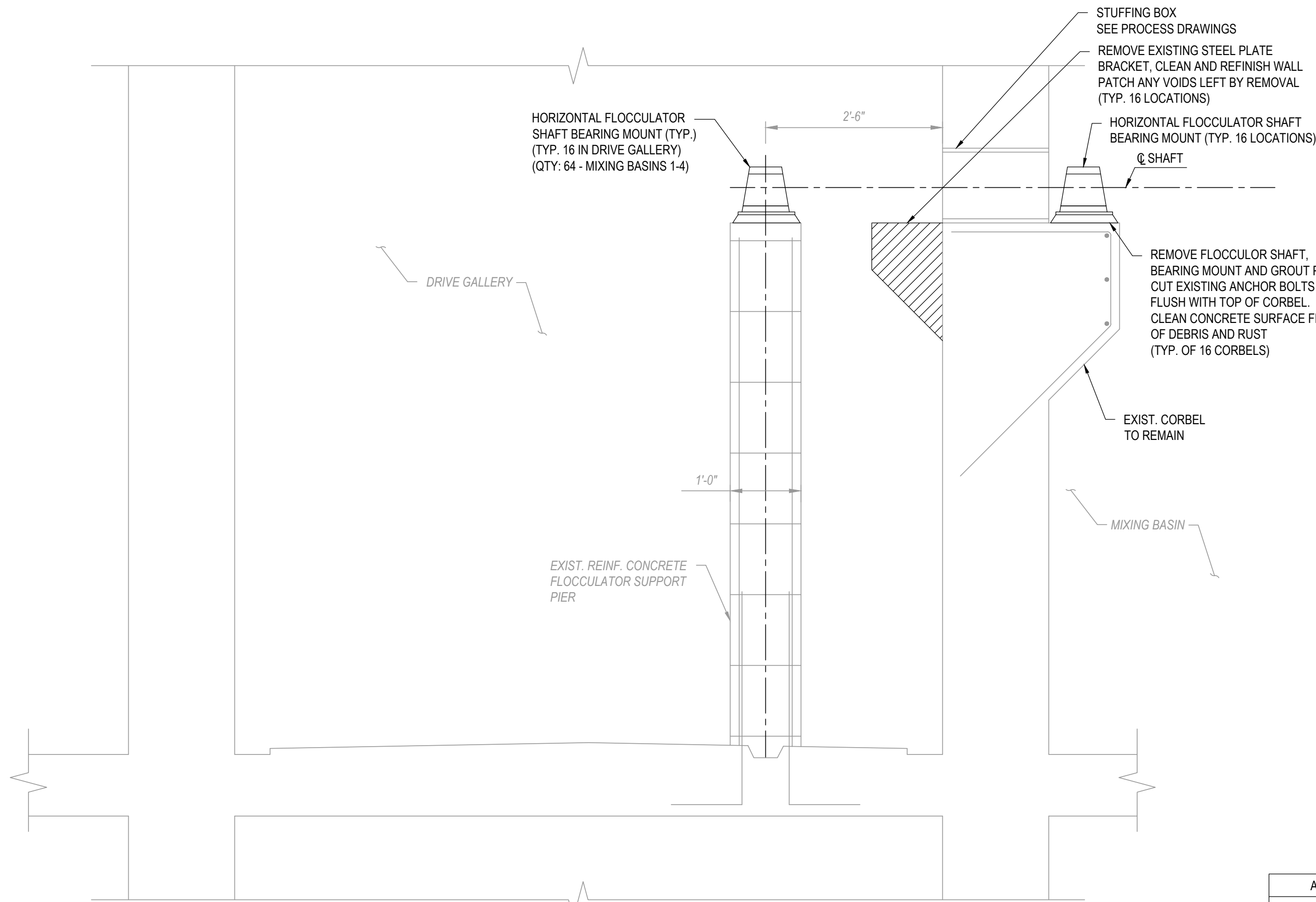
REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 REINFORCED CONCRETE WALL	
0	06/04/2021	100% DESIGN SUBMISSION		
1	09/24/2021	ISSUED FOR BID		
2				
3			NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
4				
5			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
6				
7				
8				
			DRAWN BY CA PROJECT ENG'R LD APPROVED JNB	
			DATE 06/04/2021 PROJECT E6X94500	
			USE DIMENSIONS ONLY SCALE AS NOTED	
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	S-104



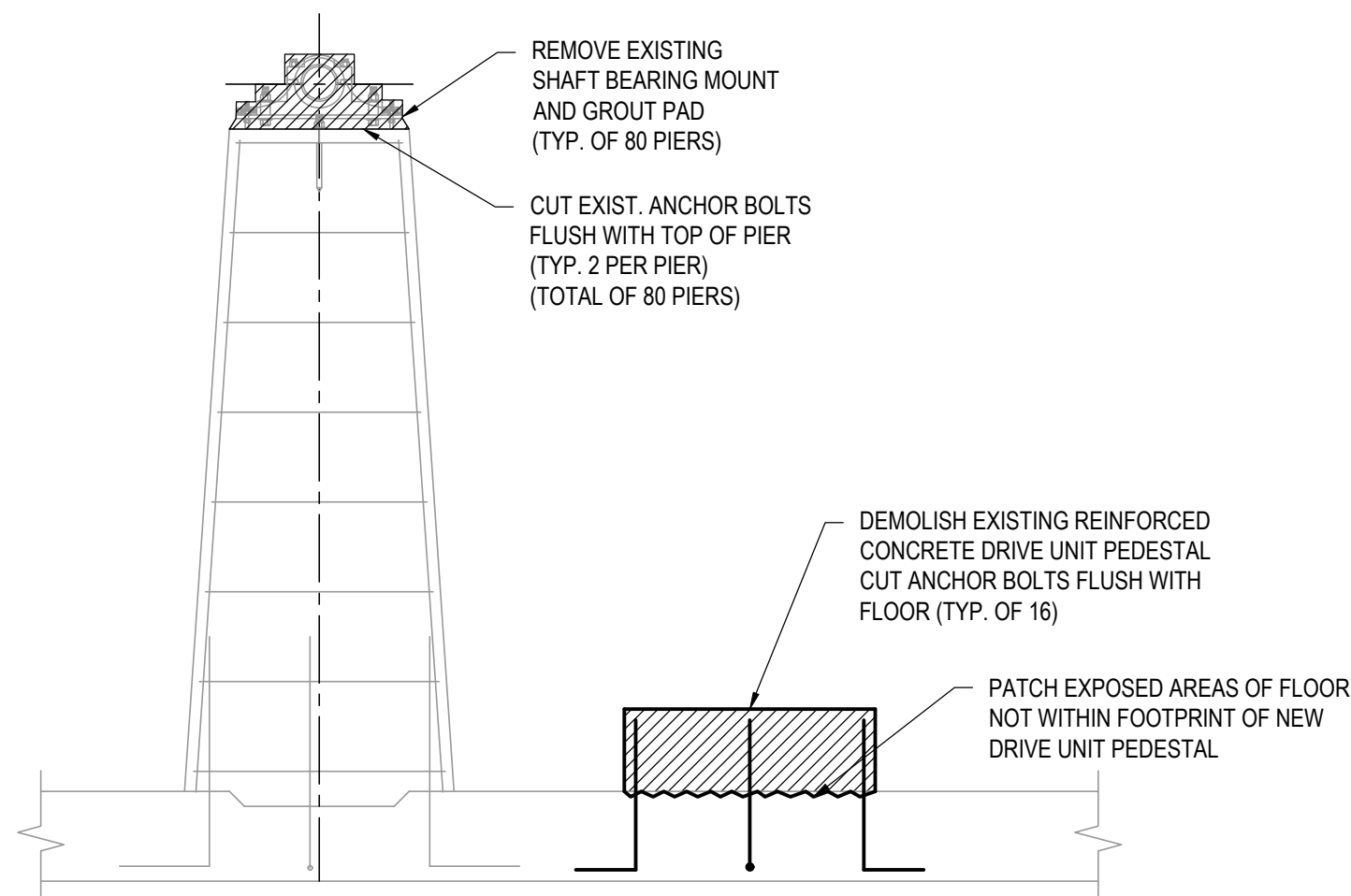
DRIVE GALLERY PARTIAL PLAN  
SCALE: 3/4"=1'-0"



SECTION A  
SCALE: 3/4"=1'-0"



SECTION B  
SCALE: 3/4"=1'-0"



DEMOLITION DETAIL  
SCALE: 1/2"=1'-0"

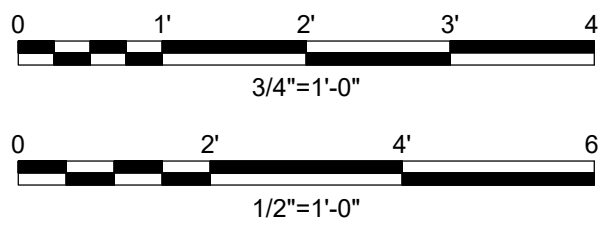
FLOCCULATOR SYSTEM GENERAL NOTES:

1. INSTALL NEW BEARING MOUNT FOLLOWING MANUFACTURER'S INSTALLATION AND ALIGNMENT PROCEDURES.
2. PROVIDE GROUT PAD UNDER BEARING MOUNT FOLLOWING MANUFACTURER'S INSTALLATION REQUIREMENTS AND GENERAL NOTES ON SHEET S-101.
3. VERIFY ALL CRITICAL DIMENSIONS OF NEW DRIVE UNIT SUPPORT PEDESTAL WITH APPROVED SHOP DRAWINGS.
4. HORIZONTAL FLOCCULATOR SHAFT BEARING MOUNT, DRIVE UNIT AND DRIVE UNIT ANCHORAGE TO BE DESIGNED BY FLOCCULATOR MANUFACTURER.

DRIVE UNIT PEDESTAL NOTES:

1. PEDESTAL SIZE SHALL BE MINIMUM INDICATED OR AS SHOWN ON THE PLANS OR AS INDICATED BY THE MANUFACTURER AND APPROVED BY THE ENGINEER.
2. THE SIZE, NUMBER, TYPE, LOCATION, AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER AND AS APPROVED BY THE ENGINEER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A TEMPLATE OR OTHER ACCEPTABLE MEANS, MATCHING THE BASE PLATE, WHILE PEDESTAL IS BEING PLACED.
3. ANCHOR BOLT SLEEVES SHALL BE USED TO PROVIDE MINIMUM ANCHOR BOLT MOVEMENT OF 1/2" IN ALL HORIZONTAL DIRECTIONS. THE MINIMUM SLEEVE LENGTH SHALL BE 8 TIMES THE BOLT DIAMETER.
4. ANCHOR BOLT SLEEVES SHALL HAVE A MINIMUM INTERNAL DIAMETER 1" GREATER THAN BOLT DIAMETER AND A MAXIMUM INTERNAL DIAMETER 3" GREATER THAN ANCHOR BOLT DIAMETER. SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT AFTER BOLTS ARE ALIGNED.
5. EQUIPMENT BASES SHALL BE INSTALLED LEVEL UNLESS INDICATED OTHERWISE.
6. WEDGES, SHIMS, OR LEVELING NUTS SHALL BE USED TO SUPPORT THE BASE WHILE THE GROUT IS PLACED.
7. HEIGHT OF PEDESTALS SHALL BE MINIMUM REQUIRED FOR ANCHOR BOLT CLEARANCE TO KEEP ANCHOR BOLT ABOVE SUPPORTING SLAB (SEE TABLE BELOW).
8. AT CONTRACTOR'S OPTION, CONCRETE ANCHORS MAY BE USED IN LIEU OF CAST-IN-PLACE ANCHOR BOLTS FOR EQUIPMENT ANCHOR BOLTS LESS THAN 3/4" DIAMETER WHEN APPROVED BY THE EQUIPMENT MANUFACTURER AND APPROVED BY THE ENGINEER. ANCHORS SHALL BE INSTALLED WITH 4" MINIMUM EDGE DISTANCE IN EACH DIRECTION.

AB DIA (IN.)	1/2	5/8	3/4	7/8	1	1 1/4	1 3/8	1 1/2	1 3/4	2
MIN PAD HT (IN.)	7	8 1/2	10	11	12 1/2	15	16 1/2	18	21	24

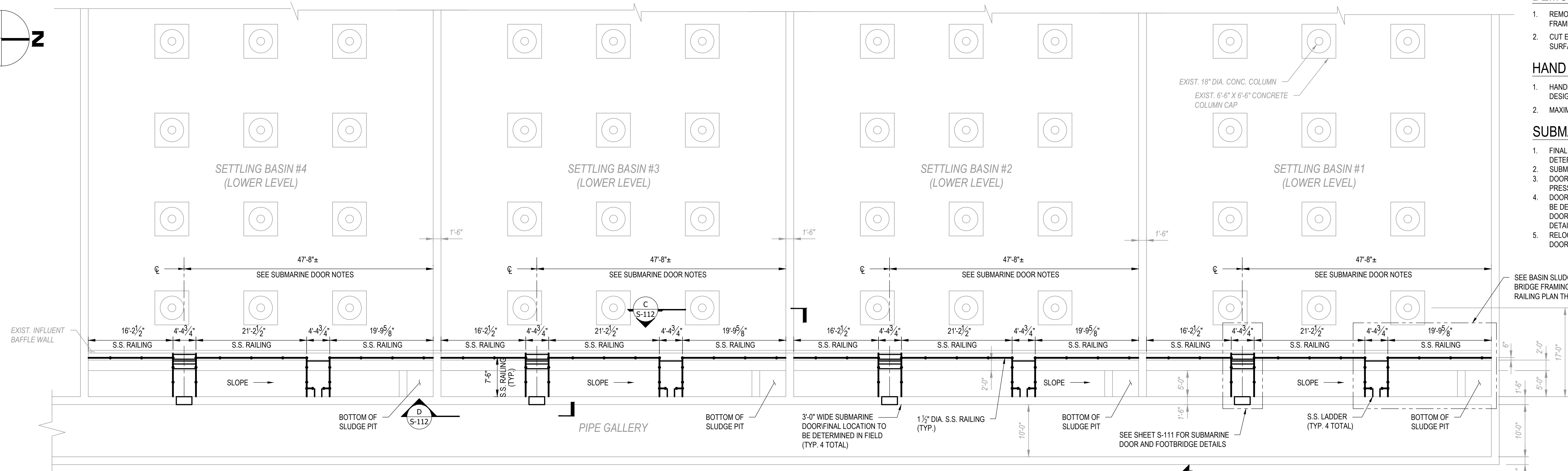
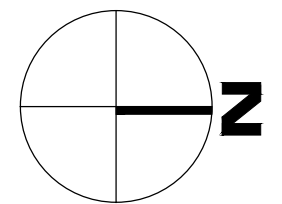


Jacobs

LUIS S. DUARTE, PE  
NJPE LICENSE NO. 24GE04642900

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 HORIZONTAL FLOCCULATOR & DRIVE SUPPORT	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
4			DRAWN BY CA PROJECT ENG'R LD APPROVED JNB	
5				
6			DATE 06/04/2021 PROJECT E6X94500	
7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			S-105	





#### DEMOLITION NOTES:

1. REMOVE EXISTING RAILING, FOOTBRIDGE, STEEL FRAME, GRATING, LADDER AND CONNECTIONS.
2. CUT EXISTING ANCHORS FLUSH WITH CONCRETE SURFACE AND PATCH VOIDS.

#### HAND RAIL NOTES:

1. HANDRAIL AND TOE PLATE CONNECTIONS TO BE DESIGNED BY RAILING MANUFACTURER.
2. MAXIMUM 6'-0" SPACING OF RAILING POSTS.

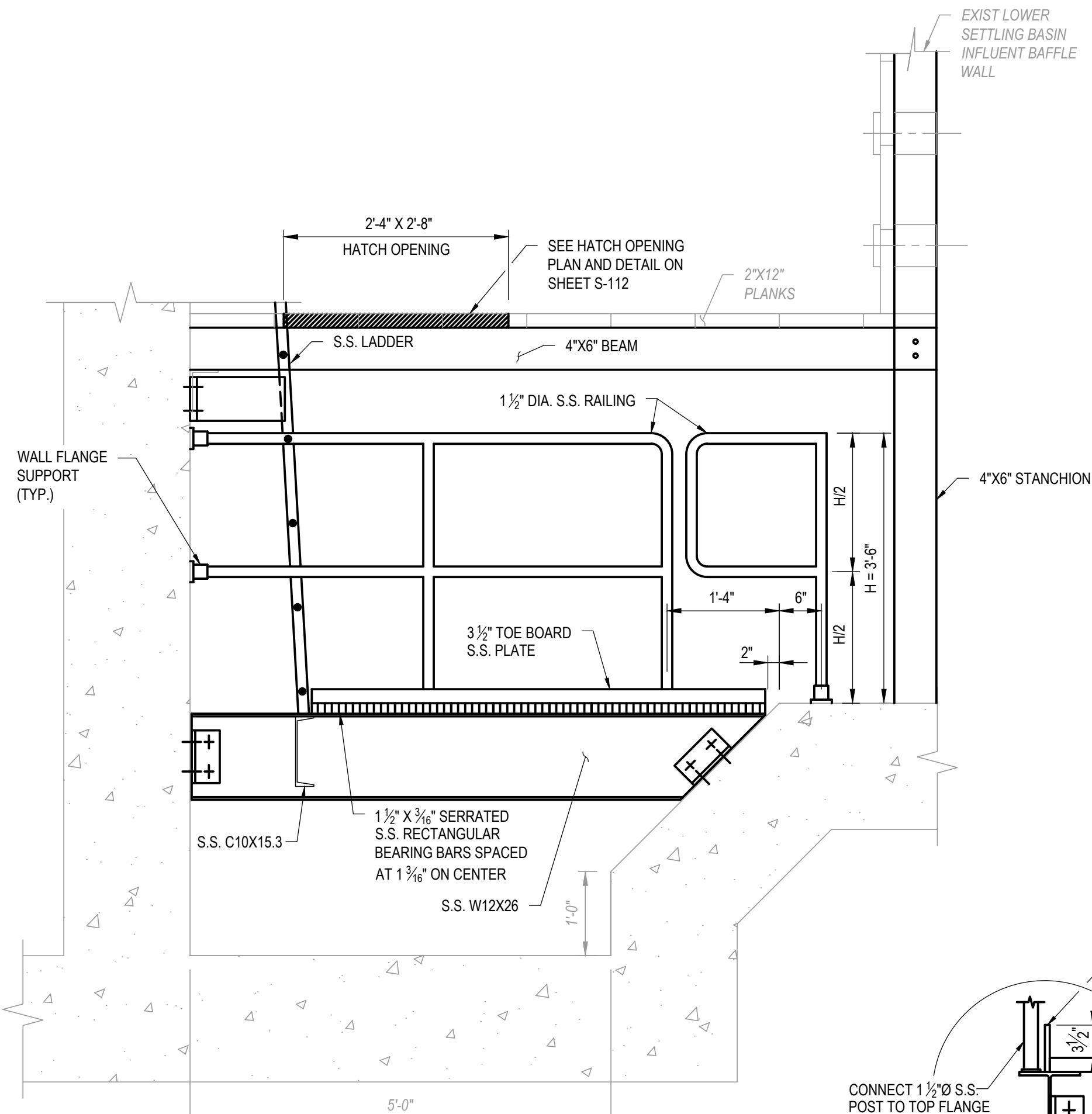
#### SUBMARINE DOORS:

1. FINAL LOCATION OF SUBMARINE DOORS TO BE DETERMINED IN THE FIELD.
2. SUBMARINE DOOR MATERIAL TO BE 316 S.S.
3. DOORS SHALL BE DESIGNED FOR 33 FT. OF PRESSURE HEAD.
4. DOORS AND FLUSH MOUNTED FRAME SHALL BE DESIGNED BY THE SELECTED SUBMARINE DOOR MANUFACTURER. SEE SHEET S-111 FOR DETAILS.
5. RELOCATE CONDUITS THAT ARE IN THE WAY OF DOOR INSTALLATION

SEE BASIN SLUDGE FOOT BRIDGE FRAMING AND RAILING PLAN THIS SHEET

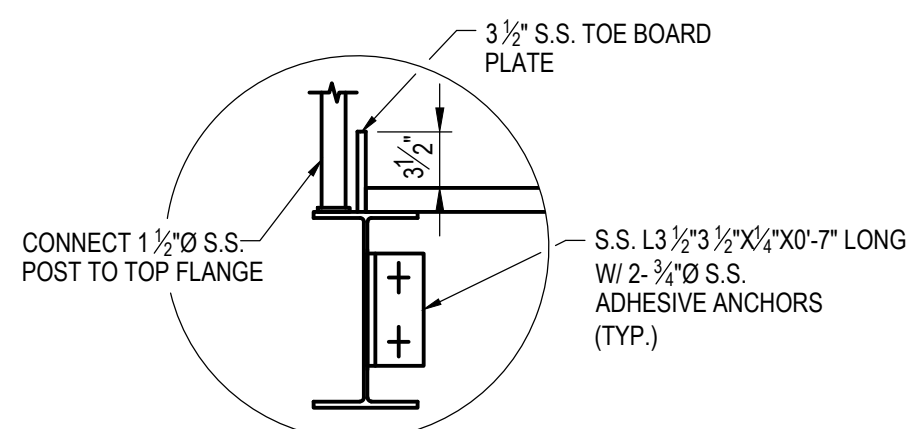
#### LOWER BASIN SLUDGE FOOT BRIDGE AND RAILING PLAN

SCALE: 3/32"=1'-0"



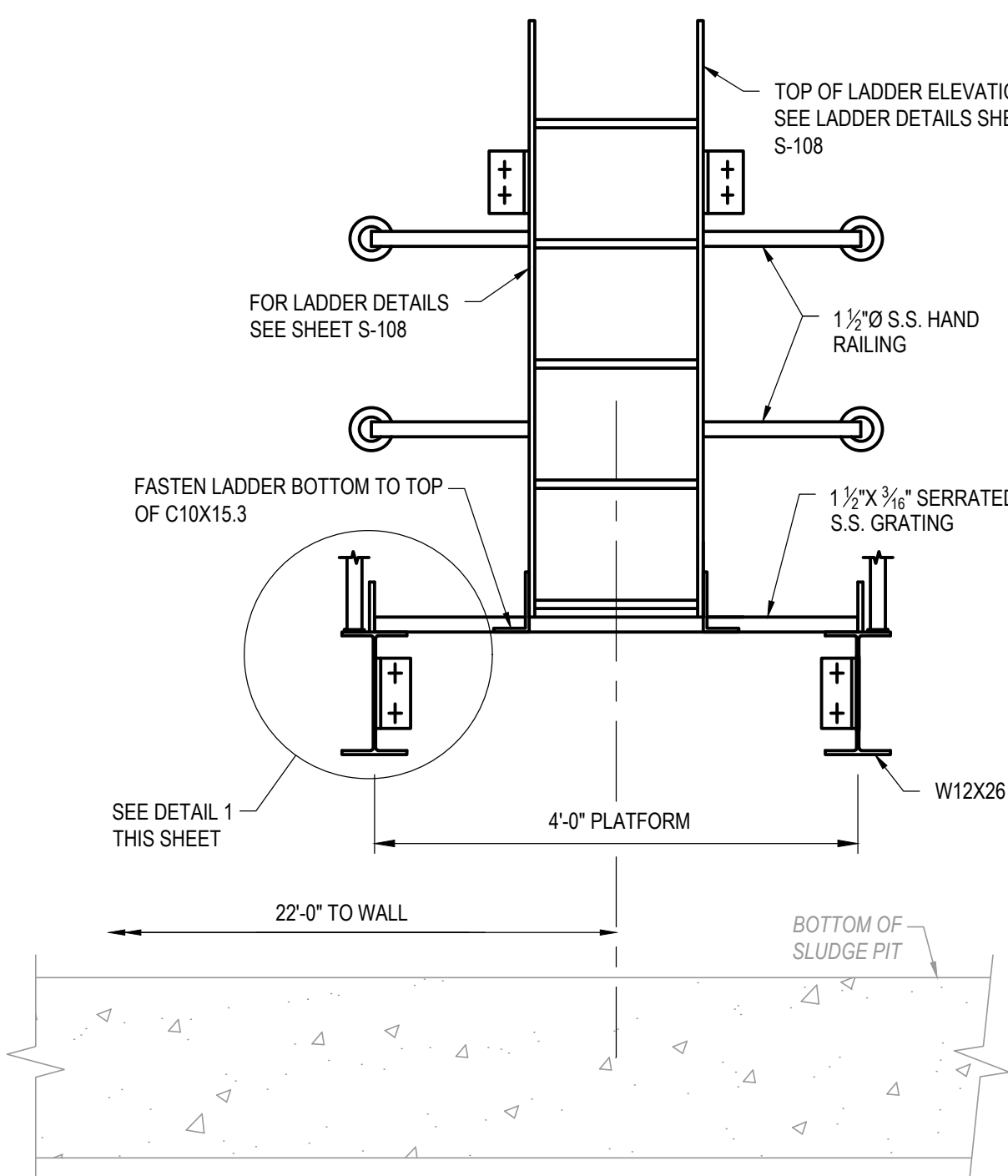
#### SECTION A

SCALE: 3/4"=1'-0"



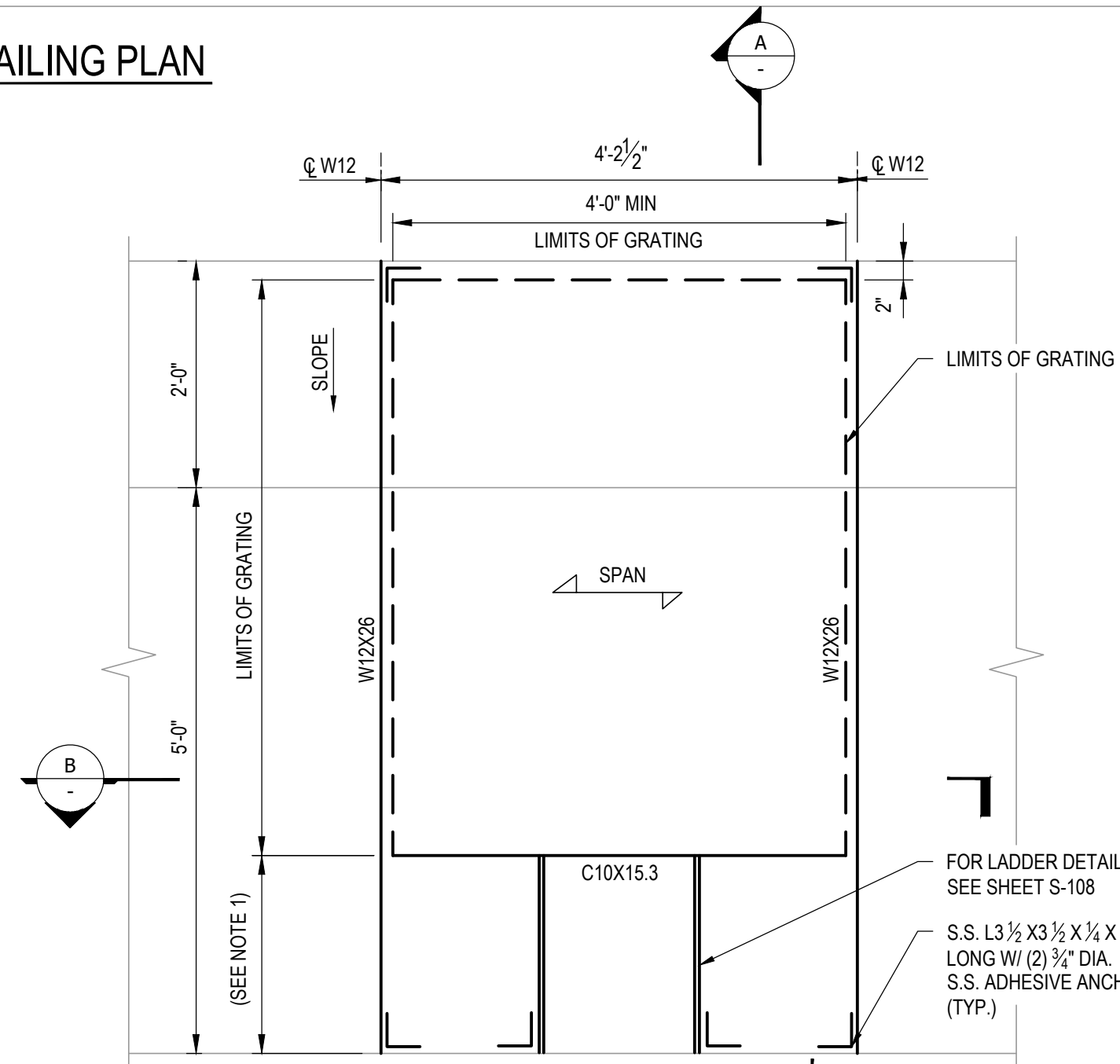
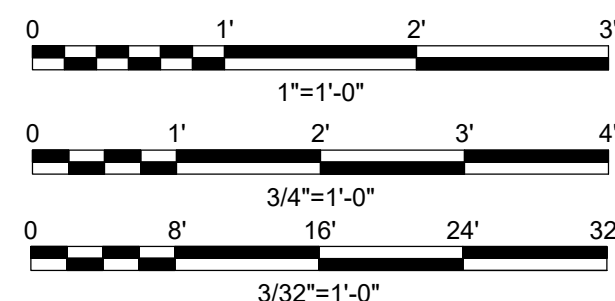
#### DETAIL 1

SCALE: 1"=1'-0"



#### SECTION B

SCALE: 3/4"=1'-0"

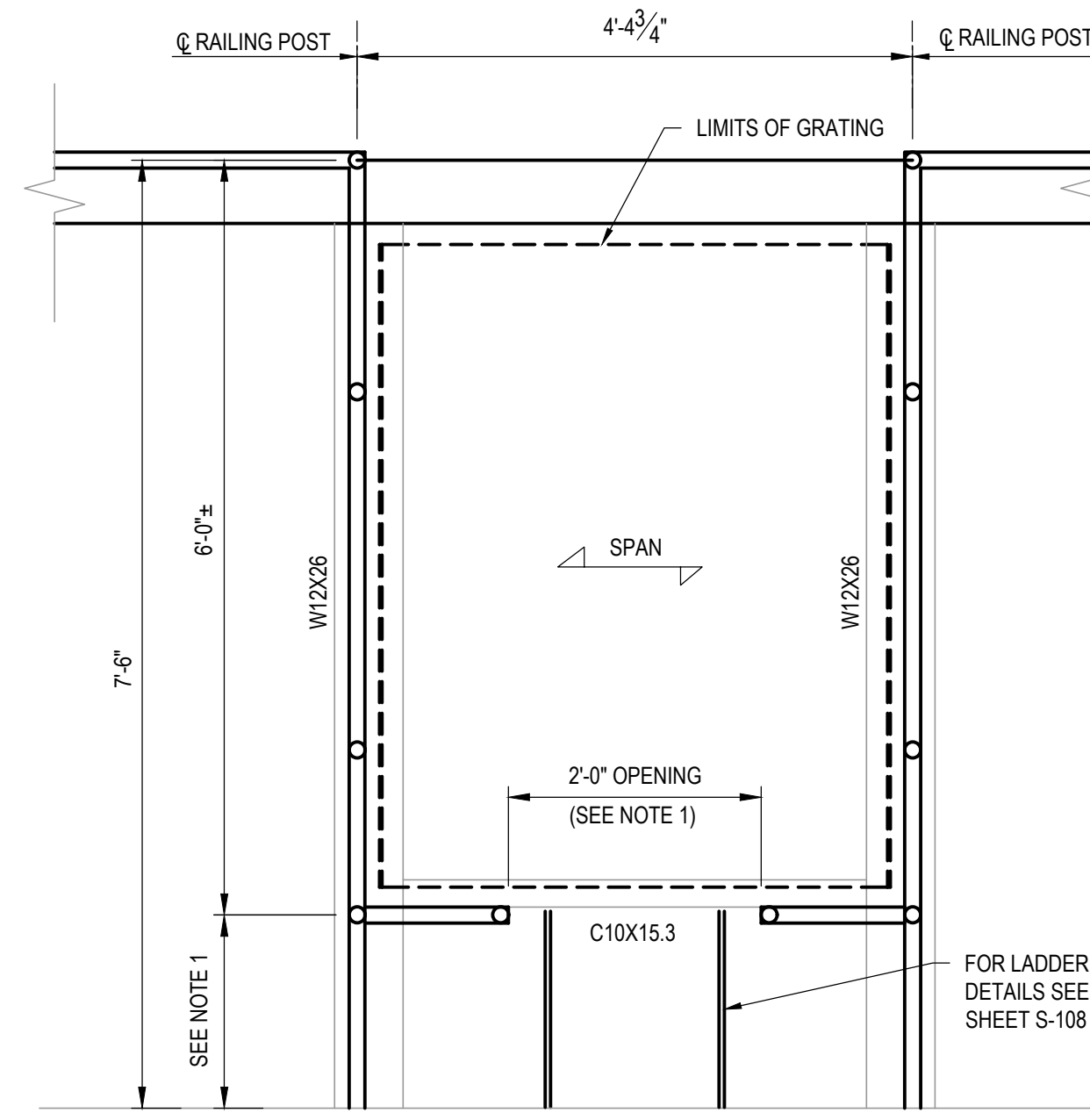


#### NOTES:

1. LOCATION OF C10 MEMBER BASED ON FINAL LADDER POSITION.
2. ALL SUPPORTING MEMBERS, GRATING AND CONNECTIONS TO BE 316L STAINLESS STEEL.
3. PRIOR TO FABRICATION, CONTRACTOR TO VERIFY THAT CENTERLINE OF FOOTBRIDGE/LADDER COINCIDES WITH THE CENTERLINE OF THE EXISTING 4' X 2' CONCRETE SLAB OPENING IN THE MIXING BASIN.

#### BASIN SLUDGE FOOT BRIDGE FRAMING PLAN

SCALE: 3/4"=1'-0"



#### NOTE:

1. LOCATION OF HANDRAIL AND 2'-0" OPENING BASED ON FINAL LADDER POSITION.

#### BASIN SLUDGE FOOT BRIDGE RAILING PLAN

SCALE: 3/4"=1'-0"

#### REVISIONS

NO.	DATE	DESCRIPTION
0	06/04/2021	100% DESIGN SUBMISSION
1	09/24/2021	ISSUED FOR BID
2		
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6		
7		
8		

#### CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 BASIN SLUDGE FOOTBRIDGE AND RAILING

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJDC 246A27990200

DRAWN BY CA  
PROJECT ENG'R LD  
APPROVED JNB

DATE 06/04/2021  
PROJECT E6X94500

USE DIMENSIONS ONLY  
SCALE AS NOTED

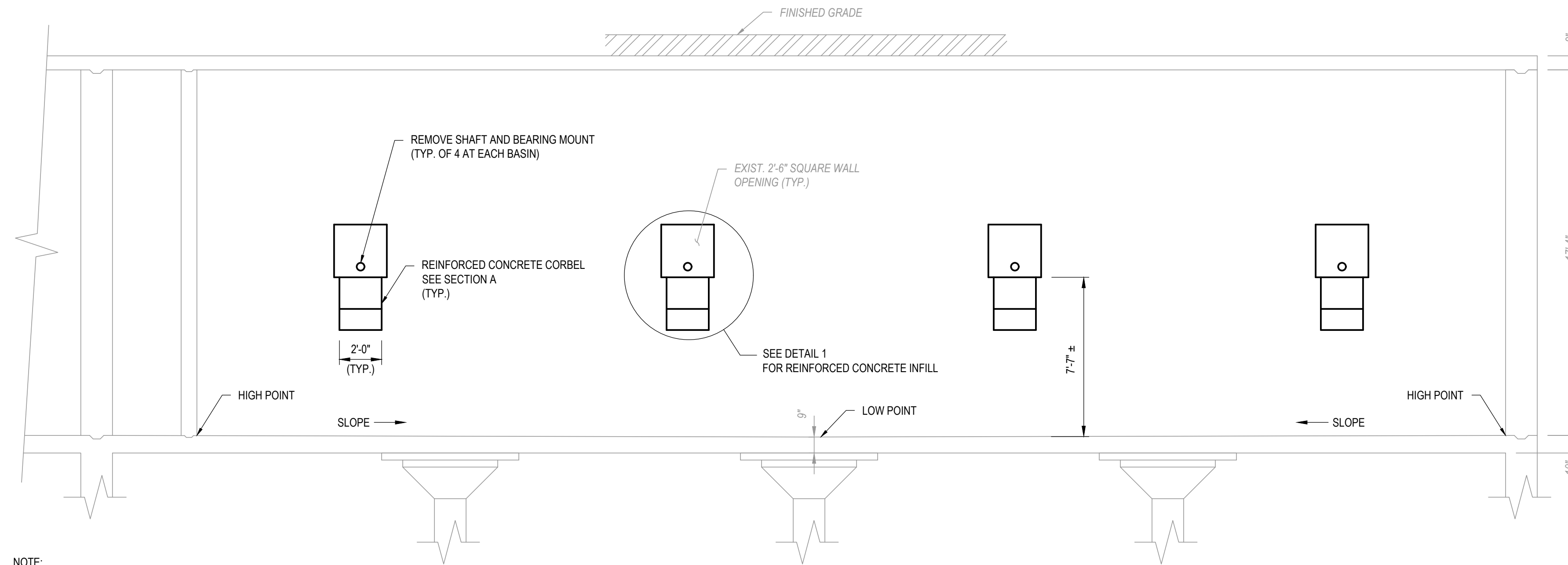
USE APPROVED DRAWINGS ONLY  
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S-106

LUIS S. DUARTE, PE

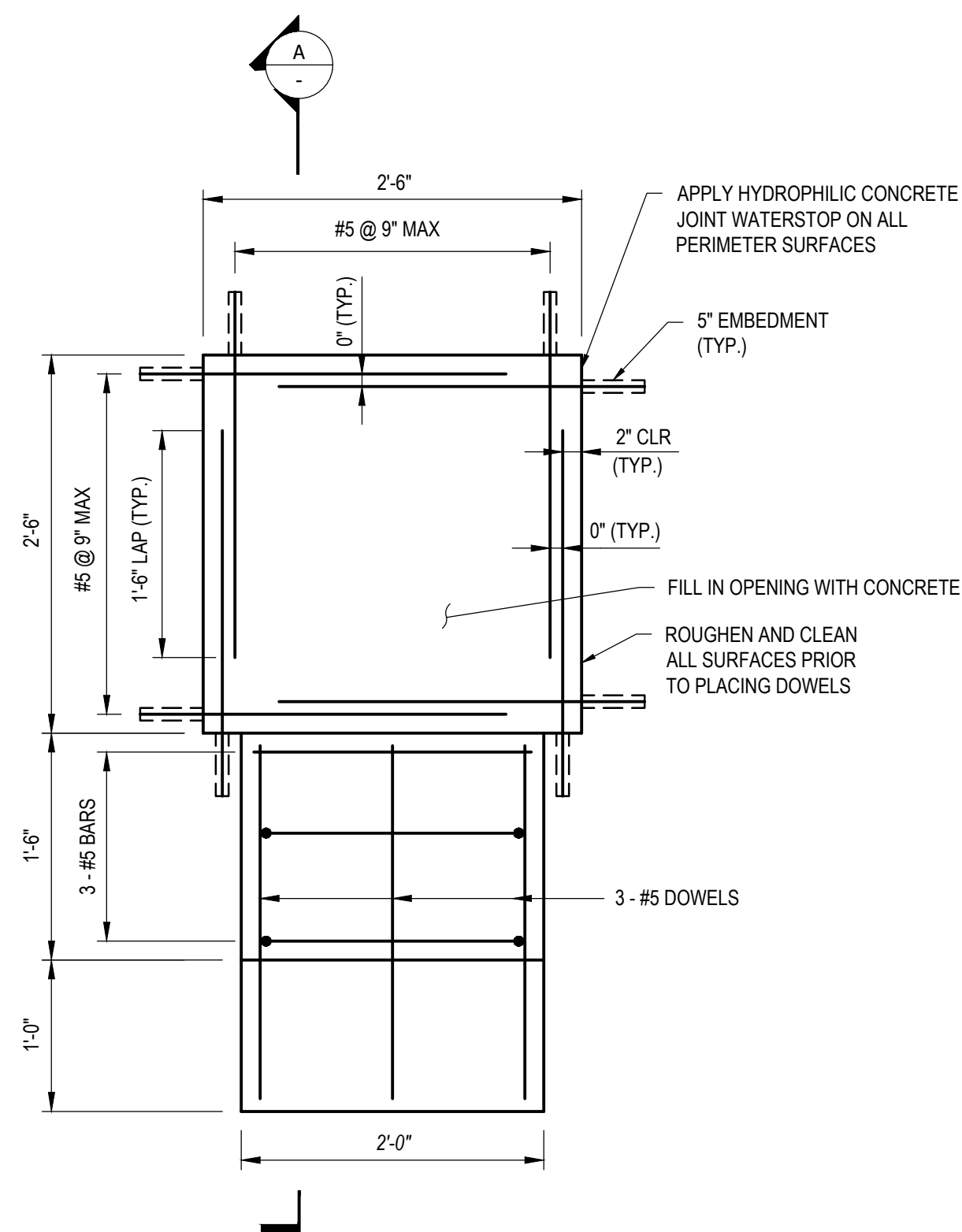
NJPE LICENSE NO. 24GE04642900

JACOBS

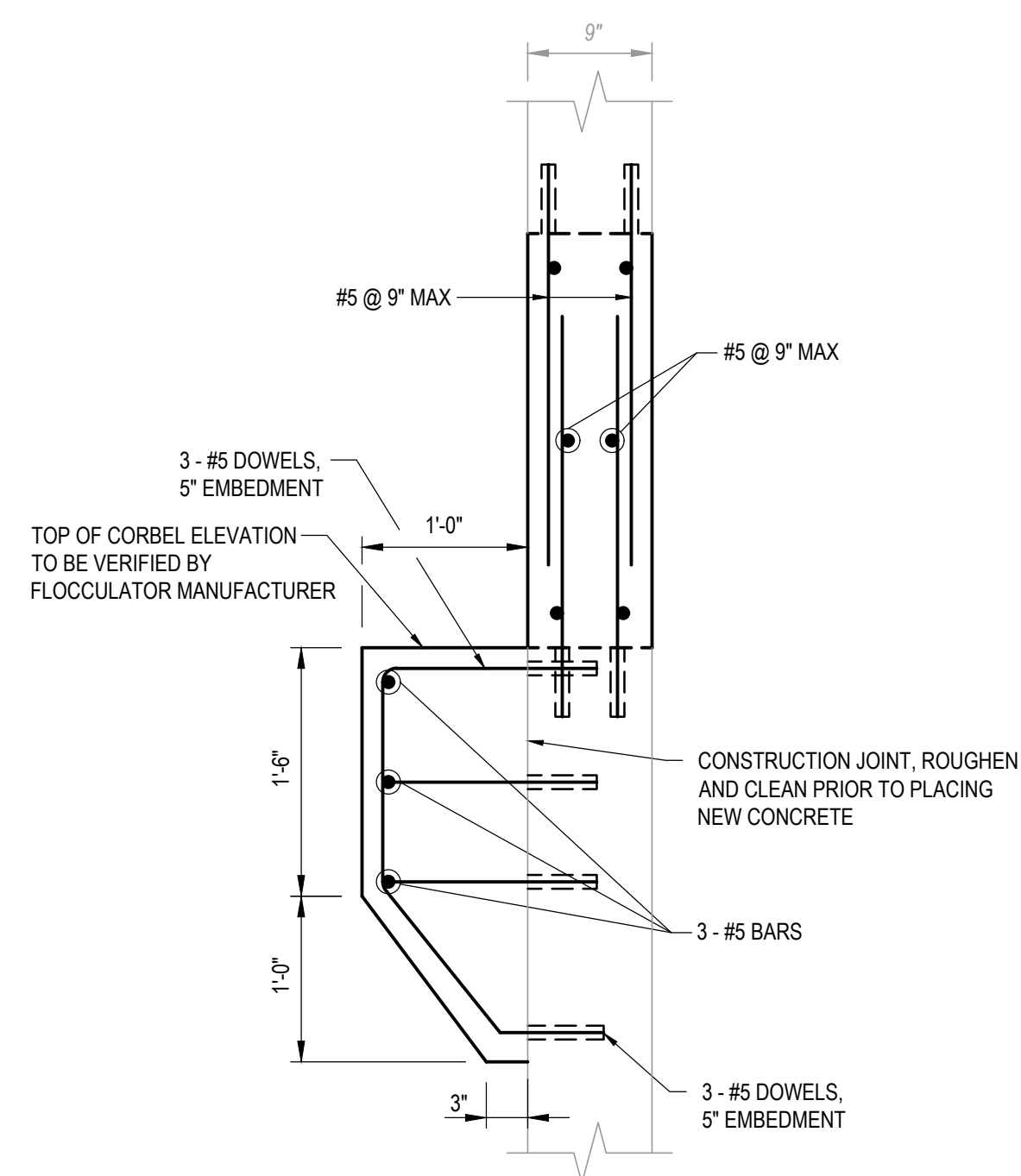


NOTE:  
1. MIXING BASIN #1 SHOWN, SIMILAR FOR BASINS 2, 3 AND 4.

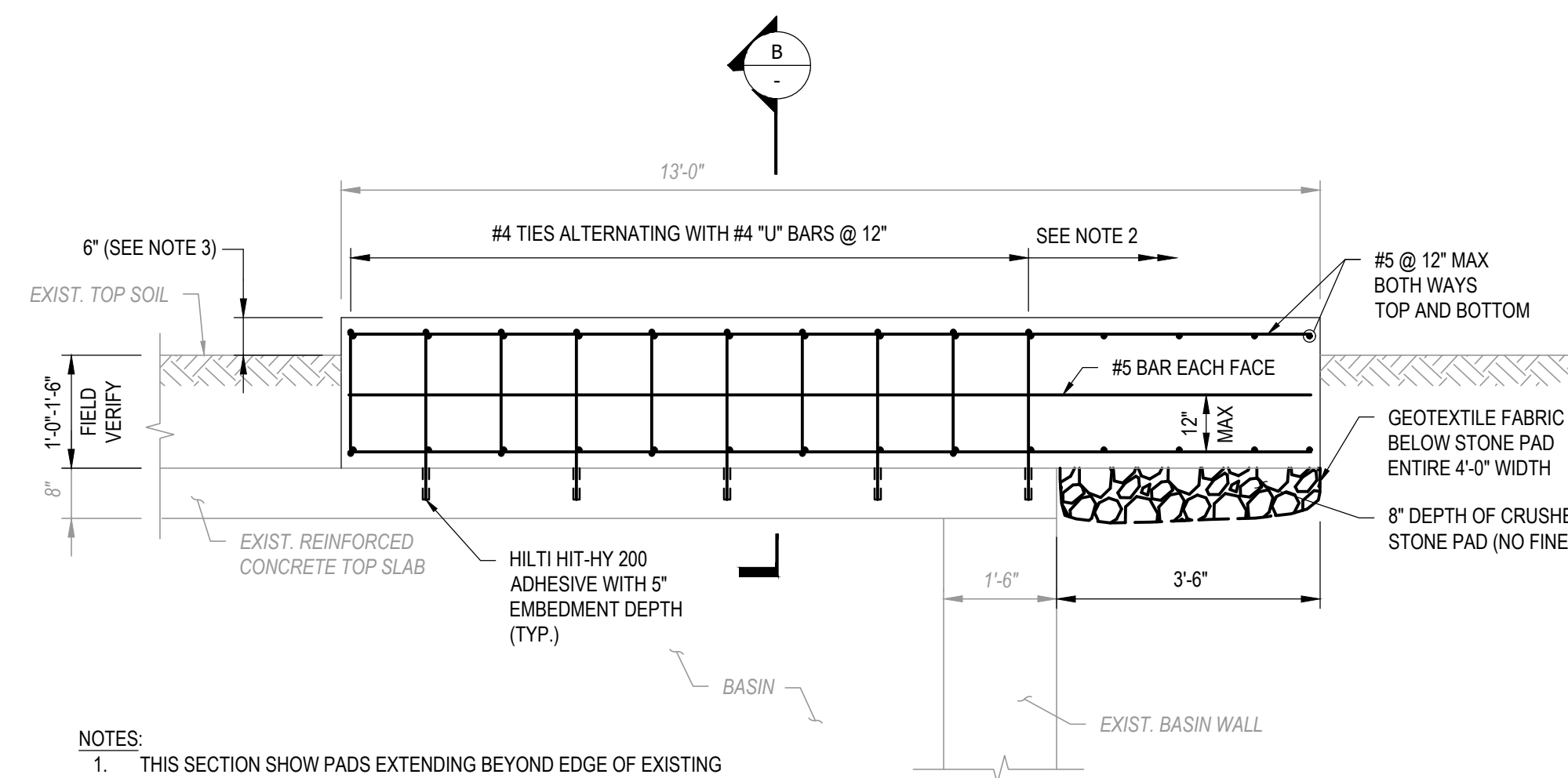
**D**  
SECTION  
S-102 SCALE: 1/4"=1'-0"  
(MIXING BASIN WEST ELEVATION)



**DETAIL 1**  
SCALE: 1"=1'-0"

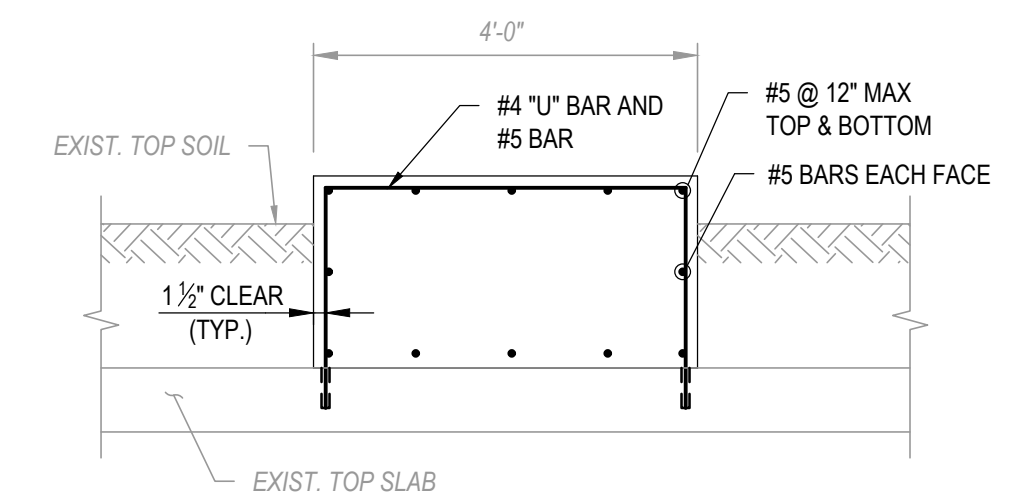
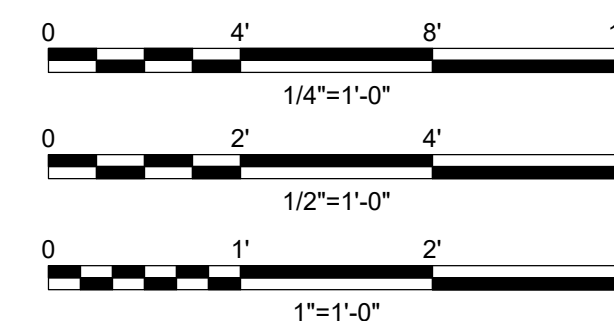


**A**  
SECTION  
SCALE: 1"=1'-0"



NOTES:  
1. THIS SECTION SHOW PADS EXTENDING BEYOND EDGE OF EXISTING BASIN WALL. REINFORCEMENT AT OTHER LOCATIONS SIMILAR.  
2. FOR LOCATIONS OF PAD THAT ARE BEARING ON EXISTING TOP SLAB CONTINUE ALTERNATING "U" BARS WITH TIES.  
3. VERIFY THAT TOP OF SLAB CLEARS TOP OF EXISTING SOIL BY 6 INCHES.

**A**  
SECTION  
M-101 SCALE: 1/2"=1'-0"



**B**  
SECTION  
SCALE: 1/2"=1'-0"

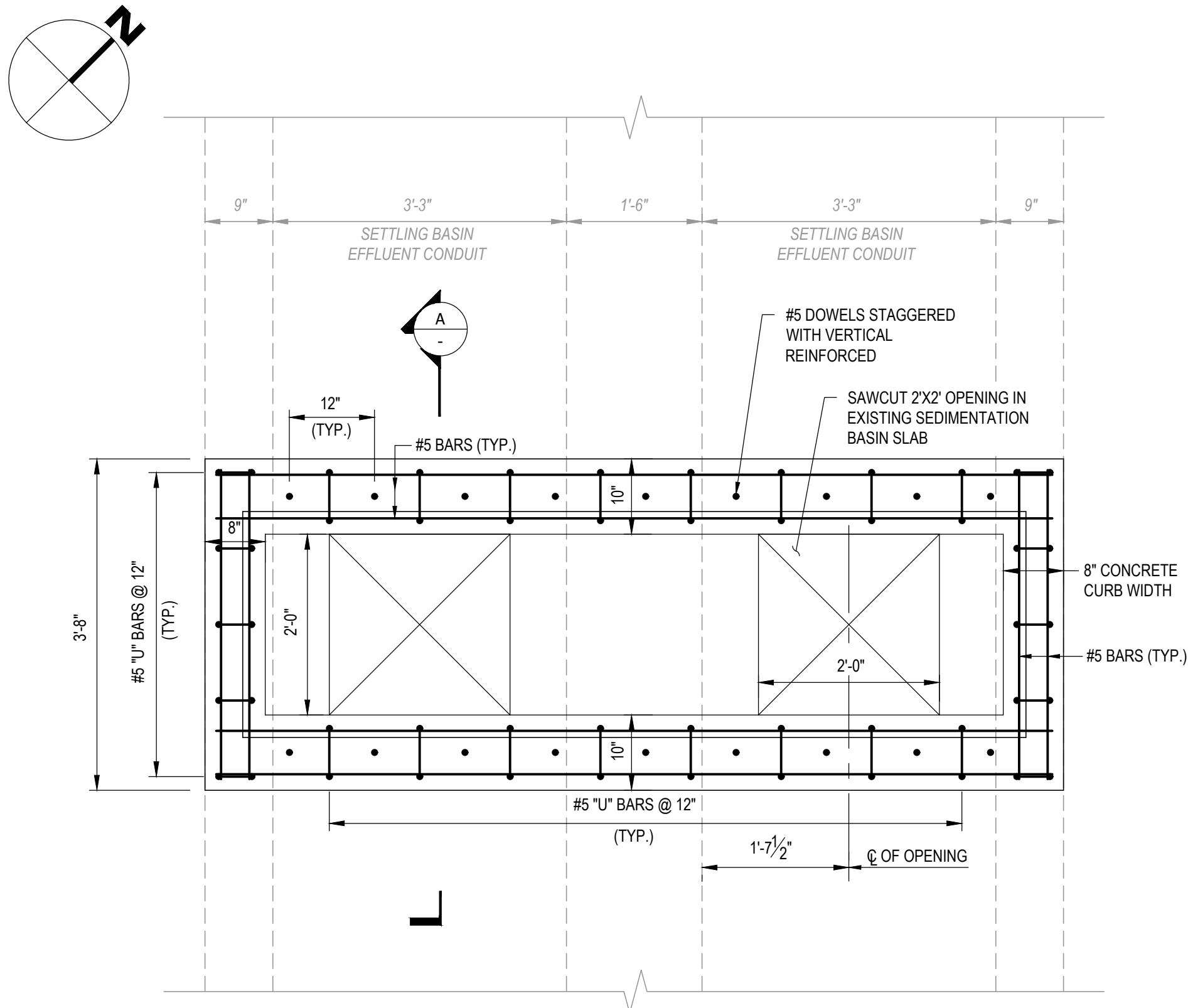
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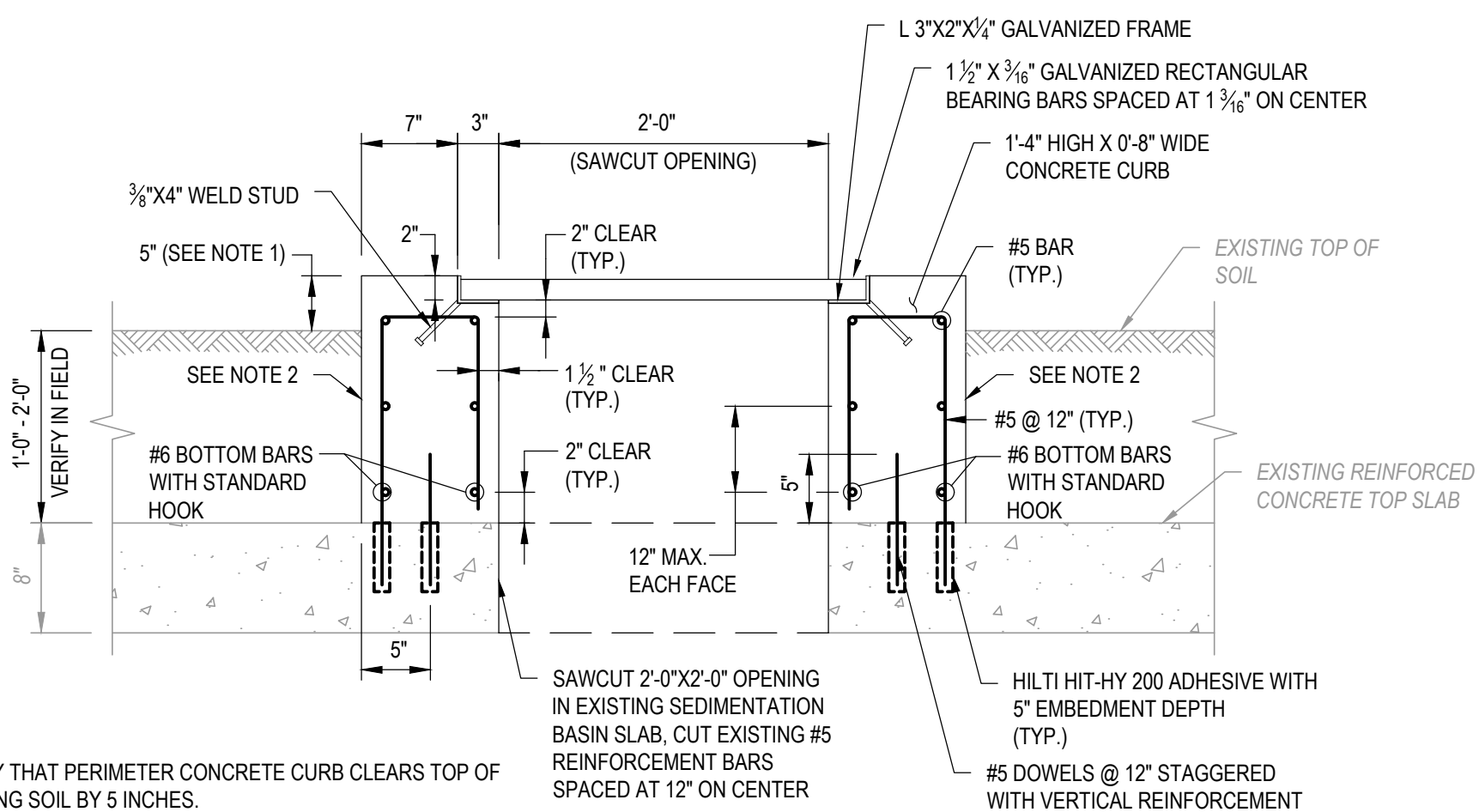
REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 MISC DETAILS 1	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
1	09/24/2021	ISSUED FOR BID		
2			JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200	
3				
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5				
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7				
8			USE DIMENSIONS ONLY SCALE AS NOTED	
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES			S-107	





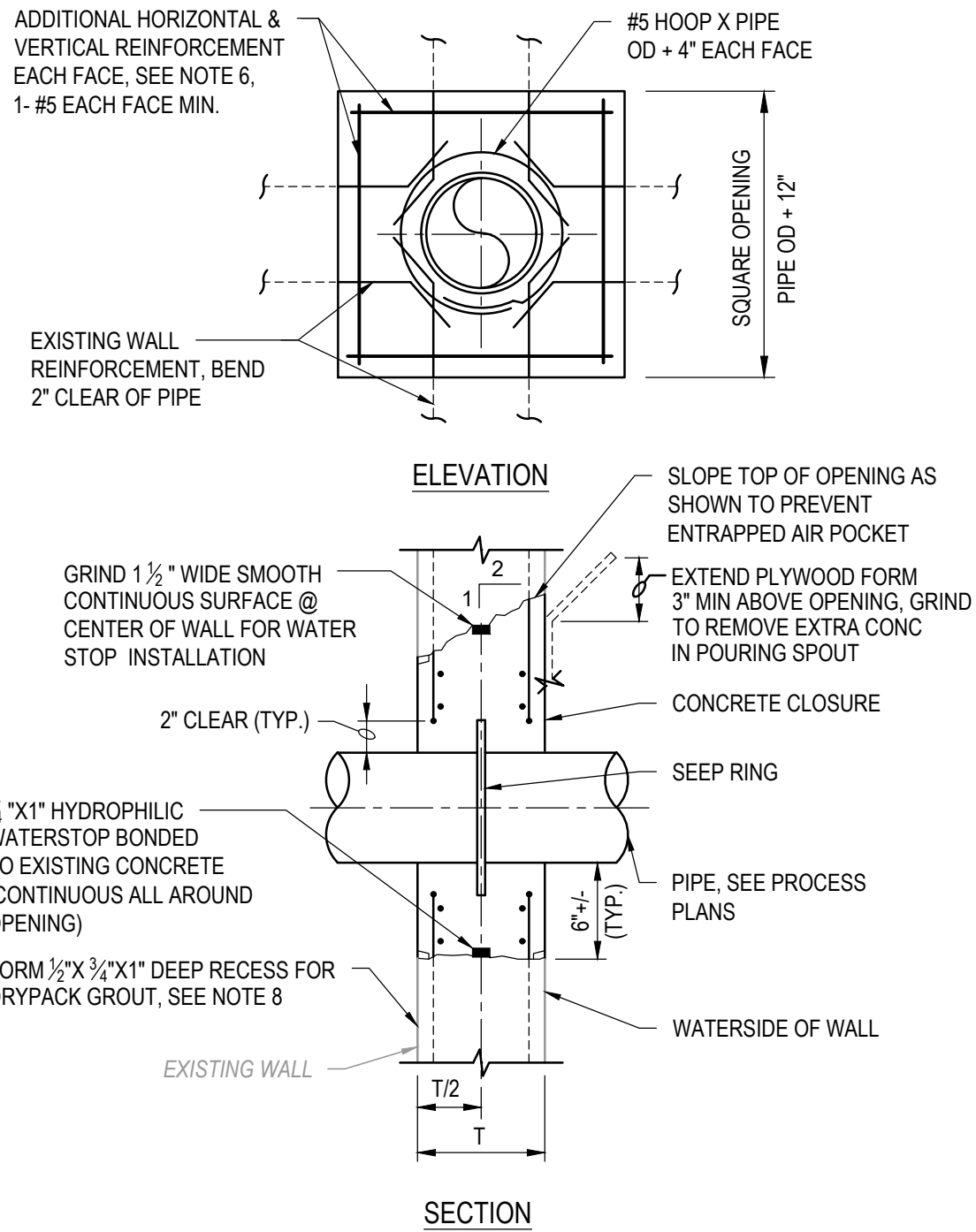
NOTE:  
1. SEE PROCESS PLAN SHEET R-202 FOR LOCATION OF 2'X2' OPENINGS.

**PARTIAL PLAN**  
SCALE: 3/4"=1'-0"

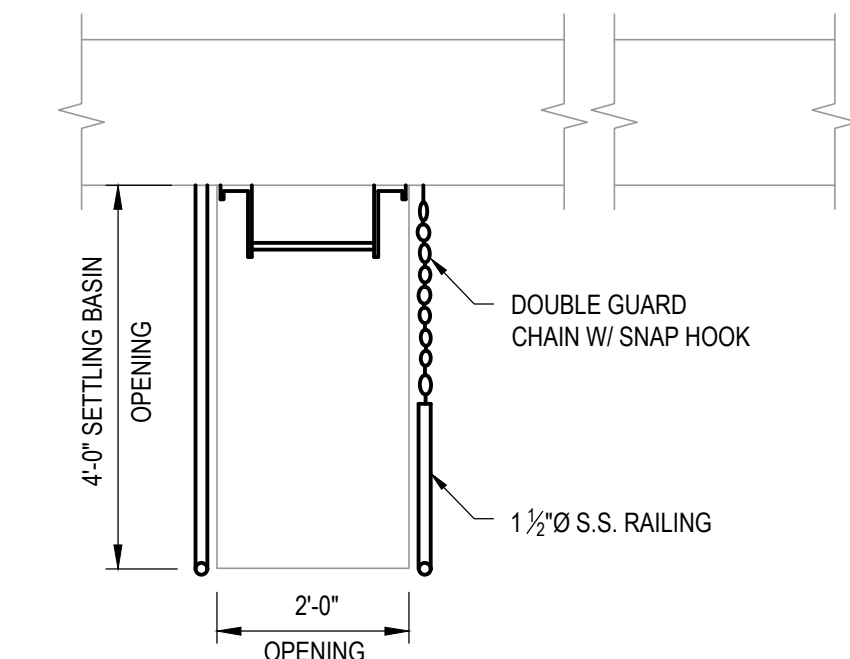


- NOTES:
- VERIFY THAT PERIMETER CONCRETE CURB CLEARS TOP OF EXISTING SOIL BY 5 INCHES.
  - SEAL CONCRETE CURB SURFACE IN CONTACT WITH SOIL WITH SIKAGUARD 7600 VG TWO COMPONENT POLYURETHANE, TROWEL GRADE, BITUMEN MODIFIED WATERPROOFING MEMBRANE (OR APPROVED EQUAL).
  - INSTALL SADDLE CLIP TO SECURE GRATING TO CONCRETE CURB. CURB BEAM SECTION HEIGHT WILL BE FIELD DETERMINED BASED ON DEPTH OF EXISTING SOIL.
  - PLACEMENT OF POST INSTALLED REBAR TO AVOID EXISTING SLAB REBAR. SCAN FOR EXISTING REBAR LOCATIONS PRIOR TO PLACEMENT.
  - REMOVE EXISTING WATERPROOFING FROM TOP SLAB.

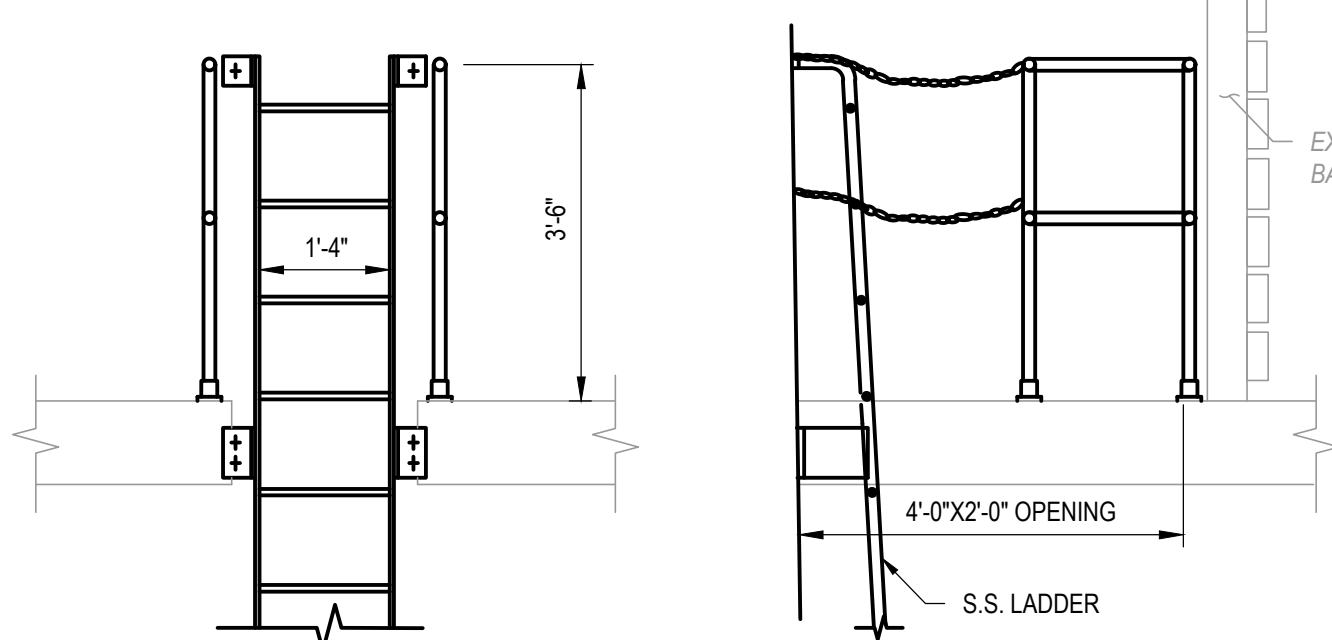
**SECTION A**  
SCALE: 1"=1'-0"



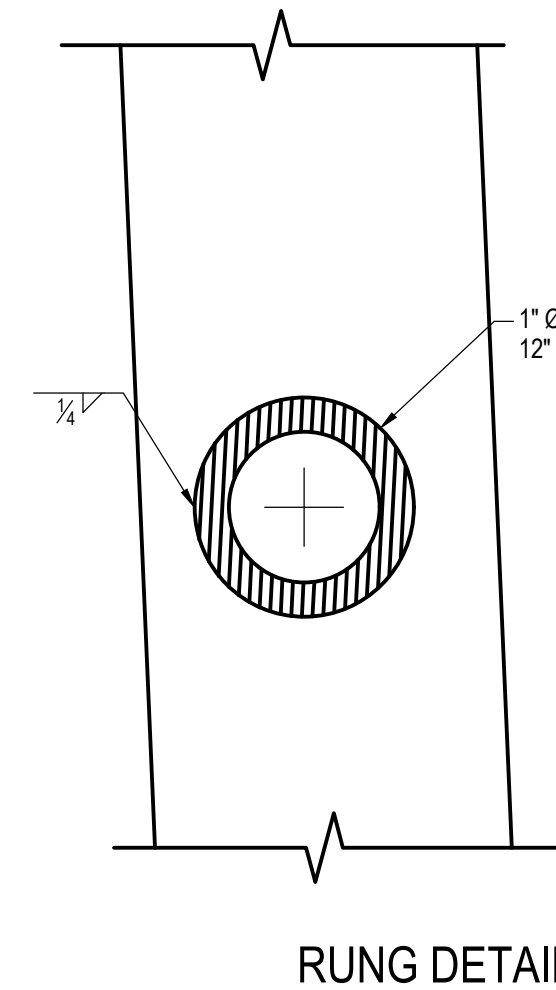
**PIPE PENETRATION - EXISTING WALL**  
SCALE: NTS



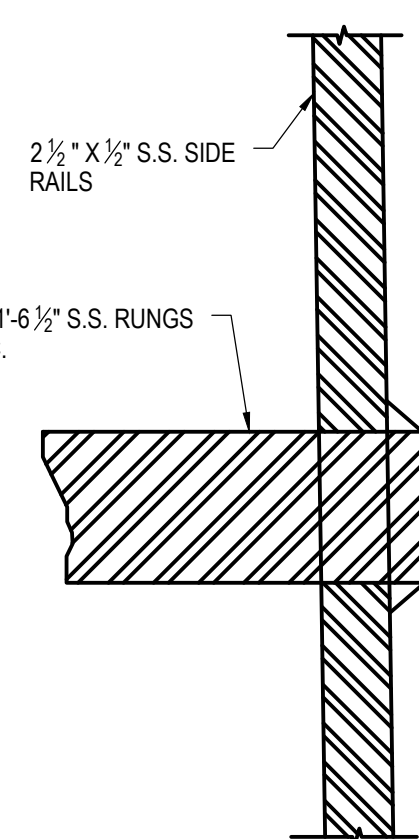
**LADDER DETAIL FOR SETTLING BASIN**  
SCALE: 1/2"=1'-0"



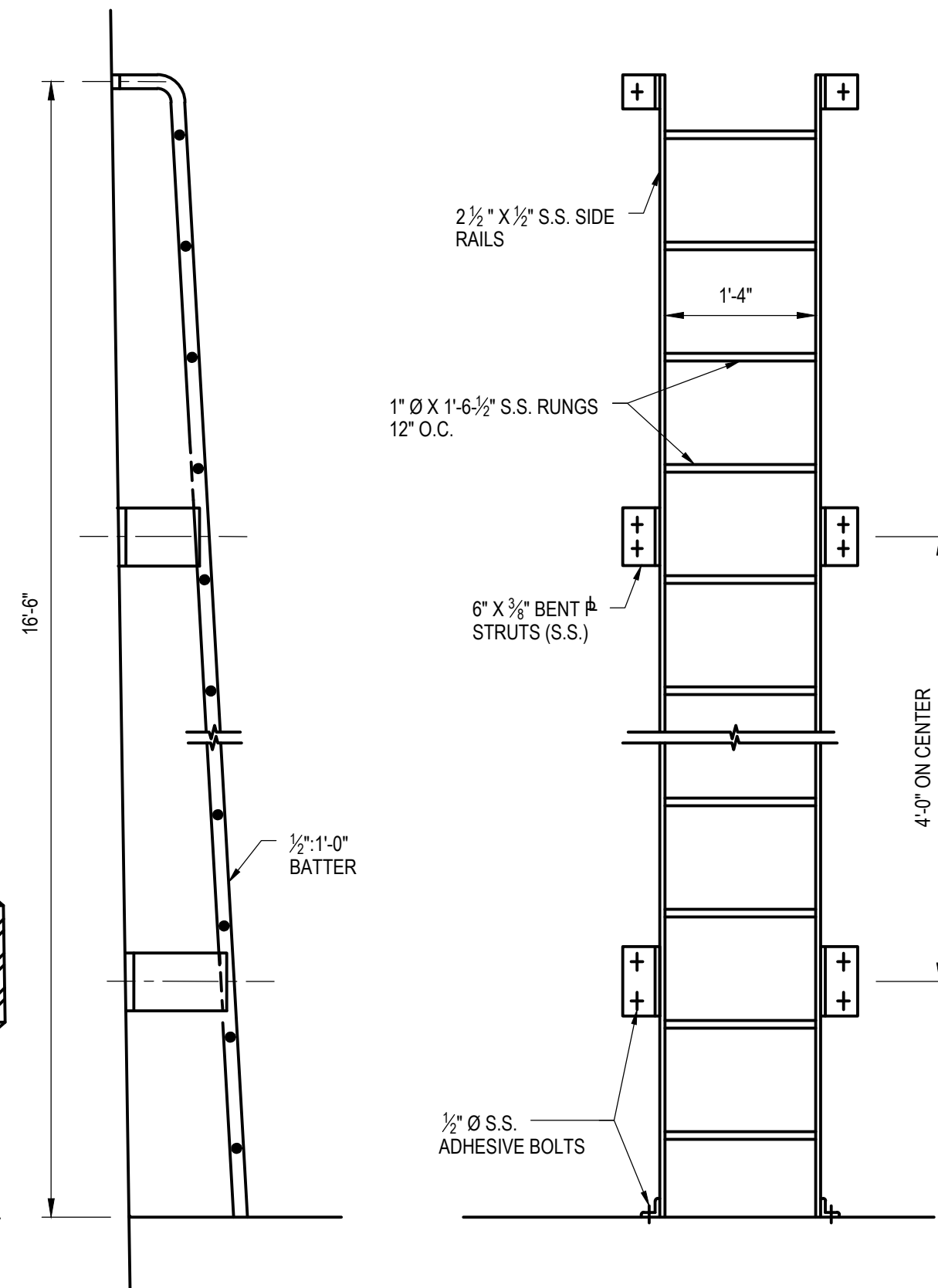
- PIPE PENETRATION NOTES:
- SAW-CUT 1-INCH DEEP X PIPE OD + 12" SQUARE SCORE LINE ON EACH FACE OF WALL. (VERIFY DEPTH OF CUT TO CLEAR REINFORCING.) (INCREASE HEIGHT AS NOTED AT TOP ON WATERSIDE FACE FOR POURING.)
  - CHIP TO REMOVE THE CONCRETE WITHIN THE SCORE LINE, WHILE PRESERVING THE EXISTING WALL REINFORCING.
  - CUT EXISTING REINFORCING AT CENTER OF OPENING AND BEND TO CLEAR PIPE.
  - GRIND 1 1/2" WIDE X CONTINUOUS SMOOTH SURFACE ALL AROUND THE OPENING AT CENTER OF WALL. CLEAN SURFACES AND BOND CONTINUOUS HYDROPHILIC WATERSTOP IN PLACE.
  - INSTALL WALL PIPE. (COAT CONCRETE ENCASED PORTION OF PIPE WITH SPECIFIED COATING SYSTEM.)
  - INSTALL ADDITIONAL REINFORCING EACH FACE, EACH SIDE, ABOVE AND BELOW PIPE. HORIZONTAL REINFORCING TO HAVE COMBINED AREA EQUAL TO AREA OF HORIZONTAL REINFORCING CUT. VERTICAL REINFORCING TO HAVE COMBINED AREA EQUAL TO AREA OF VERTICAL REINFORCING CUT.
  - SOAK CONCRETE SURFACES AND WITHIN 15-MINUTES CAST CONCRETE CLOSURE. (CONCRETE CLOSURE MUST BE CAST BEFORE HYDROPHILIC WATERSTOP EXPANDS). FORM GROOVE ON ALL SIDES OF OPENING EXCEPT AT TOP ON THE POUR SIDE.
  - CLEAN SURFACES OF FORMED GROOVE WITH POWER WIRE BRUSH OR SANDBLASTING AND DRY-PACK WITH NON-SHRINK GROUT AFTER NEW CONCRETE MIN 28-DAYS OLD.



**RUNG DETAIL**



**LADDER DETAILS**  
SCALE: NTS



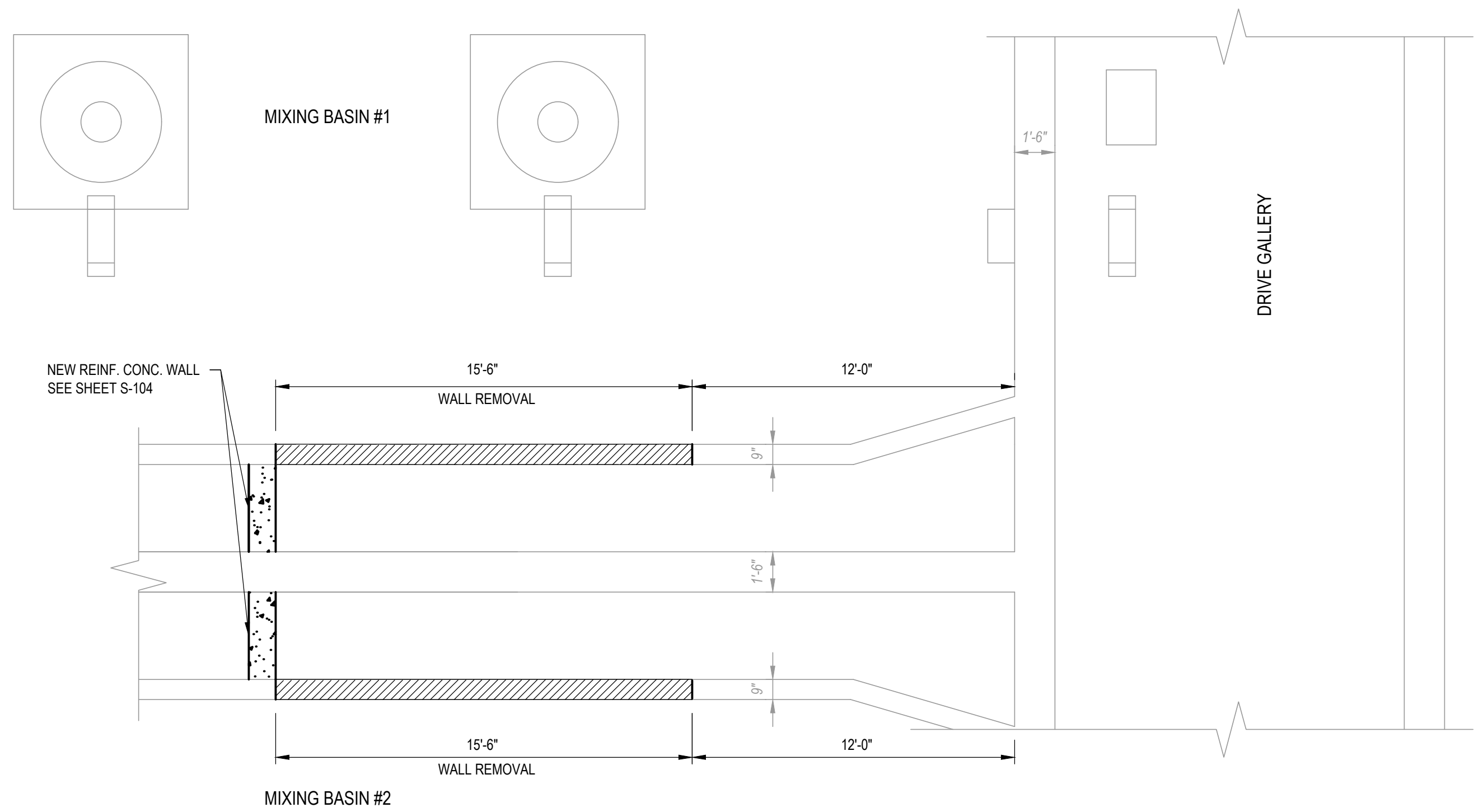
**ELEVATIONS**

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 MISC DETAILS 2	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
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8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	
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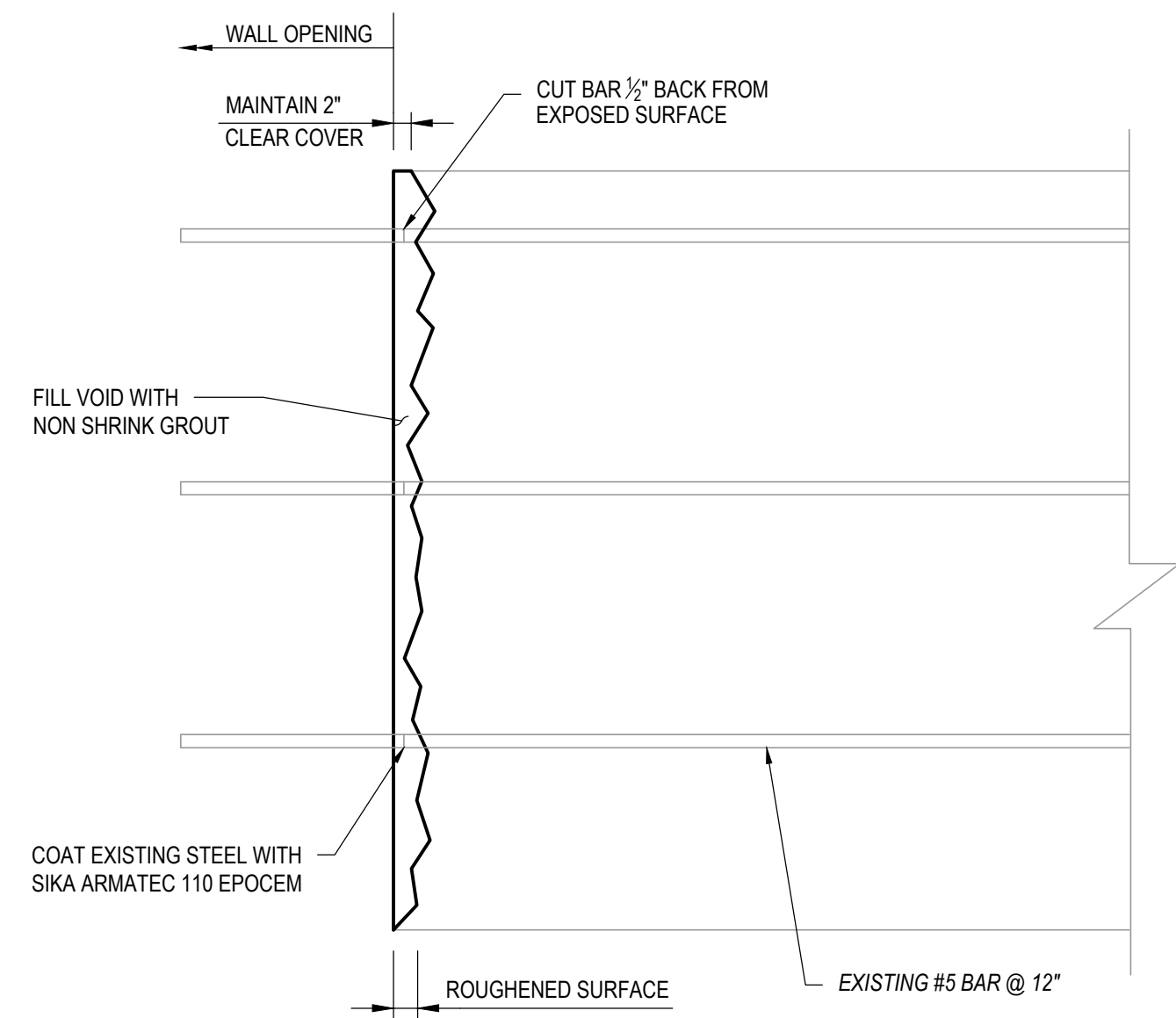
**Jacobs**

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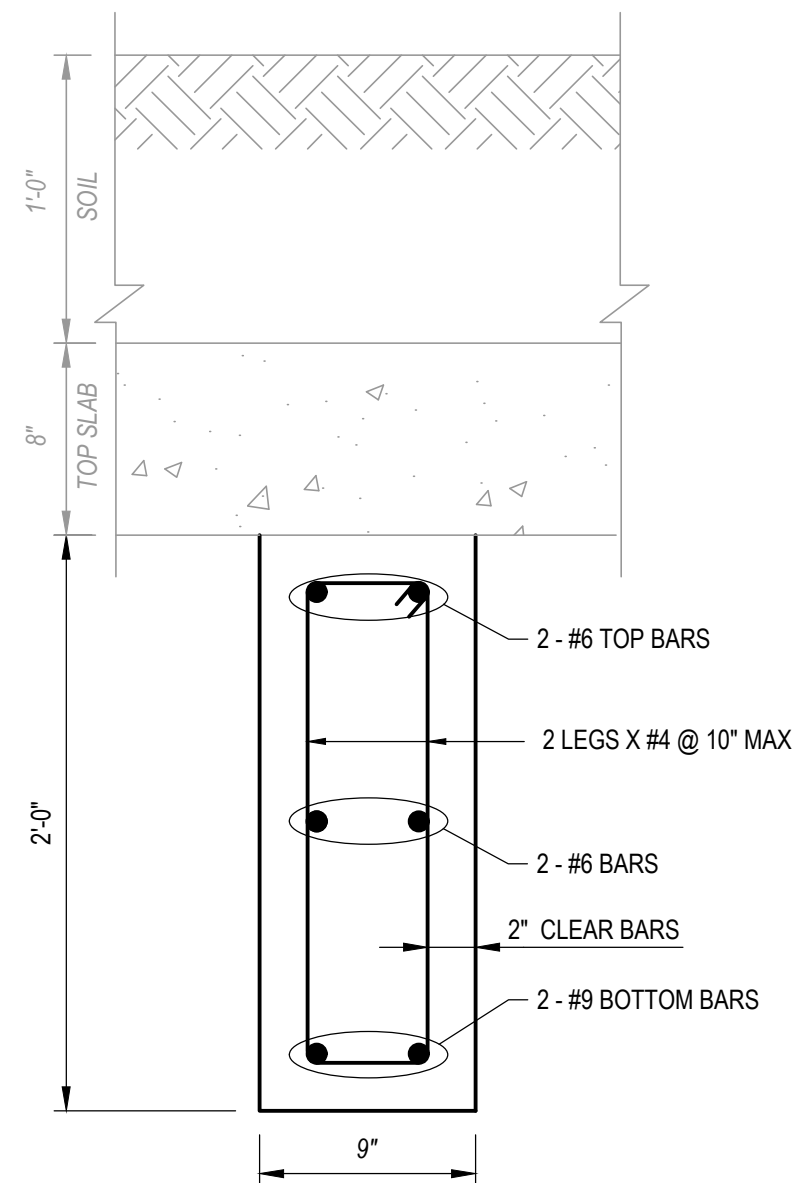
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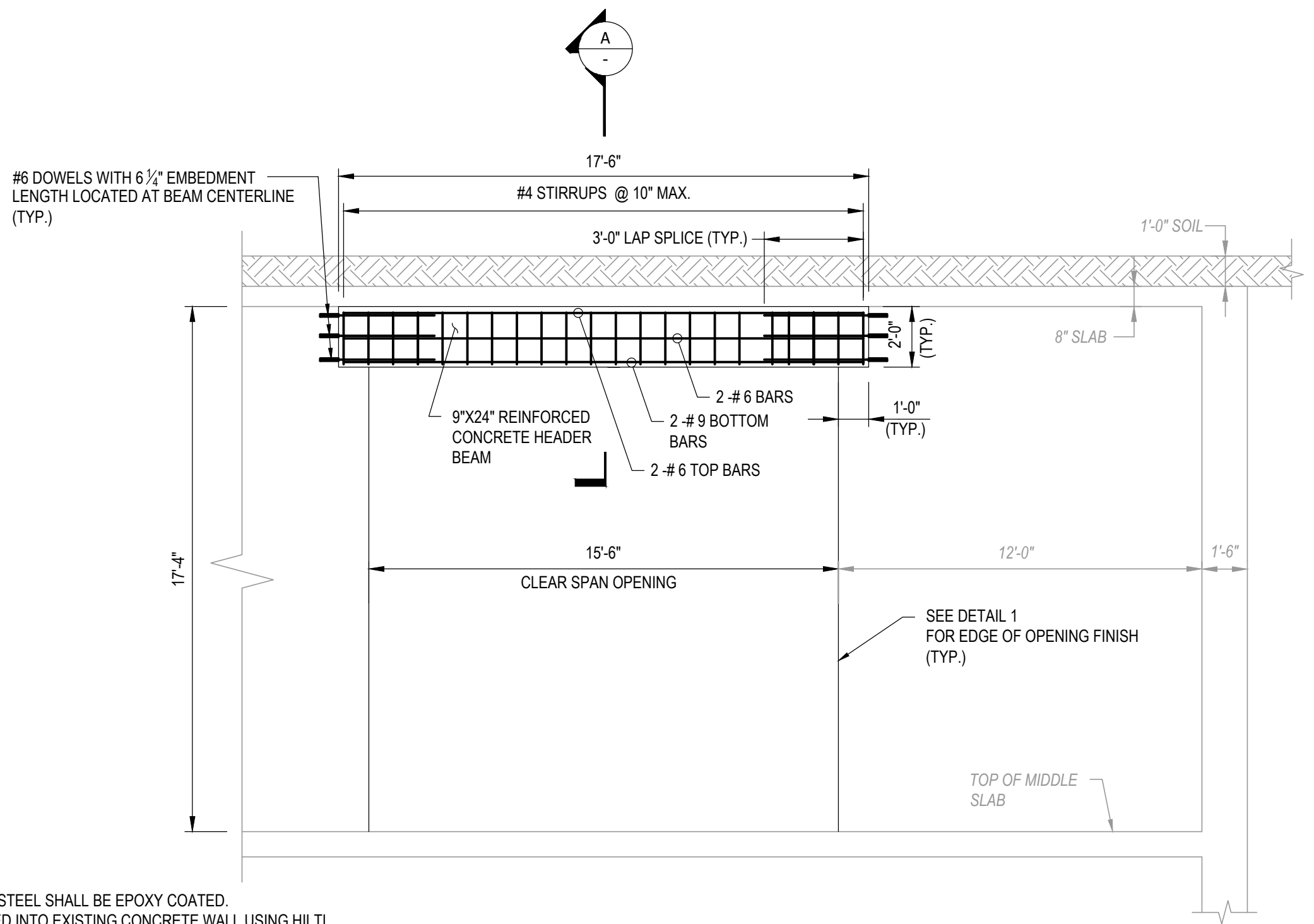
**PARTIAL PLAN**  
SCALE: 1/4"=1'-0"



**DETAIL 1**  
SCALE: 1 1/2"=1'-0"

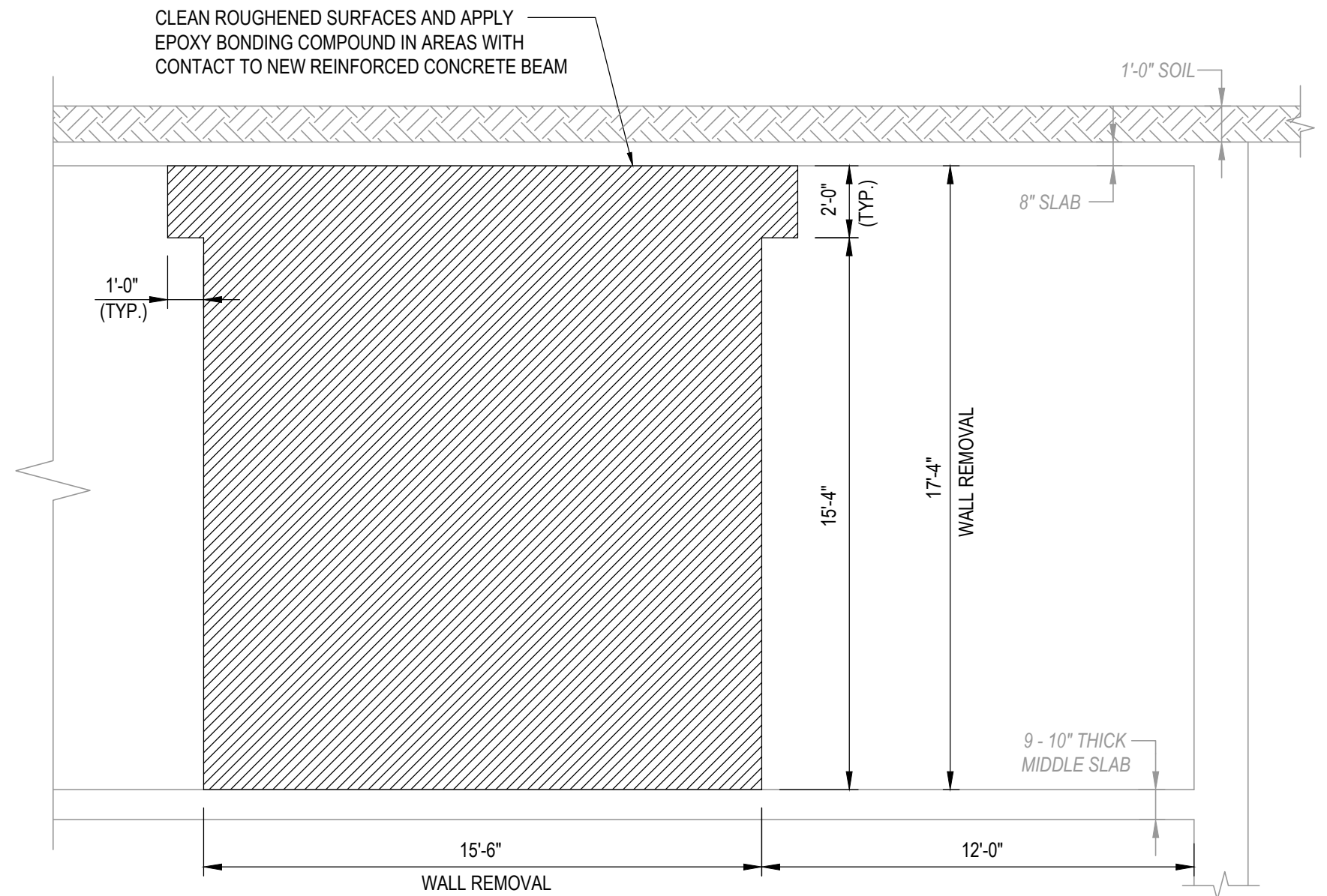


**A BEAM SECTION**  
SCALE: 1 1/2"=1'-0"



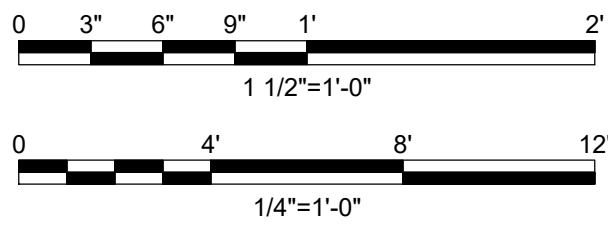
**BEAM ELEVATION**  
SCALE: 1/4"=1'-0"

- NOTES:
1. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
  2. DOWELS EMBEDDED INTO EXISTING CONCRETE WALL USING HILTI HIT-HY 200 ADHESIVE ANCHORING SYSTEM OR APPROVED EQUAL.
  3. CONCRETE  $F_c=4000$  PSI.
  4. REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60 ( $F_y=60$  KSI).
  5. TOTAL OF 4 REINFORCED CONCRETE HEADER BEAMS, TYP. FOR EACH MIXING BASIN LOCATION.



**WALL DEMOLITION**  
SCALE: 1/4"=1'-0"

- NOTES:
1. COAT ALL SURFACES IN CONTACT WITH NEW CONCRETE BEAM WITH SIKADUR 32, HI-MOD EPOXY BONDING COMPOUND BY SIKA CORPORATION, LYNDHURST, NJ (OR APPROVED EQUAL).
  2. CONTRACTOR TO DESIGN AND PROVIDE TEMPORARY CONTINUOUS TOP SLAB SUPPORT. SUPPORT SHALL WITHSTAND LOADING OF 5.2 KIPS PER LINEAR FEET.



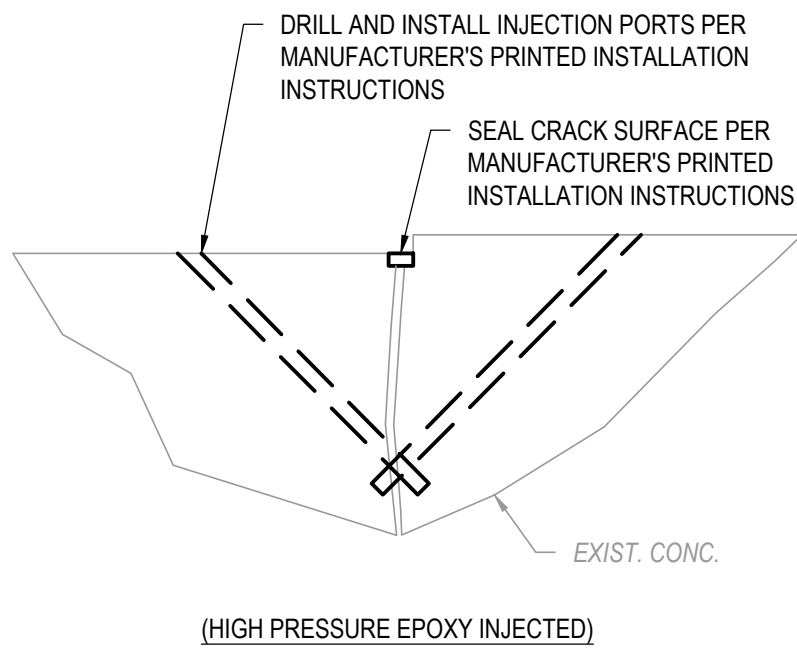
**Jacobs**

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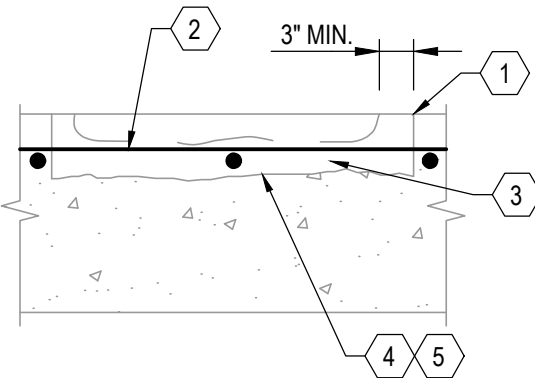
NJPE LICENSE NO. 24GE04642900

REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 REINFORCED CONCRETE HEADER BEAM	
0	06/04/2021	100% DESIGN SUBMISSION	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT	
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			DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	S-109



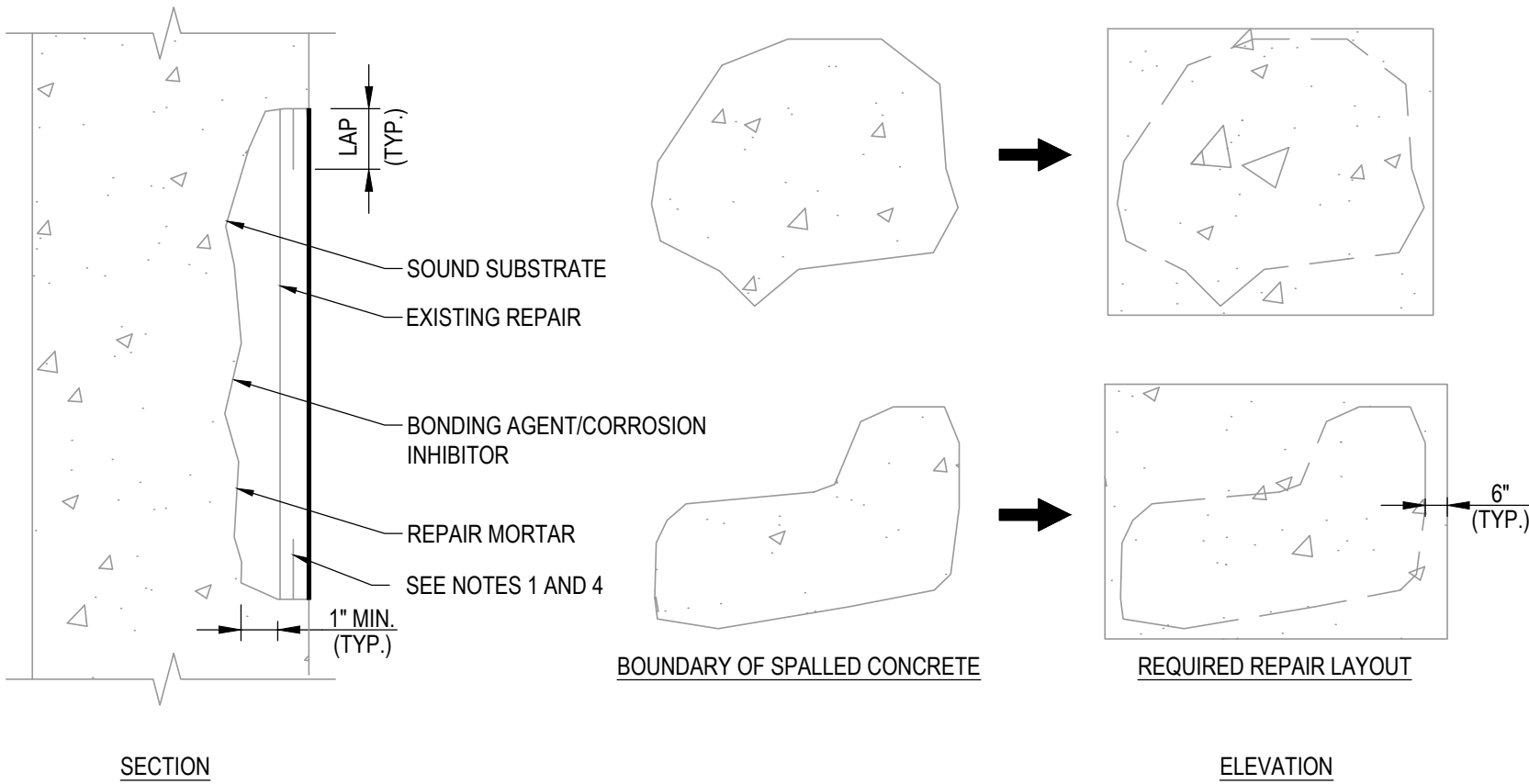


CRACK REPAIR DETAIL  
SCALE: NTS



- 1 PROVIDE  $\frac{3}{4}$ " SAWCUT AROUND DETERIORED CONCRETE SURFACE.
- 2 EXISTING REINFORCEMENT, WHERE ACTIVE CORROSION IS ENCOUNTERED, REVIEW CONDITION OF REINFORCEMENT WITH ENGINEER AND REPLACE IF OVER 25% OF CROSS SECTION IS LOST. CLEAN REINFORCING STEEL TO REMOVE ALL CONTAMINANTS AND CORROSION, COAT WITH EPOXY COATING. REPLACEMENT OF BARS SHALL BE INCIDENTAL AND INCLUDED IN THE REPAIR.
- 3 REMOVE ALL DETERIORATED AND SOUND CONCRETE TO DEPTH OF 1" BEYOND REINFORCING BARS.
- 4 COAT EXISTING SURFACE WITH CEMENTITIOUS BONDING AGENT AND REBAR COATING. NOTE SYSTEM SHALL BE DAMP PRIOR TO REPLACEMENT OF CEMENTITIOUS BONDING AGENT.
- 5 INSTALL NEW CONCRETE REPAIR MATERIALS PER SPECIFICATION SECTION 03 01 33 REPAIR OF HORIZONTAL CONCRETE SURFACES.

HORIZONTAL CONCRETE REPAIR  
SCALE: 1/4"=1'-0"

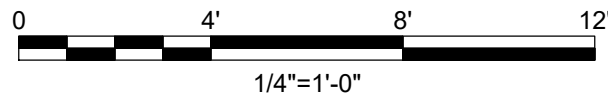


- NOTES:
1. CHOP AWAY ALL DELAMINATED CONCRETE AND REMOVE LOOSE MATERIAL DOWN TO SOUND CONCRETE. IF REBAR BECOMES EXPOSED, CLEAN AND PROVIDE 1" CLEARANCE AND COAT WITH CORROSION PROTECTION. INSTALL AN APPROVED VERTICAL / OVERHEAD PATCHING COMPOUND.
  2. DO NOT CUT REINFORCING UNLESS IT IS APPROVED BY ENGINEER TO REMOVE ALL DETERIORATED CONCRETE.
  3. WHERE REINFORCING STEEL WITH ACTIVE CORROSION IS ENCOUNTERED, ENGINEER TO REVIEW CONDITION OF CORRODED REBARS PRIOR TO REPAIR. REPLACEMENT IS REQUIRED WHERE LOSS ON REBAR CROSS SECTION IS OVER 25% AFTER REMOVAL WHERE REINFORCING REMAINS. CLEAN REINFORCING STEEL TO REMOVE ALL CONTAMINANTS AND RUST. REMOVE CONCRETE TO A DEPTH OF 1-INCH MINIMUM BEHIND REINFORCING BARS AS SHOWN. REPLACEMENT OF CORRODED REBARS SHALL BE INCIDENTAL AND INCLUDED IN REPAIR.
  4. WHERE DIRECTED BY ENGINEER, CUT EXISTING DETERIORATED REINFORCEMENT AND REPLACE WITH MATCHING BARS IN SIZE AND SPACING.

SPALL REPAIR DETAIL  
SCALE: 1/4"=1'-0"

BASIN CONCRETE SURFACE REPAIR:

1. CONCRETE SURFACES WITHIN BASINS 1 THROUGH 4 AND WITHIN THE FILTER INFLUENT CONDUIT SHOWN ON G-002 TO BE CLEANED WITH HIGH PRESSURE ABRASIVE BLASTING OR HYDRO-DEMOLITION TO REMOVE LAITANCE AND WEAKENED/LOOSE MATERIALS.
2. WHEN BASINS AND CHANNELS ARE CLEANED, CONTRACTOR SHALL CONTACT A LICENSED ENGINEER TO VISUALLY INSPECT ALL CONCRETE SURFACES AT ALL 4 BASINS AND CHANNELS AS WELL AS THE PIPE AND DRIVE GALLERIES FOR EVALUATION OF DETERIORATION. AFTER VISUAL INSPECTION ENGINEER SHALL RECOMMEND AREAS USING GROUND PENETRATING RADAR (GPR) TO DETERMINE REINFORCEMENT CONCRETE COVER. THE AMOUNT OF SCANNING SHALL BE LIMITED TO 5% OF SURFACE AREA OF ONE BASIN SELECTED BY THE ENGINEER AFTER EVALUATION.
3. CONCRETE SCALING SURFACE RESTORATION SHALL BE DETERMINED BY THE ENGINEER BASED ON THE FOLLOWING CONDITIONS ENCOUNTERED:
  - a. IF WALL SURFACES HAVE A MINIMUM 2 INCH OF CONCRETE COVER, NO ADDITIONAL CORRECTIVE ACTION IS REQUIRED.
  - b. AREAS OF WALL SURFACES WITH LESS THAN 1.5" OF CONCRETE COVER SHALL BE REPAIRED TO RESTORE THE CONCRETE COVER. A PROPRIETARY REPAIR MORTAR, THAT IS CERTIFIED COMPLIANT TO NSF/ANSI STANDARD 61 FOR CONTACT WITH POTABLE WATER, SUCH AS MASTEREMACO 488CI, MANUFACTURED BY BASF OF SHAKOPEE, MN CAN BE APPLIED VIA TROWEL OR LIGHT SPRAY COATING FOR LOCALIZED REPAIRS. THE ENTIRETY OF THE SURFACES CAN THEN BE COATED WITH TWO COATS OF XYPEX CONCENTRATE, TO COMPLY WITH NSF/ANSI CERTIFICATION. IF A LARGER PORTION OF THE CONCRETE - ON THE ORDER OF 50% OR MORE, EXHIBITS LOW REINFORCEMENT COVER, A SHOTCRETE REPAIR METHOD WOULD NEED TO BE APPLIED TO THE WALLS.
4. FOR AREAS REQUIRING CRACK OR SPALL REPAIR WITH EXPOSED REINFORCEMENT BARS, AS DETERMINED BY THE ENGINEER'S INSPECTION, CONTRACTOR SHALL REFER TO DETAILS ON THIS SHEET FOR THE REPAIR.
5. DEPENDING ON REPAIR SYSTEM USED FOR CRACK OR SPALL REPAIRS, CONTRACTOR SHALL FOLLOW MANUFACTURER'S WRITTEN INSTRUCTIONS FOR APPLICATIONS EXPOSED TO POTABLE WATER SURFACES, CERTIFIED TO MEET THE REQUIREMENTS OF NSF 61.
6. CRACKS LESS THAN 1/8" THICKNESS SHALL NOT BE REPAIRED WITH HIGH PRESSURE EPOXY INJECTION, REPAIR SURFACE AS DESCRIBED IN NOTE 3.

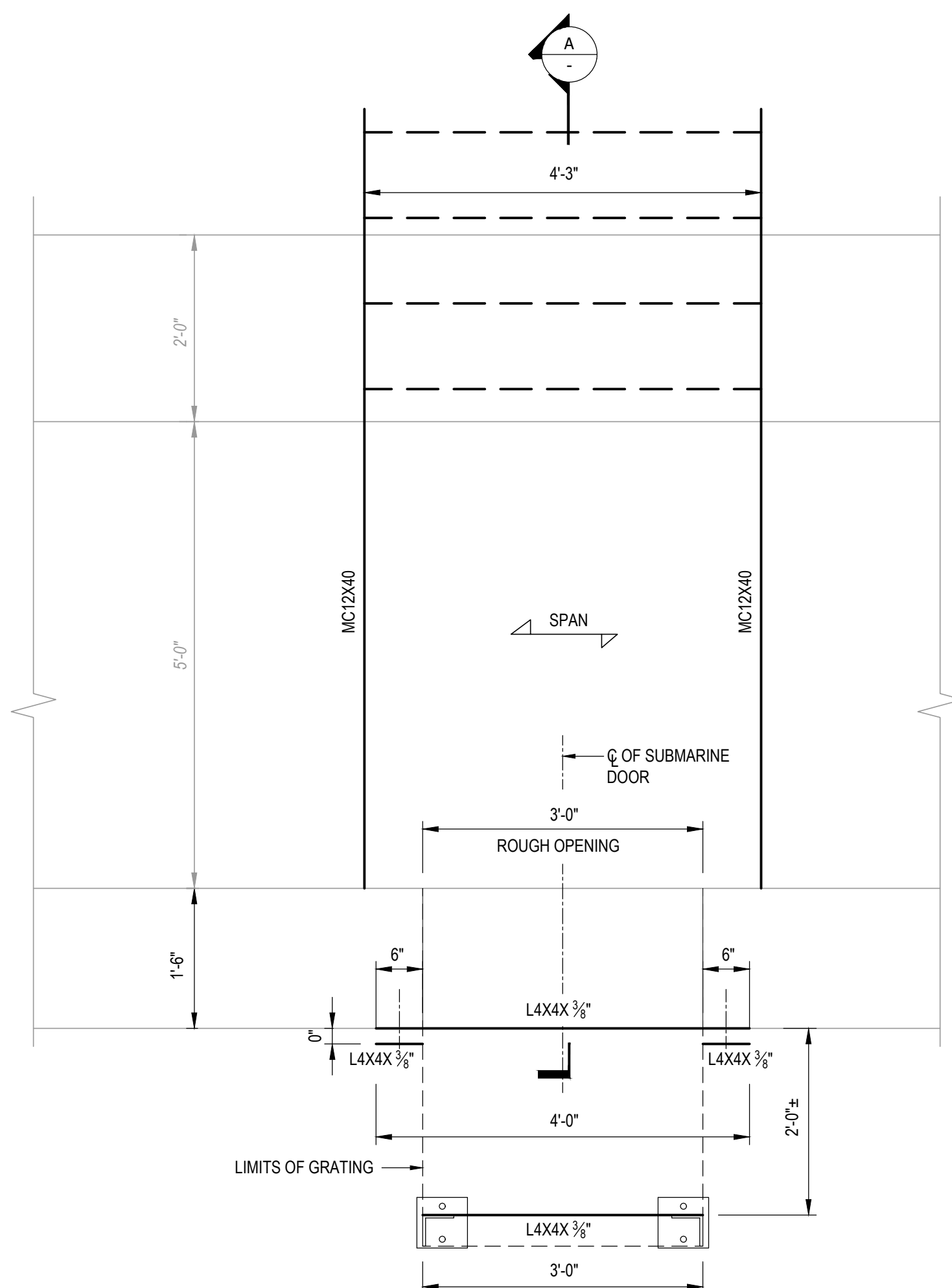


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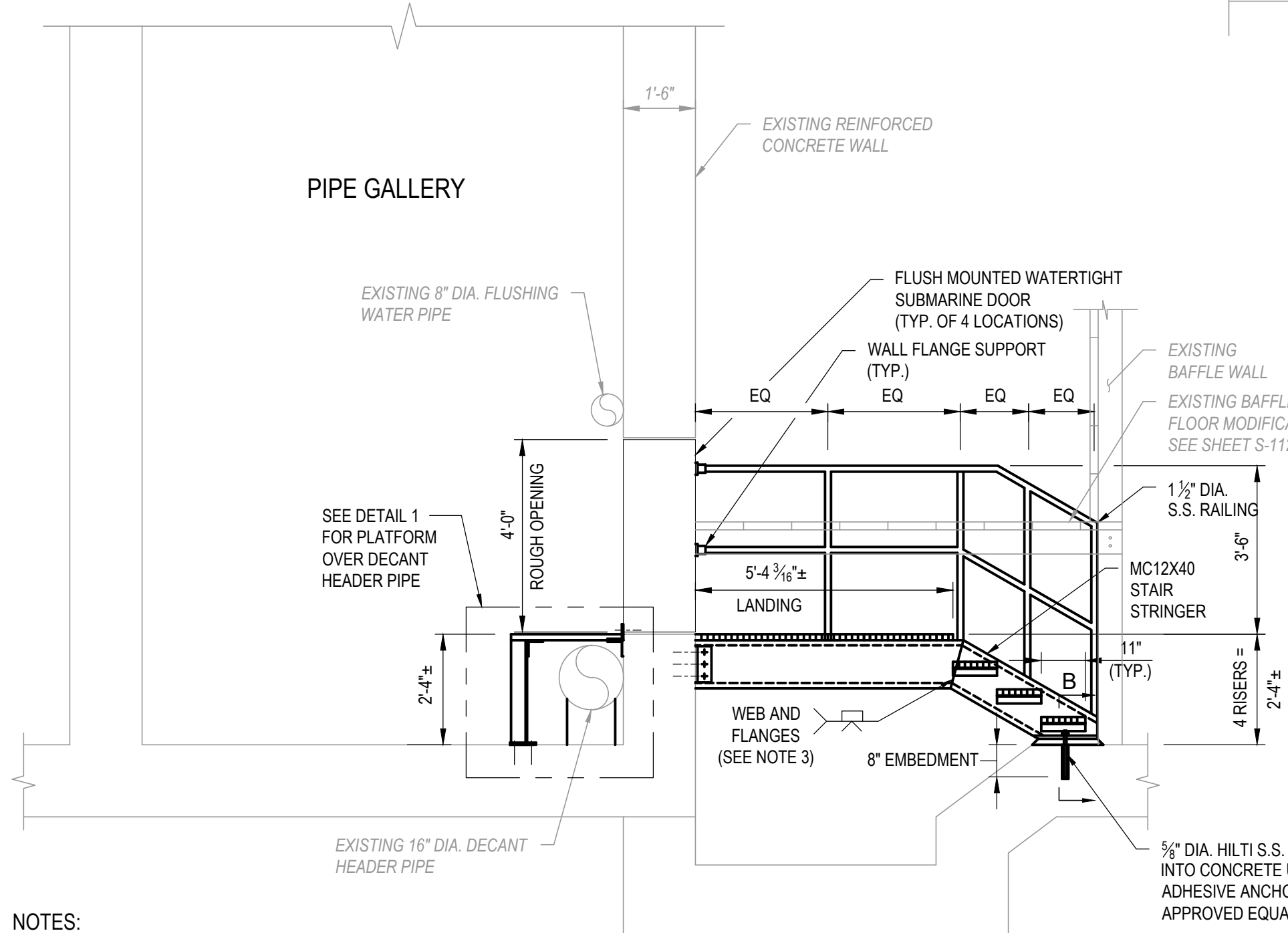
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REVISIONS			CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1–4 CONCRETE REPAIRS DETAILS	
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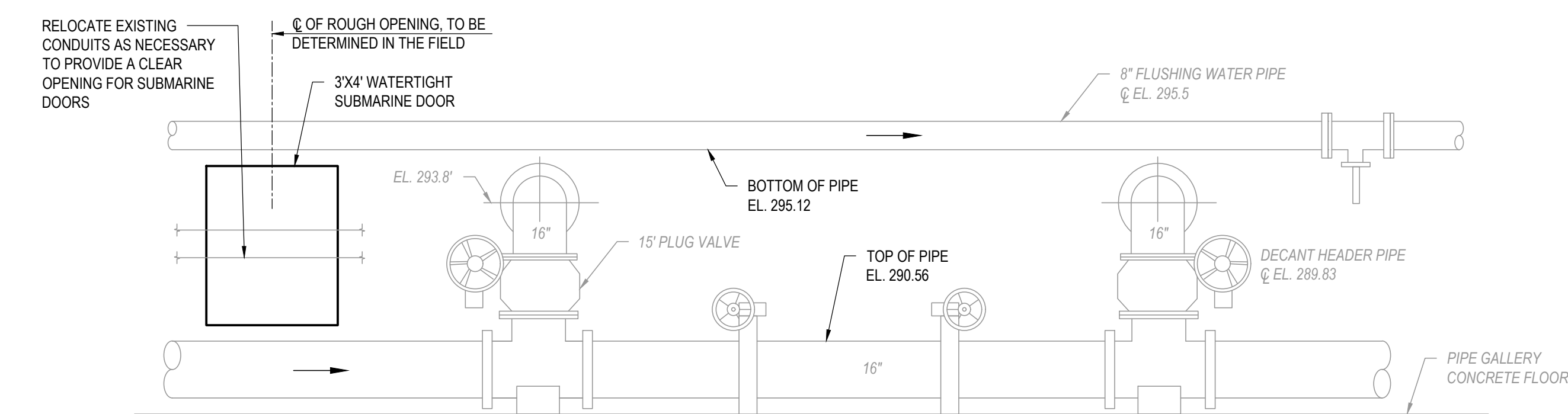




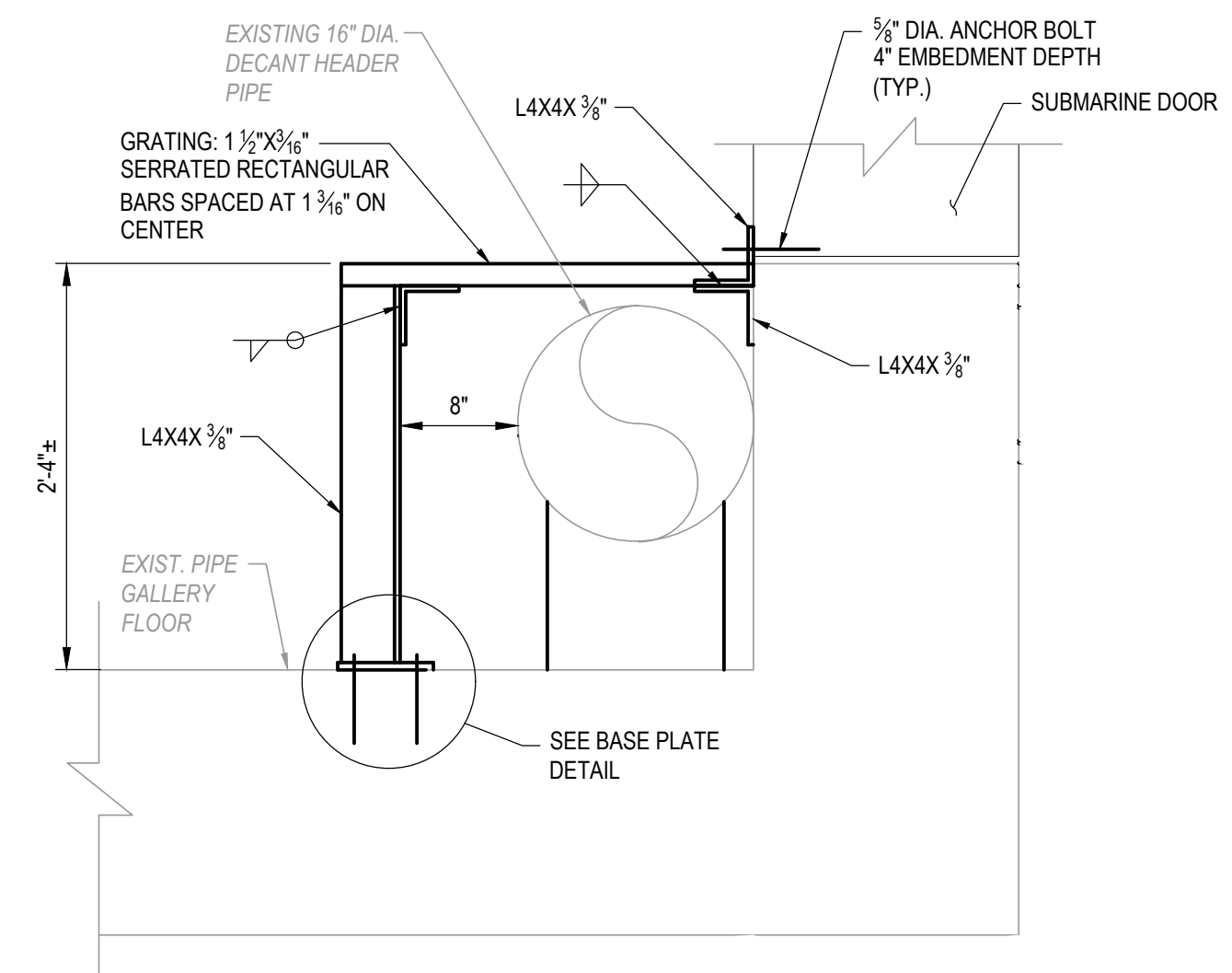
**SUBMARINE DOOR STAIR AND PLATFORM FRAMING PLAN**  
SCALE: 3/4"=1'-0"



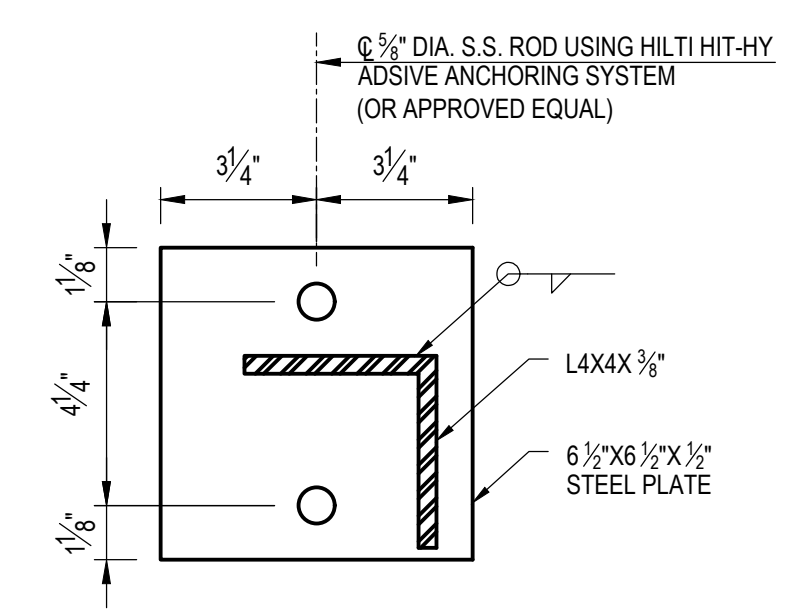
**A SUBMARINE DOOR STAIR SECTION**  
SCALE: 3/8"=1'-0"



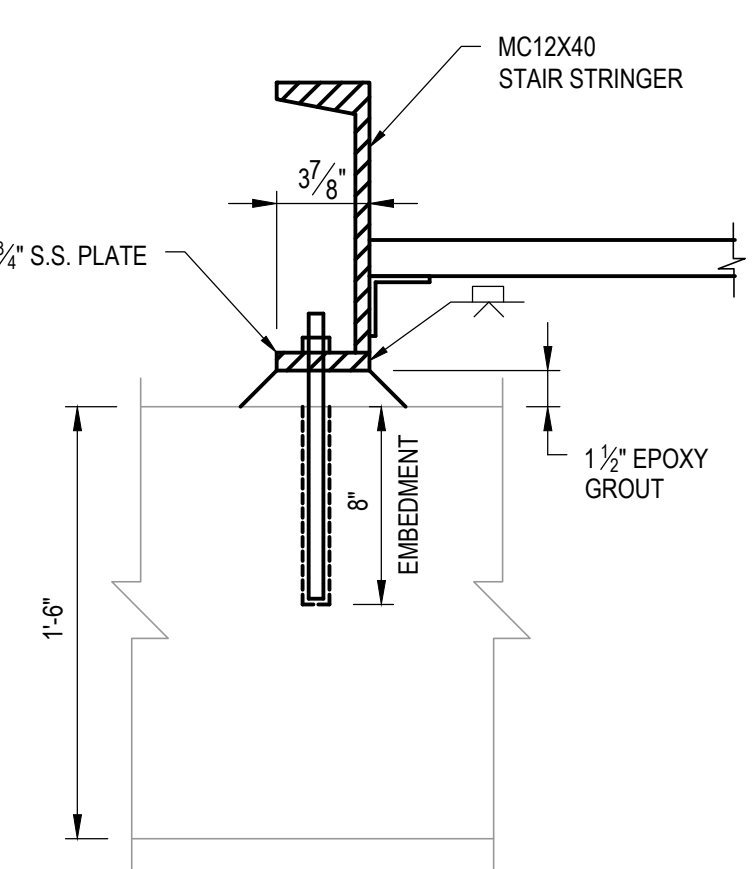
**PIPE GALLERY WALL ELEVATION**  
SCALE: NTS



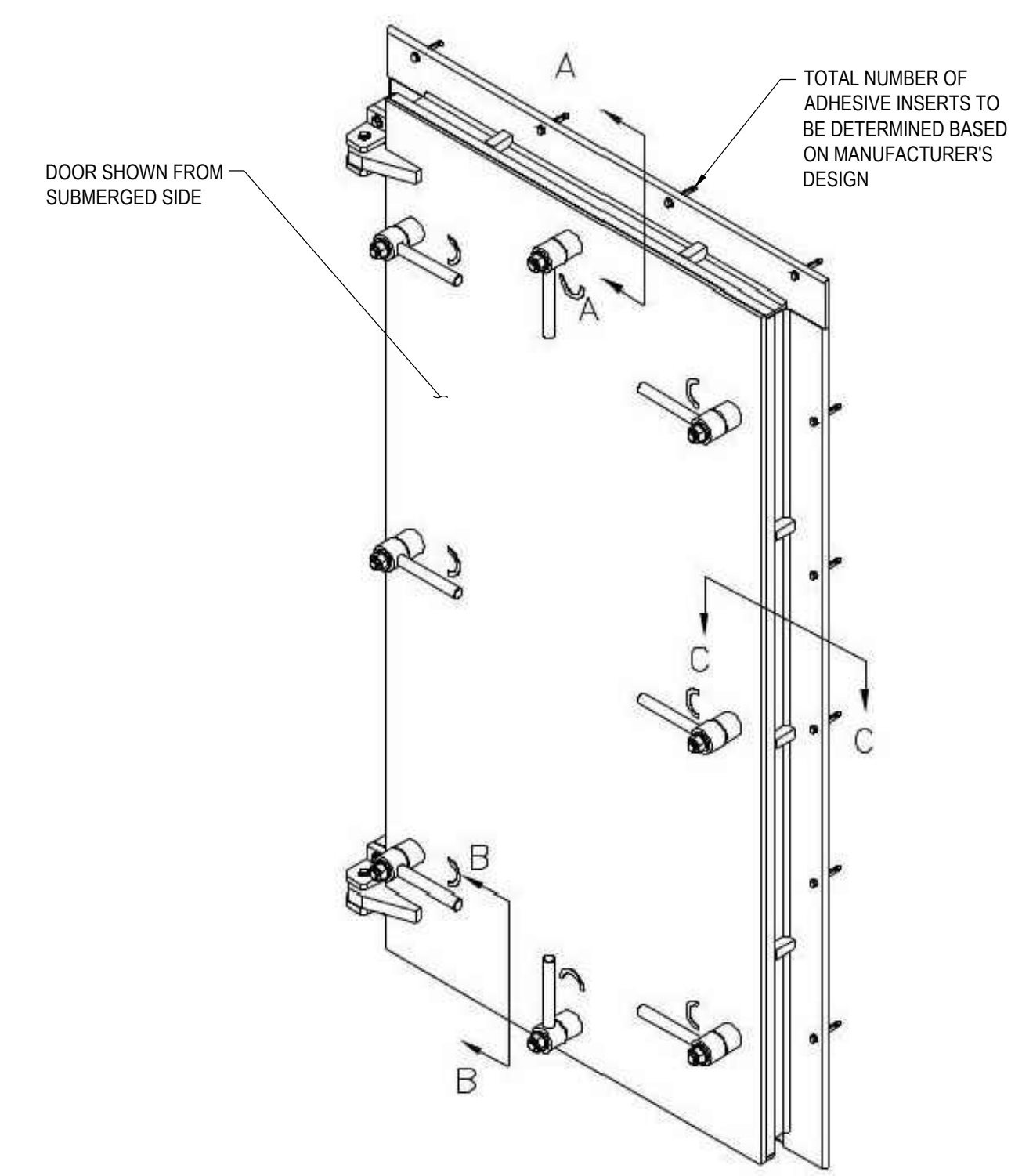
**DETAIL 1**  
SCALE: 1"=1'-0"



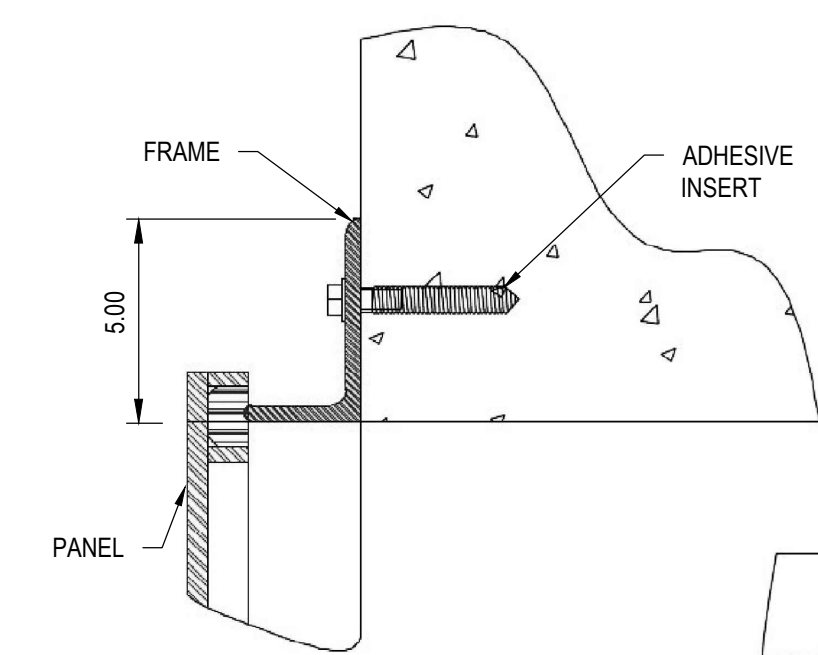
**BASE PLATE DETAIL**  
SCALE: 3"=1'-0"



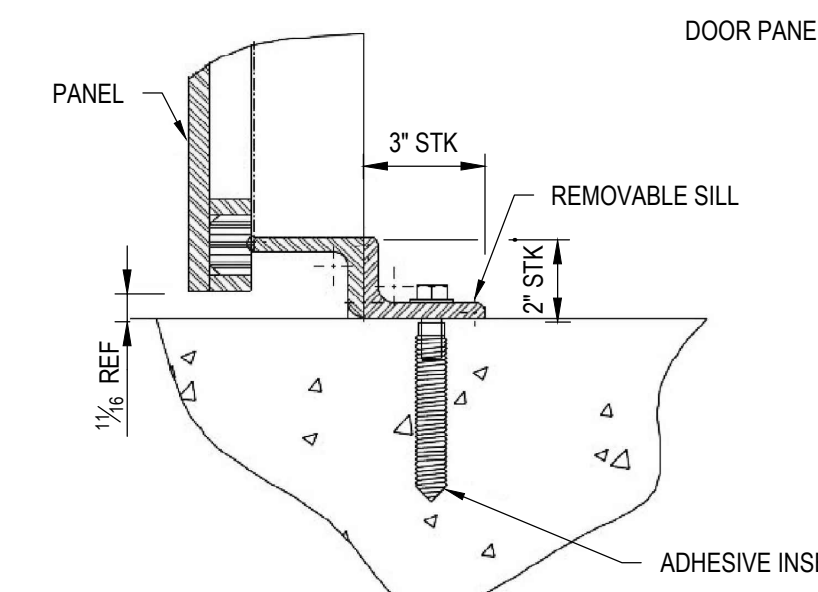
**B SECTION**  
SCALE: 1 1/2"=1'-0"



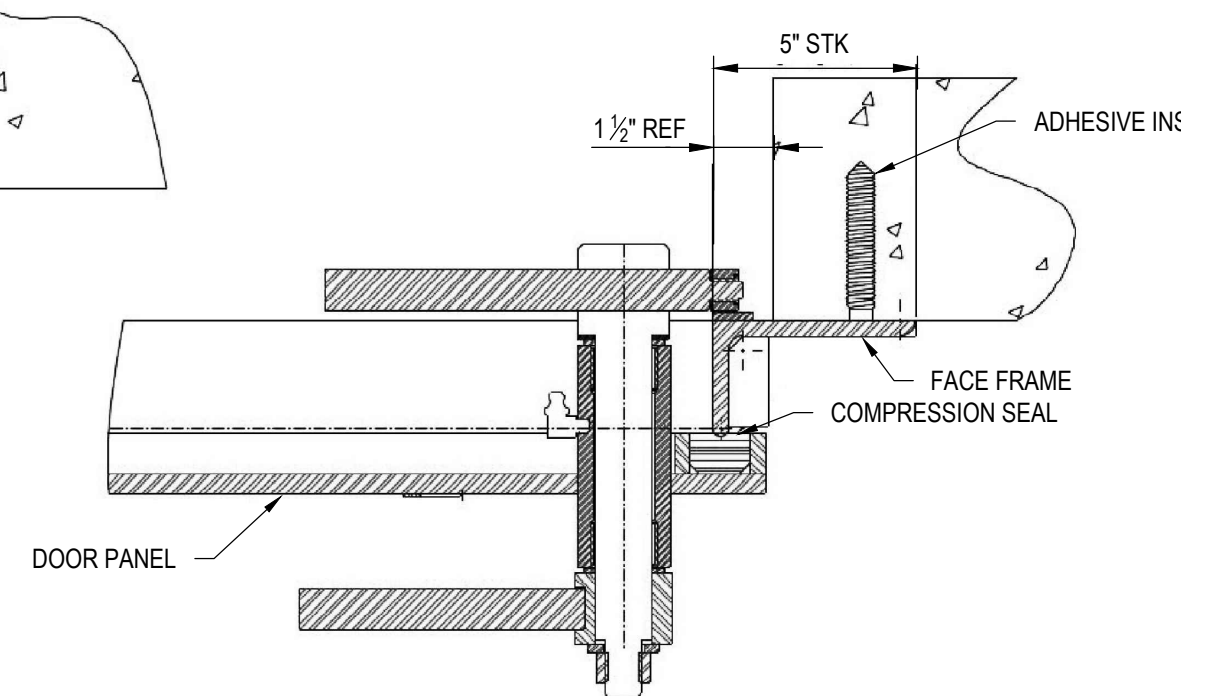
**WATERTIGHT SUBMARINE DOOR ISOMETRIC**  
SCALE: NTS



**SECTION A-A**

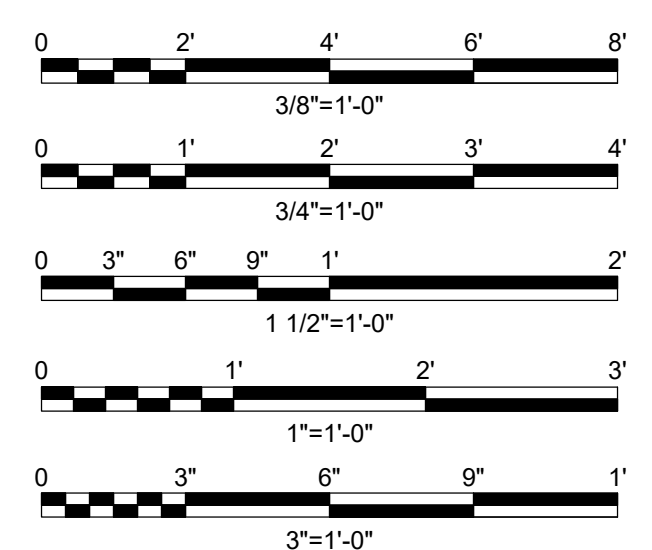


**SECTION B-B**



**SECTION C-C**

- NOTES:**
- THESE DETAILS DEPICTED ARE GENERIC AND SHALL BE DESIGNED BY THE SELECTED SUBMARINE DOOR MANUFACTURER..



**FLUSH MOUNTED SUBMARINE DOOR FRAME**  
SCALE: NTS

- NOTES:**
- CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
  - STAIR STRINGER CLIP ANGLE AND RAILING CONNECTIONS TO BE DESIGNED BY RAILING FABRICATOR.
  - WELD SHALL BE GROUND SMOOTH AND FLUSH TO MATCH AND BLEND WITH ADJOINING SURFACES.
  - GRATING FOR LANDING AND STAIR TREADS TO BE 1-1/2"X3/8" SERRATED S.S. RECTANGULAR BEARING BARS AT 1 3/16" ON CENTER.
  - TOP OF STEEL ELEVATION SHALL BE DETERMINED BASED ON FIELD DETERMINED SUBMARINE DOOR LOCATION.
  - STAIR LANDING ELEVATION SHOULD BE DETERMINED IN THE FIELD BASED ON FINAL LOCATION OF SUBMARINE DOOR FRAME.

**Jacobs**

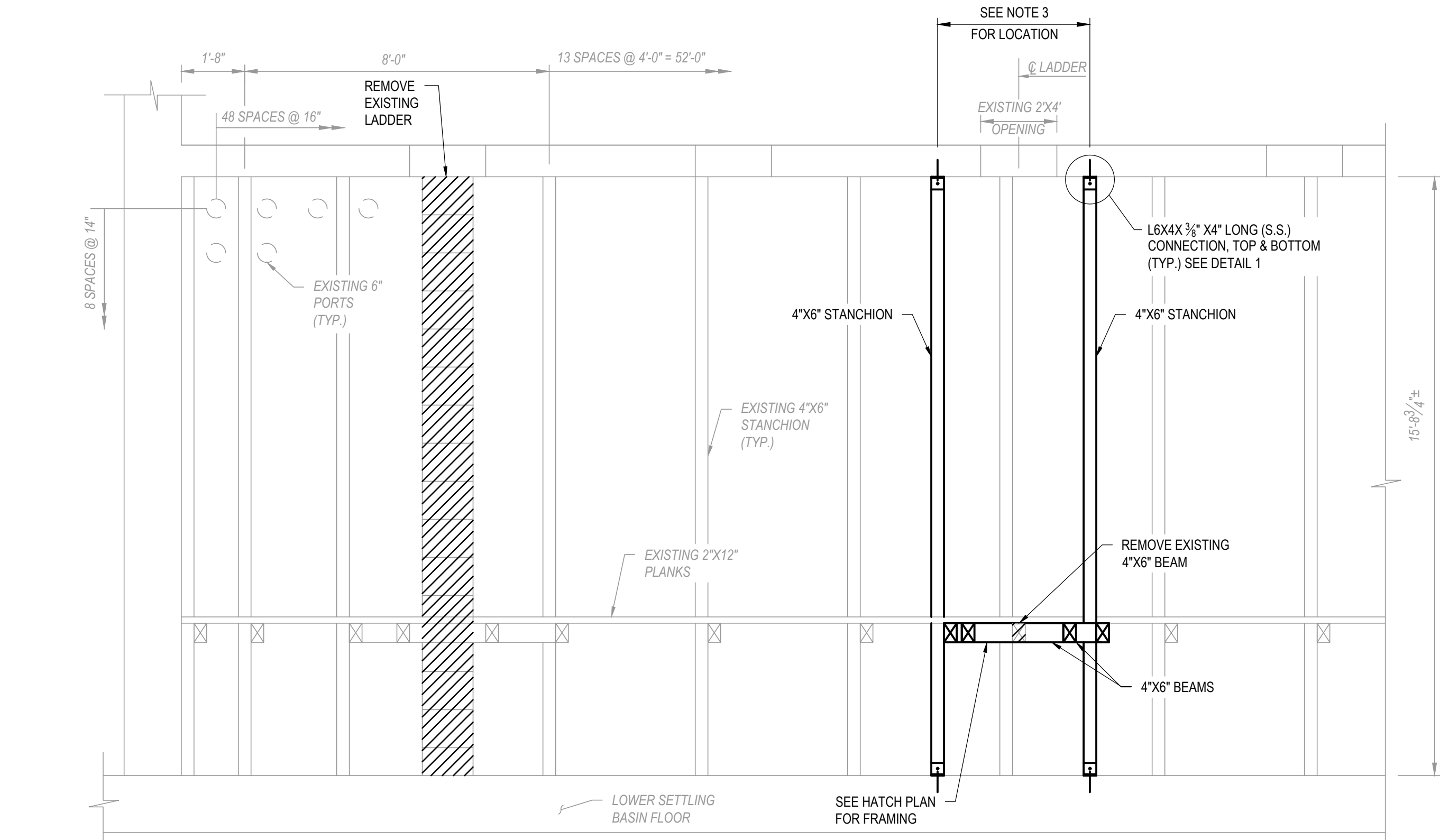
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REVISIONS		
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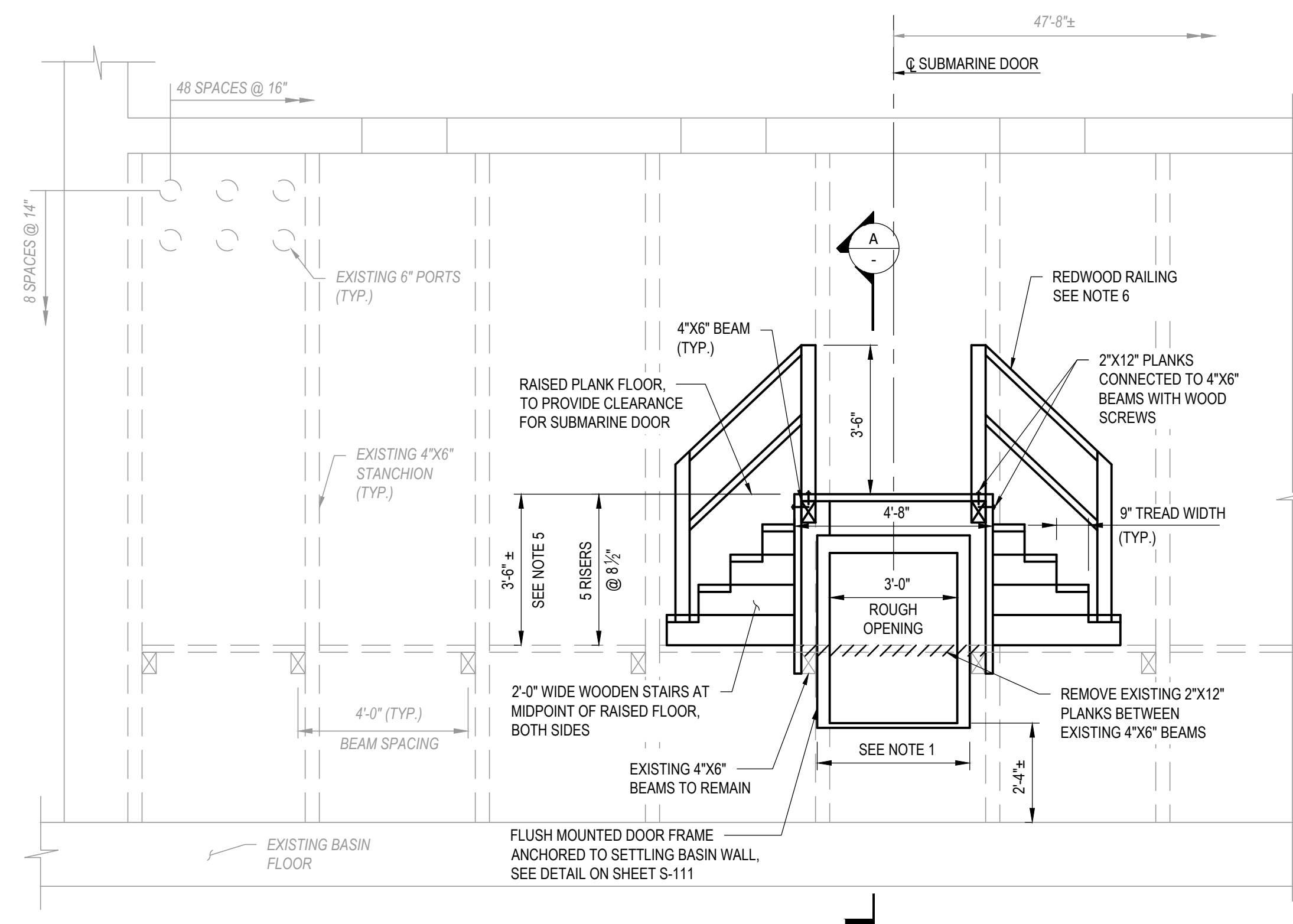
CLARIFIER SYSTEM REHABILITATION PROCESS BASINS 1-4 LOWER BASIN SUBMARINE DOORS		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJPCA 246A27990200		
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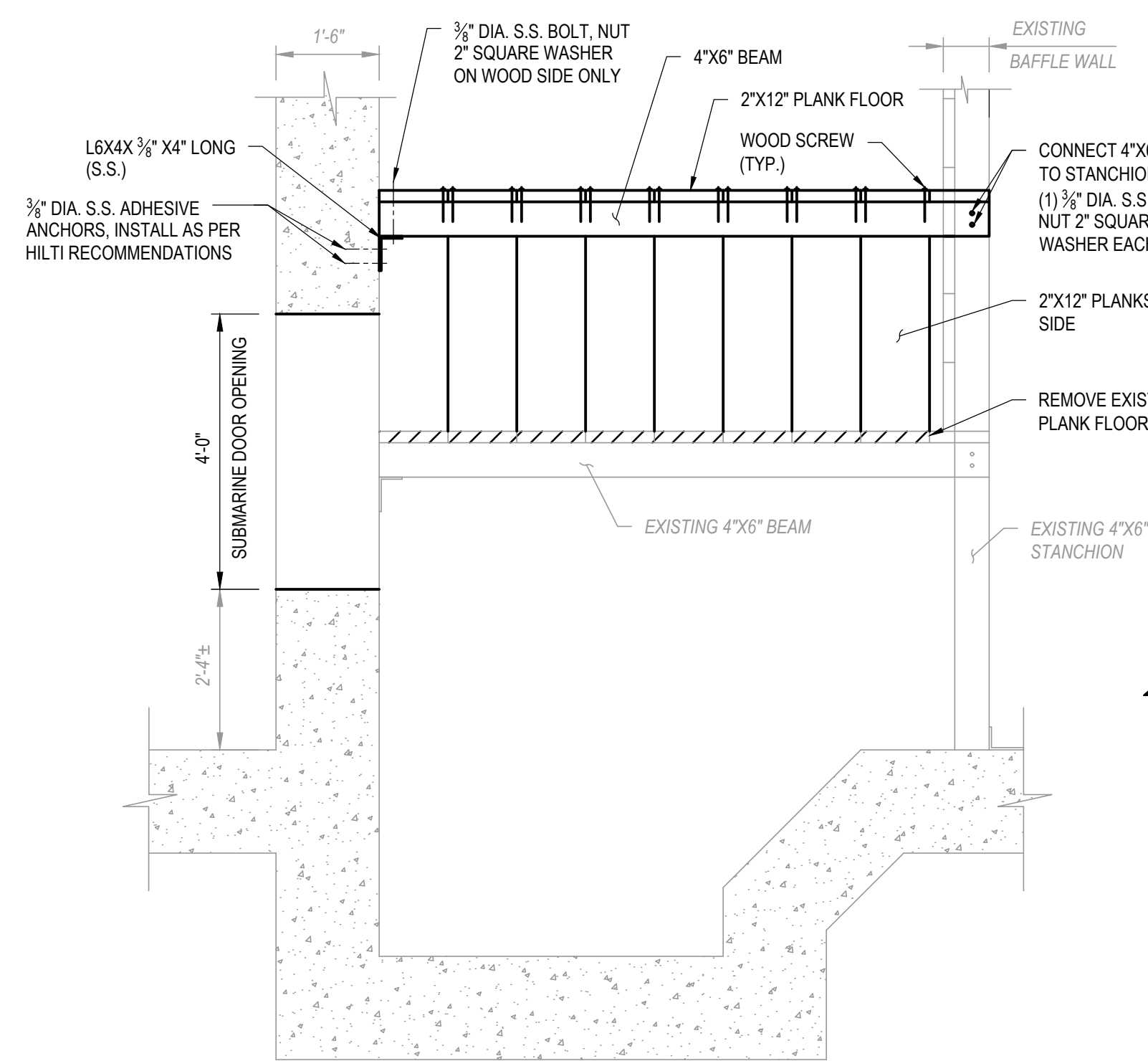
- NOTES:
1. LADDER AND EXISTING BAFFLE WALL 6" PORTS NOT SHOWN FOR CLARITY.
  2. LOWER SETTLING BASIN #3 SHOWN, SIMILAR AT BASINS 1, 2 AND 4.
  3. FINAL LOCATION OF (2) 4"x6" STANCHIONS SHALL BE LOCATED IN THE FIELD TO AVOID INTERFERENCE WITH EXISTING 6" PORTS.
  4. REMOVE BAFFLE WALL SHIPLAP PLANKS AS NECESSARY TO INSTALL 4"x6" STANCHIONS. REPLACE PLANKS AFTER INSTALLATION.

**C**  
WALL FRAMING SECTION  
SCALE: 3/8"=1'-0"



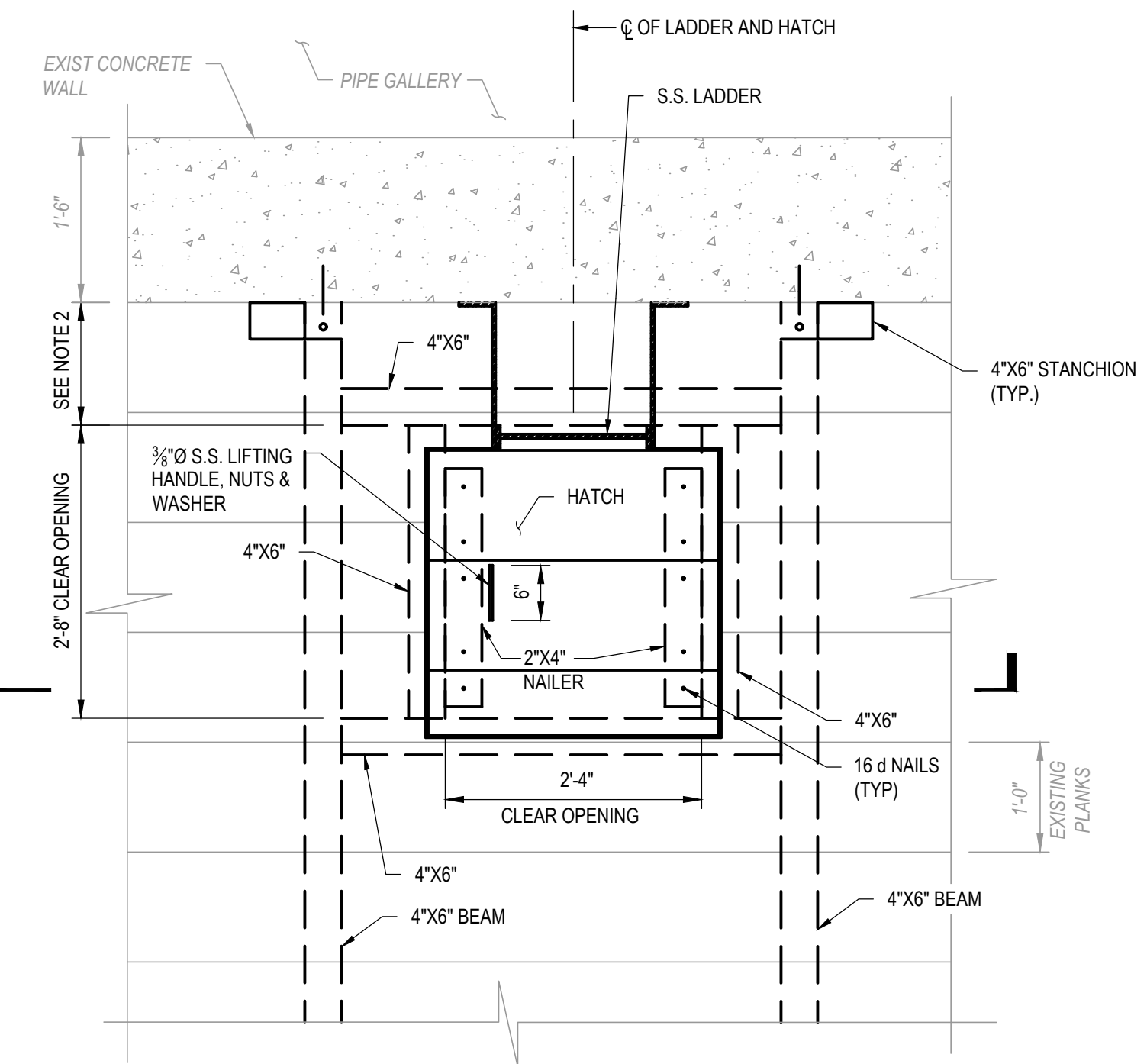
- NOTES:
1. CONTRACTOR SHALL VERIFY FLUSH MOUNTED SUBMARINE DOOR FRAME WILL NOT INTERFERE WITH EXISTING 4"x6" BEAMS.
  2. TYPICAL SUBMARINE DOOR AND RAISED PLANK FLOOR AT 4 BASIN LOCATIONS.
  3. SEE SECTION A FOR 4"x6" BEAM CONNECTIONS TO EXISTING WALL AND STANCHION.
  4. EXISTING 6" DIAMETER PORTS NOT SHOWN FOR CLARITY.
  5. FINAL HEIGHT OF PLANK FLOOR DETERMINED IN THE FIELD TO AVOID AND FIT BETWEEN EXISTING 6" PORTS.
  6. PROVIDE A WOOD HANDRAIL WITH 4"x4" POSTS AND 2"x4" TOP AND MIDDLE RAILS FOR STAIRS AT RAISED PLANK FLOOR. TOP OF RAIL 3'-6" ABOVE STAIRS.

**D**  
MODIFIED PLANK FLOOR FRAMING  
SCALE: 3/8"=1'-0"



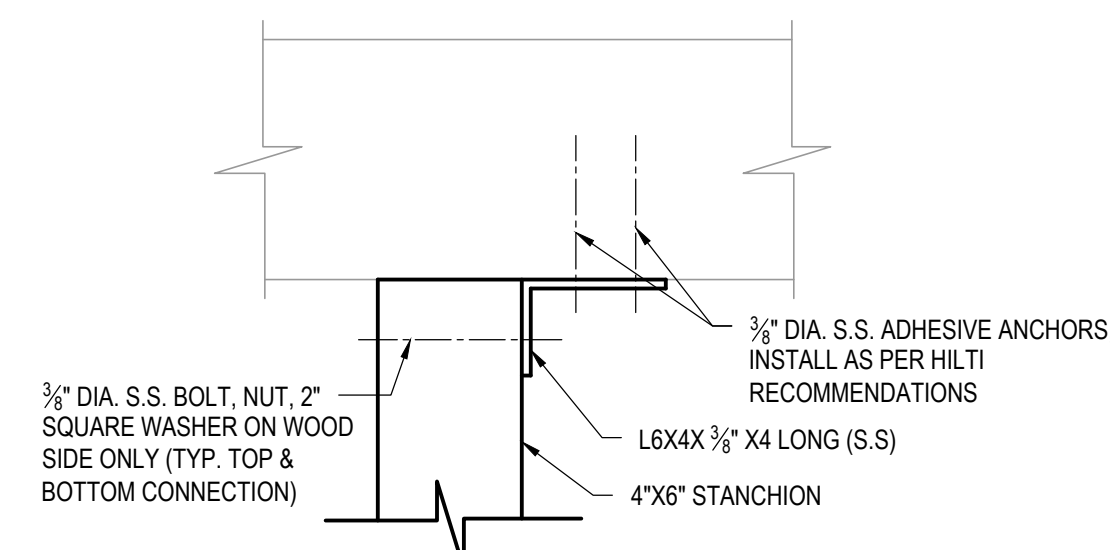
- NOTES:
1. REMOVE 2"x12" PLANKS AS NECESSARY ALONG EXISTING BAFFLE WALL TO FACILITATE THE PLACEMENT OF NEW 4"x6" BEAMS.
  2. REPLACE ANY PLANKS THAT WERE REMOVED FROM EXISTING BAFFLE WALL AND CONNECT USING S.S. BOLTS, NUTS AND 2" SQUARE WASHER EACH SIDE. SPACING AND SIZE OF BOLTS TO FOLLOW EXISTING BOLT SIZE AND PATTERN.

**A**  
SECTION  
SCALE: 1"=1'-0"

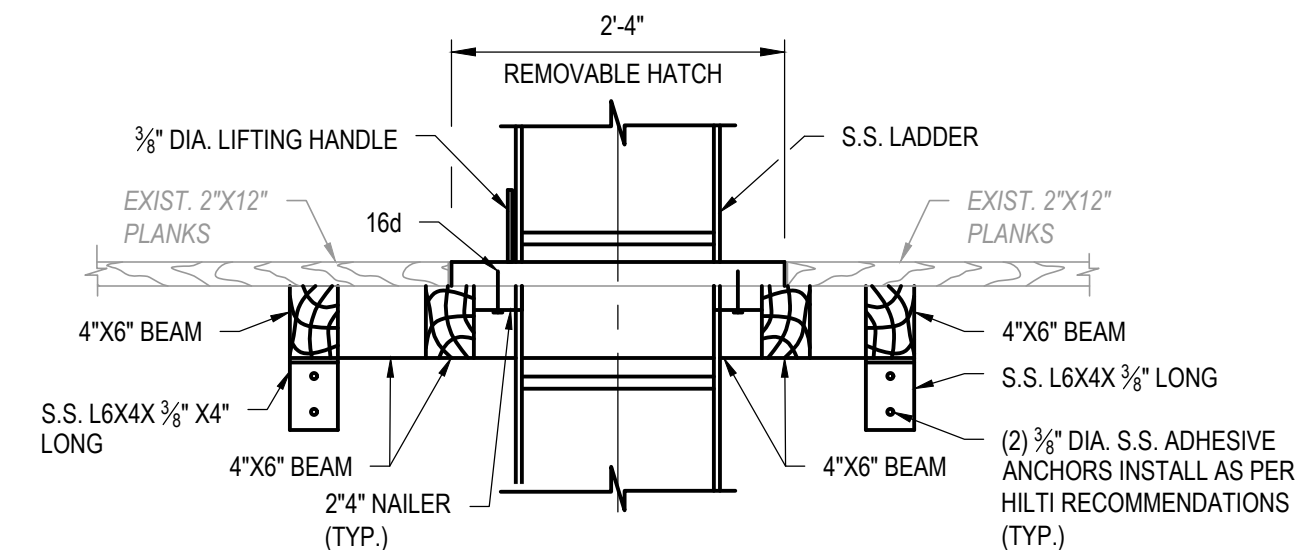


- NOTES:
1. CUT EXISTING 2"x12" PLANKS AND FRAME OUT A 2'-4"x2'-8" OPENING WITH 4"x6" WOOD BEAMS.
  2. VERIFY LOCATION OF NEW HATCH OPENING FRAMING BASED ON FINAL LADDER POSITION BASED ON BATTER.
  3. PROVIDE SIMILAR HATCH COVERS AT LOCATIONS OF LADDER REMOVAL. (TYP. AT 4 LOCATIONS)
  4. WOOD BEAM AND STANCHION MATERIAL: "REDWOOD COMMON GRADE".

**HATCH PLAN**  
SCALE: 3/4"=1'-0" (TYP AT 4 LOCATIONS)

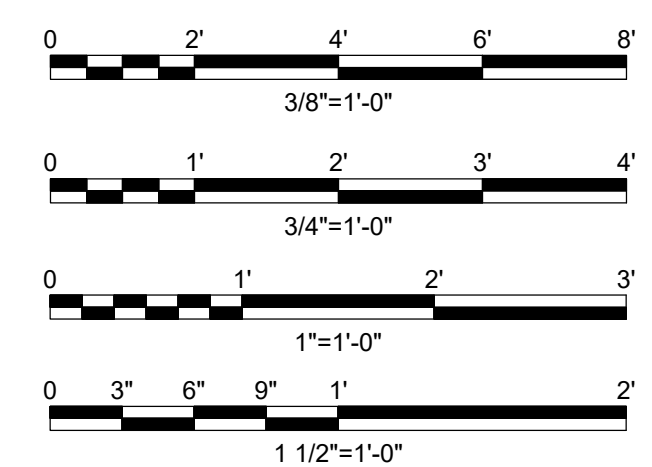


**DETAIL 1**  
SCALE: 1 1/2"=1'-0"



**B**  
SECTION  
SCALE: 3/4'-0"

LEGEND:



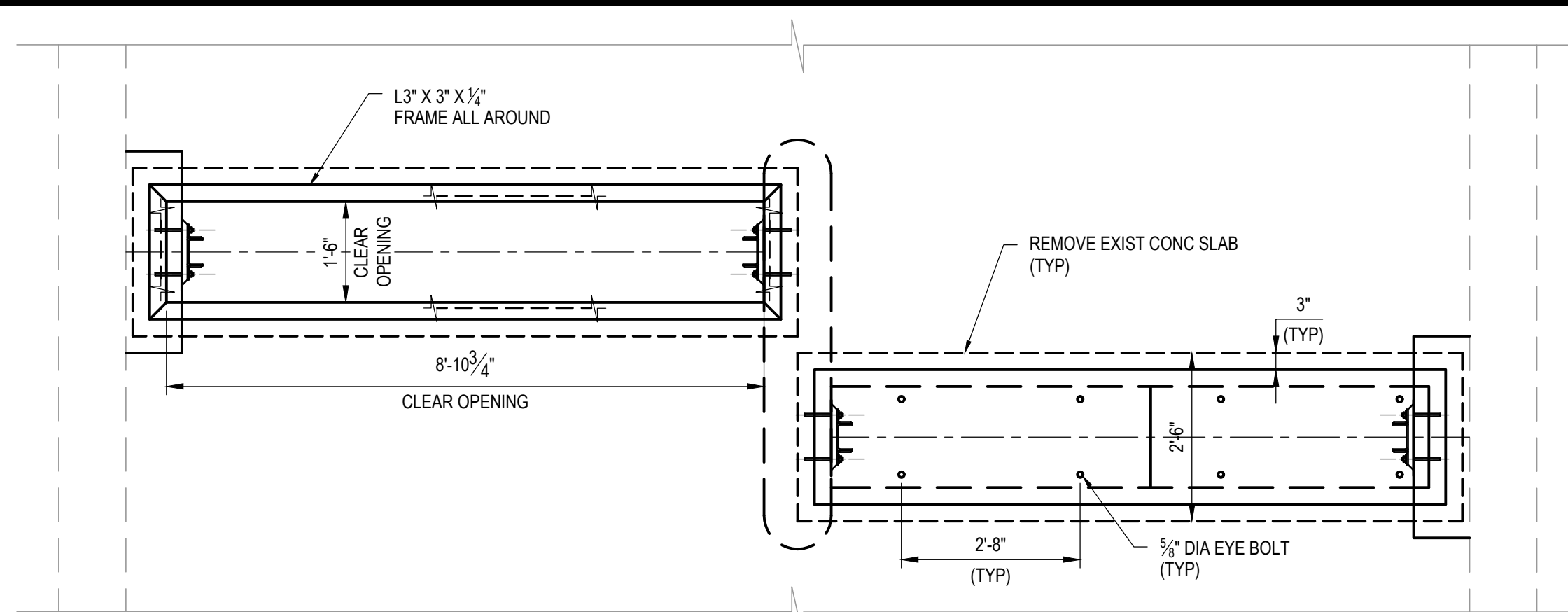
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CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 HATCH AND EXISTING BAFFLE MODIFICATIONS		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC# 246A27990200		
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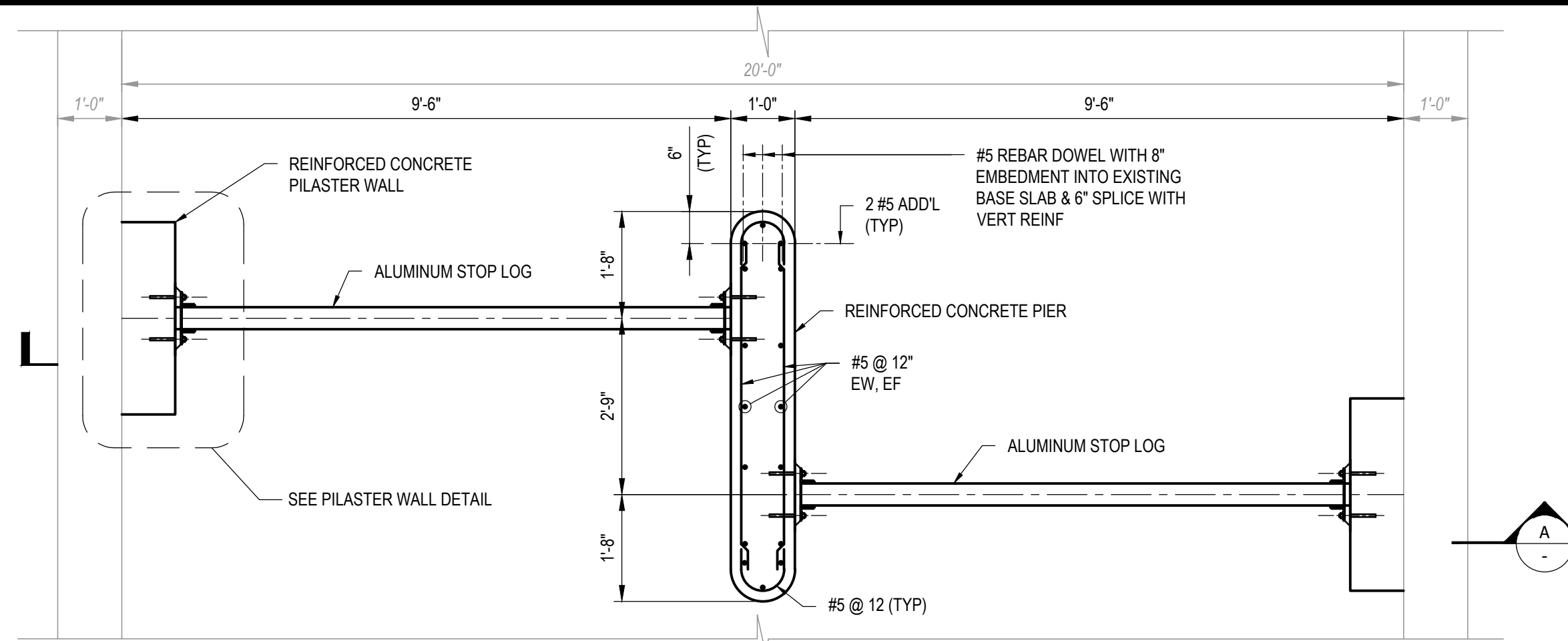
LUIS S. DUARTE, PE

NJPE LICENSE NO. 24GE04642900

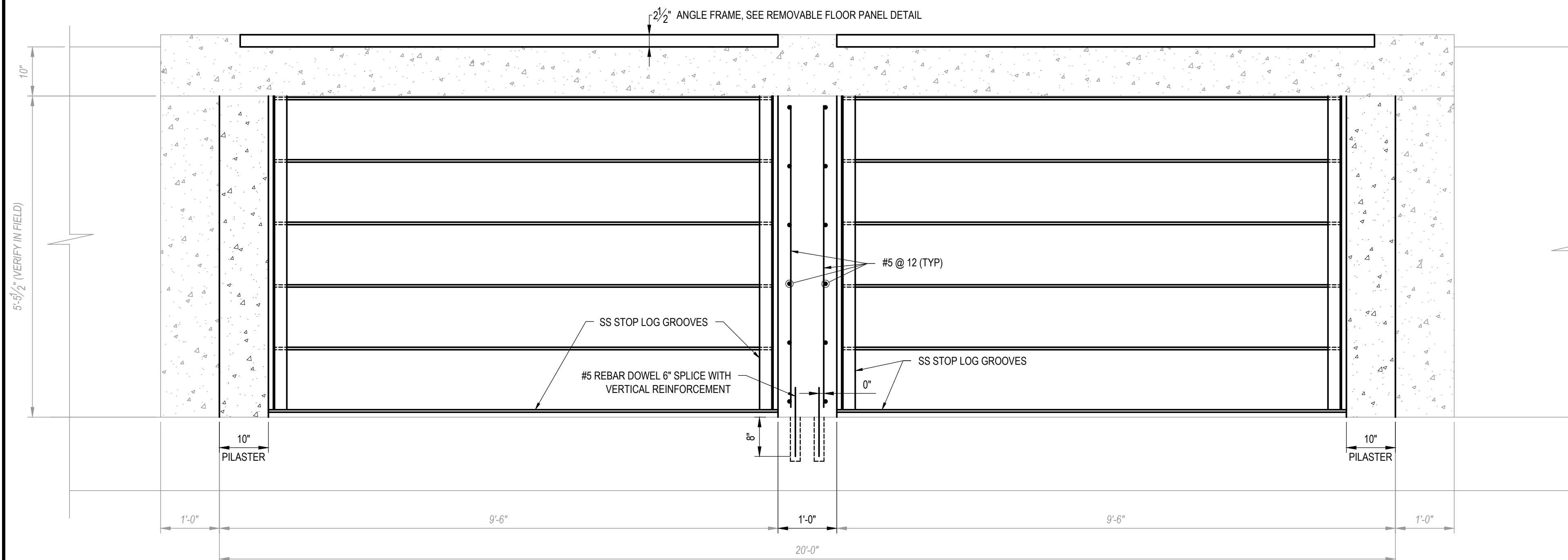
**Jacobs**



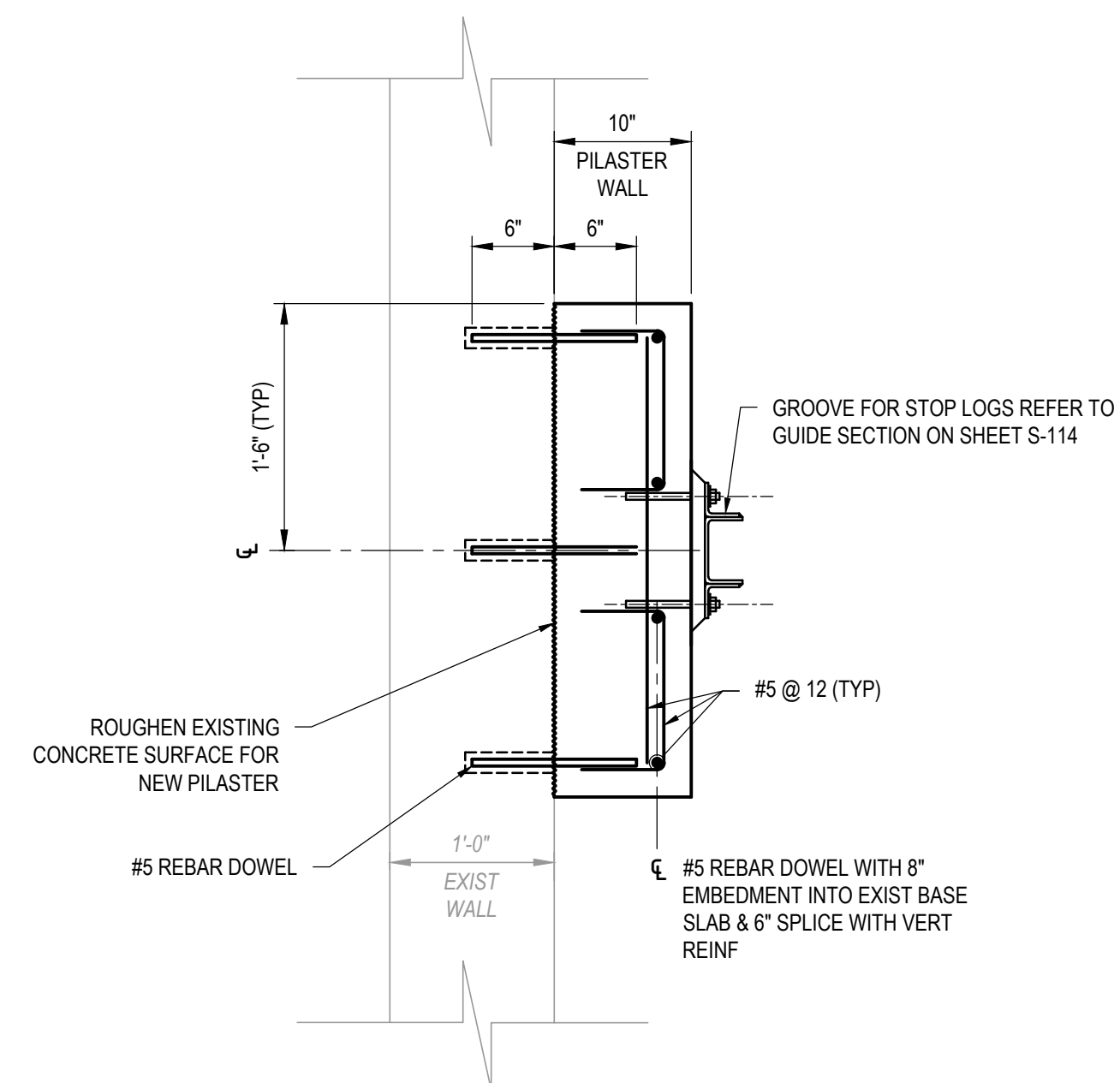
**FILTER INFLUENT CONDUIT TOP OF CONCRETE PLAN**  
SCALE: 1/2"=1'-0"



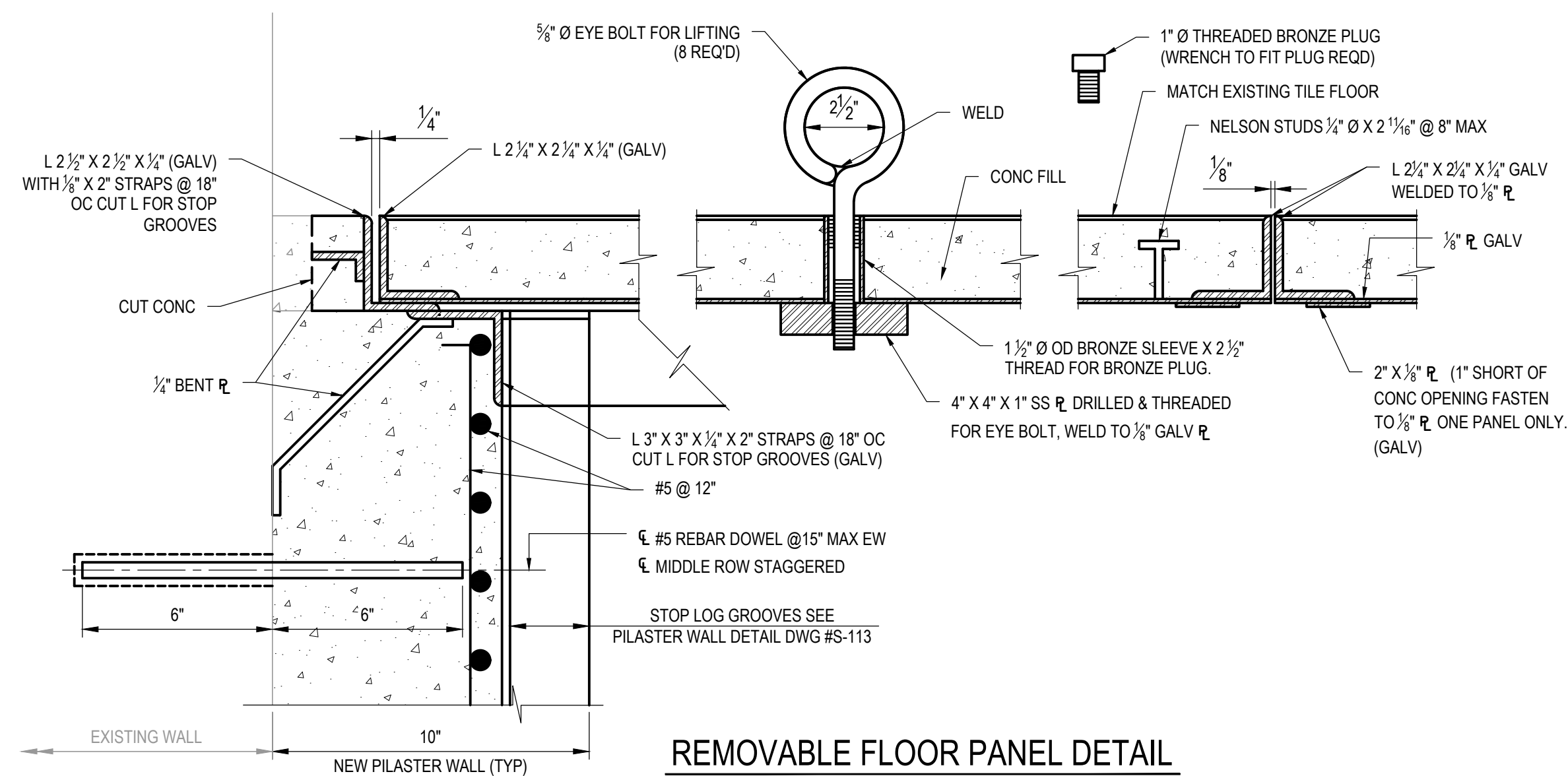
**FILTER INFLUENT CONDUIT PARTIAL PLAN**  
SCALE: 1/2"=1'-0"



**FILTER INFLUENT CONDUIT SECTION**  
SCALE: 3/4"=1'-0"



**PILASTER WALL DETAIL**  
SCALE: 1"=1'-0"



**REMOVABLE FLOOR PANEL DETAIL**  
SCALE: 3"=1'-0"

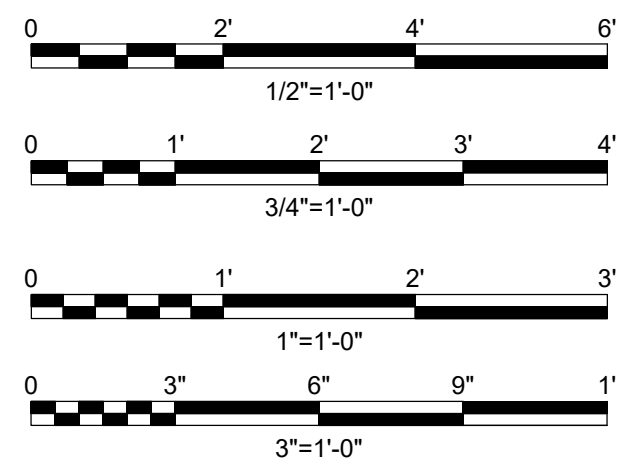
**ADHESIVE ANCHOR NOTES:**

- ADHESIVE SUPPLIED BY INSTALLER TO BE:
  - HILTI HIT RES500 EPOXY ADHESIVE
  - ITW RAMSET / REDHEAD EPCON CERAMIC 6 EPOXY ADHESIVE
  - OR APPROVED EQUAL
- UNLESS OTHERWISE NOTED, THE EMBEDMENT DEPTH REQUIRED FOR EACH SIZE ANCHOR WILL BE:

ANCHOR DIAMETER	EMBEDMENT DEPTH
1/2"	4-1/2"
5/8"	6"
3/4"	7"
7/8"	8"
1"	9"

**STOP LOG ASSEMBLY GENERAL NOTES:**

- WELDING ACCORDING TO AWS D1.2 FOR LOGS AND GROOVES.
- STOP LOG THICKNESS, MAX BENDING STRESS AND MAX DEFLECTION, SHALL BE DESIGNED BY SELECTED MANUFACTURER.
- REINFORCEMENT COVER SHALL BE 2 INCHES FOR ALL FILTER CONDUIT CONCRETE WORK.



**Jacobs**

**LUIS S. DUARTE, PE**

NJPE LICENSE NO. 24GE04642900

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**CLARIFIER SYSTEM REHABILITATION  
STRUCTURAL  
BASINS 1-4  
FILTER CONDUIT STOP LOGS**

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
F.A. ORECHO DRIVE PLANT

JACOBS ENGINEERING GROUP  
412 MOUNT KEMBLE AVE.  
MORRISTOWN, NEW JERSEY 07960  
NJCA 246A27990200

DRAWN BY KPL  
PROJECT ENG'R LD  
APPROVED JNB

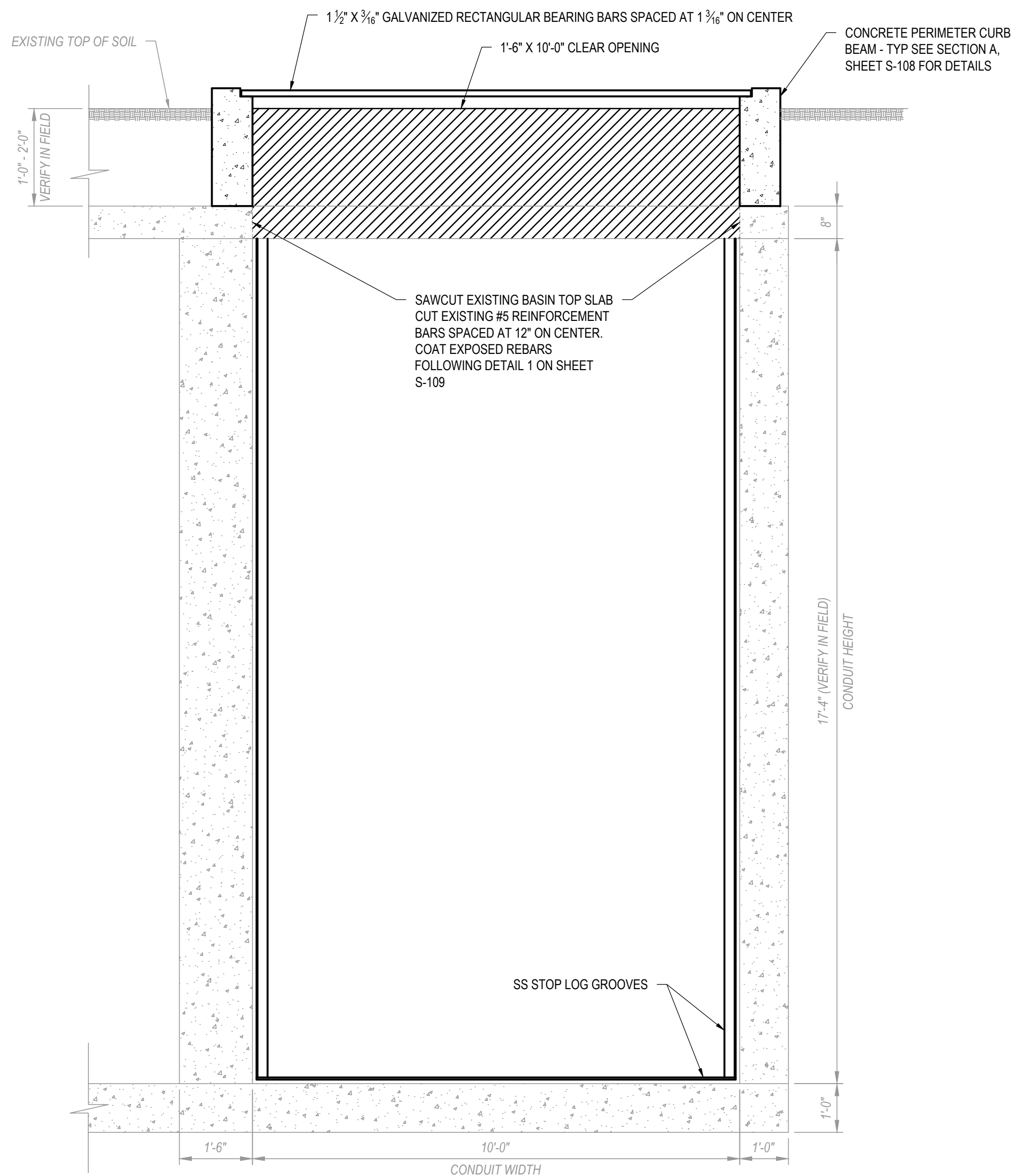
DATE 06/04/2021  
PROJECT E6X94500

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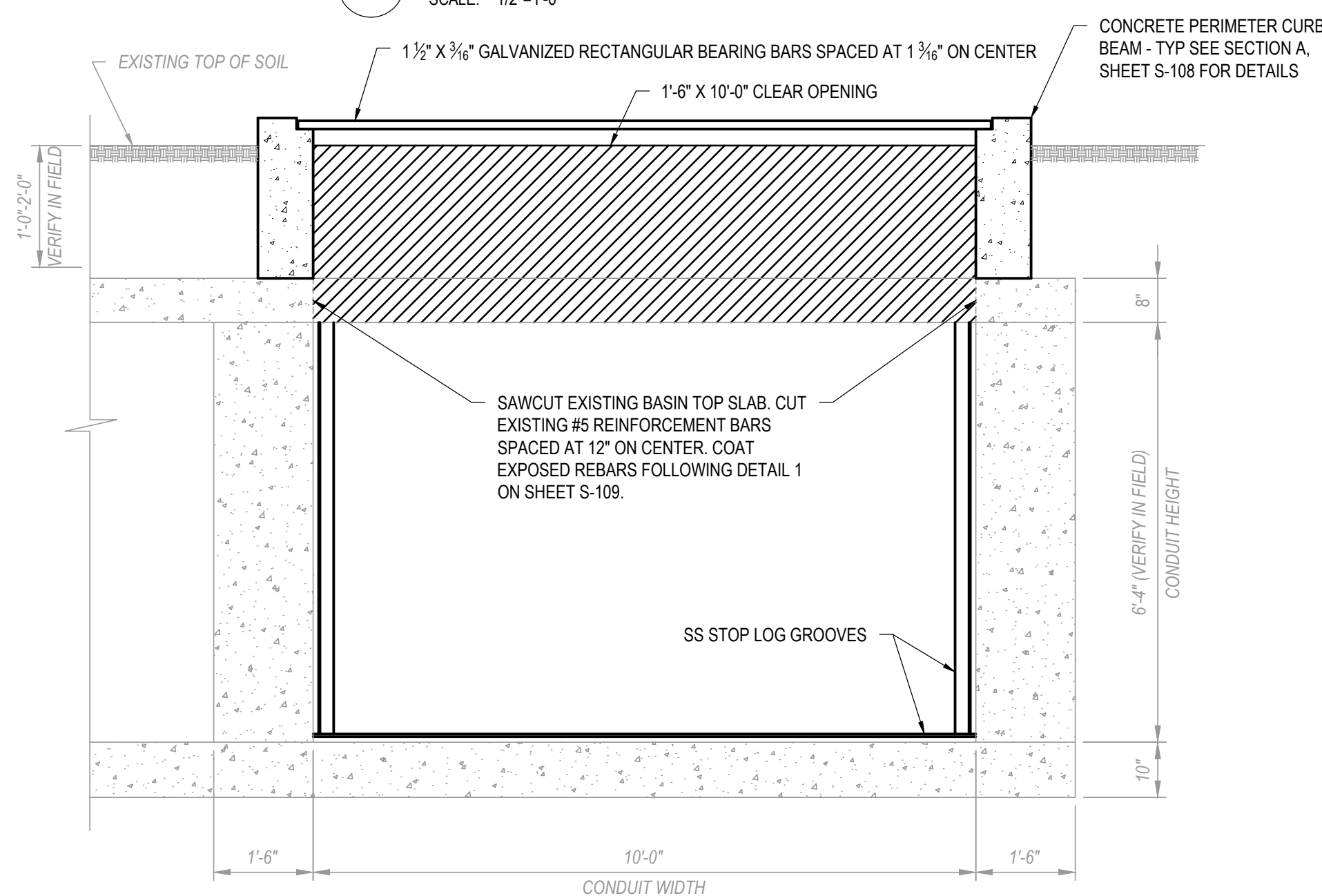
**S-113**





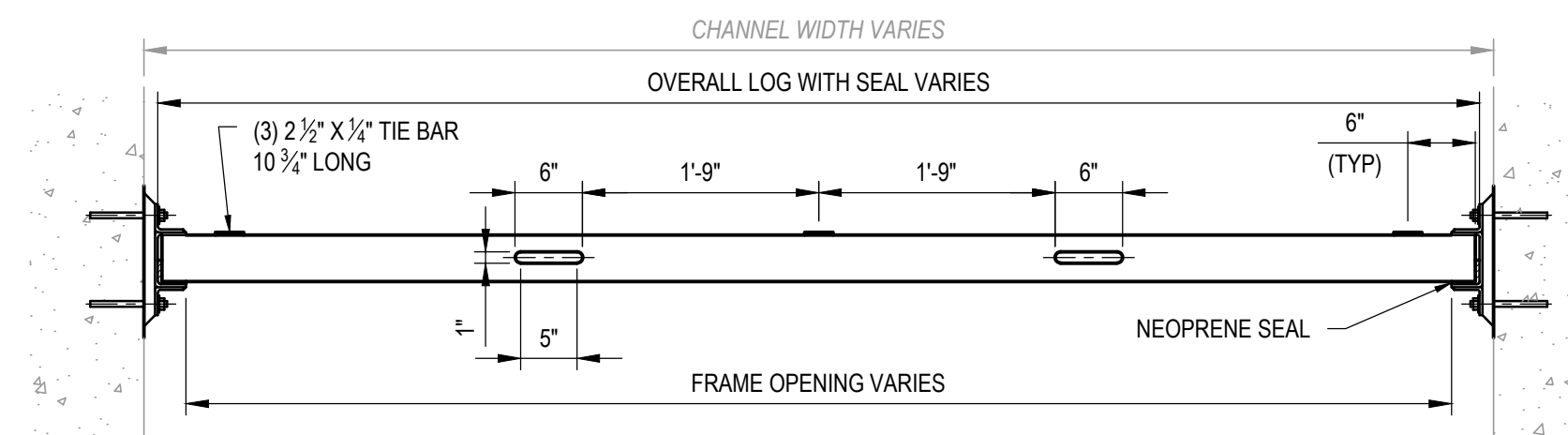
**A BASIN EFFLUENT CONDUIT SECTION**

SCALE: 1/2"=1'-0"



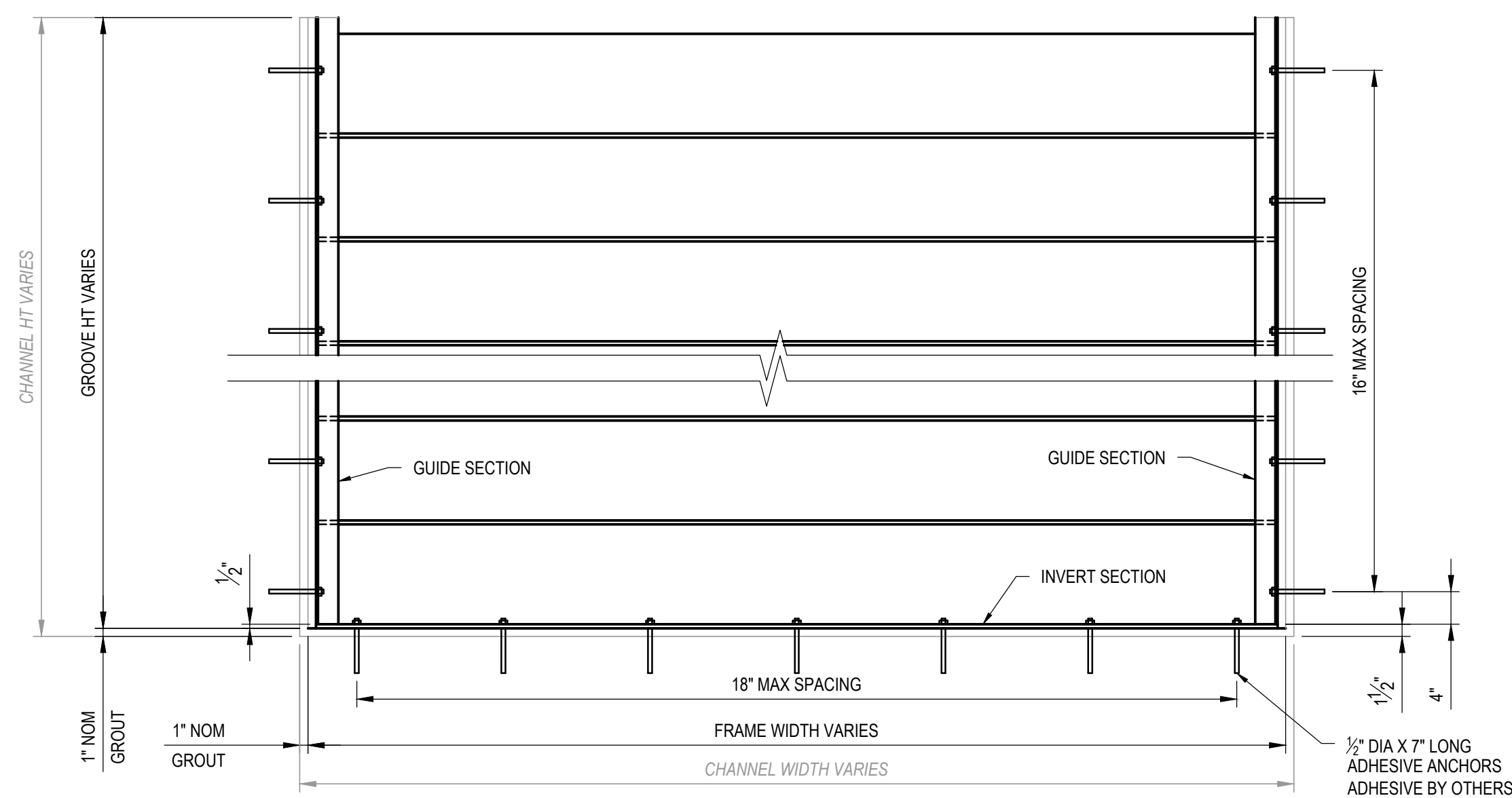
**B BASIN INFLUENT CONDUIT SECTION**

SCALE: 1/2"=1'-0"



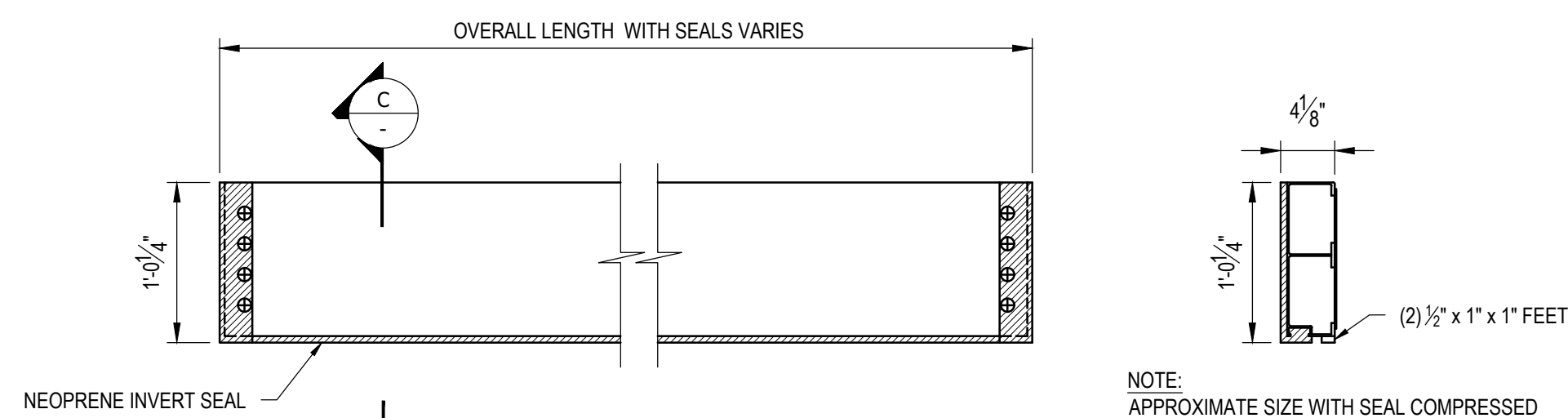
**PLAN VIEW SHOWING LIFTING SLOT DETAIL**

SCALE: 3/4"=1'-0"



**STOP LOG AND GROOVE DETAILS**

SCALE: 3/4"=1'-0"



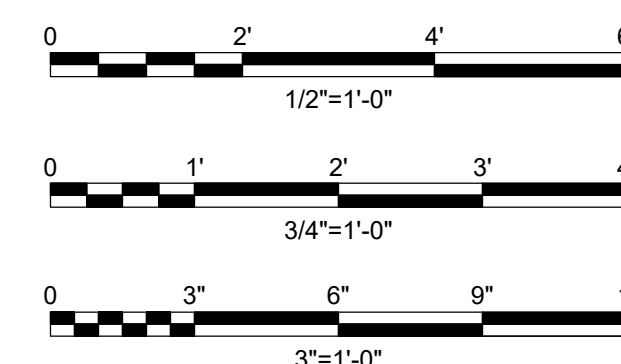
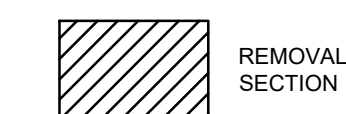
**STOP LOG FRONT VIEW**

SCALE: 1"=1'-0"

**C STOP LOG SECTION**

SCALE: 1"=1'-0"

**LEGEND:**



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<b>CLARIFIER SYSTEM REHABILITATION STRUCTURAL BASINS 1-4 BASIN CONDUIT STOP LOGS</b>		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION F.A. ORECHO DRIVE PLANT		
JACOBS ENGINEERING GROUP 412 MOUNT KEMBLE AVE. MORRISTOWN, NEW JERSEY 07960 NJDC 246A27990200		
DRAWN BY KPL PROJECT ENG'R LD APPROVED JNB	DATE 06/04/2021 PROJECT E6X94500	USE DIMENSIONS ONLY SCALE AS NOTED
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES		<b>S-114</b>

**Jacobs**

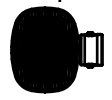





**LUIS S. DUARTE, PE**

NJPE LICENSE NO. 24GE04642900

ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
ELEC	ELECTRICAL
FRE	FIBERGLASS REINFORCED EPOXY
G, GND	GROUND
JB	JUNCTION BOX
KVA	KILOVOLT AMPERES
KW	KILOWATT
LED	LIGHT EMITTING DIODE
LFNC	LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MSB	MAIN SWITCHBOARD
N	NEUTRAL
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
NJDWSC	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION
NTS	NOT TO SCALE
P	POLE
PH	PHASE
PNL	PANEL
PVC	POLYVINYL CHLORIDE CONDUIT
QTY	QUANTITY
RGS	RIGID GALVANIZED STEEL CONDUIT
SP	SPARE
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
V	VOLT
VA	VOLT AMPERE
W	WATT
WP	WEATHERPROOF

LEGEND

	CIRCUIT 143W LED LUMINAIRE WITH A YOKE MOUNT
	CONDUIT SEE PLANS FOR SIZE, TYPE AND INSTALLATION
	12" X 12" X 4" POLYCARBONATE PULL BOX
	24" X 24" X 10" GALVANIZED STEEL PULL BOX NEMA 3R
	8" X 8" X 4" POLYCARBONATE PULL BOX (LOCATED UNDER LUMINAIRE)
	277V, 10 POLE CONTACTOR WITH PUSHBUTTON SWITCH IN A NEMA 3R ENCLOSURE

GENERAL NOTES


- FURNISH AND INSTALL HOT DIPPED GALVANIZED CLAMPS FOR SUPPORTING 3/4" CONDUITS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS SPACED PER NEC REQUIREMENTS.
- FURNISH AND PROVIDE GALVANIZED STEEL HANGERS FOR SUPPORTING ALL RMC CONDUITS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS SPACED PER NEC REQUIREMENTS.
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH NJAC 5:23-3, NJAC 5:23-3.16 ELECTRICAL SUBCODE, NFPA 70 (NEC) CURRENT EDITION AND ALL GOVERNING LOCAL CODES AND ORDINANCES. THESE ELECTRICAL DRAWINGS ARE BASED ON 2017 NEC.
- ALL PENETRATIONS BETWEEN LOWER SETTTLING BASIN AND BASINS ABOVE SHALL BE EPOXY SEALED TO MINIMIZE WATER PENETRATION BETWEEN BASINS.
- ALL WALL PENETRATIONS BETWEEN MIXING BASINS AND DRIVE GALLERY SHALL BE MECHANICALLY SEALED WITH LINK SEAL OR APPROVED EQUAL, SEE DETAIL ON SHEET L-201.

EQUIPMENT SPECIFICATIONS

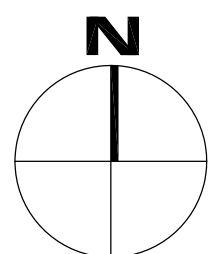
- WIRE
  - VOLTAGE: 600V
  - INSULATION: THWN-2
  - SIZE: AS SHOWN
  - MANUFACTURER: AETNA, SOUTHWIRE OR APPROVED EQUAL
- CONDUIT
  - FRE (SIZE AS SHOWN)
  - MANUFACTURER: FRE COMPOSITES, CHAMPION FIBERGLASS OR APPROVED EQUAL
  - FITTINGS: FRE
  - LFNC (SIZE AS SHOWN)
  - MANUFACTURER: ATKORE, KAIFLEX OR APPROVED EQUAL
  - RMC (SIZE AS SHOWN)
  - MANUFACTURER: ALLIED, WHEATLAND OR APPROVED EQUAL
  - FITTINGS: RMC
- PULL BOX
  - MATERIAL: POLYCARBONATE
  - MANUFACTURER: ADALET OR APPROVED EQUAL
  - MATERIAL: GALVANIZED STEEL
  - RATING: NEMA 3R
  - MANUFACTURER: HOFFMAN OR APPROVED EQUAL
- LUMINAIRE
  - RATING: IP68
  - MANUFACTURER: NEMALUX OR APPROVED EQUAL
  - CATALOG CUT: XR20-50-WC-GY-GN-AC-68-XR-YM
  - LED DRIVER WIRED FOR 277VOLT, 1-PHASE OPERATION



STEVE EICHINGER, P.E.  
Professional Engineer  
NJPE License No. 24GE03337900

REVISIONS			CLARIFIER SYSTEM REHABILITATION LIGHTING BASINS 1–4 LEGEND AND GENERAL NOTES	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION 1 FA ORECHIO DR., WANAQUE, NEW JERSEY	
1	03/15/2021	80% DESIGN SUBMISSION		
2	09/24/2021	ISSUED FOR BID	JACOBS ENGINEERING GROUP INC. 299 MADISON AVENUE MORRISTOWN, NJ 07962 NJPCA 246A27990200	
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6			DRAWN BY: ML PROJECT ENG'R: ML APPROVED: SE	
7				
8			DATE: 03/15/21 PROJECT: E6X94500	
			USE DIMENSIONS ONLY SCALE: AS NOTED	
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UPPER SETTLING BASIN #1

MIXING BASIN #1

UPPER SETTLING BASIN #2

MIXING BASIN #2

UPPER SETTLING BASIN #3

MIXING BASIN #3

UPPER SETTLING BASIN #4

MIXING BASIN #4

BASINS AT GRADE LEVEL

DRIVE GALLERY

NOTES 2&3

NOTES 2&3

NOTES 2&3

NOTES 2&3

1  
L-104

REACTION  
BASIN NO. 1  
(BELOW GROUND)

LIGHTING  
PANEL (NOTE 1)



SHEET KEYNOTES (X)

- FURNISH AND INSTALL CONCRETE ENCASED 2 SETS (36#10&1#10GND IN 2"RMC) (18 LIGHTING CIRCUITS PER CONDUIT) AND 2" RMC WITH 8#10&1#10GND (4 CONTACT CIRCUITS). CONCRETE ENCASED CONDUITS SHALL HAVE 6" MINIMUM COVER.
- FURNISH AND INSTALL GALVANIZED STEEL 24" X 24" X 10" NEMA 3R PULL BOX SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
- FURNISH AND INSTALL 3 SETS (6#12&1#12GND IN 3/4" RMC)(9 LIGHTING CIRCUITS).
- FURNISH AND INSTALL 3 SETS (6#12&1#12GND IN 3/4" FRE CONDUIT)(9 LIGHTING CIRCUITS).
- FURNISH AND INSTALL FRE TO RMC CONDUIT ADAPTER.
- FURNISH AND INSTALL 1 1/2" RMC WITH 18#10&1#10GND (9 LIGHTING CIRCUITS) AND 2#10 (CONTACT CIRCUIT).
- FURNISH AND INSTALL GALVANIZED STEEL 12" X 12" X 4" NEMA 3R PULL BOX SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
- FURNISH AND INSTALL GALVANIZED STEEL 24" X 24" X 10" NEMA 3R PULL BOX SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ATTACHED TO THE OUTSIDE OF THE PASSAGE WAY TO ALLOW FOR CONNECTION TO LIGHTING PANEL LOCATED INSIDE PASSAGE WAY.
- FURNISH AND INSTALL 277V, 10 POLE CONTACTOR WITH PUSHBUTTON SWITCH IN A NEMA 3R ENCLOSURE SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.

SHEET NOTES

- SEE ELECTRICAL PLANS FOR PANEL INFORMATION.
- FEED FROM MIXING BASIN SHALL BEND 90 DEGREES IN MIXING BASIN AND RUN TROUGH DRIVE GALLERY TO ALLOW FOR TRANSITION TO IN GRADE INSTALLATION. CONTRACTOR SHALL USE 3/4" FRE CONDUIT BODY TO MAKE BEND IN BASIN.
- SEE "CONDUIT PENETRATION SEAL DETAIL" ON SHEET L-201. CONTRACTOR SHALL USE ROXTEC SEAL OR APPROVED EQUAL TO PREVENT WATER FROM PASSING FROM MIXING BASINS TO DRIVE GALLERY.

CLARIFIER SYSTEM REHABILITATION  
LIGHTING  
BASINS 1-4  
GRADE LEVEL

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
1 FA ORECHIO DR., WANAUKE, NEW JERSEY

JACOBS ENGINEERING GROUP INC.  
299 MADISON AVENUE  
MORRISTOWN, NJ 07962  
NJPCA 246A27990200



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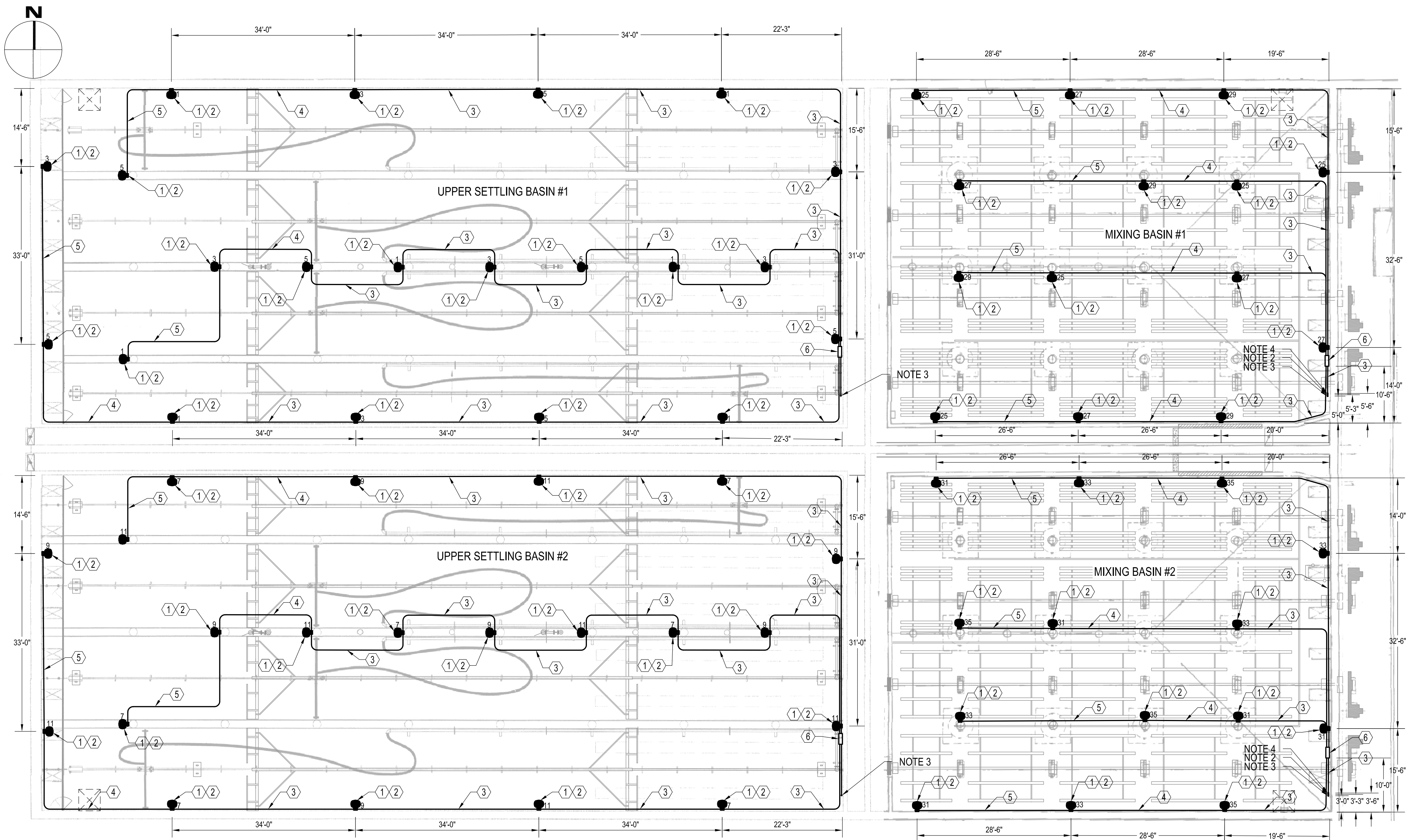
L-101

STEVE EICHINGER, P.E.

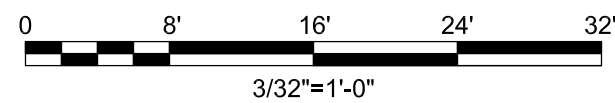
Professional Engineer  
NJPE License No. 24GE03337900

JACOBS





UPPER SETTLING AND MIXING BASINS  
(NOTE 5)



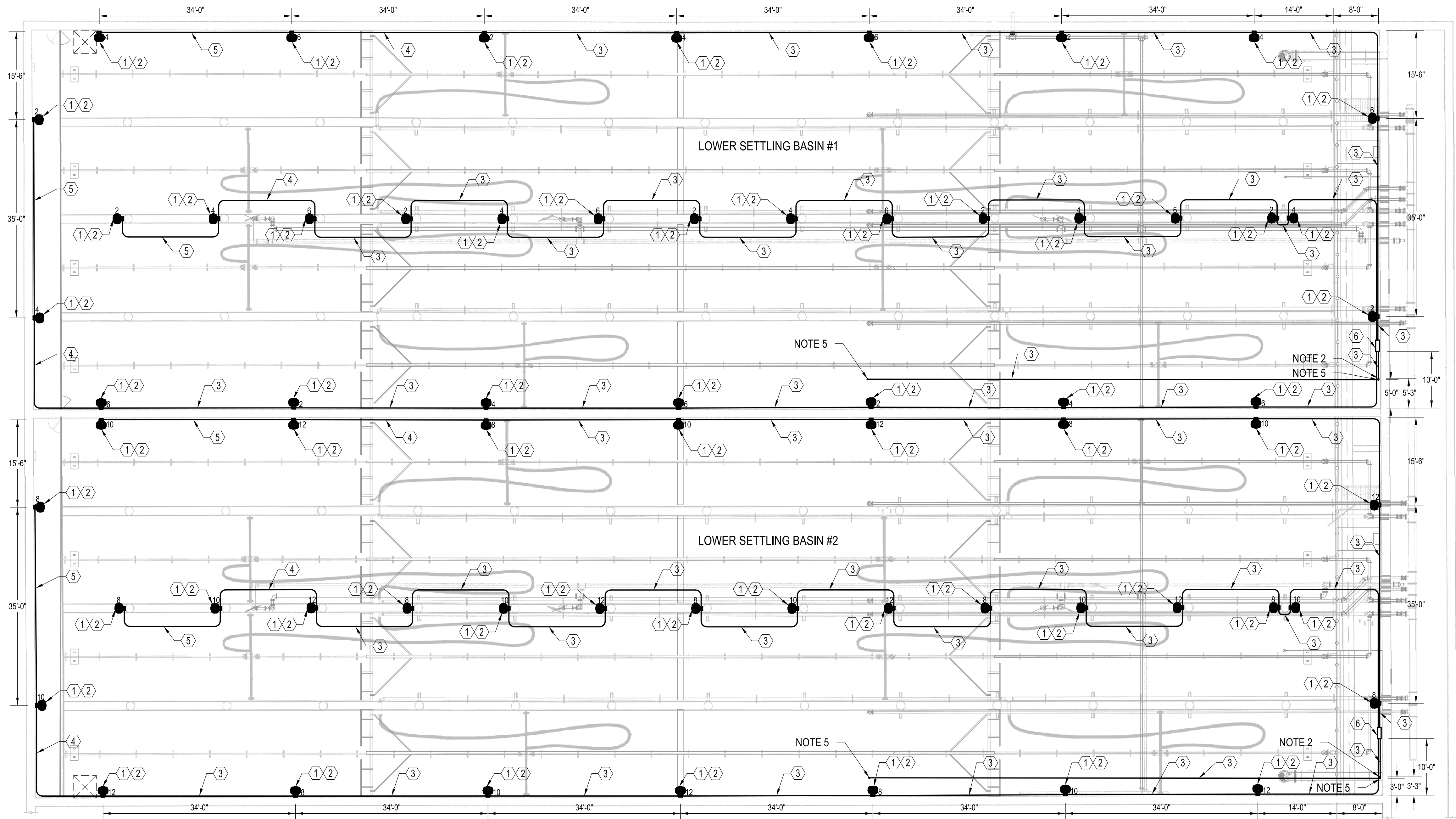
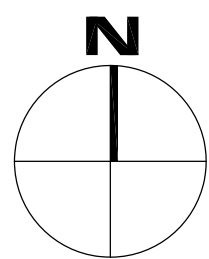
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Professional Engineer  
NJPE License No. 24GE03337900

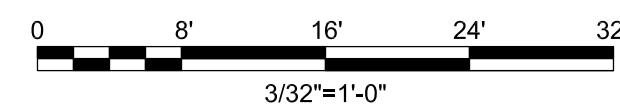
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CLARIFIER SYSTEM REHABILITATION LIGHTING BASINS 1-4 UPPER LEVEL		
NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION 1 FA ORECHIO DR., WANAUKE, NEW JERSEY		
JACOBS ENGINEERING GROUP INC. 299 MADISON AVENUE MORRISTOWN, NJ 07962 NJPCA 246A27990200		
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LOWER SETTLING BASINS  
(NOTE 3)



**Jacobs**

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Professional Engineer  
NJPE License No. 24GE03337900

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CLARIFIER SYSTEM REHABILITATION  
LIGHTING  
BASINS 1-4  
LOWER LEVEL

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
1 FA ORECHIO DR., WANAEQUE, NEW JERSEY

JACOBS ENGINEERING GROUP INC.  
299 MADISON AVENUE  
MORRISTOWN, NJ 07962  
NJPCA 246A27990200



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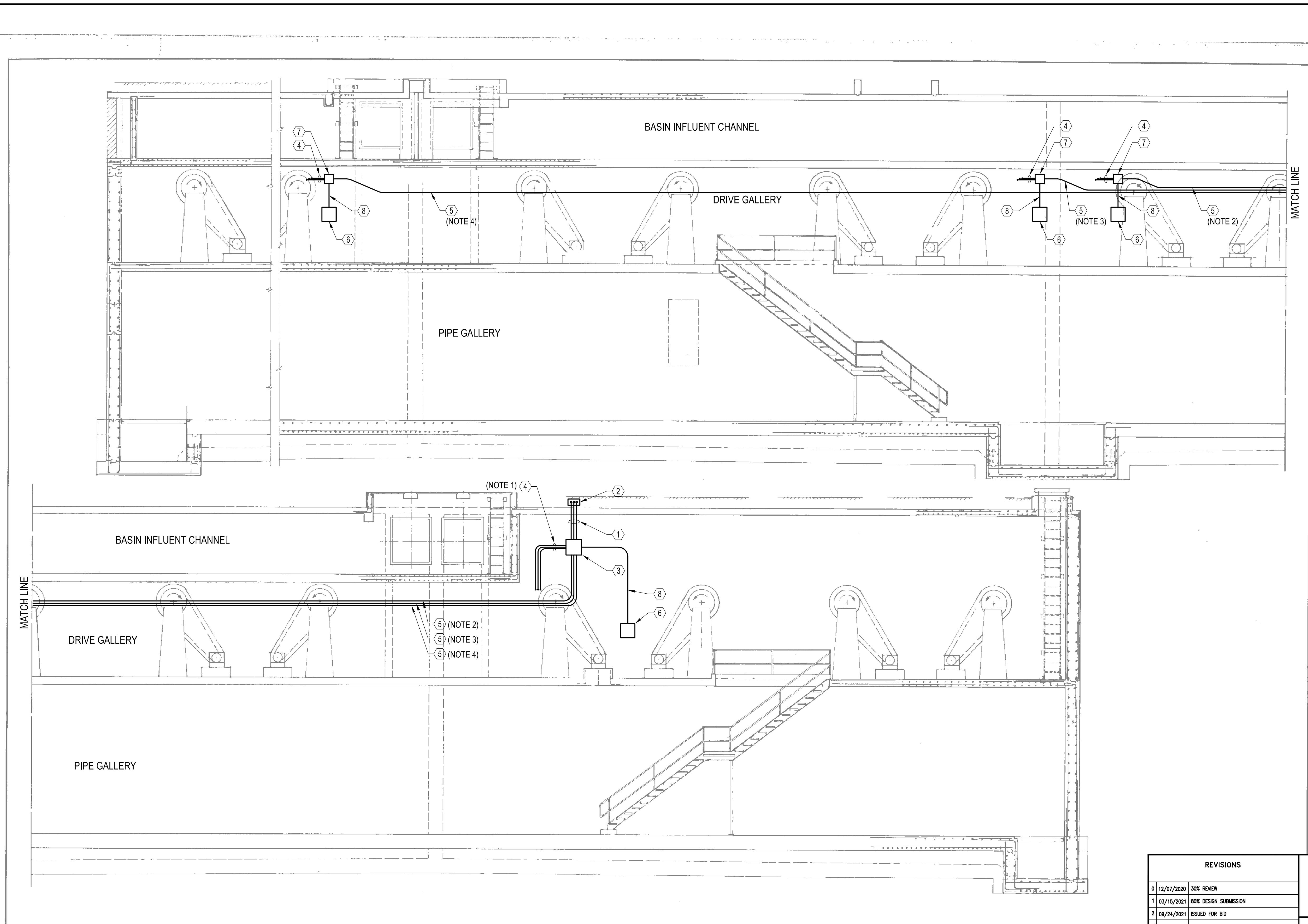
SHEET KEYNOTES (X)

- FURNISH AND INSTALL LED LUMINAIRE WITH YOKE MOUNT FOR WALL ATTACHMENT. ANCHOR TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
- FURNISH AND INSTALL 8" X 8" X 4" POLYCARBONATE PULL BOX. ANCHOR TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
- FURNISH AND INSTALL 6#12&1#12GND IN 3/4" FRE CONDUIT.
- FURNISH AND INSTALL 4#12&1#12GND IN 3/4" FRE CONDUIT.
- FURNISH AND INSTALL 2#12&1#12GND IN 3/4" FRE CONDUIT.
- FURNISH AND INSTALL 12" X 12" X 4" POLYCARBONATE PULL BOX SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.

SHEET NOTES

- SEE DETAILS ON L-301 FOR LUMINAIRE MOUNTING INFORMATION.
- CONDUIT PENETRATION BETWEEN LOWER SETTLING BASIN AND UPPER MIXING BASIN.
- LIGHTING AND CONDUIT LAYOUTS ARE SHOWN FOR LOWER SETTLING BASINS 1 AND 2. LOWER SETTLING BASINS 3 AND 4 PLANS ARE NOT INCLUDED AS PART OF THE PLAN SET BUT ARE MIRRORED IMAGES OF BASINS 1 AND 2 AND SHALL BE CONSTRUCTED AS PART OF THIS PROJECT.
- ALL CONDUCTOR SPLICES AND TERMINATIONS SHALL BE WATERPROOF AND LISTED FOR SUBMERSED IN WATER INSTALLATION.
- CONDUIT FROM UPPER SETTLING BASIN SHALL PENETRATE DOWN INTO LOWER SETTLING BASIN AND RUN TROUGH LOWER SETTLING BASIN. CONDUIT SHALL THEN PENETRATE UP INTO MIXING BASIN.



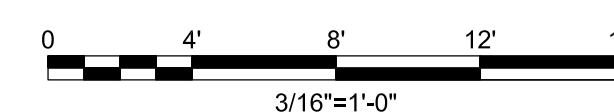


### SHEET KEYNOTES <sup>(X)</sup>

1. FURNISH AND INSTALL 2 SETS (36#10&1#10GND IN 2"RMC) (18 LIGHTING CIRCUITS PER CONDUIT). FURNISH AND INSTALL 2" RMC WITH 8#10&1#10GND (4 CONTACT CIRCUITS).
2. FURNISH AND INSTALL CONCRETE ENCASED 2 SETS (36#10&1#10GND IN 2"RMC) (18 LIGHTING CIRCUITS PER CONDUIT) AND 2" RMC WITH 8#10&1#10GND (4 CONTACT CIRCUITS). CONCRETE ENCASED CONDUITS SHALL HAVE 6" MINIMUM COVER.
3. FURNISH AND INSTALL GALVANIZED STEEL 24" X 24" X 10" NEMA 3R PULL BOX SUPPORT FROM 1 5/8" GALVANIZED STEEL CHANNEL STRUT ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
4. FURNISH AND INSTALL 3 SETS (6#12&1#12GND IN 3/4" RMC)(9 LIGHTING CIRCUITS).
5. FURNISH AND INSTALL 1 1/2" RMC WITH 18#10&1#10GND (9 LIGHTING CIRCUITS) AND 2#10 (CONTACT POWER).
6. FURNISH AND INSTALL 277V, 10 POLE CONTACTOR WITH PUSHBUTTON SWITCH IN A NEMA 3R ENCLOSURE SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
7. FURNISH AND INSTALL GALVANIZED STEEL 12" X 12" X 4" NEMA 3R PULL BOX SUPPORTED ON 1 5/8" GALVANIZED STEEL CHANNEL STRUTS ANCHORED TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
8. FURNISH AND INSTALL 2" RMC WITH 36#10&1#10GND (9 LIGHTING CIRCUITS) AND 2#10 (CONTACT POWER)

### SHEET NOTES

1. FEED FROM BASIN 1.
2. FEED FROM BASIN 2.
3. FEED FROM BASIN 3.
4. FEED FROM BASIN 4.



REVISIONS		
0	12/07/2020	30% REVIEW
1	03/15/2021	80% DESIGN SUBMISSION
2	09/24/2021	ISSUED FOR BID
3		
4		
5		
6		
7		
8		

### CLARIFIER SYSTEM REHABILITATION LIGHTING BASINS 1-4 ELEVATIONS

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
1 FA ORECHIO DR., WANAQUE, NEW JERSEY

JACOBS ENGINEERING GROUP INC.  
299 MADISON AVENUE  
MORRISTOWN, NJ 07962  
NJPCA 246A27990200



DRAWN BY:ML  
PROJECT ENG'R: ML  
APPROVED: SE

DATE:03/15/21  
PROJECT:E6X94500

USE DIMENSIONS ONLY  
SCALE: AS NOTED

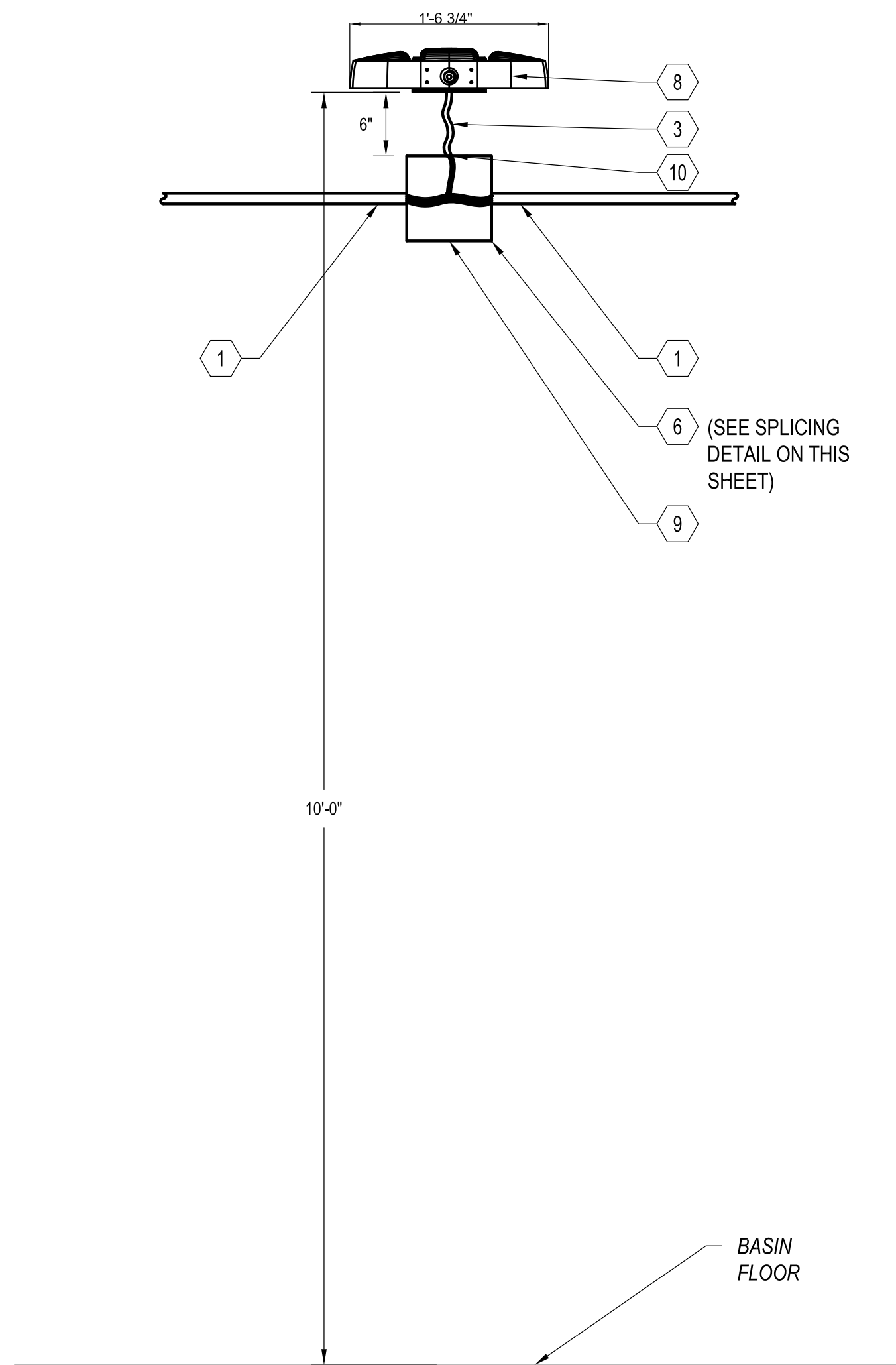
USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

L-104

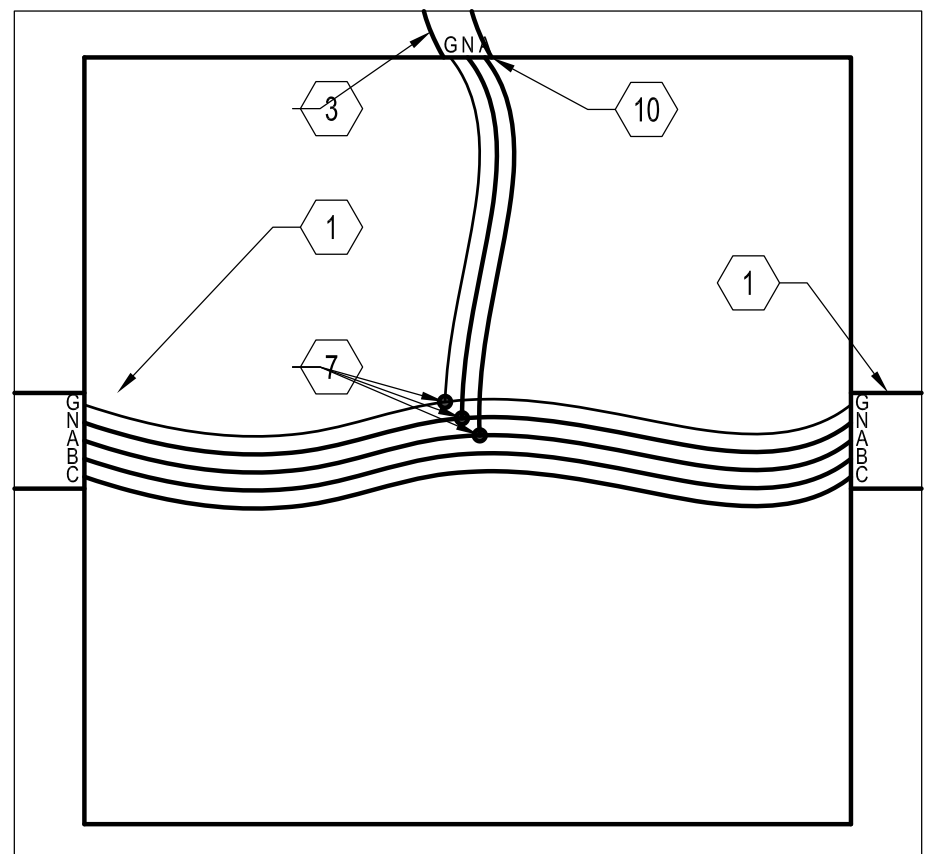
**Jacobs**

**STEVE EICHINGER, P.E.**  
Professional Engineer  
NJPE License No. 24GE03337900

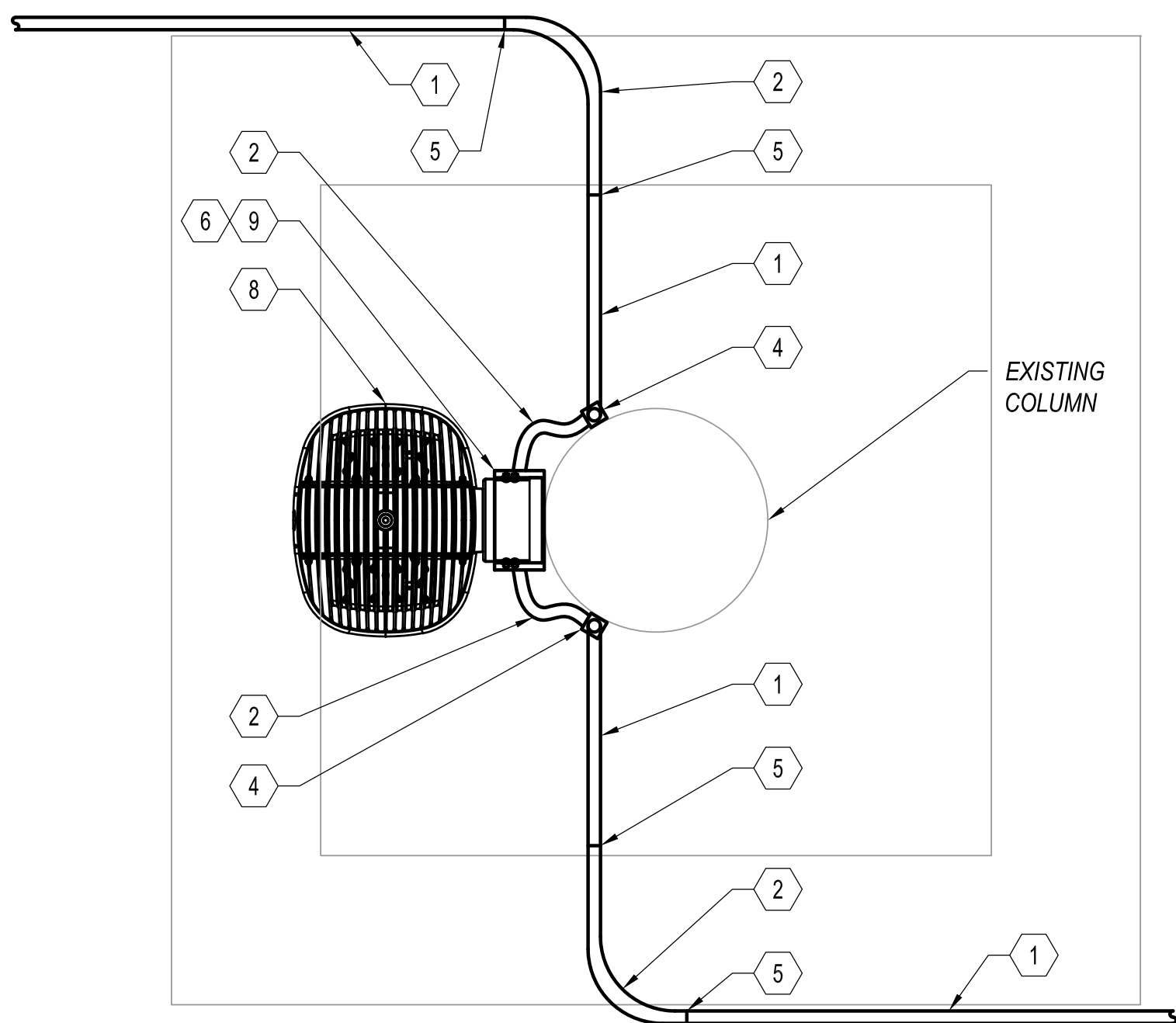




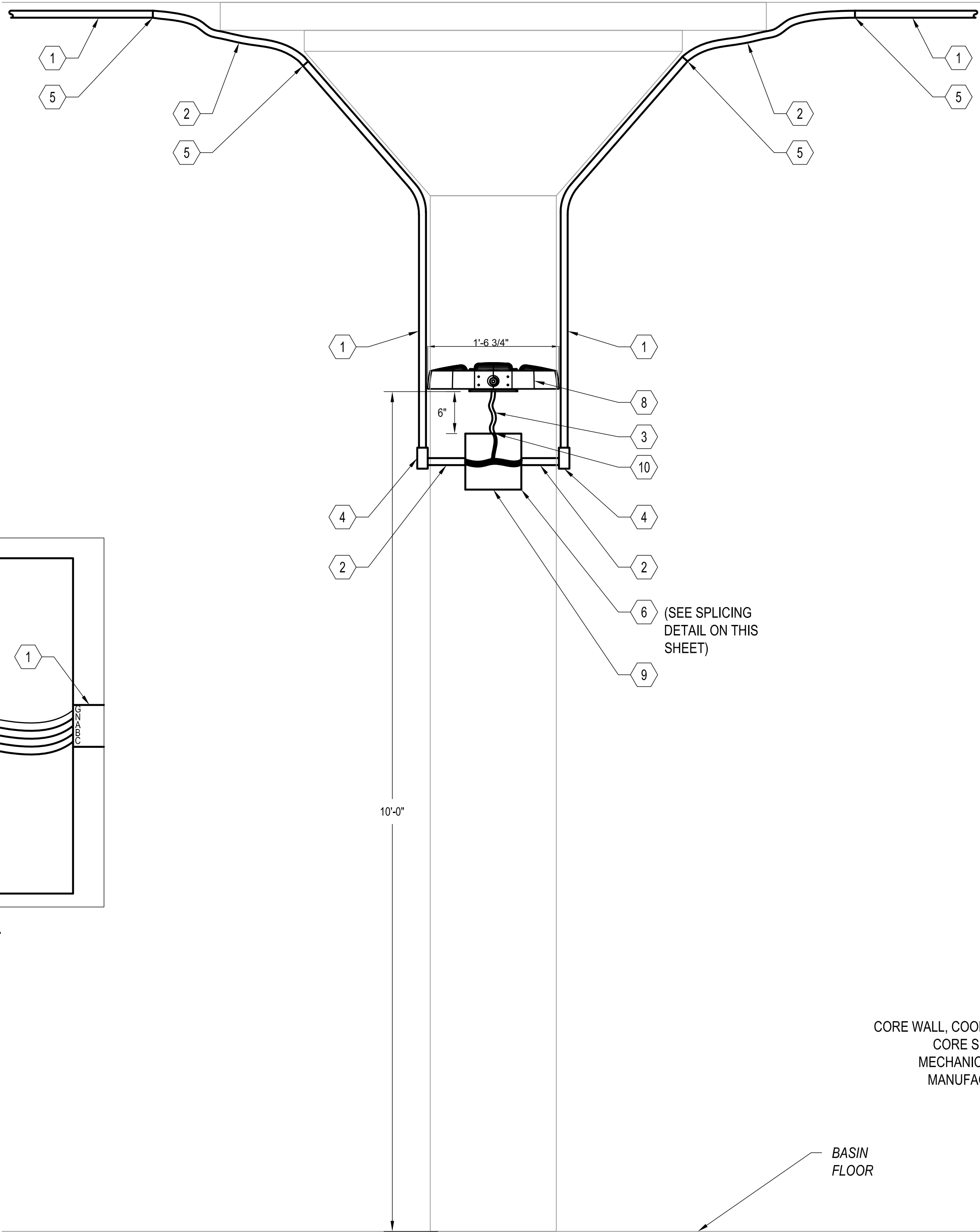
WALL ATTACHMENT  
ELEVATION VIEW



SPLICING DETAIL



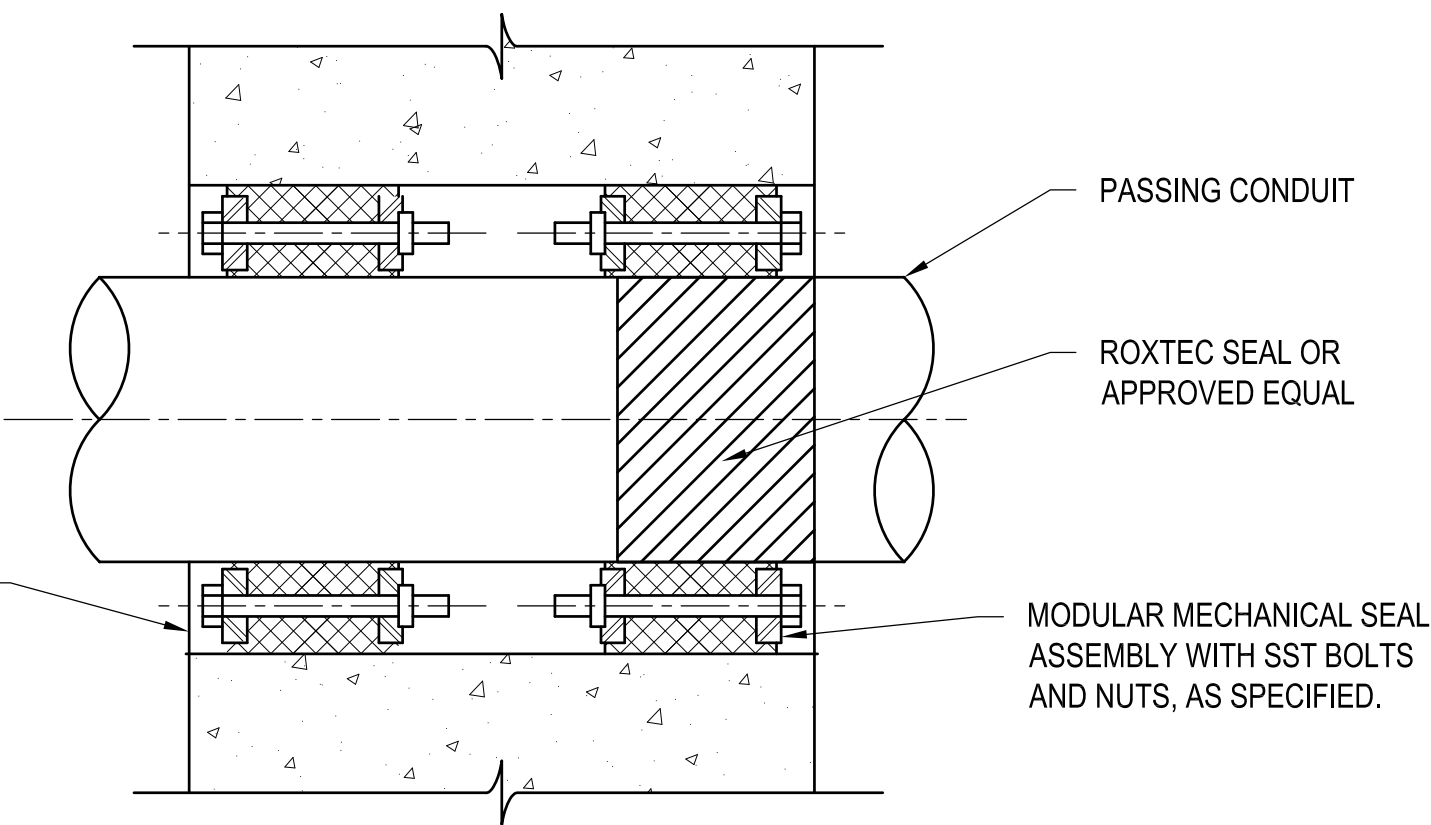
COLUMN ATTACHMENT  
PLAN VIEW



COLUMN ATTACHMENT  
ELEVATION VIEW

SHEET KEYNOTES (X)

1. FURNISH AND INSTALL 6#12&1#12GND IN 3/4" FRE CONDUIT.
2. FURNISH AND INSTALL 6#12&1#12GND IN 3/4" LFNC CONDUIT, LENGTH SHALL NOT EXCEED 6'.
3. 2'-0" SOOW CABLE FURNISHED WITH LUMINAIRE.
4. FURNISH AND INSTALL 3/4" FRE CONDUIT BODY.
5. FURNISH AND INSTALL FRE TO LFNC ADAPTER.
6. FURNISH AND INSTALL 8" X 8" X 4" POLYCARBONATE PULL BOX. ANCHOR TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS
7. ALL CONDUCTOR SPLICES AND TERMINATIONS SHALL BE WATERPROOF AND LISTED FOR SUBMERSED IN WATER INSTALLATION.
8. FURNISH AND INSTALL LED LUMINAIRE WITH YOKE MOUNT FOR WALL ATTACHMENT. ANCHOR TO CONCRETE WITH 5/16" EPOXY SET ANCHORS WITH EMBEDMENT PER ANCHOR MANUFACTURER RECOMMENDATIONS.
9. FURNISH AND INSTALL 3/4" THREADED DRAIN PLUG IN BOTTOM OF ALL POLYCARBONATE PULL BOX.
- 10.FURNISH AND INSTALL WATER TIGHT COMPRESSION CONNECTOR ON SOOW CABLE CONNECTION TO POLYCARBONATE PULL BOX. PROVIDE SILICON SEALANT AROUND SOOW CABLE JACKET AND CABLE CONDUCTORS.



CONDUIT PENETRATION  
SEAL DETAIL  
N.T.S.

NOTES:

1. PROVIDE SIMILAR FLOOR PENETRATION WHERE CALLED OUT ON DRAWINGS. ONLY 1 MECHANICAL SEAL IS REQUIRED FOR FLOOR PENETRATIONS. .

REVISIONS			CLARIFIER SYSTEM REHABILITATION LIGHTING BASINS 1-4 DETAILS	
0	12/07/2020	30% REVIEW	NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION 1 FA ORECHIO DR., WANAQUE, NEW JERSEY	
1	03/15/2021	80% DESIGN SUBMISSION		
2	09/24/2021	ISSUED FOR BID	JACOBS ENGINEERING GROUP INC. 299 MADISON AVENUE MORRISTOWN, NJ 07962 NJDCA 246A27990200	
3				
4			DRAWN BY:ML PROJECT ENG'R: ML APPROVED: SE	
5				
6			DATE:03/15/21 PROJECT:E6X94500	
7				
8			USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	

STEVE EICHINGER, P.E.  
Professional Engineer  
NJPE License No. 24GE03337900

Jacobs



USE DIMENSIONS ONLY  
SCALE: AS NOTED

L-201

UPPER SETTLING BASIN #1

PANEL LTG

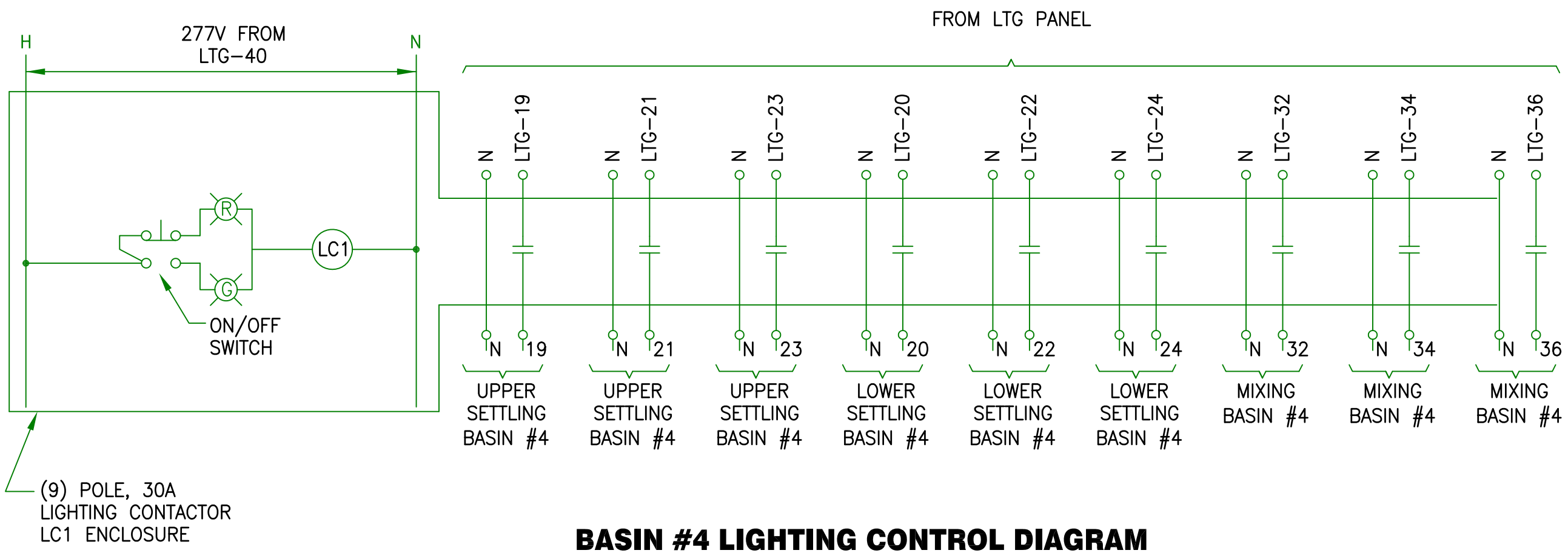
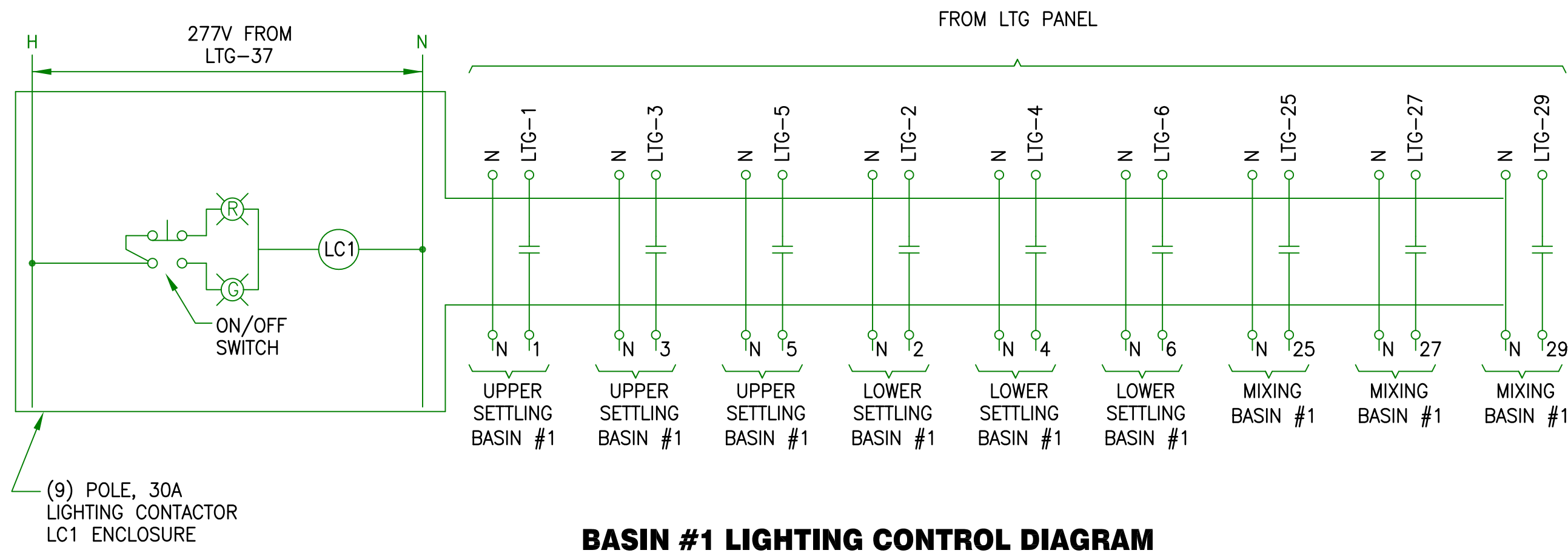
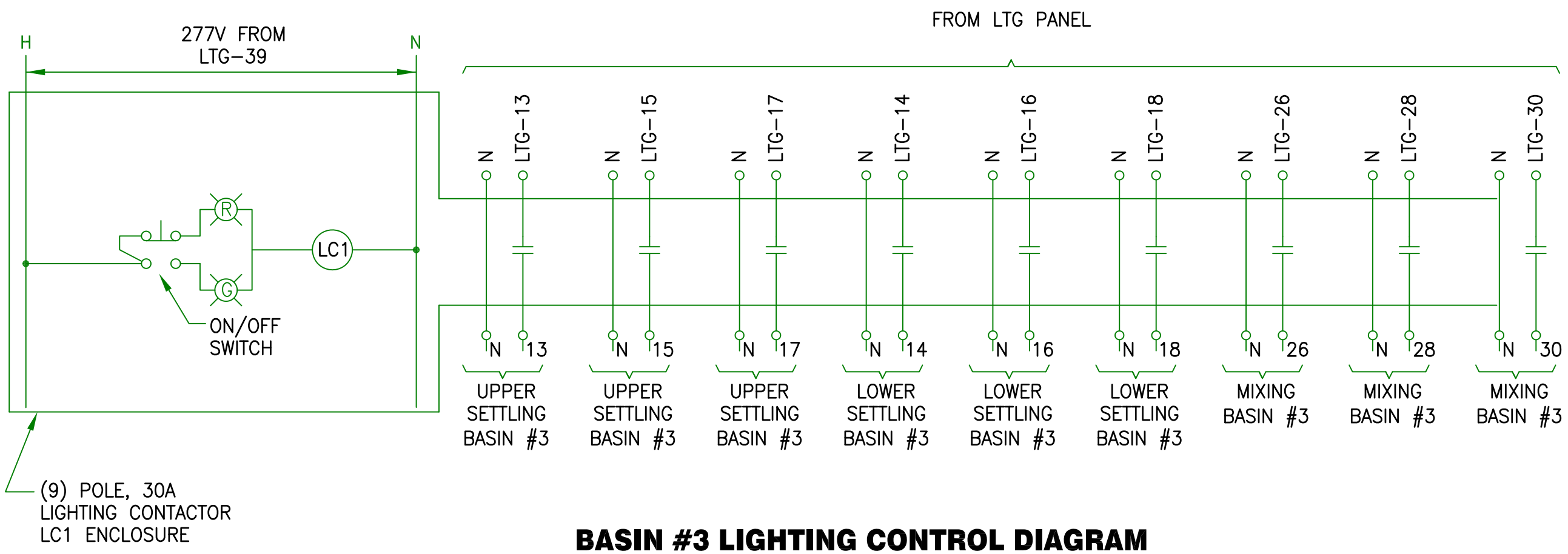
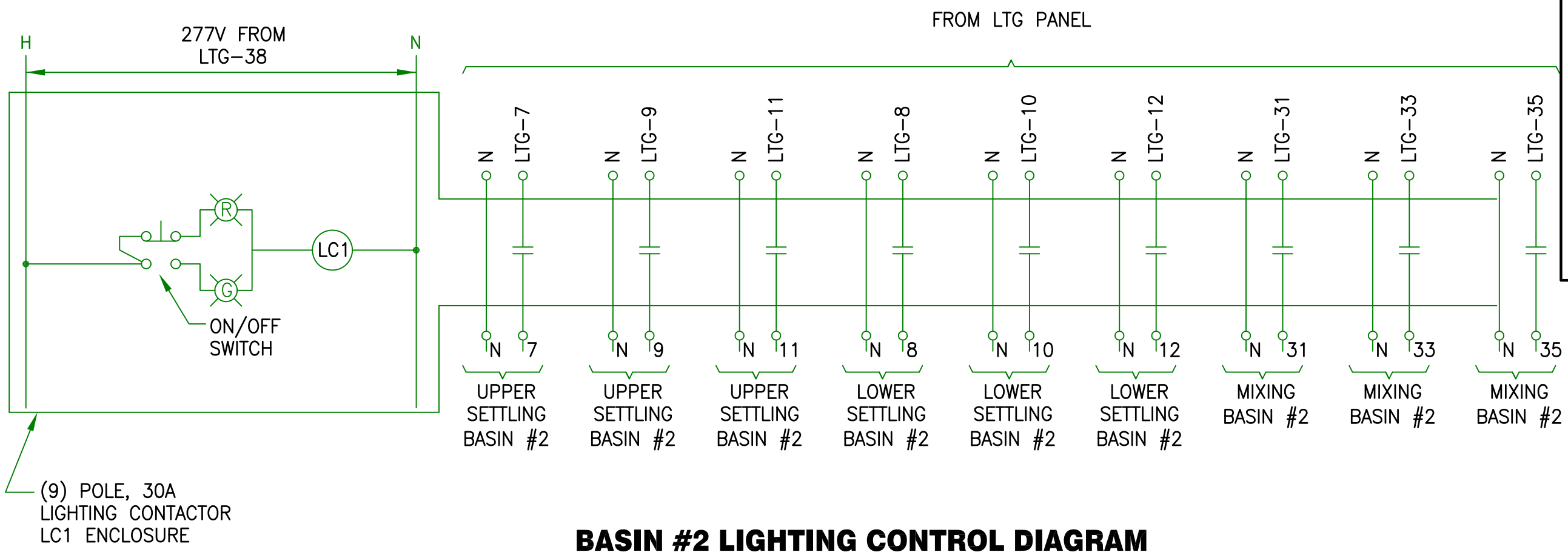
CKT. NO.	SERVICE	(VA)	WIRE SIZE AWG	BKR. (A)	SOLID NEUTRAL	BKR. (A)	WIRE SIZE AWG	(VA)	SERVICE	CKT. NO.
1	UPPER SETTLING BASIN #1	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #1	2
3	UPPER SETTLING BASIN #1	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #1	4
5	UPPER SETTLING BASIN #1	1,001	10	15		15	10	1,430	LOWER SETTLING BASIN #1	6
7	UPPER SETTLING BASIN #2	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #2	8
9	UPPER SETTLING BASIN #2	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #2	10
11	UPPER SETTLING BASIN #2	1,001	10	15		15	10	1,430	LOWER SETTLING BASIN #2	12
13	UPPER SETTLING BASIN #3	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #3	14
15	UPPER SETTLING BASIN #3	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #3	16
17	UPPER SETTLING BASIN #3	1,001	10	15		15	10	1,430	LOWER SETTLING BASIN #3	18
19	UPPER SETTLING BASIN #4	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #4	20
21	UPPER SETTLING BASIN #4	1,001	10	15		15	10	1,573	LOWER SETTLING BASIN #4	22
23	UPPER SETTLING BASIN #4	1,001	10	15		15	10	1,430	LOWER SETTLING BASIN #4	24
25	MIXING BASIN #1	715	10	15	15	10	715	MIXING BASIN #3	26	
27	MIXING BASIN #1	715	10	15	15	10	715	MIXING BASIN #3	28	
29	MIXING BASIN #1	572	10	15	15	10	572	MIXING BASIN #3	30	
31	MIXING BASIN #2	715	10	15	15	10	715	MIXING BASIN #4	32	
33	MIXING BASIN #2	715	10	15	15	10	715	MIXING BASIN #4	34	
35	MIXING BASIN #2	572	10	15	15	10	572	MIXING BASIN #4	36	
37	CONTACT BASIN #1	100	10	15	15	10	100	CONTACT BASIN #2	38	
39	CONTACT BASIN #3	100	10	15	15	10	100	CONTACT BASIN #4	40	
41									42	

PANEL MOUNTING: UNISTRUT

SERVICE CHARACTERISTICS  
42-CIRCUIT PANEL  
277/480 VOLT, 3 PHASE, 4 WIRE, SOLID NEUTRAL, 60 CYCLE, WITH GROUND BUS  
250 AMP MAIN BUS, 22KA IC  
70 AMP TRIP MAIN CIRCUIT BREAKER

ENCLOSURE: NEMA 3R LOCATION: PASSAGE

PANEL LOADING SCHEDULE	
PHASE	VA
A	13,356
B	13,356
C	12,012
CONNECTED LOAD	38,724
DEMAND LOAD	9,681
SPARE	6,276
TOTAL LOAD	45,000



REVISIONS

0	12/07/2020	30% REVIEW
1	03/15/2021	80% DESIGN SUBMISSION
2	09/24/2021	ISSUED FOR BID
3		
4		
5		
6		
7		
8		

CLARIFIER SYSTEM REHABILITATION  
LIGHTING  
BASINS 1-4  
PANEL SCHEDULE & CONTROL DIAGRAM

NORTH JERSEY DISTRICT WATER SUPPLY COMMISSION  
1 FA ORECHIO DR., WANAEQUE, NEW JERSEY

JACOBS ENGINEERING GROUP INC.  
299 MADISON AVENUE  
MORRISTOWN, NJ 07962  
NJPCA 246A27990200

DRAWN BY:ML  
PROJECT ENG'R: ML  
APPROVED: SE

DATE:03/15/21  
PROJECT:E6X94500

USE DIMENSIONS ONLY  
SCALE: AS NOTED

USE APPROVED DRAWINGS ONLY  
FOR CONSTRUCTION PURPOSES

L-301

STEVE EICHINGER, P.E.  
Professional Engineer  
NJPE License No. 24GE03337900



**ATTACHMENT #1**

**ACCESS APPROVAL & COVID-19  
VISITOR QUESTIONNAIRE FORMS**

**Pages (2) Two**



# North Jersey District Water Supply Commission

## Visitor/Vendor/Contractor Access

Every person entering the N.J.D.W.S.C. must complete and submit the following before access will be granted:

1. Completed copy of *Access Approval Form*.
  2. Completed copy of *Visitor Questionnaire* related to Covid19.
  3. Copy of Drivers License or Photo I.D.
- 
- If hazardous materials is being delivered, attach a copy of the MSDS for each chemical.
  - Contractors must meet with a N.J.D.W.S.C. Safety Officer prior to work being started.
  - Contractors will be responsible for all sub-contractors (paperwork and safety).
  - Upon arrival, everyone must check in with Security prior to the entrance gates.
  - If any emergency arises while on N.J.D.W.S.C. property, Security must be call at (973) 831-6200.
  - For anyone entering multiple days, the Covid19 form will only be necessary once a week.

All paperwork must be emailed to [security@njdwsc.com](mailto:security@njdwsc.com) and to their Commission contact person.

Any questions please call (973) 831-6200



# 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](mailto: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.***



# North Jersey District Water Supply Commission

The safety of our employees, supplying partners, customers, families and visitors remain NJDWSC's overriding priority. As the Coronavirus disease 2019 (COVID-19) continues, NJDWSC Security are monitoring the situation closely and will periodically update company guidance based on current recommendations from the Centers for Disease Control and Prevention and the World Health Organization.

To prevent the spread of COVID-19 and reduce the potential risk of exposure to our workforce and visitors, we are conducting a simple screening questionnaire. Your participation is important to help us take precautionary measures to protect you and everyone in this building. Thank you for your time.

Visitor's Name:

Personal Phone Number (mobile/home)

Visitor's Company/Organization:

## Self-Declaration by Visitor

1. Have you been quarantined within the last 14 days?      **Yes**      **No**
2. Have you had close contact with or cared for someone diagnosed with COVID-19 within the last 14 days?      **Yes**      **No**
3. Have you experienced any cold or flu-like symptoms in the last 14 days (to include fever, cough, sore throat, respiratory illness, difficulty breathing)?      **Yes**      **No**
4. Have you traveled from any of the prohibited countries within the past 14 days?      **Yes**      **No**
5. Have you received any COVID-19 vaccinations?      **Yes**      **No**      **Date:** \_\_\_\_\_

If the answer is "yes" to questions 1, 2, 3 or 4, access to the facility will be denied.

Signature (visitor): \_\_\_\_\_ Date: \_\_\_\_\_

Note: if you plan to be onsite for consecutive days, please immediately advise your NJDWSC contact if any of your responses change.

The information collected on this form will be used to determine your access right to NJDWSC facilities.

Access to facility (circle one):    **Approved**    **Denied**    **Temperature:** \_\_\_\_\_

**MASKS MUST BE WORN AT ALL TIMES WHILE ON NJDWSC PROPERTY**

**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](mailto: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](mailto: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](mailto: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
- ☐ 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**

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**All Equity partners of a Partnership**

**All Equity members of a LLC**

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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.**

Remove Contribution

Click the "Add a Contribution" tab to enter additional contributions.

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](mailto: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 #2087 CLARIFIER REHABILITATION, BASINS 1 – 4** 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: \_\_\_\_\_