

MIAMI-DADE COUNTY  
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS (DTPW)

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ADDENDUM No. 12  
May 23, 2025

PROJECT: Biscayne Shores Pump Station Retrofit Nos. 109 and 110 and MIC Stormwater Pump Station Trash Rack Repair  
Project No. 20230197-R

BID DUE DATE: June 4, 2025; 02:00 P.M.

FROM: Miami-Dade County DTPW  
Capital Improvements Division  
111 NW First Street, 14<sup>th</sup> Floor  
Miami, FL 33128  
305.375.2930

TO: Prospective Bidders and Interested Parties

This Addendum forms part of the project solicitation documents and will be incorporated into the Contract Documents, as applicable. Insofar as the Original Contract Documents, Drawings and Specifications are inconsistent, this Addendum shall govern. Please acknowledge receipt of this Addendum, at the time of bid submittal to Miami-Dade County, in the space provided on the "Acknowledgement of Addenda Form" provided with the project solicitation documents. Failure to acknowledge receipt of all addenda may be cause for disqualification.

CHANGES TO SOLICITATION DOCUMENTS:

- A. Replace the Disadvantaged Business Enterprise (DBE) Package Information, Form 275-030-11 dated 09/19, in its entirety with the attached DBE Bid Package Information, Form 275-030-11 dated 07/24.

CHANGES TO SPECIAL PROVISIONS:

- A. In Appendix "C" – Standard Terms and Conditions – Grant Agreement, replace Exhibit H in its entirety with the attached Exhibit H, Revised 4/8/2024.
- B. Add to Appendix "E" of the Special Provisions the attached Class I and Class II Permits.

CHANGES TO ENGINEERING DRAWINGS:

- A. Replace the original Set of Plans PS 109 & 110 including the Electrical Plans, in their entirety with the attached Revised Civil Set of Plans by Addendum No. 12 and Revised Electrical Plans by Addendum No. 12.

**END OF ADDENDUM NO. 12**

MIAMI-DADE COUNTY  
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS (DTPW)

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ADDENDUM No. 12  
May 23, 2025



on behalf of

Tiondra Wright  
Chief, Capital Improvements Division  
Department of Transportation and Public Works (DTPW)

TW:er

c: Elva Reyes, DTPW  
Katherine Fernandez, DTPW  
Liza Herrera, P.E., DTPW  
Daryl Hildoer, P.E., DTPW  
Caesar Suarez, SBD  
Clerk of the Board  
Project File

### **DBE Utilization**

The Department began its DBE race neutral program January 1, 2000. **Contract specific goals are not placed on Federal/State contracts;** however, the Department has an overall 10.54% DBE goal it must achieve. In order to assist contractors in determining their DBE commitment level, the Department has reviewed the estimates for this letting.

As you prepare your bid, please monitor potential or anticipated DBE utilization for contracts. When the low bidder executes the contract with the Department, information will be requested of the contractor's DBE participation for the project. While the utilization is not mandatory in order to be awarded the project, continuing utilization of DBE firms on contracts supports the success of Florida's DBE Program, and supports contractors' Equal Employment Opportunity and DBE Affirmative Action Programs.

Any project listed as 0% DBE availability does not mean that a DBE may not be used on that project. A 0% DBE availability may have been established due to any of the following reasons: limited identified subcontracting opportunities, minimal contract days, and/or small contract dollar amount. Contractors are encouraged to identify any opportunities to subcontract to DBE's.

Please contact the Equal Opportunity Office at (850) 414-4747 if you have any questions regarding this information.

### **DBE Reporting**

If you are the prime contractor on a project, enter your DBE participation in the Equal Opportunity Compliance system prior to the pre-construction or pre-work conference for all federal and state funded projects. This **will not** become a mandatory part of the contract. It will assist the Department in tracking and reporting planned or estimated DBE utilization. During the contract, the prime contractor is required to report actual payments to DBE and MBE subcontractors through the web-based Equal Opportunity Compliance (EOC) system.

All DBE payments must be reported whether or not you initially planned to utilize the company. In order for our race neutral DBE Program to be successful, your cooperation is imperative. If you have any questions, please contact EOOHelp@dot.state.fl.us.

### **Bid Opportunity List**

The Federal DBE Program requires States to maintain a database of all firms that are participating or attempting to participate on FDOT-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on FDOT-assisted projects, including both **DBE's and non-DBEs**.

Please complete the Bidders Opportunity List through the Equal Opportunity Compliance system within 3 business days of submission of the bid or proposal for ALL subcontractors or sub-consultants who quoted to you for specific project for this letting. The web address to the Equal Opportunity Compliance system is: <https://www.fdot.gov/equalopportunity/eoc.shtml>.

### **DBE/AA Plans**

Contractors bidding on FDOT contracts are to have an approved DBE Affirmative Action Plan (FDOT Form 275-030-11B) on file with the FDOT Equal Opportunity Office before execution of a contract. DBE/AA Plans must be received with the contractors bid or received by the Equal Opportunity Office prior to the award of the contract.

Plans are approved by the Equal Opportunity Office in accordance with Ch. 14-78, Florida Administrative Code. Plans that do not meet these mandatory requirements may not be approved. Approvals are for a (3) three year period and should be updated at anytime there is a change in the company's DBE Liaison Officer and/or President. Contractors may evidence adoption of the DBE/AA Policy and Plan and/or a change in the designated DBE Liaison officer as follows:

- Print the first page of the document on company stationery ("letterhead") that indicates the company's name, mailing address, phone number, etc.
- Print the company's name in the "\_\_\_\_" space; next to "Date" print the month/day/year the policy is being signed; record the signature of the company's Chief Executive Officer, President or Chairperson in the space next to "by" and print the full first and last name and position title of the official signing the policy.
- Print the DBE Liaison's full name, email address, business mailing address and phone number the bottom of email.

E-mail the completed and signed DBE AA Plan to: **eeoforms@dot.state.fl.us.**

The Department will review the policy, update department records and issue a notification of approval or disapproval; a copy of the submitted plan will not be returned to the contractor.



**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
RESILIENT FLORIDA GRANT PROGRAM  
CONTRACTUAL SERVICES CERTIFICATION**

**Exhibit H**

*Required for all grant agreements that include Contractual Services as an expenditure category.*

DEP Agreement Number:

Project Title:

Grantee:

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Subcontractor: \_\_\_\_\_

*Note: Submit separate Exhibit H Certification for each additional subcontractor.*

Prior to making a request for payment of contractual services, the Grantee must provide the following to the Department Grant Manager then responsible for the Grantee's Resilient Florida Grant Program grant agreement:

1. Documentation of the Grantee's procurement process, as consistent with Attachment 1, Paragraph 9(c) and Attachment 2, Paragraph 11;
2. A list of all subcontractor quote and/or bid amounts (as applicable), including the company name and address for each subcontractor;
3. An explanation of how and why the Grantee made their determination(s) for the subcontractor(s) selected to perform certain task(s) under the Grantee's relevant grant agreement;
4. A copy of the Grantee's executed subcontract agreement, as required by Attachment 2, Paragraph 11; and
5. This Exhibit H, signed and dated by the Grantee's own (non-Departmental) grant manager.

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By signing below, I certify that, on behalf of the Grantee, I have provided all the information required by items 1. through 4. of this exhibit, as stated above, to the Department Grant Manager currently responsible for the Grantee's Resilient Florida Grant Program grant agreement. I also certify that the procurement process the Grantee utilized follows all of said Grantee's non-Departmental policies and procedures for subcontractors.

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Grantee's Grant Manager Signature

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Print Name

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Date



Department of Regulatory and Economic Resources  
Coastal Resources Section  
701 NW 1st Court, Suite 400  
Miami, FL 33136-3912  
305-372-6575

## Class I Construction Permit

**Permit Number:** CLI-2024-0221  
**DERM Project Manager:** Nicole Alvarado

**Issue Date:** 5/13/2025 **MC**  
**Work Expiration Date:** 5/13/2027 **RA**

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### Permittee

Miami-Dade County Department of  
Transportation and Public Works  
c/o Josiel Ferrer-Diaz, Chief Development  
Officer  
7100 Northwest 36 Street  
Miami, Florida 33166  
Phone No. (305) 679-0090

### Contractor

See Specific Condition #1.

### Bond

### Engineer

**Performance Bond:** N/A

Nelson H. Ortiz, P.E. #57556

**Mitigation Bond:** \$3,127.50

**BBEETF Contribution:** N/A

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THE ABOVE NAMED PERMITTEE IS HEREBY AUTHORIZED TO PERFORM THE WORK SHOWN ON THE APPLICATION AND APPROVED DRAWINGS, PLANS, AND OTHER DOCUMENTS ATTACHED HERETO OR ON FILE WITH THE DEPARTMENT AND MADE PART HEREOF, SUBJECT TO THE ATTACHED GENERAL AND SPECIFIC CONDITIONS.

**Plans Entitled:** PROJECT: BISCYANE SHORES PUMP  
STATION NO.'S 109 & 110 RETROFIT

**Date Signed and Sealed:** 11/27/2024

**Project Location:** Northeast 109<sup>th</sup> Street and Northeast 110<sup>th</sup> and North Bayshore Avenue

**Project Description:**

- Removal of the existing concrete seawall, seawall cap and riprap.

#### **Northeast 109<sup>th</sup> Street**

- Installation of 17.50 linear feet of new concrete seawall located between 0 and 17.50 linear feet from the north property line as per the DERM final approved plans. The wetface of the new seawall will extend no more than 12 inches waterward of the Mean High Water Line.

**THIS PERMIT AND PLANS SHALL BE KEPT ON SITE  
DURING ALL PHASES OF CONSTRUCTION**

CLI-2024-0221

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- Installation of 17.25 linear feet of new concrete seawall 32.83 and 50.08 linear feet from the north property line as per the DERM final approved plans. The wetface of the new seawall will extend no more than 12 inches waterward of the Mean High Water Line.
- Installation of 11 concrete batter piles, 7 concrete king piles, and 34.75 linear feet of concrete seawall cap located between 0 - 17.50 and 32.83 – 50.08 linear feet from the north property line as per the DERM final approved plans. The seawall cap will measure 2.8 feet wide by 2.0 feet high, and extend 1.7 feet waterward of the wetface of the new seawall.
- Installation of two 10 foot long concrete return walls one located at each end of the property.
- Installation of a 0.7 foot wide by 21.3 foot long portion of the energy dissipater in-water located approximately between 17.50 and 32.83 linear feet from the north property line as shown in DERM final approved plans.
- Installation of 50.08 linear feet of coral rock riprap boulders along the new seawall located between 0 and 50.08 linear feet from the north property line. The riprap will consist of 1 to 3 foot diameter boulders and will be placed at a 2 horizontal :1 vertical slope extending a maximum of 10 feet waterward from the base of the new seawall.

#### **Northeast 110<sup>th</sup> Street**

- Installation of 18.58 linear feet of new concrete seawall located between 0 and 18.58 linear feet from the north property line as per the DERM final approved plans. The wetface of the new seawall will extend no more than 12 inches waterward of the Mean High Water Line.
- Installation of 16.67 linear feet of new concrete seawall located between 33.91 and 49.24 linear feet from the north property line as per the DERM final approved plans. The wetface of the new seawall will extend no more than 12 inches waterward of the Mean High Water Line.
- Installation of 11 concrete batter piles, 7 concrete king piles, and 33.91 linear feet of concrete seawall cap located between 0 – 18.58 and 33.91 – 49.24 linear feet from the north property line as per the DERM final approved plans. The seawall cap will measure 2.8 feet wide by 2.0 feet high, and extend 1.7 feet waterward of the wetface of the new seawall.
- Installation of two 10 foot long concrete return walls one located at each end of the property.
- Installation of a 0.7 foot wide by 21.3 foot long portion of the energy dissipater in-water located approximately between 18.58 and 33.91 linear feet from the north property line as shown in DERM final approved plans.
- Installation of 49.24 linear feet of coral rock riprap boulders along the new seawall located between 0 and 50.1 linear feet from the north property line. The riprap will consist of 1 to 3 foot diameter boulders and will be placed at a 2 horizontal :1 vertical slope extending a maximum of 10 feet waterward from the base of the new seawall.

#### **Attachment A: Mooring Prohibited Area (MPA)**

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## **Specific Conditions**

1. **The name, address, telephone number, and license number of the contractor who will be performing the work shall be submitted a minimum of 30 days prior to the commencement of work. Work authorized by this permit shall not commence until written acceptance of the contractor by DERM has been issued and all pre-construction conditions have been completed to DERM's satisfaction.**
2. **After the new seawall has been installed and prior to backfilling or forming/pouring the seawall cap, the site shall be inspected by DERM staff. The contractor shall provide a minimum of 2 business days and a maximum of 5 business days notice to the Coastal Resources Section at (305) 372-6575 prior to the desired inspection date. The above-referenced work shall not commence until DERM has inspected the site and authorized construction to begin.**
3. A turbidity curtain shall completely enclose the work area and shall not be removed until turbidity levels within the enclosed area return to background levels outside the curtain.
4. **Turbidity curtains must be clearly marked in 10 foot intervals along the length with the name of the contractor on-site. In the event that a turbidity curtain becomes detached from the project area and is identified by DERM, the contractor will be notified to immediately remove the turbidity curtain from tidal waters and properly dispose, or return to the project area and resecure it. Failure to mark turbidity curtains as specified above and remove derelict turbidity curtains from tidal waters may result in enforcement action without further notice.**
5. Turbidity controls shall be employed and maintained in the most effective manner possible to prevent turbidity from extending beyond the turbidity control mechanism in place. Failure to deploy and maintain the turbidity curtain or other turbidity control mechanism in the most effective manner possible may result in the issuance of a Uniform Civil Violation Notice (UCVN). In no event may turbidity exceed 0 Nephelometric Turbidity Units (NTU) above background beyond 50 feet of the operation. If turbidity levels exceed 0NTU above background beyond 50 feet of the operation, all construction shall be halted and additional turbidity controls implemented. The incident shall be immediately reported to the Coastal Resources Section Compliance and Enforcement Group at (305) 372-6575 and the work shall not resume until the contractor has received authorization from DERM.
6. Environmental controls and best management practices must be implemented to prevent any materials related to construction from entering the surrounding water. Any material removed as well as material applied to accomplish repairs must be contained so as to prevent fugitive particulates and/or discharge to surface waters. Any materials which fall into the water shall be removed immediately. The contractor shall ensure that no material is placed in the water either temporarily or permanently.
7. The wetface of the new seawall shall extend a maximum of 12 inches waterward of the wetface of the Mean High Water Line.
8. The final grade of the uplands immediately adjacent to the seawall cap shall be maintained a minimum of 6 inches below the seawall cap in order to prevent positive drainage of stormwater into the waterway and adjacent areas. All uplands immediately adjacent to the seawall cap shall be graded away from the said structures.
9. Pursuant to Section 24-48.3(4) of the Code of Miami-Dade County, Florida, the contractor shall ensure that the backfill is from upland sources and it consists of suitable material and must meet the definition of clean fill as defined in Section 24-5 of the Code of Miami-Dade County.
10. All backfilling shall be done after completion of the seawall. This permit does not authorize any filling except for backfill landward of the bulkhead. This permit does not authorize the filling of tidal waters or wetlands for additional development.
11. The contractor shall provide trucking receipts for all fill from upland sites that is utilized for backfilling behind the new seawall. This condition shall be satisfied within 30 days of the completion of the seawall.

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12. Due to shallow water depths, vessels shall be restricted from mooring in areas designated as a **“Mooring Prohibited Area” (Attachment A)**. Failure to comply with this specific condition may be subject to enforcement by DERM.
13. The installation of fenders, davits, mooring whips, cleats, or any hardware to facilitate the mooring of vessels within the MPA is prohibited. Failure to comply with this specific condition may be subject to enforcement by DERM.
14. In order to mitigate for the water quality impacts associated with the seawall installation, and in order to extend the life of the seawall and provide habitat for a variety of invertebrates and protective cover for small fish, 34.75 cubic yards of riprap (approximately 47 tons) shall be placed on-site at the base of the seawall at a two to one (2H:1V) slope. The riprap shall consist of natural limerock riprap boulders ranging in size from 1 to 3 feet in diameter and may not extend greater than 10 feet waterward of the base of the new seawall. Riprap shall be installed in a manner which prevents it from shifting or relocating. This condition shall be satisfied within 30 days of the completion of the seawall.
15. Please be advised that the federal government may have designated all or part of the subject property as critical habitat for one or more endangered species. You are not authorized to commence any work or activities pursuant to this permit until you obtain any and all approvals or permits, if necessary, from the federal government pursuant to the Endangered Species Act and from the State of Florida pursuant to Florida law on endangered species. Please be advised that, even after work commences, if Miami-Dade County is advised by the federal government, the State of Florida, or a court that an activity on the subject property is in violation of the Endangered Species Act, in violation of Florida law on endangered species, or in violation of a permit or approval granted by the federal government pursuant to the Endangered Species Act, such violation may result in an immediate stop work order. You are strongly advised to consult with the United States Fish and Wildlife Service and any other necessary federal or state agencies before conducting any work or activities on the property. The Vero Beach office of the United States Fish and Wildlife Service may be reached at (772) 562-3909. Please be aware that the federal government may require certain actions or protections on the property, and this may result in the need to modify the plans for the property. Therefore, it is recommended that you consult with the United States Fish and Wildlife Service at an early stage in the process. In the event that the United States Fish and Wildlife Service advises that your plans for the subject property may result in a “take” of endangered or threatened species, you are strongly recommended to inform Miami-Dade County in writing at the earliest stage possible.

See General Permit Conditions.

### **General Permit Conditions**

1. This permit does not eliminate the necessity to obtain any required federal, state, and local authorizations prior to the start of any activity approved by this permit. This permit is a regulatory approval and does not convey to the permittee or create in the permittee any property right or privilege, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee. In the event that any structure authorized hereunder is determined by a final adjudication issued by a court of competent jurisdiction to encroach on or interfere with adjacent riparian rights, the permittee agrees to either obtain written consent for the offending structure from the affected riparian owner or to remove the interference.
2. This permit must be kept on-site during all phases of construction.
3. All work shall be performed in accordance with the above referenced plans and in accordance with the attached specific and general permit conditions. If a General Condition(s) conflicts with a Specific Condition(s) in this permit document, the Specific Condition shall be the controlling condition for work authorized by this permit.
4. This permit only authorizes the work described under the Project Description. Any additional work in, on, over or upon tidal waters or coastal wetlands at the property shall require additional Class I approval.
5. Any deviation from the approved plans for this project shall be submitted in writing to, and approved by DERM prior to the commencement of this project. The contractor and the permittee shall take whatever remedial action

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is necessary to bring the project into compliance with the permit and approved plans upon determination by DERM that the structure is not in compliance with such.

6. DERM shall be notified no later than 48 hours and no earlier than 5 days prior to the commencement of the work authorized by this permit, unless otherwise noted herein. The permittee and/or contractor may notify DERM by calling (305) 372-6575 or by submitting the attached Notice of Commencement of Construction via hand delivery, U.S. Mail, or facsimile at (305) 372-6479.
7. Prior to performing any work, the contractor shall verify the location of all underground and overhead utility lines and verify that no utilities will be damaged by the work. Contact Sunshine State One-Call of Florida at 1-800-432-4770 or on the web at <http://www.callsunshine.com/corp/before/submitting.html> for locating underground utility lines.
8. The permittee and the contractor are hereby advised that under Florida law, no person shall commence any excavation, filling, construction, or other activity involving the use of sovereign or other lands of the State, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Florida Department of Environmental Protection (FDEP), until such person has received the required authorization for the proposed use from the Board of Trustees or FDEP. If such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to \$10,000 per offense pursuant to the Florida Administrative Code.
9. The permittee and contractor shall obtain all required approvals from all local, state and federal agencies prior to performing the work authorized by this permit.
10. Trimming or alteration of mangroves or work in wetlands other than what is authorized by this permit is prohibited. Work not authorized by this permit or that is not explicitly exempt from permit requirements pursuant to the Mangrove Trimming and Preservation Act (403.9321-9334 F.S.) shall require additional Class I approval.
11. For any work involving mangrove trimming or alteration, if the subject Class I permit is revoked by DERM, or the state statute providing the exemption is modified or eliminated, the permittee shall be required to obtain a new permit from DERM prior to mangrove trimming or alteration.
12. All work authorized by this permit shall be performed by the contractor and/or subcontractor holding an applicable certificate of competency and shall be licensed in Miami-Dade County to perform such work. Any work which is subcontracted shall require that the permittee or contractor (i.e. the permittee or contractor who is listed on this permit) notify the project manager at DERM at (305) 372-6575 or by facsimile at (305) 372-6479 a minimum of 72 hours prior to the subcontractor performing any work. Notification shall include the name of the subcontractor performing the work, the subcontractor's Miami-Dade County license number or state general contractor license number, and scope of work. Failure to comply with this condition is a violation of the Class I permit and may result in enforcement action DERM.
13. The contractor shall not store or place, even on a temporary basis, construction materials or demolition debris in tidal waters and shall take all necessary precautions to prevent construction material or demolition debris from falling into the water or adjacent wetlands. Any debris that falls into the water and/or adjacent wetlands shall be removed immediately. Construction material and demolition debris shall be disposed of in accordance with all federal, state and local regulations.
14. Turbidity controls (such as, but not limited to, turbidity curtains) shall be implemented whenever visible plumes are present to ensure compliance with the water quality standards stipulated in Section 24-42(3) of the Code of Miami-Dade County. Turbidity controls shall be employed and maintained in the most effective manner possible to prevent turbidity from extending beyond the control mechanism in place.
15. Turbidity may not exceed 0 Nephelometric Turbidity Units (NTU) within the Aquatic Preserve or 29 NTU outside of the Aquatic Preserve, above background beyond the turbidity control device or 50 feet from any point of discharge. Turbidity levels shall be monitored. If the turbidity levels exceed the above standards, all construction shall stop and additional turbidity controls shall be implemented. Work shall not resume until the contractor has implemented adequate turbidity control methods and has received authorization from DERM to recommence

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work. At DERM's discretion, turbidity samples may be required to be collected in accordance with Section 24-44.2(3) of the Code of Miami-Dade County.

16. Environmental controls and best management practices must be implemented to prevent any materials related to construction from entering the surrounding water. Any material removed as well as material applied to accomplish repairs must be contained so as to prevent fugitive particulates and/or discharge to surface waters. Any materials which fall into the water shall be removed immediately. The contractor shall ensure that no material is placed in the water either temporarily or permanently.
17. If any work or activity associated with this project is to take place in navigable waters, the contractor shall instruct all personnel associated with the project of the potential presence of manatees and the need to avoid collision with manatees. All vessels associated with the project must operate at "Idle Speed/No Wake" at all times while in water where the draft of the vessel provides less than a 4 foot clearance from the bottom. Additionally, all vessels will follow routes of deep water whenever possible. All in-water construction activities shall cease upon the sighting of a manatee(s) within 50 feet of the project area and will not resume until the manatee(s) has departed the project area. Any collision with and/or injury to a manatee shall be reported immediately to the "Manatee Hotline" (1-888-404-FWCC), the U.S. Fish and Wildlife Service, Jacksonville Field Office (904) 791-2580, and DERM (305) 372-6864.
18. The contractor shall ensure that all vessels associated with the construction shall operate within waters of sufficient depth so as to preclude bottom scouring or prop dredging and shall maintain a minimum of 1 foot of water between the vessel bottom and submerged aquatic resources.
19. The contractor shall ensure that there are no impacts to seagrass, hard corals, or soft corals as a result of construction operations, such as, but not limited to, propeller scouring; and vessel or barge anchoring, grounding or spudding. The marine contractor and permittee shall be held jointly liable for any of these unauthorized impacts. For any impacts caused by the construction operation, DERM shall require, at a minimum, restoration and mitigation.
20. For the purposes of this permit, "vessel" is herein defined as any craft designed to float or navigate on water, including but not limited to: sailboats, powerboats, rowboats, boats, ships, skiffs, houseboats, personal watercraft and inflatable boats.
21. Pursuant to Section 24-48.10 of the Code of Miami-Dade County the work or structures authorized under this permit shall be privately maintained by the permittee, his successors and assigns. Whenever, in the opinion of the Director of the DERM, said work or structures are not maintained in such a manner so as to prevent deterioration to the extent that they become a hazard to the public or to navigation, or create an obstruction of flow, or prevent access for drainage maintenance purposes, or may damage adjacent property, then the owner is required to perform any necessary remedial work.
22. Unless otherwise authorized in this permit and pursuant to Sections 24-48.23 and 24-48.24 of the Code of Miami-Dade County, the installation or construction of non-water-dependent floating or fixed structures (e.g. covered structures, canopies, helicopter pads, commercial signs, etc.) is prohibited in, on, over or upon any of the tidal waters of Miami-Dade County and constitutes a violation of this permit. Failure to comply with this condition may subject the permittee to enforcement action without further warning.
23. A DERM Class II permit is required for the construction, installation, and/or alteration of any outfall or overflow system in, on, under or upon any water body of Miami-Dade County. In addition, a DERM Class V permit is required for any dewatering of groundwater, surface waters or water, which has entered into an excavation. The contractor shall contact the Water Control Section of DERM at (305) 372-6681 in order to obtain a Class II or Class V permit prior to the construction of any outfall or overflow system and prior to any dewatering activity.
24. The time allotted to complete the work for which this permit has been issued shall be limited to the period stipulated on the permit unless an extension of time is granted pursuant to Section 24-48.9(2) of the Code of Miami-Dade County. Applications for extensions of time shall be submitted to DERM at least 30 days prior to the date of permit expiration; incomplete or untimely applications for extensions of time will be returned to the permittee.

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25. An application for Transfer of a Class I permit may be filed with DERM at any time prior to the transfer of property ownership up to 120 days after the date of transfer of fee simple ownership of the property that is the subject of the permit. The Application for Transfer must be signed by both the transferee and transferor. Applications for Transfer shall be filed in the form prescribed by DERM and shall not be processed if the filed Application for Transfer is not fully complete in all respects pursuant to Section 24-48.18, of the Code of Miami-Dade County within 120 days of the date of transfer of property ownership.
26. If the project involves construction, replacement, or repair of a seawall, the new seawall cap shall be a minimum of 6 inches above the final grade of the uplands immediately adjacent, and in order to prevent positive drainage of stormwater into the waterway, all uplands immediately adjacent to the new seawall shall be graded away from the waterway.
27. To further reduce the possibility of injuring or killing a manatee during construction, work within portions of the Biscayne Canal, Little River, and the Coral Gables Waterway shall be performed only between May 1 and November 15.
28. A minimum of 1 foot of clearance shall be maintained at all times between the submerged bottom, and any existing benthic resources, and any vessels moored at the property.
29. Adequate clearance shall be maintained at all times between the submerged bottom, and any existing benthic resources, and any vessels moored at the property, such that there are no impacts to State or County water quality standards, even on a temporary basis, or to benthic resources or the submerged bottom, including but not limited to bottom scouring or prop dredging.
30. If railing is required to be installed pursuant to this permit, it shall be installed within 30 days of completion of the permitted work, and prior to the use of the structure(s) authorized by this permit, including the mooring of vessels.
31. A performance and/or mitigation bond may be held to ensure compliance with the aforementioned conditions and the completion of any required mitigation. Failure to comply with any of these conditions may result in the revocation by Miami-Dade County of all or a portion of the bond without further notice.
32. Pursuant to Section 24-48.3.(9), the use or installation of unencapsulated polystyrene as defined in Section 24-5 shall be prohibited in connection with any work requiring a Class I permit. Pursuant to Section 24-48.26, for all facilities which are subject to a County marine facilities operating permit pursuant to this chapter, such permit shall require the removal, replacement or repair of any unencapsulated polystyrene where such polystyrene shows evidence of degradation, disintegration, shredding, or other damage, as determined in the discretion of the Director.
33. Please be advised that chapter 18C of the Miami-Dade County Code has designated Fertilizer-Free Zones on properties throughout the County that contain or lie adjacent to any open body of water, including Biscayne Bay, wetlands, other surface waters, or that contain or lie adjacent to stormwater drains and seawalls. The Fertilizer-Free Zone is defined as that area, as measured from the top of bank, within twenty (20) feet of any open body of water, including Biscayne Bay, wetlands, other surface waters, or within twenty (20) feet of any stormwater drain or seawall. The application of any fertilizer within a Fertilizer-Free Zone is strictly prohibited at all times. Violations of this requirement may be punished by fines in accordance with chapter 8CC of the Code and may require restoration of animal, plant, and aquatic life in accordance with the provisions in chapter 24 of the Code. For further information, please visit [www.miamidade.gov/fertilizer](http://www.miamidade.gov/fertilizer).

**THIS PERMIT AND PLANS SHALL BE KEPT ON SITE  
DURING ALL PHASES OF CONSTRUCTION**





## DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES

**COASTAL RESOURCES SECTION**

**701 NW 1<sup>st</sup> Court, Ste 600, Miami, FL 33136**

**Phone 305-372-6575      Email [dermcr@miamidade.gov](mailto:dermcr@miamidade.gov)**

## NOTICE OF COMMENCEMENT OF CONSTRUCTION

**PERMIT NO.:**

**PERMITTEE'S NAME:**

**PROJECT LOCATION:**

**PERMIT ISSUANCE DATE:****CONTRACTOR NAME:****PROPOSED DATE OF COMMENCEMENT:****ANTICIPATED DATE OF COMPLETION:**

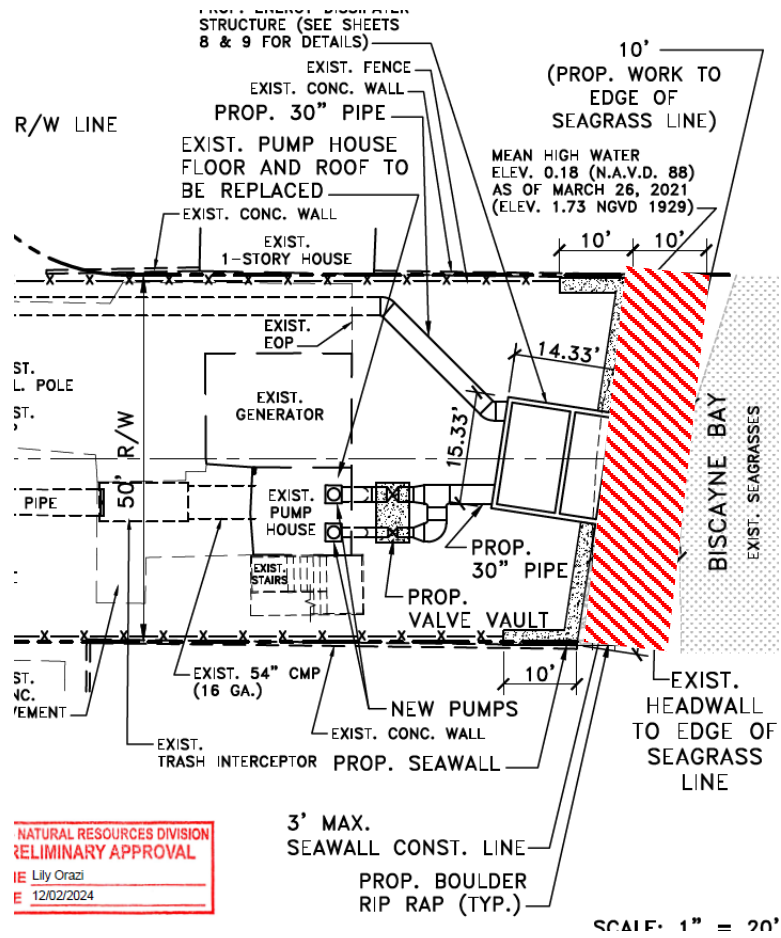
**COMMENTS:**

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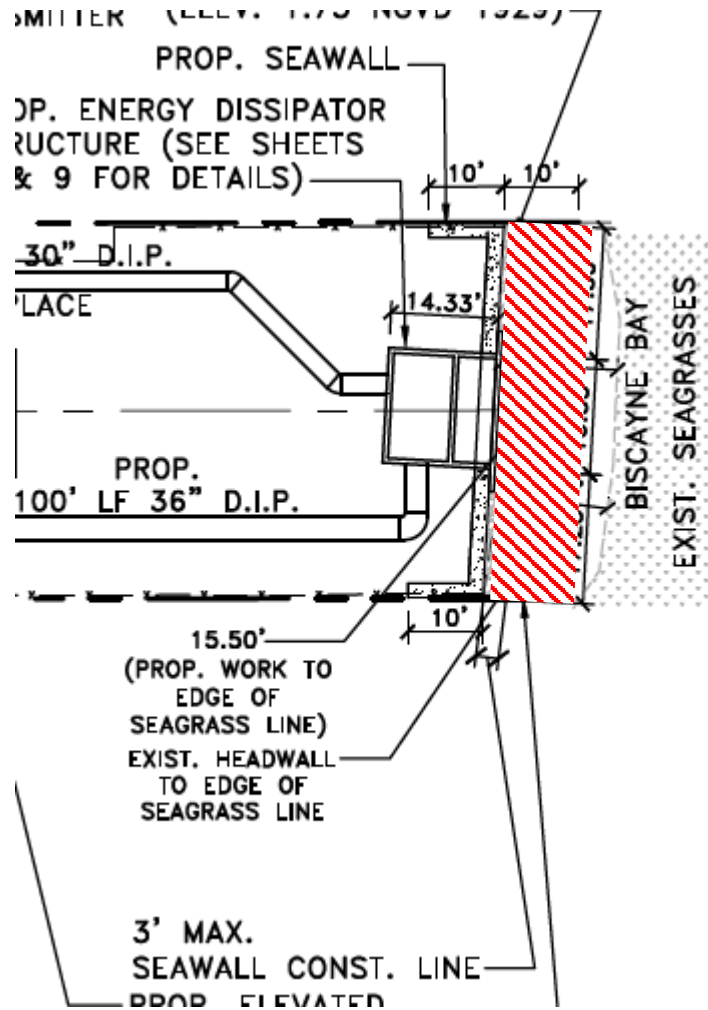
CLI-2024-0221



**Northeast 110<sup>th</sup> Street**



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**Regulatory and Economic Resources**

Environmental Resources Management

701 NW 1st Court, 6th Floor

Miami, Florida 33136-3912

T 305-372-6567 F 305-372-6407

May 13, 2025

RE: Miami-Dade County Class II Permit No. 20240028: located at N BAYSHORE DR BETWEEN NE 109 ST & 110 ST UNIC, FL 00000-

Dear JOSIEL FERRER-DIAZ:

Enclosed is a copy of Class II Permit No. 20240028, pursuant to the provisions of Section 24-48 of the Miami-Dade County code. Please call or notify this office no later than forty eight(48) hours and no earlier than five(5) days prior to the commencement of work authorized by this permit, by submitting the attached Notice of Commencement of Construction via U.S. Mail, or by email [dermwatercontrol@miamidade.gov](mailto:dermwatercontrol@miamidade.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Marsel Fakhrutdinov".

Marsel Fakhrutdinov, P.E.  
Senior Professional Engineer, Water Control Section  
Division of Environmental Resources Management

Enclosure





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**Regulatory and Economic Resources**

Environmental Resources Management

701 NW 1st Court, 6th Floor

Miami, Florida 33136-3912

T 305-372-6567 F 305-372-6407

**NOTICE OF COMMENCEMENT OF CONSTRUCTION**

Permit Number: CLII - 20240028

Issue Date: May 13, 2025

Expiration Date: May 13, 2027

Project Name: BISCAYNE SHORES 109 & 110 PUMP STATION RETROFIT

Location: N BAYSHORE DR BETWEEN NE 109 ST & 110 ST UNIC, FL 00000-

Permittee: JOSIEL FERRER-DIAZ  
MDC DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

Professional Engineer: Mr. NELSON H ORTIZ  
GRAEF NELSON H. ORTIZ, PE

**MUST BE FILLED IN BY PERMITTEE OR CONTRACTOR:**

START DATE: \_\_\_\_\_

DATE OF COMPLETION : \_\_\_\_\_





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Environmental Resources Management  
701 NW 1st Court, 6th Floor  
Miami, Florida 33136-3912  
T 305-372-6567 F 305-372-6407

**Class II Drainage Construction Permit**

**Permit Number:** CLII-20240028  
**Project Manager:** MAYRA A DE TORRES

**Issue Date:** 05/13/2025  
**Expiration Date:** 05/13/2027

---

**Permittee:**

MDC DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS  
JOSIEL FERRER-DIAZ  
7100 NW 36TH STREET  
MIAMI, FL 33166-

**Professional Engineer:**

GRAEF NELSON H. ORTIZ, PE  
Mr. NELSON H ORTIZ  
9200 S. DADELAND BLVD., SUITE 601  
MIAMI, FL 33156-

---

**Application Name:** BISCAYNE SHORES 109 & 110 PUMP STATION RETROFIT

**Project Location:**  
N BAYSHORE DR BETWEEN NE 109 ST & 110 ST UNIC, FL 00000-

**Project Description:**

The proposed project is for the drainage improvement of storm drainage Pump Station 109 and 110 serving the Miami-Dade County Department of Transportation and Public Works. This project proposes to improve two existing pump station (PS 109 and 110) to making them more efficient and more capable of handling more significant storm events, as wells as, storm surges.

The retrofit project includes upgrades to both pump stations such as a new roof and floor for the 110 pump house: new pumps, emergency back-up generators for both stations, dissipater structures. The water quality for the site remains in place by the existing twelve (12) storm drainage wells permitted under the Florida Department of Environmental Protection (FDEP) Permit No. UC 13-293899 and the South Florida Water Management District (SFWMD) Environmental Resources Permit (ERP) No. 13- 00820-S. All construction activities must be conducted according to the signed and sealed plans by Nelson H. Ortiz, P.E., Graef, on January 30, 2025 (19 Pages).

Based on the information provided, the Department has determined that the project is consistent with Chapter 24-48 of the Code of Miami Dade County.

**Specific Conditions:**

THE ABOVE NAMED PERMITTEE IS HEREBY AUTHORIZED TO PERFORM THE WORK SHOWN ON THE APPLICATION AND APPROVED DRAWINGS, PLANS, AND OTHER DOCUMENTS ATTACHED HERETO OR ON FILE WITH THE DEPARTMENT AND MADE PART HEREOF, SUBJECT TO THE ATTACHED GENERAL AND SPECIAL CONDITIONS.

THIS PERMIT AND PLANS SHALL BE KEPT ON SITE  
DURING ALL PHASES OF CONSTRUCTION



1. Contractor's information must be provided to this office prior to the commencement of this project.
2. The contractor shall comply with the terms and conditions of the approved Miami-Dade County RER DERM Class I Permit CLI-2024-0221.
3. The contractor shall take all the necessary measurement to prevent any adverse environmental impact over adjacent properties and/or bodies of water.
4. All works authorized by this permit shall be maintained and operated in accordance with the requirements of Chapter 24 of the Code of Miami-Dade County for the life of the system. Should the permittee and/or DERM become aware that discharges from the system do not meet water quality standards pursuant to Section 24-42 of the Code of Miami-Dade County, the permittee shall make such changes to the system as deemed necessary by DERM in order to meet water quality standards.
5. The permittee shall ensure that once construction is completed and prior to the start of operation, the proposed drainage system is thoroughly cleaned in order to prevent adverse environmental impacts as referenced above.
6. The contractor shall ensure that all turbidity control devices are in place to avoid bottom scouring or dredging and maintain a minimum of 1 foot of clearance between the bottom of the device and any submerged aquatic resources.
7. Installation of temporary pollution prevention measures such as floating turbidity barriers and silt fences are required to minimize adverse impacts to natural resources.
8. The applicant is advised that a permit from the South Florida Water Management District may be required for the proposed project. It is the applicant's responsibility to contact this agency for more information regarding permit and procedures.
9. If solid waste or debris other than clean fill is encountered, the contractor shall provide a plan for the removal and proper disposal of all unsuitable material, within the limits of the work, for review and approval by DERM. Any fill material to be used shall be in accordance with the clean fill requirements of Chapter 24 of the Miami-Dade County Code.
10. The contractor shall take all the necessary measures to keep pollutants of any kind, including oil, grease, and debris from entering any body of water and adjacent properties.
11. The Permittee shall employ turbidity controls methods and best management practices to prevent adverse impact to the existing storm sewer system along the street areas and adjacent properties.
12. Please note, any construction activities that require dewatering will require a Class V permit, pursuant to Section 24-48.1(1)(e) of the Miami-Dade County Code. Class V permits are required for any dewatering of groundwater, surface water, or water which has entered into an underground facility, excavation, or trench.

**General Conditions:**

13. DERM shall be notified no later than forty-eight (48) hours and no earlier than five (5) days prior to the commencement of the work authorized by this permit, unless otherwise noted herein. The permittee and/or contractor may notify DERM by calling (305) 372-6681 or by submitting the attached Notice of Commencement of Construction via hand delivery, U.S. Mail, or facsimile at (305) 372-6489.
14. This permit or a copy thereof, complete with all conditions, attachments, exhibits and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by DERM staff. The permittee shall require the contractor to review the complete permit prior to the commencement of the activity authorized by this permit.

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Environmental Resources Management  
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Miami, Florida 33136-3912  
T 305-372-6567 F 305-372-6407

15. All of the plans and documents referenced on page 1 of this permit are part of the conditions of this permit. In the case of a conflict between any of the approved plans and any condition of this permit, a determination as to which plan or condition to be followed will be made by DERM.
16. This permit only authorizes the grading and drainage work summarized in page 1 of this permit. Any additional work not shown in this permit or on the approved plans shall require additional Class II permit approval.
17. This Class II Permit does not authorize any dewatering activities on the subject property. A separate Class V Permit from the Department, (305) 372-6681, is required for this activity.
18. The time allotted to complete the work for which this permit has been issued shall be limited to the period stipulated on the permit unless the permittee requests an extension of time from DERM. The time extension request form must be submitted at least thirty (30) calendar days prior to the time of expiration of the time period set forth in the permit or in a prior extension of time. Applications for extensions of time that are not timely filed pursuant to Section 24-48.9(2)(b) of the Code of Miami-Dade County will be returned to the applicant.
19. The permittee must allow DERM representatives to inspect the authorized activity during normal business hours to ensure that the work authorized through this permit is being, or has been accomplished in accordance with the terms and conditions of this permit.
20. Compliance with Chapter 24 of the Code of Miami-Dade County as well as all General and Specific Conditions contained in this permit, is required. If DERM determines that the permittee and/or contractor is not performing the construction in accordance with the conditions of the permit, the Code, or the approved plans upon which the permit was issued, DERM may order suspension of the permit or the stopping of work until such time as the permittee and/or the contractor has complied with the permit, plans or standards. In such case, the permittee or the contractor or both shall take all necessary precautions to leave the work area in a safe and secure condition.
21. If any contamination is encountered on site during construction, the contractor shall immediately cease all subsurface disturbances and notify the Department by calling (305) 372-6955, (305) 372-6700, or (305) 372-6681.
22. The permittee shall be responsible for establishing adequate measures and engineering controls during construction to ensure compliance with the water quality standards stipulated in Section 24-42(3) of the Code of Miami-Dade County.
23. The permittee shall apply sediment and erosion control measures along the perimeter of the construction site to protect the adjacent properties from sediment and turbidity discharge and erosion damage.
24. Turbidity may not exceed twenty-nine (29) Nephelometric Turbidity Units (NTU's) above background within surrounding surface waters, and within Outstanding Florida Waters, the standards is no degradation above background levels. If the turbidity levels exceed the above standard, all construction activity shall stop and additional turbidity controls shall be implemented. The construction activity shall not resume until the contractor has received authorization from DERM. At DERM's discretion, turbidity samples may be required and shall be collected in accordance with Section

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24-44.2(3) of the Code of Miami-Dade County, or as specified by DERM, and the results sent directly to the review engineer.

25. The permittee shall hold and save Miami-Dade County harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operations, maintenance, removal, abandonment or use of any system authorized by this permit.
26. The permittee shall take all necessary precautions to prevent construction or demolition debris from falling into adjacent water bodies or wetlands. Any debris that falls into the adjacent water bodies or wetlands shall be removed immediately via a methodology approved by DERM. Construction and demolition debris shall be disposed of in accordance with all Federal, State and Local regulations.
27. Any water body affected by the construction activity should be restored to its pre-existing condition prior to the commencement of the work covered by this permit. The permittee shall also be responsible for ensuring complete removal of accumulated sediments, turbidity curtains, and other devices in a water body that would reduce its conveyance or storage capacity. The permittee is responsible in securing any permits required for this restoration work.
28. The permittee shall comply with the provisions of Chapter 16A of the Code of Miami-Dade County related to Historic Preservation to preserve known and potential archeological resources in the area that are subject to this permit.
29. A NPDES (National Pollutant Discharge Elimination System) Stormwater Permit may be required as per Rule 62-621.300(4), F.A.C. for the proposed construction activity. Please contact the Florida Department of Environmental Protection NPDES Stormwater Section at (850) 245-7522 or [www.dep.state.fl.us/water/stormwater/NPDES](http://www.dep.state.fl.us/water/stormwater/NPDES).
30. If any work or activity associated with this project is to take place in-water:
  - a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
  - b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
  - c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
  - d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
  - e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922 and RER at 305.372.6452. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (1-772-562-3909) for south Florida, and to FWC at [ImperiledSpecies@myFWC.com](mailto:ImperiledSpecies@myFWC.com)
  - f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this

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use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used (see MyFWC.com/manatee). One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 1/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Questions concerning these signs can be sent to the email address listed above.

31. All work authorized by this permit shall be performed by the contractor and/or subcontractor holding an applicable certificate of competency and shall be licensed in Miami-Dade County to perform such work. Any work that is subcontracted shall require that the permittee and contractor (i.e. the contractor listed on this permit) notify the review engineer at (305) 372-6681 or by facsimile at (305) 372-6489 a minimum of seventy-two hours prior to the subcontractor performing any work. Notification shall include the name of the subcontractor performing the work, the subcontractor's Miami-Dade County license number or state general contractor license number and scope of work.
32. It is a violation of the Code to perform any work authorized pursuant to this permit if the permittee(s) sell or otherwise transfer ownership of the property unless DERM has approved an Application for Transfer. An Application for Transfer may be filed with DERM at any time prior to the transfer of property ownership and, for a limited time, after the transfer of property ownership and must be signed by both the proposed transferee and transferor. Applications for Transfer shall be filed in the form prescribed by DERM and shall not be processed if the filed Application for Transfer is not fully complete in all respects pursuant to Section 24-48.18 of the Code within 120 days of the date of transfer of property ownership. The project must be in compliance with all the restrictions, limitations, and conditions of this permit at the time of submittal of the Application for Transfer and continuously throughout the time period during which the application is being processed.
33. A performance and/or mitigation bond may be held to ensure compliance with the aforementioned conditions and the completion of any required mitigation. Failure to comply with any of these conditions may result in the revocation by Miami-Dade County of all or a portion of the bond without further notice. The bond shall remain in force for up to six (6) months after the approved completion date if the work covered by the bond.
34. If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) of the code or pursuant to Section 24-48.2(II)(A)(4) of the code is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work allowed by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit.
35. Issuance of a this permit does not relieve the applicant from obtaining all required federal, State and local permits.
36. Within thirty (30) days after completion of the work, the permittee or contractor shall file record drawings or as-builts certified by the engineer of record with DERM.
37. FOR CONSTRUCTION ACTIVITIES THAT DISTURB ONE (1) ACRE OR GREATER, A NPDES GENERIC

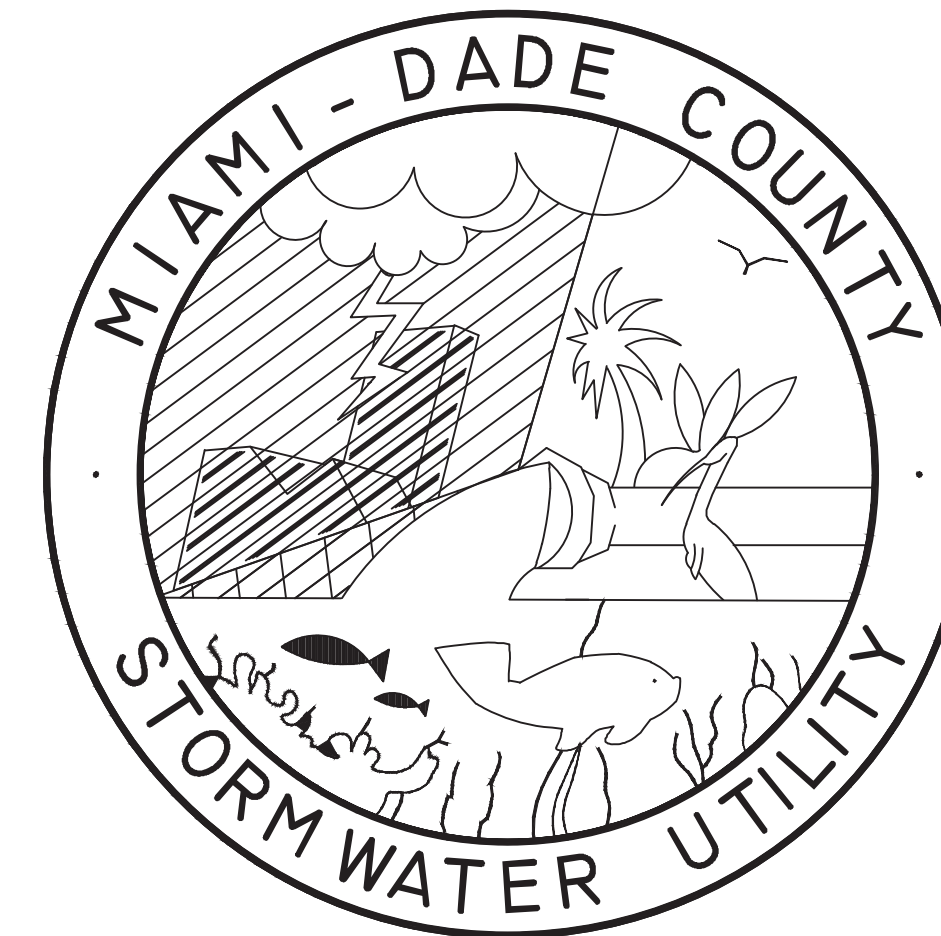
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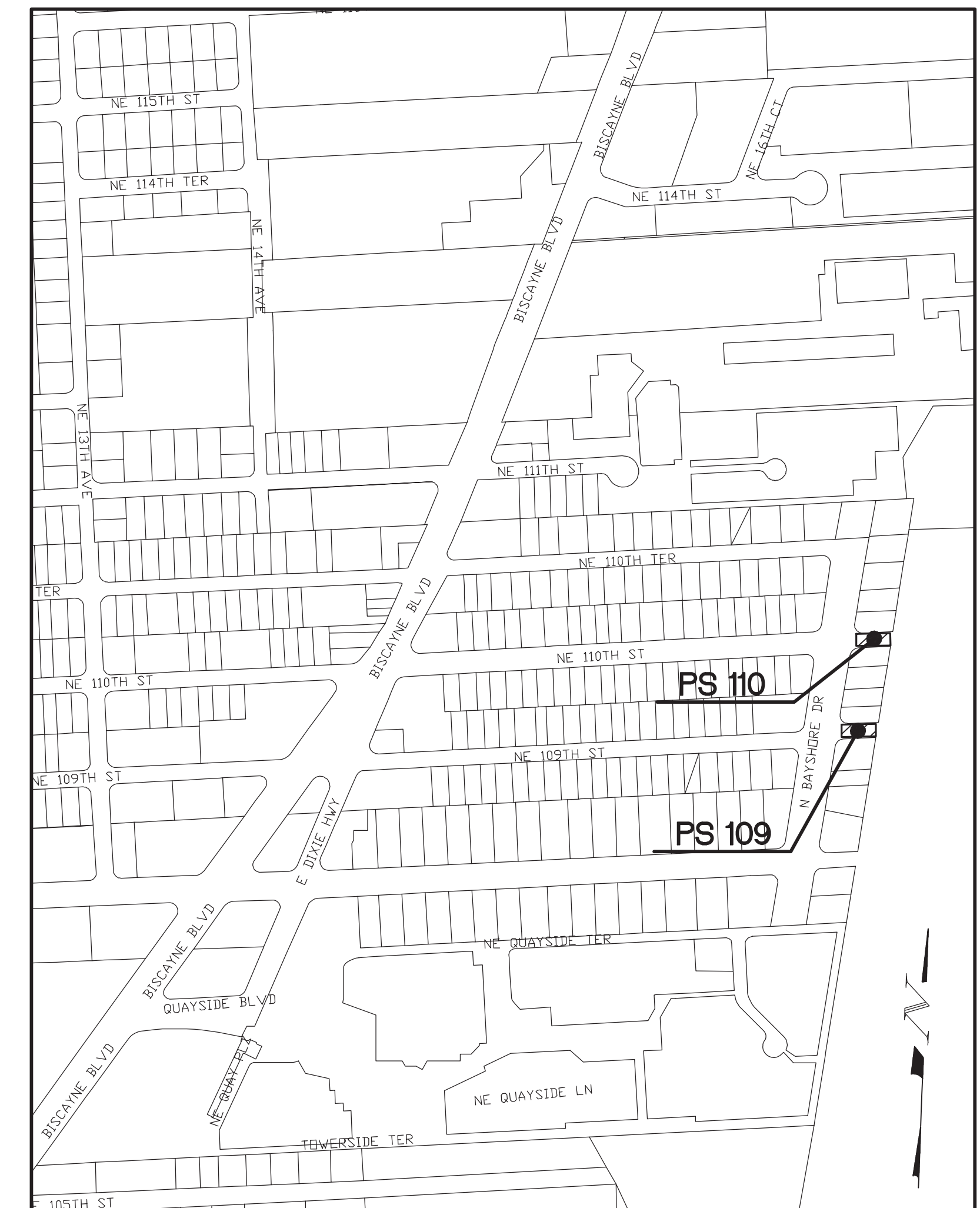
PERMIT IS REQUIRED. To apply for this permit call FDEP Stormwater Program: (850) 245-7522 or visit Florida DEP NPDES website at: <http://www.floridadep.gov/water/stormwater/content/construction-activity-cgp>

38. The permittee shall retain a copy of the stormwater pollution prevention plan (SWPP) and all reports, records and documentation required by this permit at the construction site, or an appropriate alternative location as specified in the Notice of Intent (NOI), from the date of project initiation to the date of final stabilization . Please refer to DEP Document No. 62-621.3000 (4) (a): <http://www.dep.state.fl.us/water/stormwater/npdes/docs/cgp.pdf>

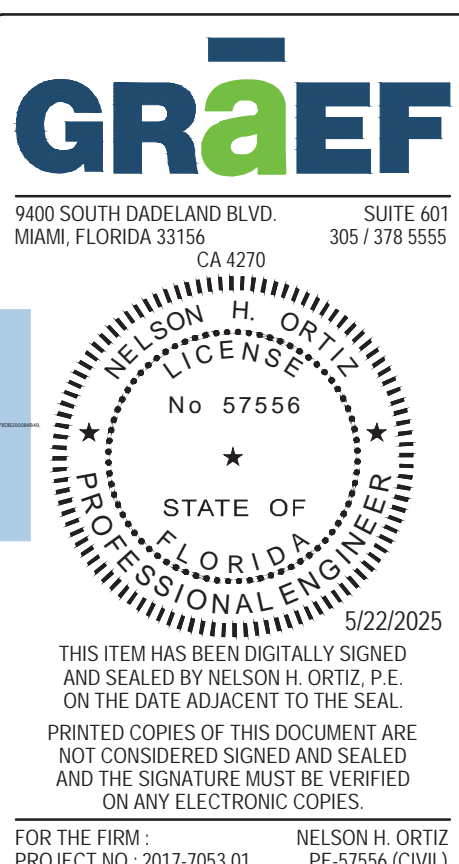
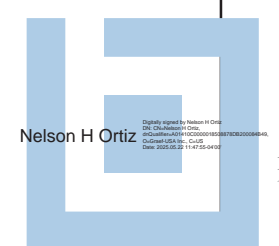
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<u>SHT. No.</u>	<u>DESCRIPTION</u>
C-1	COVER SHEET
C-2	QUANTITIES, PAY ITEMS, AND NOTES
C-3	PS 109 EXISTING CONDITIONS/DEMOLITION PLAN
C-4	PS 109 PROPOSED SITE PLAN
C-5	PS 109 PROPOSED PUMP STATION PLAN AND ELEVATION
C-6	PS 109 ELEVATED GENERATOR STRUCTURE
C-7	PS 109 SEAWALL PLAN AND DETAILS
C-8	PS 110 EXISTING CONDITIONS/DEMOLITION PLAN
C-9	PS 110 PROPOSED SITE PLAN
C-10	PS 110 PROPOSED PUMP STATION PLAN AND ELEVATION, SLUICE GATE DETAILS
C-11	PS 110 PUMP HOUSE RETROFIT DETAILS
C-12	PS 110 SEAWALL PLAN AND DETAILS
C-13	ENERGY DISSIPATOR DETAILS
C-14	SEAWALL DETAILS AND SECTIONS
C-15	TRASH INTERCEPTOR DETAILS
C-16	MISCELLANEOUS DETAILS & NOTES
C-17	STORMWATER POLLUTION PREVENTION PLAN DETAILS AND NOTES
C-18	PS 109 STORMWATER POLLUTION PREVENTION PLAN
C-19	PS 110 STORMWATER POLLUTION PREVENTION PLAN
E-0	SITE LOCATION, LEGEND AND NOTES
E-1	PS 110 EXISTING SITE CONDITIONS/DEMOLITION PLAN
E-2	PUMP STATION 110 ELECTRICAL DEMOLITION PLAN
E-3	PUMP STATION 110 ELECTRICAL NEW WORK PLAN
E-4	PUMP STATION 109 EXISTING CONDITIONS/DEMOLITION PLAN
E-5	PUMP STATION 109 ELECTRICAL NEW WORK PLAN
E-6	POWER RISER DIAGRAM
E-7	PANEL SCHEDULES AND GENERATOR SPECIFICATIONS
E-8	GENERATOR TANK DRAWING



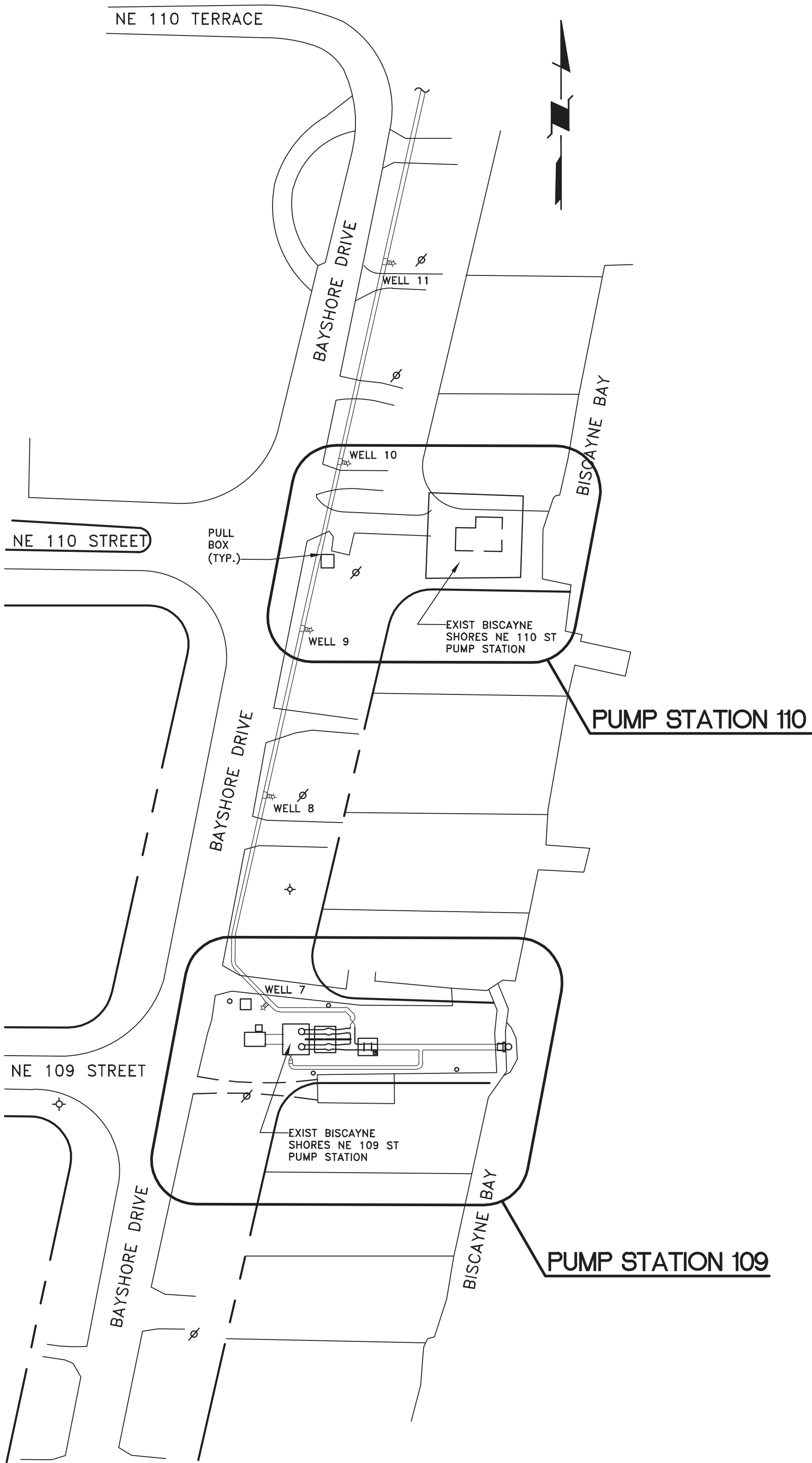
KEY PLAN  
N.T.S.



09/13/2024 ADDRESS M-D C COMMENTS

100% SUBMITTAL





**SITE LOCATION PLAN**  
SCALE: 1" = 50'

SUMMARY OF PAY ITEMS			
Item No.	Description	Unit	Quantity
102-74-1	Barricades (Temporary - Types I, II, VP and Drum)	E.A./DAY	7,200
104-10-3	Sediment Barrier	L.F.	675
104-11	Floating silt barrier	L.F.	200
104-18	Inlet Protection System	E.A.	2
110-1-1B	Clearing and grubbing	L.S.	1
110-3D	Building Demolition	LS	1
120-6	Finbankment	C.Y.	79
334-2-13-1A	Driveway Pavement - Asphalt	S.Y.	159
400-1-15	Class 1 Concrete (Miscellaneous) (Trench build-up, collars, pipe plugs, structure plugs etc.) (This item is contingent upon field conditions and may increased decreased or eliminated by the Engineer)	C.Y.	5
400-11-4	Seawall (Includes reinforcement)	S.F.	840
425-99E	ENERGY DISSIPATING OUTFALL (E.A.)	E.A.	2
430-19-30	Ductile Iron Pipe and Fittings, 30" Diameter	LF	145
430-19-36	Ductile Iron Pipe and Fittings, 36" Diameter	LF	120
430-94-1-1	Desilting Pipe, 0 - 48"	L.F.	190
430-95-2	Desilting Drainage Structure	E.A.	3
430-880-2533	CHECK VALVE (Pipe diameter 18" to 36 or equivalent)	EA	4
446-30-45	30" D.I.P. - 45 DEGREE BEND	E.A.	4
446-30-90	30" D.I.P. - 90 DEGREE BEND	E.A.	1
446-36-90	30" D.I.P. - 90 DEGREE BEND	E.A.	3
446-38-16	30" X 16" D.I.P. CONCENTRIC REDUCER	E.A.	1
446-38-30	30" X 24" D.I.P. CONCENTRIC REDUCER	E.A.	1
446-38-36	36" X 30" D.I.P. CONCENTRIC REDUCER	E.A.	2
447-30-30	30" x 30" Tee	E.A.	1
447-36-36	36" x 36" Tee	E.A.	1
508-72A	Emergency Generator with ATS and Fuel Tank	ASSM.	2
527-2	Detectable Warning on Walking Surface	S.F.	40
550-10-998	FENCE (Type B) (5.1'-6.0' Height)	L.F.	573
550-60-233	Fence Gate - Type B, Sliding/Cantilever, 12' -18' Opening	E.A.	1
550-60-235	Fence Gate, Type B, Sliding/Cantilever, 20.1 - 24' Opening	E.A.	1
550-75-1	REMOVAL AND DISPOSAL OF EXISTING CHAIN LINK FENCE	L.F.	300
575-2A	Sodding-ST. Augustine, or match existing, includes watering and maintenance. Contingent item based on field conditions, may be increased, or decreased by the engineer.	S.Y.	1,020
580-4-32	Clusia Rosea Shrub	L.F.	160
580-327-3C	Removal and Relocate Existing Coconut Palm Trees	E.A.	3
600-4	Pump Station Improvements	L.S.	1
639-1-021	Electrical Power Service (FPL)	LS	1
685-1183	Telemetry System	LS	1

**NOTES:**

- 1) The Pump Station Improvements item covers, but is not limited to, all work to be completed at the BS 109 and BS 110 Pump Stations in the (structure/building footprint). Work is to include the replacement of roof and floor at BS 110, a new generator platform at BS 109, all electrical work, including the parts, associated in the cost of separating both pump station electrical systems; new ultra sonic transmitters and other miscellaneous items. Item price incudes all labor, parts, and permits.
- 2) The Electrical Power Service item includes all work and materials to establish new power and/or reestablish power at the pump stations, which includes all cost to FPL.
- 3) The Telemetry System item includes all work, labor, and materials to establish a new telemetry system and/or re-establish the system at the pump stations.
- 4) The Energy Dissipating Structure items includes the cost of the adjacent approved bank stabilization method and related costs.
- 5) The Emergency generator fuel tank shall be full upon delivery.

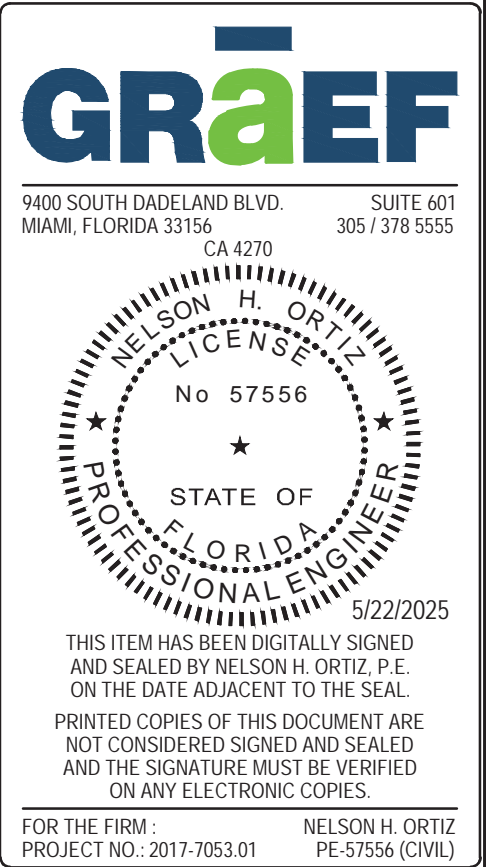
**GENERAL NOTES**

1. ELEVATIONS SHOWN REFER TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (N.G.V.D. 29). SUBTRACT 1.55 FEET FROM ELEVATION SHOWN TO N.A.V.D.
2. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. IT IS THE INTENT OF THESE DRAWINGS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. EXISTING UTILITIES SHOWN ARE BASED ON INFORMATION SUPPLIED BY OTHERS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION AND COORDINATE WITH THE VARIOUS UTILITY COMPANIES TO RELOCATE, BY PASS OR OTHERWISE ENSURE THAT UTILITY SERVICES WILL NOT BE INTERRUPTED DURING CONSTRUCTION.
5. EXISTING GRADES WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS, AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
6. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, MIAMI-DADE COUNTY DRER AND ALL OTHER LOCAL, STATE AND NATIONAL CODES, WHERE APPLICABLE.
7. ALL SECTIONS INDICATED HEREIN REFER TO THE MIAMI-DADE COUNTY PUBLIC WORKS MANUAL.
8. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.
9. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING FACILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.
10. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.
11. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 1-800-432-4770.
12. THE CONTRACTOR IS REQUIRED TO HAVE ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION.
13. THE CONTRACTOR SHALL NOTIFY THE MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS, MIAMI-DADE COUNTY DRER, WATER CONTROL, STORMWATER PLANNING AND DESIGN SECTION AND THE ENGINEER OF RECORD AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
14. PRIOR TO CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, FIVE SETS OF SHOP DRAWINGS SHALL BE SUBMITTED TO, AND APPROVED BY DRER-STORMWATER PLANNING AND DESIGN SECTION. IN ADDITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY OTHER AGENCY SHOP DRAWING APPROVAL, IF REQUIRED.
15. THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY ON ANY CONFLICT ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN IN THESE DRAWINGS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES AT NO ADDITIONAL COST.
17. COMPLETE "AS-BUILT" INFORMATION RELATIVE TO LOCATION, SIZE AND DEPTH OF NEW PIPES, STRUCTURES, ETC., SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED (SIGNED AND SEALED BY A FLORIDA CERTIFIED P.L.S.) TO THE ENGINEER, PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL RECORD INFORMATION ON EXISTING UTILITIES CROSSINGS ENCOUNTERED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPES, INLETS, MANHOLES, ETC., SHALL BE TAKEN BY A FLORIDA REGISTERED SURVEYOR AND SHOWN ON THE RECORD DRAWINGS. COST OF SIGNED AND SEALED AS-BUILTS SHALL BE COVERED IN OVERALL BID.
18. GRADING SHALL CONSIST OF ALL EXCAVATION, FILLING, SHAPING AND SLOPING NECESSARY FOR THE CONSTRUCTION, PREPARATION AND COMPLETION OF ALL SUBGRADES, SHOULDERS, SLOPES, INTERSECTIONS, PAVEMENTS AND OTHER AREAS, ALL IN ACCORDANCE WITH THE ALIGNMENT AND GRADES SHOWN IN THESE DRAWINGS.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ALL DISTURBED EXISTING MANHOLE COVERS, VALVE BOXES, BLOW-OFF RISERS, ETC. TO NEW ELEVATIONS, AS REQUIRED, WHETHER SPECIFICALLY SHOWN ON DRAWINGS OR NOT.
20. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT, UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.
21. ALL DEMOLITION DEBRIS AND EXCESS MATERIAL TO BE DISPOSED OF BY CONTRACTOR IN AREAS PROVIDED BY HIM, UNLESS OTHERWISE NOTED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS ITEM.
22. THE PROJECT SITE IS LOCATED IN FLOOD ZONE VE 11 (+11 FEET N.G.V.D. 29). ALL ELECTRICAL AND MECHANICAL EQUIPMENT, SUCH AS MOTORS, SWITCHES, RECEPTACLES, ETC. ARE REQUIRED TO BE AT LEAST A FOOT ABOVE FEMA'S FLOOD ELEVATION (+11 NGVD).

**SPECIAL NOTES**

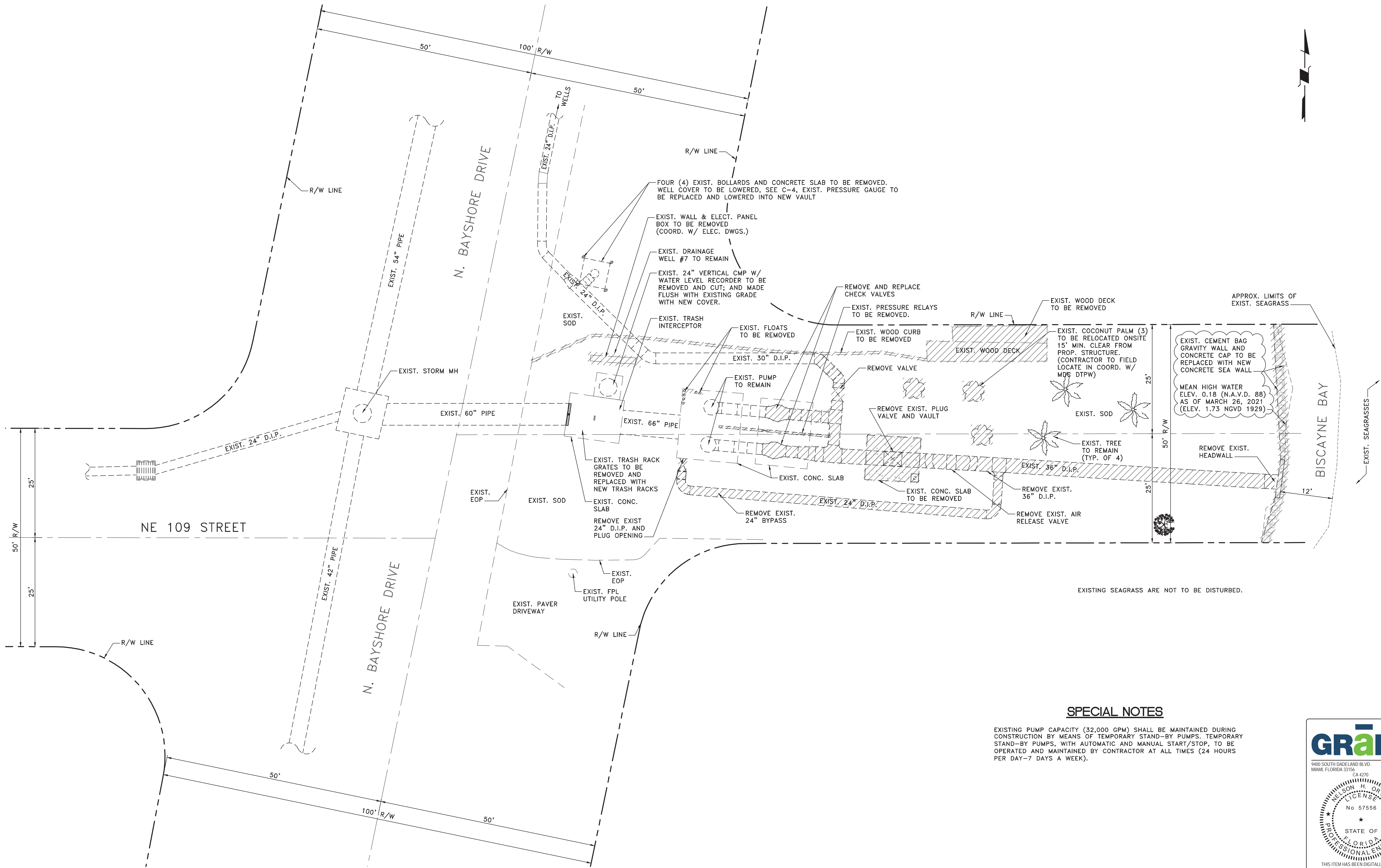
EXISTING PUMP CAPACITY (32,000 GPM) SHALL BE MAINTAINED DURING CONSTRUCTION BY MEANS OF TEMPORARY STAND-BY PUMPS. TEMPORARY STAND-BY PUMPS, WITH AUTOMATIC AND MANUAL START/STOP, TO BE OPERATED AND MAINTAINED BY CONTRACTOR AT ALL TIMES (24 HOURS PER DAY-7 DAYS A WEEK).

DESIGN BY: J.R.G.	DATE: 04/10/2020	QUANTITIES, PAY ITEMS, AND NOTES	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 2
DRAWN BY: P.F.	DATE:					DRAWING NO. C-2	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						



05/15/2024 UPDATE PAY ITEMS  
12/05/2023 UPDATE PAY ITEMS  
09/26/2022 UPDATE PAY ITEMS  
12/17/2021 ADDRESS M-D C COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS





PS 109 EXISTING CONDITIONS/ DEMOLITION PLAN  
SCALE: 1" = 10'

SPECIAL NOTES

EXISTING PUMP CAPACITY (32,000 GPM) SHALL BE MAINTAINED DURING CONSTRUCTION BY MEANS OF TEMPORARY STAND-BY PUMPS. TEMPORARY STAND-BY PUMPS, WITH AUTOMATIC AND MANUAL START/STOP, TO BE OPERATED AND MAINTAINED BY CONTRACTOR AT ALL TIMES (24 HOURS PER DAY-7 DAYS A WEEK).

09/13/2024 ADDRESS M-D C COMMENTS  
07/20/2023 ADDRESS DERM COMMENTS  
06/22/2023 ADDRESS M-D C COMMENTS  
12/17/2021 ADDRESS M-D C COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS

GRaEF

9400 SOUTH DADELAND BLVD.  
MIAMI, FLORIDA 33156

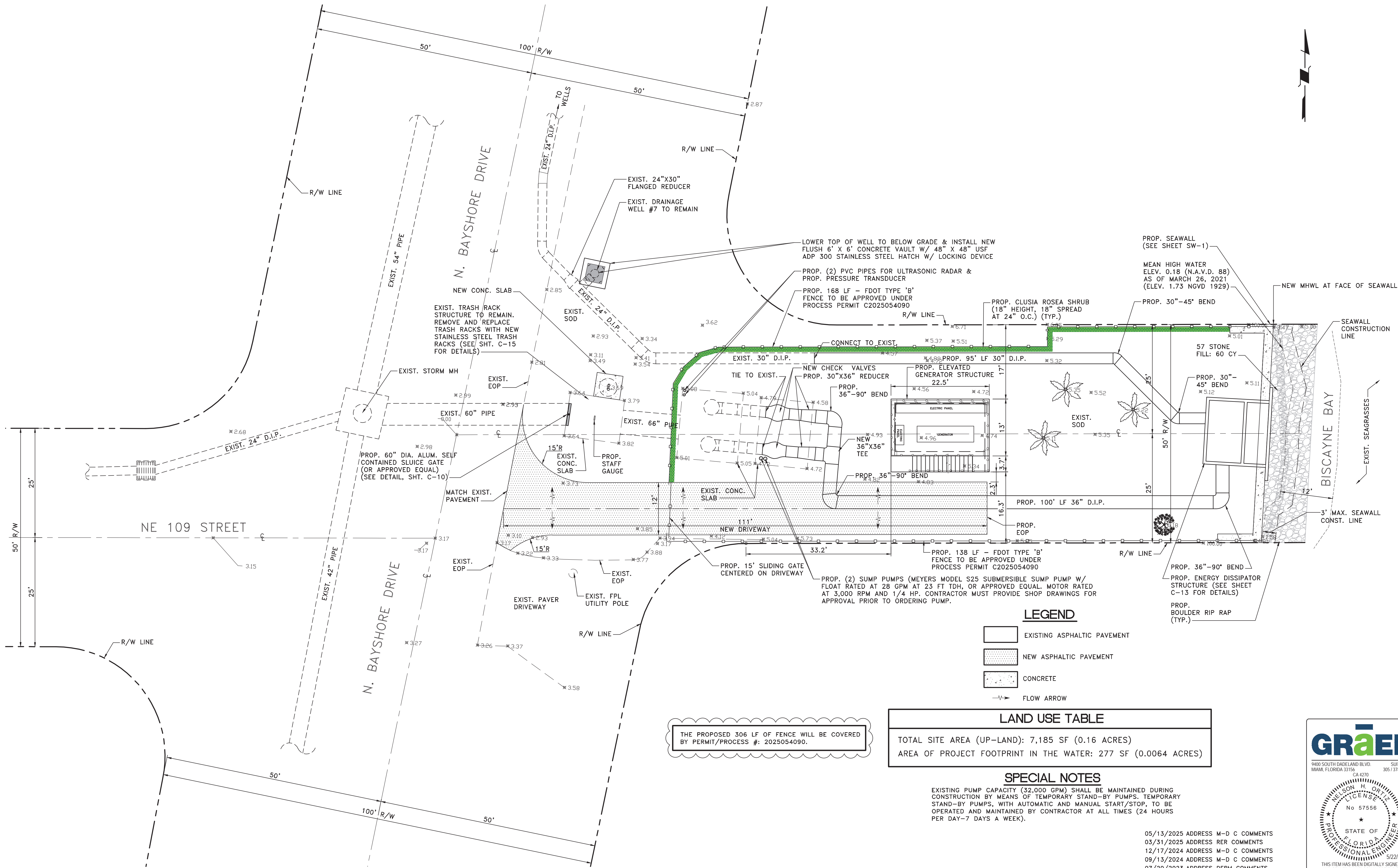
CA 4270  
SUITE 601  
305 / 378 5555

NELSON H. ORTIZ  
LICENSE  
No 57556  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

5/22/2025  
THIS ITEM HAS BEEN DIGITALLY SIGNED  
AND SEALED BY NELSON H. ORTIZ, P.E.  
ON THE DATE ADJACENT TO THE SEAL.  
PRINTED COPIES OF THIS DOCUMENT ARE  
NOT CONSIDERED SIGNED AND SEALED  
AND THE SIGNATURE MUST BE VERIFIED  
ON ANY ELECTRONIC COPIES.  
FOR THE FIRM: NELSON H. ORTIZ  
PROJECT NO.: 2017-7063.01 PE 57556 (CIVIL)

DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 109 EXISTING CONDITIONS / DEMOLITION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 3
DRAWN BY: P.F.	DATE:					DRAWING NO. C-3	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						





THE PROPOSED 306 LF OF FENCE WILL BE COVERED BY PERMIT/PROCESS #: 2025054090.

PS 109 PROPOSED SITE PLAN  
SCALE: 1" = 10'

DESIGN BY: J.R.G.	DATE: 04/10/2020
DRAWN BY: P.F.	DATE:
CHECKED BY: N.H.O.	DATE:

PS 109 PROPOSED SITE PLAN

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



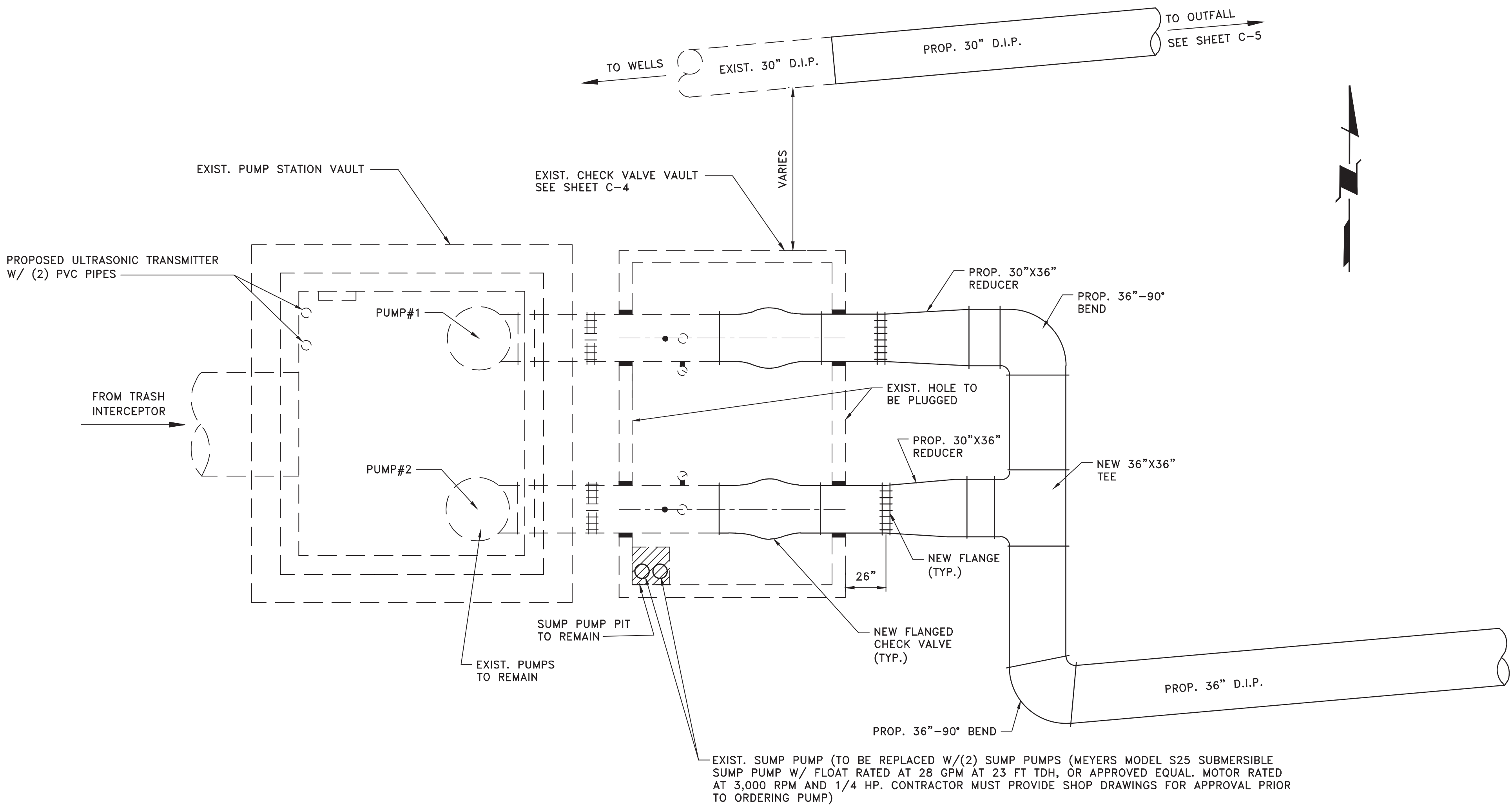
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO. 17053.01	SHEET NO. 4
DRAWING NO. C-4	OF 28 SHEETS



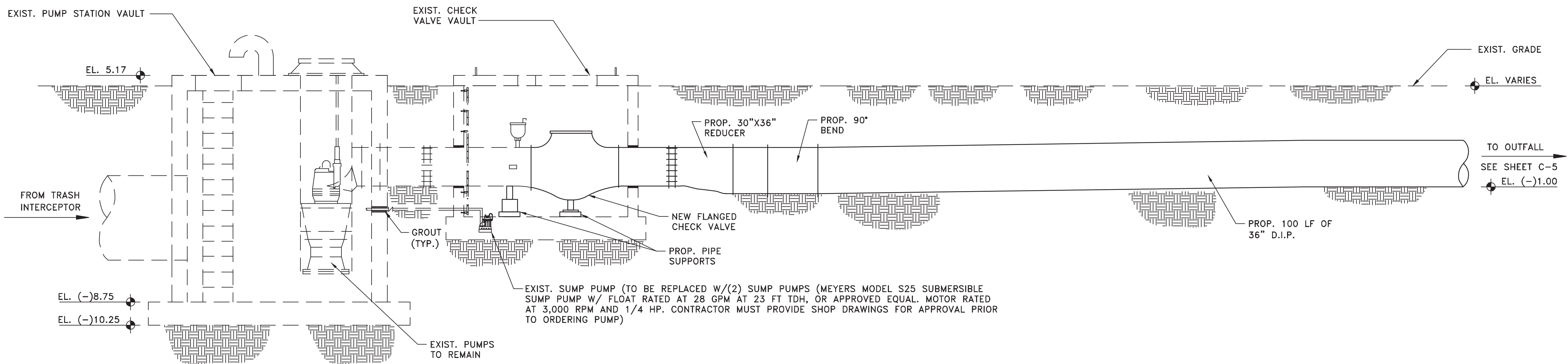
05/13/2025 ADDRESS M-D C COMMENTS  
03/31/2025 ADDRESS RER COMMENTS  
12/17/2024 ADDRESS M-D C COMMENTS  
09/13/2024 ADDRESS M-D C COMMENTS  
07/20/2023 ADDRESS DERM COMMENTS  
06/22/2023 ADDRESS M-D C COMMENTS  
12/17/2021 ADDRESS M-D C COMMENTS  
09/08/2021 ADDRESS SFWMD COMMENTS  
08/10/2021 ADDRESS SFWMD COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS





OVERALL PROPOSED PLAN

SCALE: 1" = 4'



OVERALL PROPOSED SECTION

SCALE: 1" = 4'

EXIST. PUMP STATION DATA TABLE			
#1	PUMP CAPACITY	G.P.M.	16,000
	T.D.H.	FEET	12.0
#2	PUMP CAPACITY	G.P.M.	16,000
	T.D.H.	FEET	12.0
NORMAL OPERATING RANGE		FEET OF HEAD	6.0-18.0
PUMP CYCLE TIME		MINUTES	10 MIN.
WET WELL DIMENSIONS		FEET	12'X14' I.D.
PUMP MODEL		SUBMERSIBLE PROPELLER	
SIZE		24" PROPELLER	
B.H.P.		-	61
PUMP EFFICIENCY		-	80%
DISCHARGE PIPE DIAMETER		INCHES	30"
MOTOR SIZE		H.P.	75
FINISH GRADE		ELEV. A	4.5
Q DISCHARGE PIPE		ELEV. B	0.25
INFLUENT PIPE INVERT		ELEV. C	-5.25
ALARM SIGNAL HIGH WATER VALVE OPEN		ELEV. D	3.5
LAG PUMP ON		ELEV. E	3.0
LEAD PUMP ON		ELEV. F	2.5
WET WELL SLAB		ELEV. H	-8.75
ELECTRICAL SERVICE		AMP. MIN.	-
R.P.M.		-	660
HIGH PRESSURE SHUT OFF SWITCH		FEET OF HEAD	22#
HIGH PRESSURE ALARM LIGHT AND CONTROL VALVE OPEN		FEET OF HEAD	18
LAG PUMP LOW WATER SHUT OFF		ELEV. J	-2.0
LEAD PUMP LOW WATER SHUT OFF		ELEV. K	-2.5
LOW WATER ALARM/EMERGENCY SHUT OFF		ELEV. L	-3.0

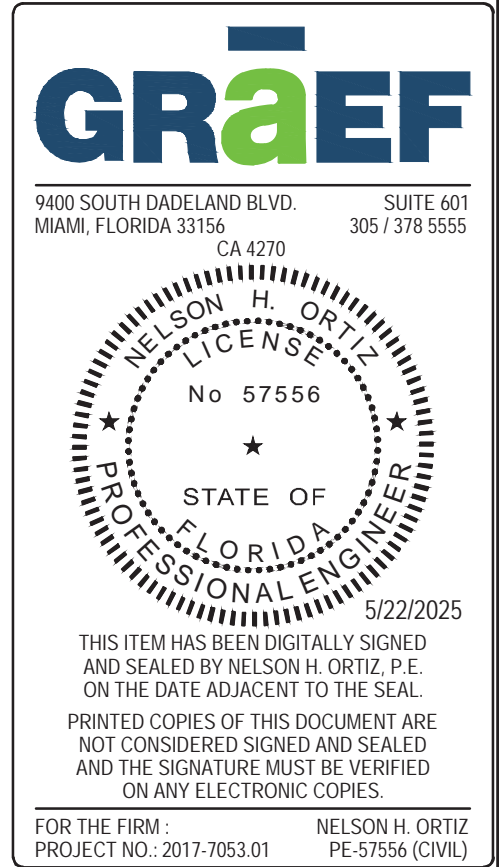
SEQUENCE OF CONSTRUCTION NOTES

- TURN OFF PUMPS #1 & #2.
- REMOVE EXIST. PLUG VALVE VAULT IN ITS ENTIRETY.
- REMOVE ALL PLUG VALVES AND PIPES, AS REQUIRED.
- INSTALL ENERGY DISSIPATOR STRUCTURE.
- INSTALL PIPES & APPURTENANCES.
- ALL PIPES AND VALVES SHALL BE TESTED FOR LEAKS PRIOR TO BACKFILLING THE EXCAVATIONS, WHILE MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS PERSONNEL ARE PRESENT.

NOTE: CONTRACTOR TO PROVIDE CONTINUOUS TEMPORARY BY-PASS PUMPING AND PIPING DURING THE DURATION OF PROJECT CONSTRUCTION. CAPACITY SHALL MATCH EXISTING CAPACITY.

DATUM: N.G.V.D. 29

12/17/2021 ADDRESS M-D C COMMENTS

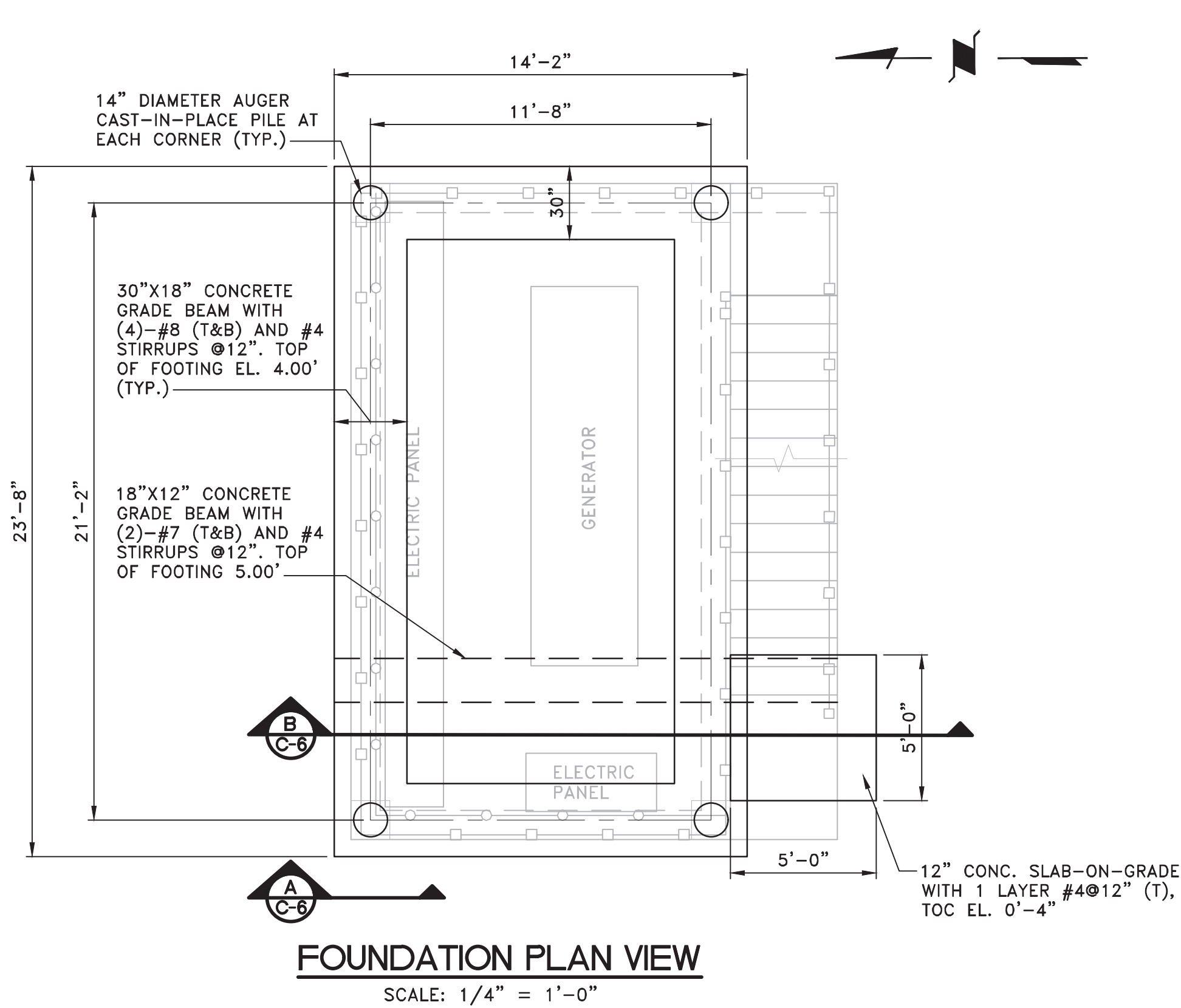


DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 109 PLAN AND ELEVATION	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 5
DRAWN BY: P.F.	DATE:					DRAWING NO. C-5	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						



STRUCTURAL GENERAL NOTES

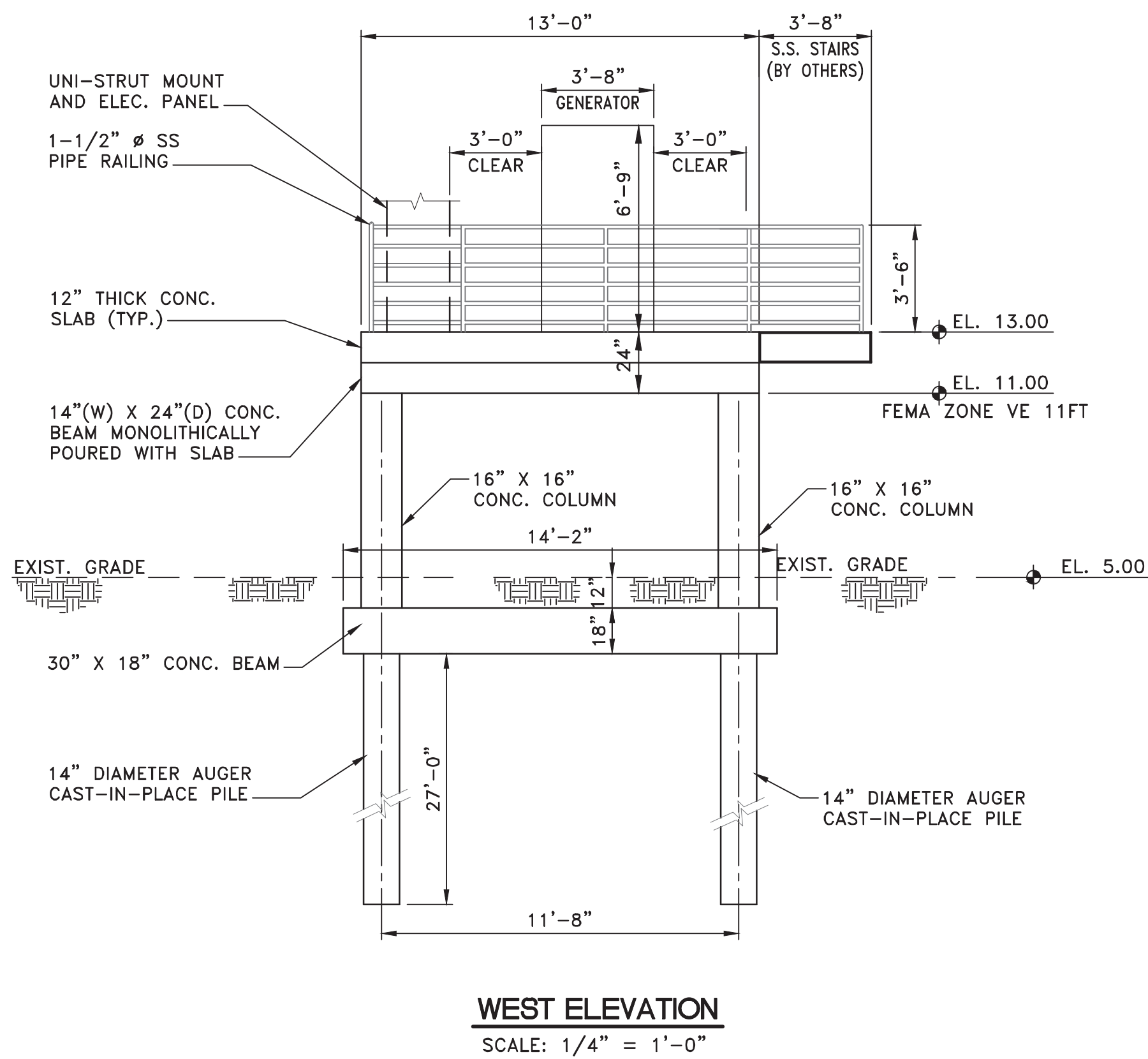
- DESIGN IS IN ACCORDANCE WITH THE STATE OF FLORIDA BUILDING CODE, 2023 EDITION.
- MINIMUM 28 DAY CONCRETE CYLINDER STRENGTH SHALL BE: AUGER CAST-IN-PLACE PILES: 5000 PSI  
OTHERS: 4000 PSI.  
WATER/CEMENT RATIO SHALL NOT BE LARGER THAN 0.50.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
- STAINLESS STEEL WIDE FLANGE BEAMS, CHANNELS, ANGLES SHALL CONFORM TO ASTM A276, ALLOY 316L.
- STAINLESS STEEL PLATES SHALL CONFORM TO ASTM A240, ALLOY 316L.
- STAINLESS STEEL BOLTS SHALL CONFORM TO ASTM F593D, ALLOY 316L.
- STAINLESS STEEL NUTS AND WASHERS SHALL CONFORM TO ASTM F594 GROUP 2, ALLOY 316L.
- ALL WELDING SHALL COMPLY WITH AWS D1.6 USING E316 ELECTRODES. ALL WELDERS TO BE CERTIFIED BY AWS.
- ALL STAIR, HARDWARE, WIDE FLANGE BEAMS, CHANNELS, ANGLES, PLATES, RAILS, BRACKETS, BOLTS AND ANY FIXTURES OR SUPPORTS SHALL BE STAINLESS STEEL.
- STATED AUGER CAST PILE COMPRESSIVE CAPACITY IS 26 TONS, TENSILE CAPACITY IS 6.5 TONS AND LATERAL CAPACITY IS 10, BASED ON SOIL REPORT PREPARED BY WINGERTER LABORATORIES, INC., DATED NOVEMBER 15, 2019.
- DESIGN LOADS:  
LIVE LOADS:  
PLATFORM: 40 PSF  
WIND LOAD (ASCE 7-22)  
BUILDING RISK CATEGORY III  
BASIC WIND SPEED V = 186 MPH  
EXPOSURE: D  
INTERNAL PRESSURE COEFFICIENT GCPI =0.0
- RESISTANCE TO LATERAL LOADS ON STRUCTURE IS PROVIDED BY FLOOR DIAPHRAGMS AND CONCRETE MOMENT FRAMES. CONTRACTOR SHALL PROVIDE SUFFICIENT TEMPORARY BRACING UNTIL ALL LATERAL SUPPORT SYSTEMS ARE IN PLACE AND FUNCTIONAL.
- ALL STRUCTURAL FRAMING AND CONNECTIONS HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE STRUCTURAL FRAMING AND CONNECTIONS FOR ADEQUACY DURING THE ERECTION AND CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND JOB SITE SAFETY.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ITEMS PRIOR TO FABRICATION: REBAR, CONCRETE MIX DESIGN, STRUCTURAL STEEL, STEEL STAIRS AND STEEL RAILING.



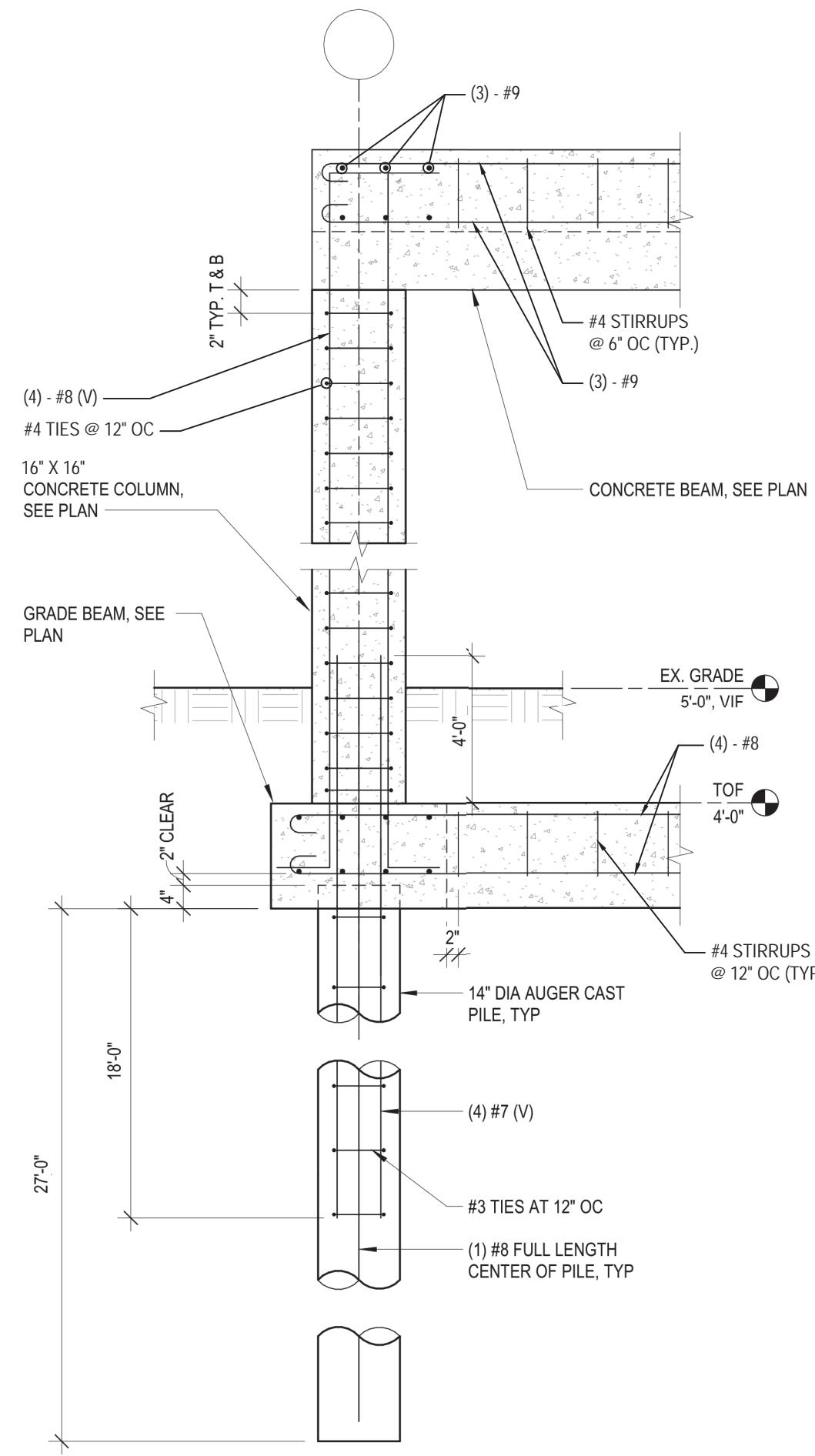
FOUNDATION PLAN VIEW  
SCALE: 1/4" = 1'-0"

NOTES:

- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR FABRICATION.
- CONTRACTOR SHALL PROVIDE ACCESS LADDER SHOP DRAWINGS BEFORE BEGINNING FABRICATION TO E.O.R. FOR REVIEW & APPROVAL.
- DIMENSIONS SHOWN ON THIS SHEET SHALL NOT SUPERCEDE DIMENSIONS SHOWN ON FABRICATION DRAWINGS.

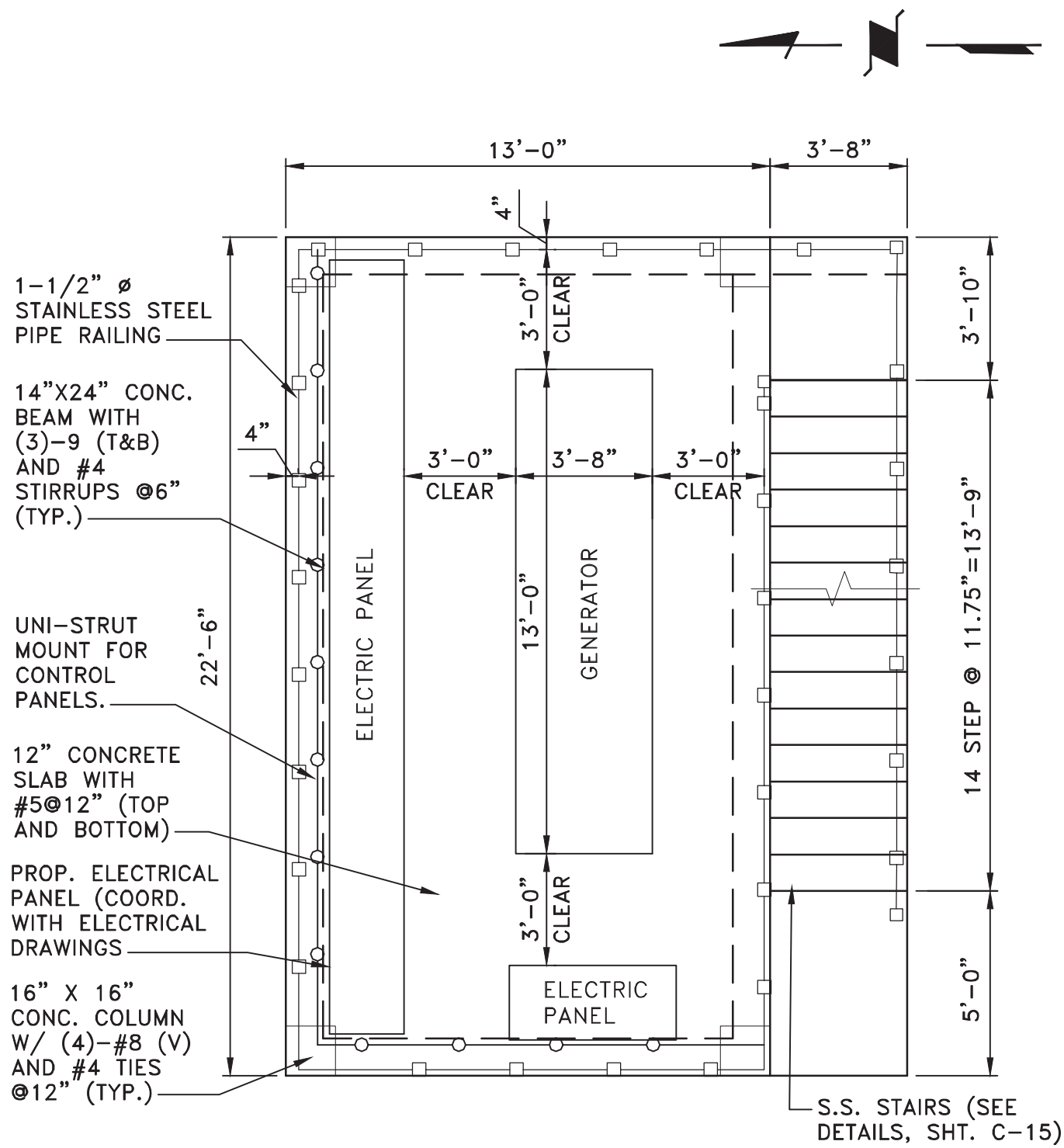


WEST ELEVATION  
SCALE: 1/4" = 1'-0"

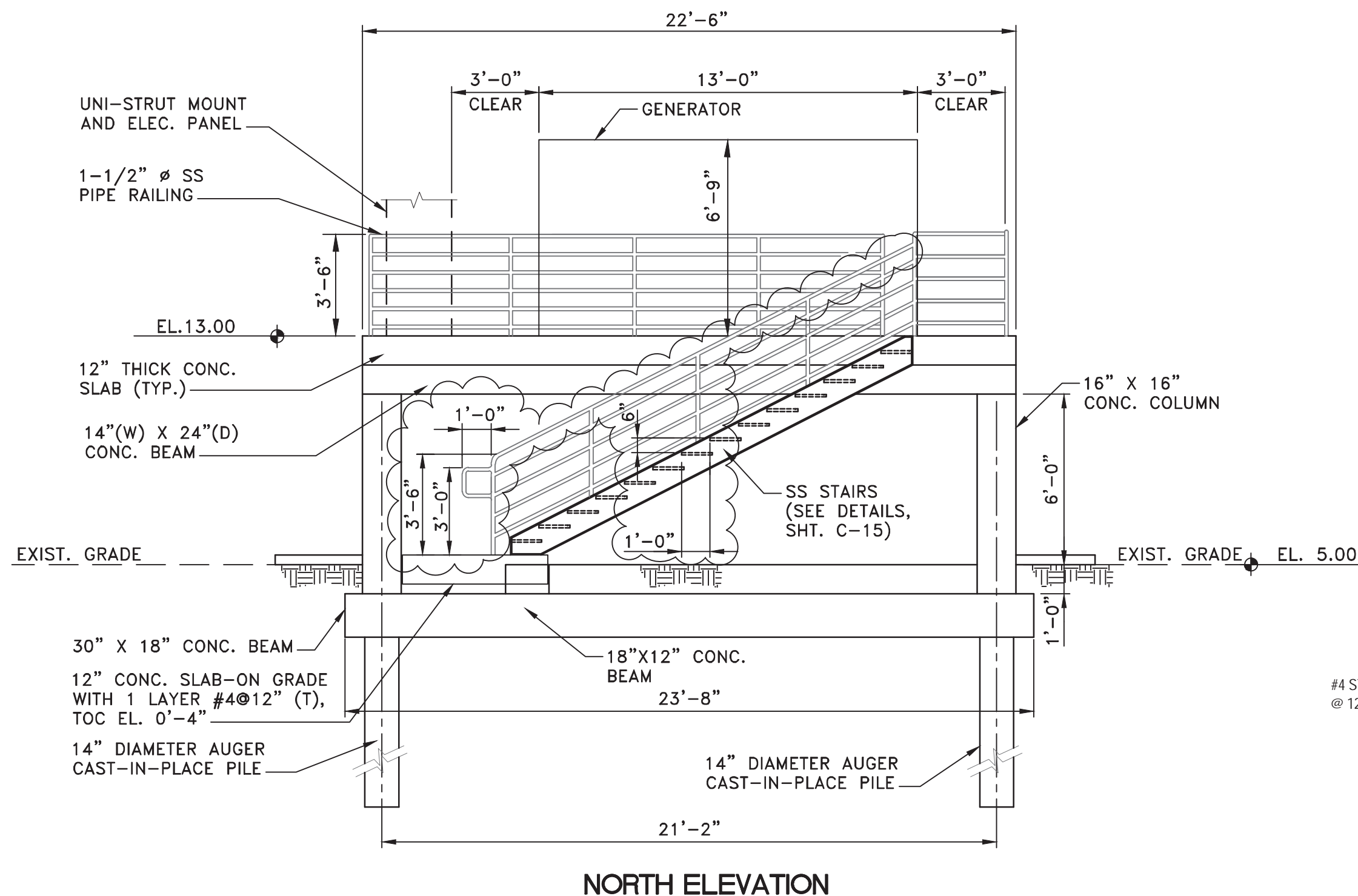


SECTION "A"  
SCALE: N.T.S.

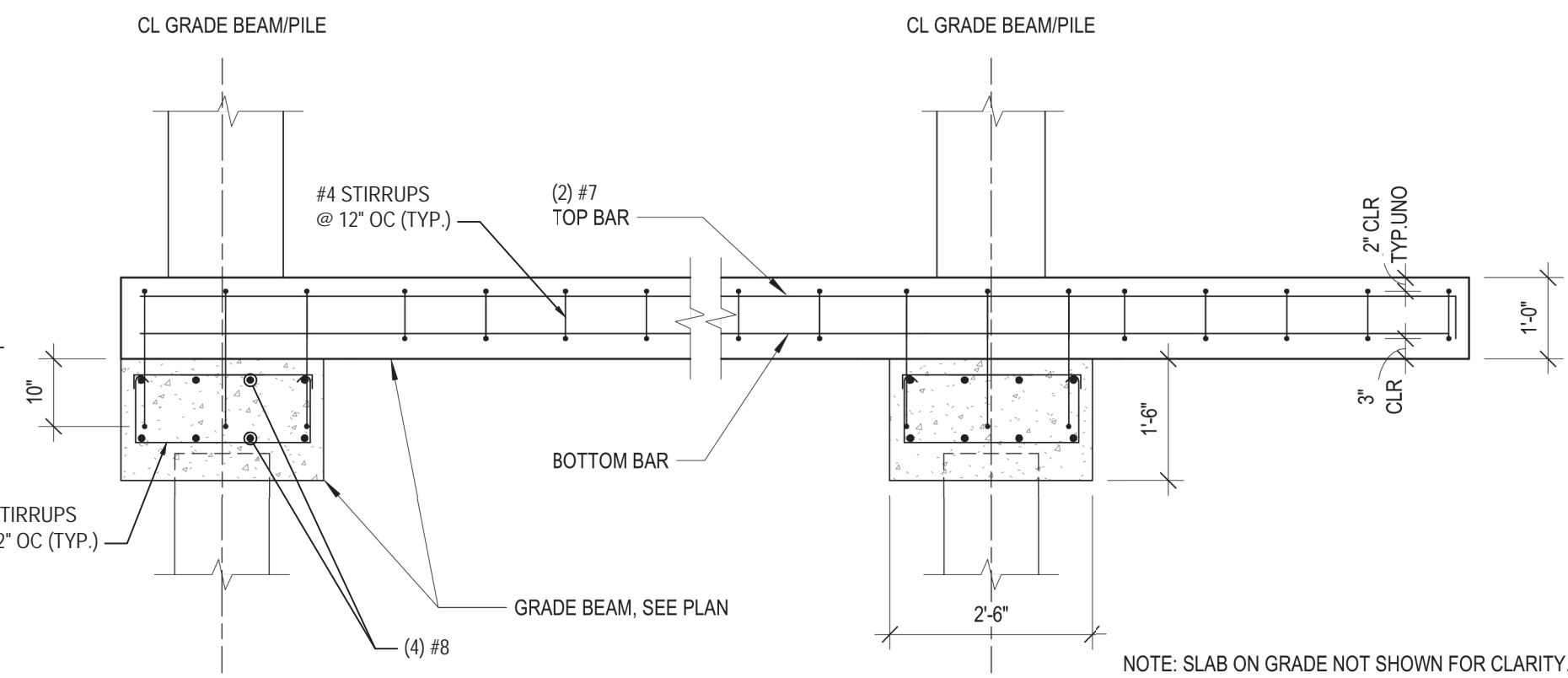
PILE DESIGN CAPACITY:  
ALLOWABLE AXIAL LOADS:  
• 26 TONS DOWNWARD  
• 6.5 TONS UPWARD  
• 10 TONS LATERAL



PLATFORM PLAN VIEW  
SCALE: 1/4" = 1'-0"

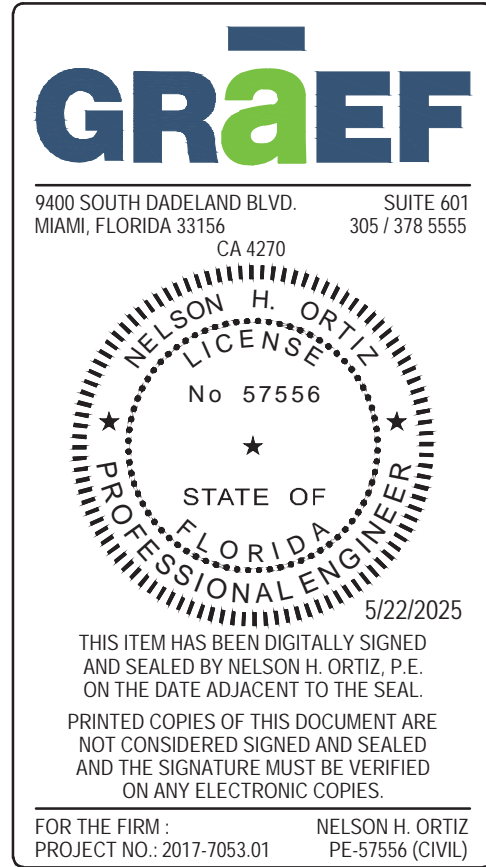


PROPOSED ELEVATED GENERATOR STRUCTURE  
SCALE: 1/4" = 1'-0"



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

12/17/2024 ADDRESS M-D C COMMENTS  
09/13/2024 ADDRESS M-D C COMMENTS  
12/17/2021 ADDRESS M-D C COMMENTS



DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 109 ELEVATED GENERATOR STRUCTURE	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT	MIAMI-DADE COUNTY	DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 6
DRAWN BY: P.F.	DATE:					DRAWING NO. C-6	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						



STRUCTURAL NOTES

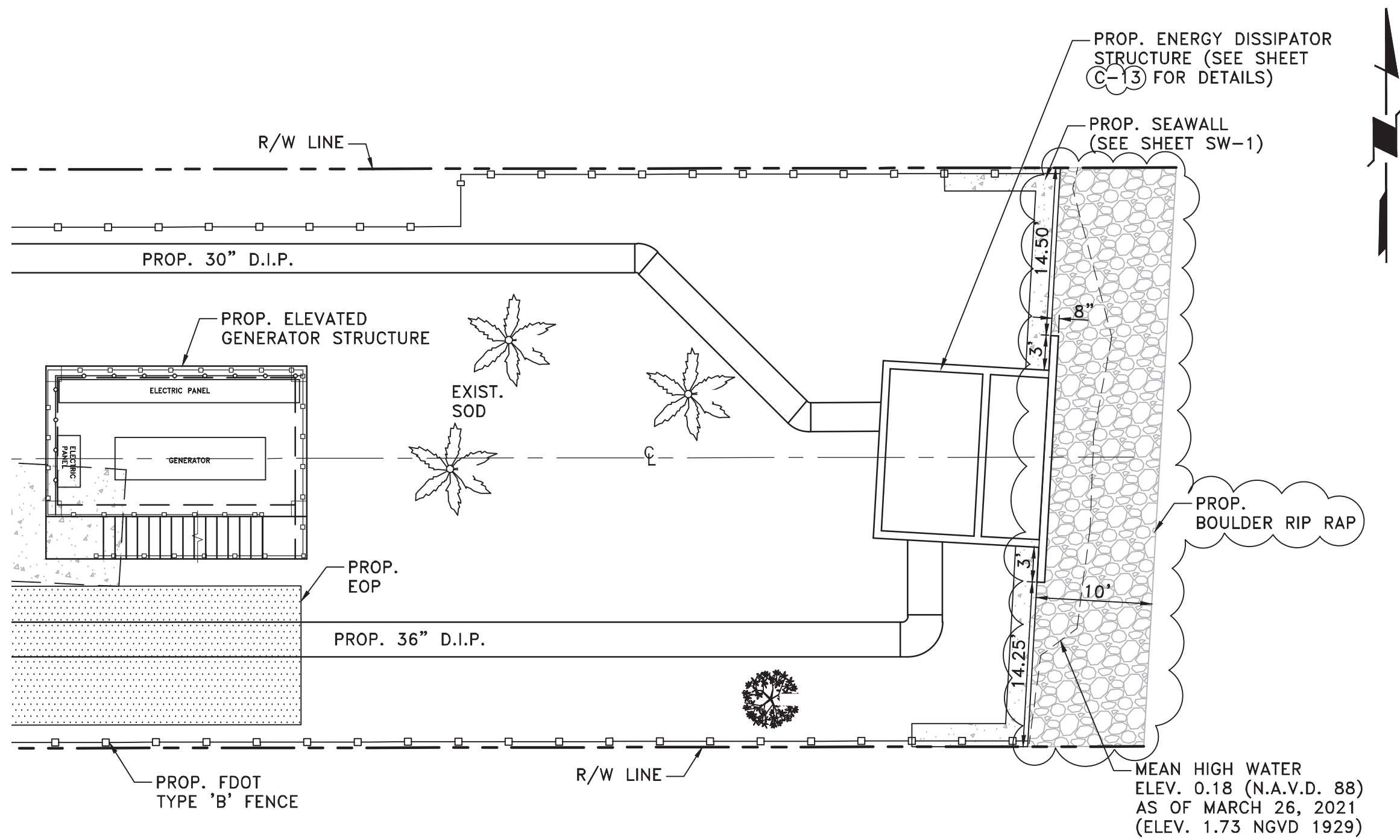
- ALL DEBRIS ASSOCIATED WITH CLEARING SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR.
- CONCRETE PILES SHALL BE DRIVEN TO THE FOLLOWING CRITERIA:  
KING PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 25 TONS AND TO A TIP ELEVATION OF ELEV.  
BATTER PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 25 TONS AND A MINIMUM DEPTH OF EMBEDMENT OF FEET INTO FIRM MATERIAL.
- CONCRETE PILES SHALL BE 12" SQUARE PRECAST PRESTRESSED PILES, AS DETAILED IN THESE DRAWINGS.
- SHOP DRAWINGS FOR ALL REBAR SHALL SHOW THE ACTUAL MILL MARK ON THE REBARS MEETING ASTM A615.
- SPLICES IN REINFORCING STEEL BARS SHALL BE A MINIMUM OF 36 BAR DIAMETERS EXCEPT WHERE DIMENSIONED OTHERWISE.
- MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS DETAILED IN THESE DRAWINGS. WHERE THIS COVER IS NOT DIMENSIONED, USE THE SAME AS DIMENSIONED FOR SIMILAR ITEMS. WHERE THERE ARE NO SIMILAR ITEMS THAT INDICATE THE AMOUNT OF COVER, 3 INCHES OF COVER SHALL BE PROVIDED.
- THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL PRECAST UNITS AND SHALL NOT PROCEED WITH THE MANUFACTURE OF THESE ITEMS PRIOR TO RECEIVING APPROVAL OF THE ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CASTING ANY NON-TYPICAL CONCRETE PANELS. RE-CASTING OF ANY NON-TYPICAL CONCRETE PANEL DUE TO A DISCREPANCY IN DIMENSIONS SHALL AT THE CONTRACTOR'S EXPENSE.
- ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4", OR AS SHOWN.
- ALL EXPOSED CONCRETE SURFACES SHALL HAVE A LIGHT BROOM FINISH.
- EXPANSION JOINTS SHALL BE PREFORMED BITUMINOUS MATERIAL CONFORMING TO ASTM D1751 AND LOCATED AS SHOWN IN THESE DRAWINGS.
- NO CONSTRUCTION JOINTS, OTHER THAN SHOWN, SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE
- ALL BACKFILL WHICH MAY BE REQUIRED FOR THE PROJECT WILL BE ACQUIRED FROM OFF-SITE SOURCES. CONTRACTOR SHALL BEAR ALL COSTS OF TRANSPORT OF THIS MATERIAL TO AND WITHIN THE PROJECT
- TESTING OF CONCRETE: TESTING LABORATORY WILL BE RETAINED BY THE OWNER TO VERIFY SPECIFIED CONCRETE STRENGTHS. FAILURE OF ANY CONCRETE CYLINDER TO MEET SPECIFIED REQUIREMENTS SHALL BE DEEMED NON-COMPLYING. ALL COSTS OF ADDITIONAL TESTING TO DETERMINE ADEQUACY AND/OR REPLACEMENT OF DEFECTIVE WORK SHALL BE BORNE BY CONTRACTOR.
- SILT BARRIERS: FLOATING SILT BARRIERS SHALL BE INSTALLED AROUND ALL GRADING OPERATIONS AND AROUND PILE OPERATIONS (PREDRILLING PILE HOLES AND PILE DRIVING). WHERE NECESSARY, SUCH THAT ALL REQUIRED TURBIDITY LIMITS AS DESIGNATED BY ENVIRONMENTAL REGULATORY AGENCIES ARE MAINTAINED.

GENERAL NOTES

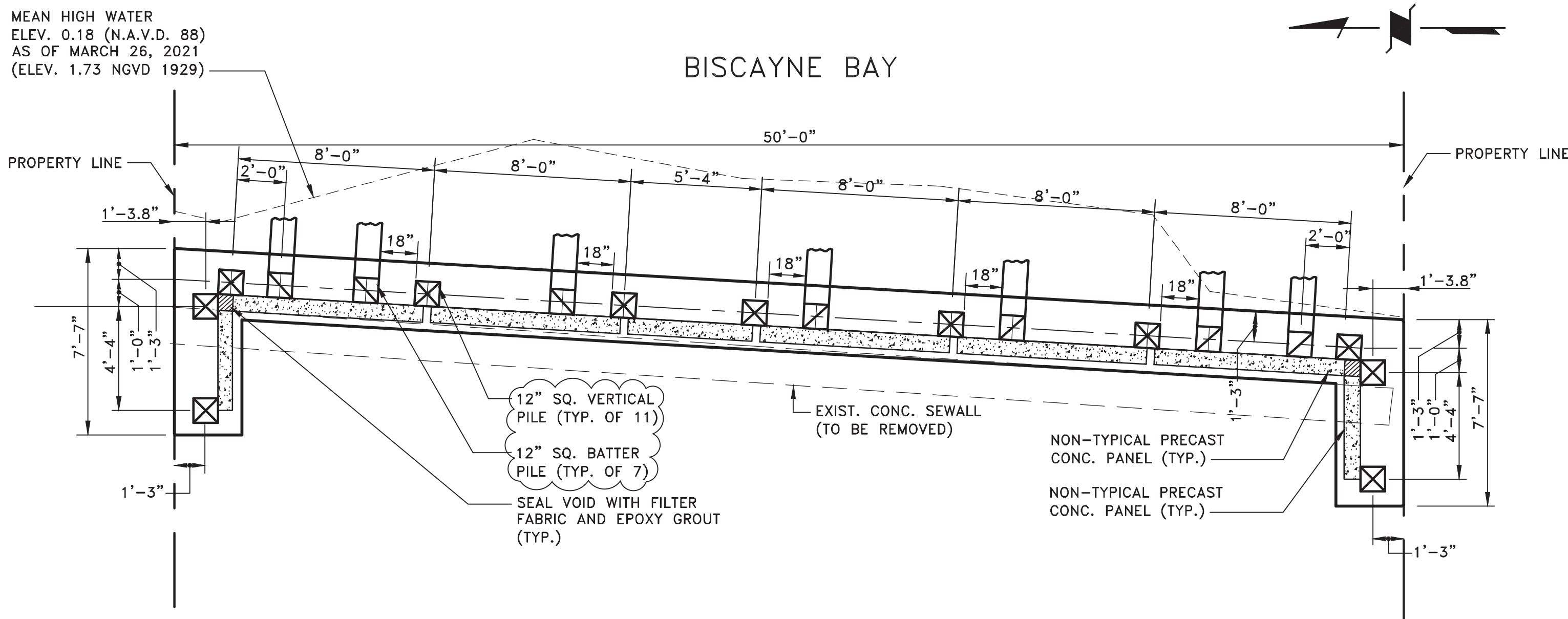
- ELEVATIONS SHOWN REFER TO THE NORTH GEODETIC VERTICAL DATUM. (N.G.V.D.).
- HORIZONTAL AND VERTICAL CONTROL SHALL BE PROVIDED BY THE OWNER'S SURVEYOR. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- IT IS THE INTENT OF THESE PLANS AND THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH LOCAL, STATE, AND FEDERAL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH AND GOVERN HIMSELF BY ALL PROVISIONS OF THESE PERMITS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION AND COORDINATE WITH THE VARIOUS UTILITY COMPANIES TO RELOCATE, BYPASS, OR OTHERWISE ENSURE THAT UTILITY SERVICES WILL NOT BE INTERRUPTED DURING CONSTRUCTION.
- EXISTING GRADES AND SOUNDINGS WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS, AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
- EXISTING CONDITIONS WERE TAKEN FROM THE SURVEY PREPARED BY MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS ROADWAY ENGINEERING AND RIGHT OF WAY DIVISION, MIAMI, FLORIDA, DATED JUNE 14, 2016.

MATERIAL AND DESIGN DATA

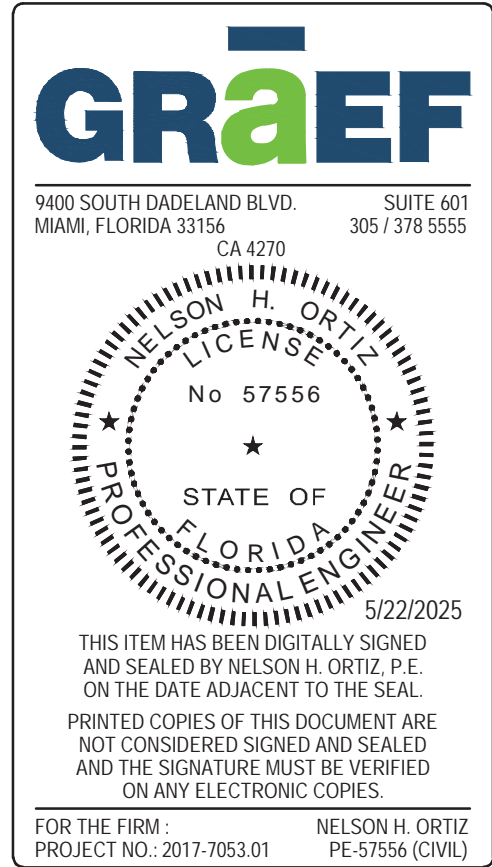
- A. MATERIALS:
- CONCRETE: (F<sub>c</sub>' = MIN. COMPRESSIVE STRENGTH AT 28 DAYS)  
A. CAST-IN-PLACE CONCRETE.....F<sub>c</sub>' = 4,000 PSI  
B. PRECAST CONCRETE.....F<sub>c</sub>' = 4,000 PSI  
C. PRECAST PRESTRESSED CONCRETE PILES.....F<sub>c</sub>' = 5,500 PSI
  - CONCRETE PILES SHALL BE 12" SQUARE PRECAST PRESTRESSED PILES WITH FOUR 1/2"Ø 270K LO-LAX STRANDS WITH #5 GAGE WIRE SPIRAL TIES.
  - REBAR, ANY SIZES, SHALL BE GALVANIZED STEEL AND SHALL CONFORM TO ASTM A615, GRADE 60.
  - ACCESSORIES SHALL BE ASTM A-36.
  - GEOTEXTILE FABRIC SHALL BE NON-WOVEN POLYPROPYLENE, MIRAFI 140N OR APPROVED EQUAL AT EACH PILE LOCATION (24" MIN. WIDTH).
- B. STRUCTURAL DESIGN IN ACCORDANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS:
- THE FLORIDA BUILDING CODE (CURRENT EDITION).
  - ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).




N.E. 109 STREET PUMP STATION SEAWALL  
SCALE: 1" = 10'

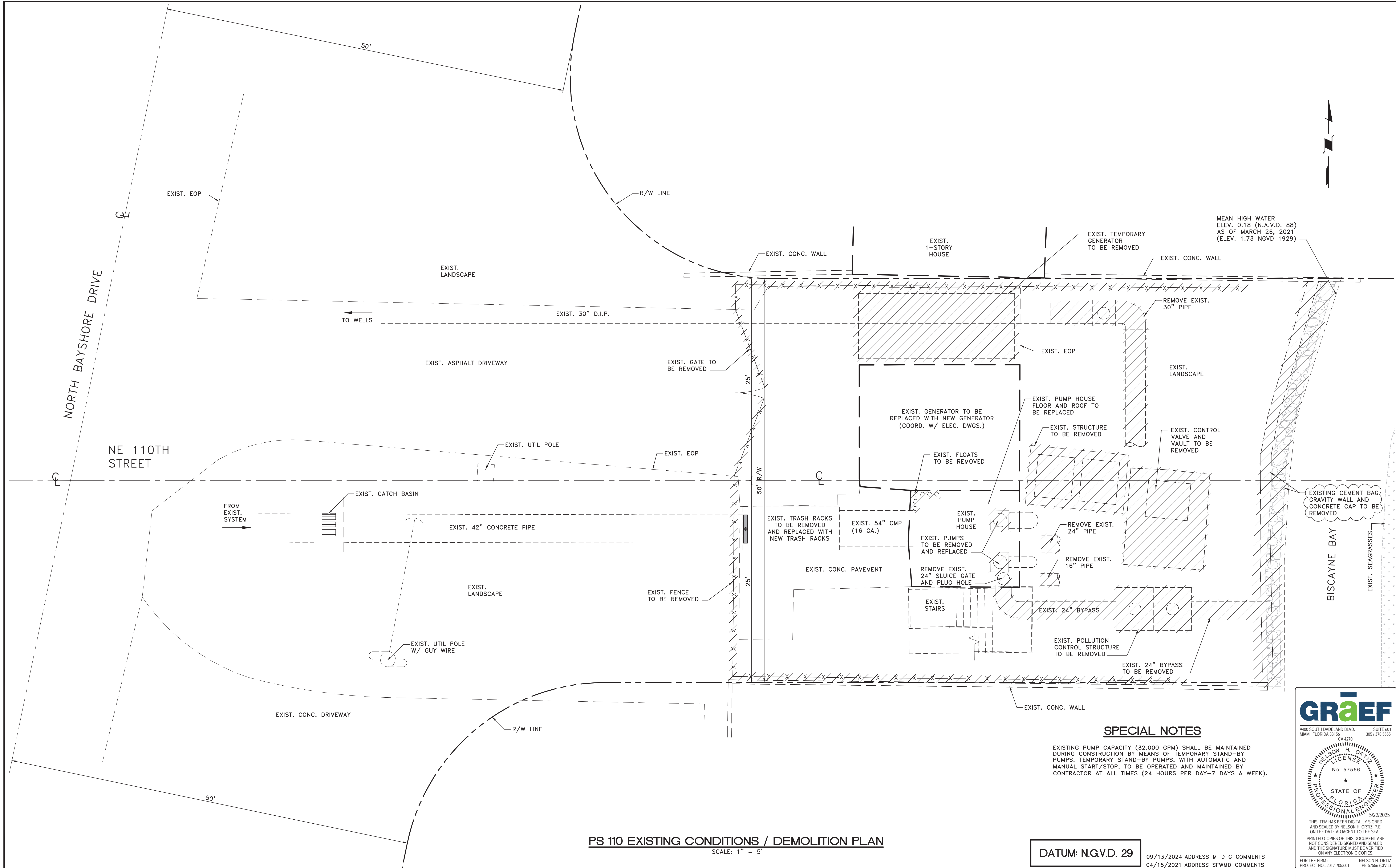


PILE LAYOUT PLAN  
SCALE: 1/4" = 1'-0"



DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 109 SEAWALL PLAN AND DETAILS	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT	 DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 7
DRAWN BY: P.F.	DATE:				DRAWING NO. C-7	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:					





PS 110 EXISTING CONDITIONS / DEMOLITION PLAN

SCALE: 1" = 5'

SPECIAL NOTES

EXISTING PUMP CAPACITY (32,000 GPM) SHALL BE MAINTAINED DURING CONSTRUCTION BY MEANS OF TEMPORARY STAND-BY PUMPS. TEMPORARY STAND-BY PUMPS, WITH AUTOMATIC AND MANUAL START/STOP, TO BE OPERATED AND MAINTAINED BY CONTRACTOR AT ALL TIMES (24 HOURS PER DAY-7 DAYS A WEEK).

DATUM: N.G.V.D. 29


09/13/2024 ADDRESS M-D C COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS

**GrāEF**  
9400 SOUTH DADELAND BLVD. SUITE 601  
MIAMI, FLORIDA 33156 CA 4270 305 / 378 5555

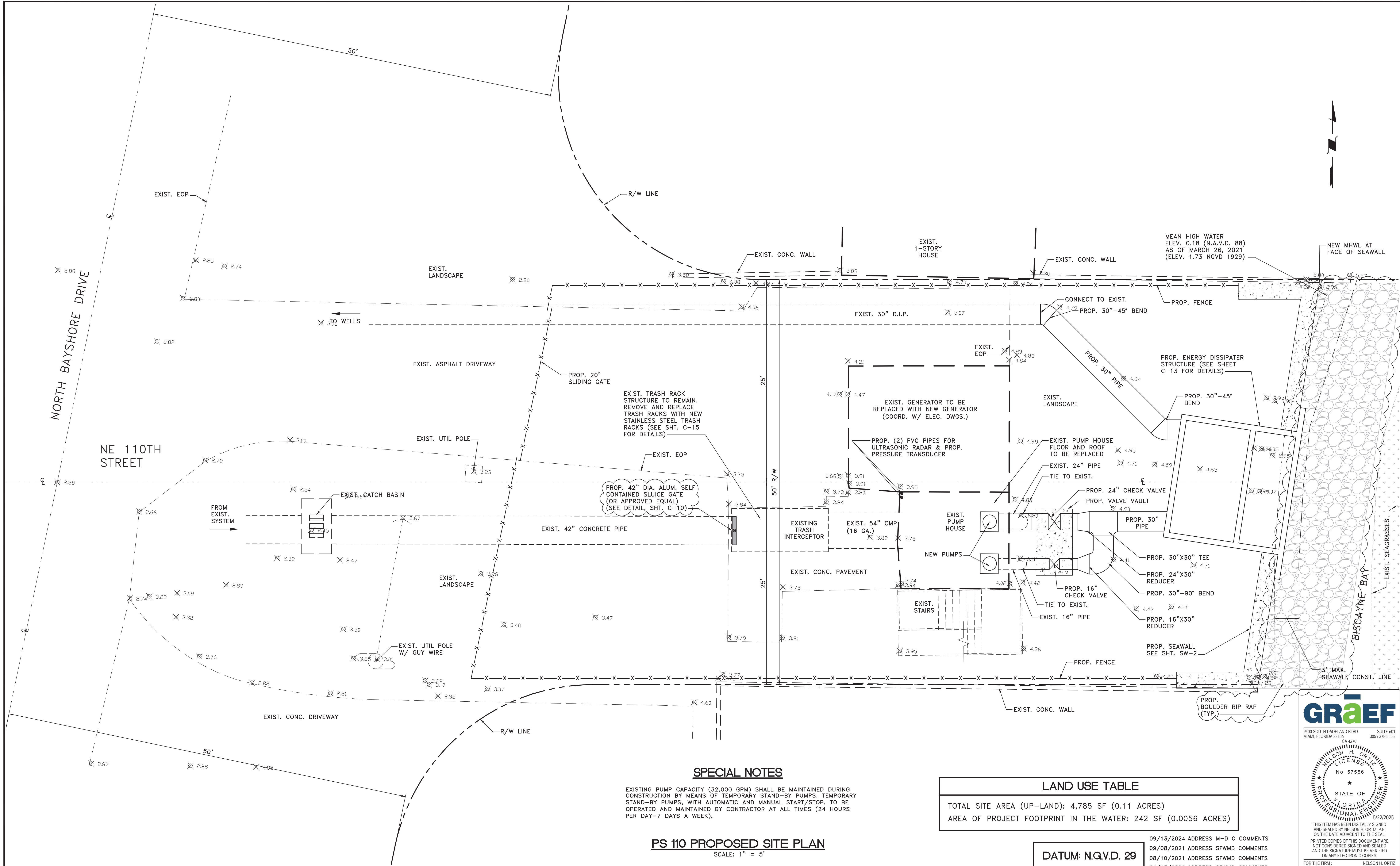
NELSON H. ORTIZ  
P.E. LICENSE  
No. 57556  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

5/22/2025  
THIS ITEM HAS BEEN DIGITALLY SIGNED  
AND SEALED BY NELSON H. ORTIZ, P.E.  
ON THE DATE ADJACENT TO THE SEAL.  
PRINTED COPIES OF THIS DOCUMENT ARE  
NOT CONSIDERED SIGNED AND SEALED  
AND THE SIGNATURE MUST BE VERIFIED  
ON ANY ELECTRONIC COPIES.

FOR THE FIRM:  
PROJECT NO.: 2017-7063.01 NELSON H. ORTIZ  
PE-57556 (CIVIL)

DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 110 EXISTING CONDITIONS / DEMOLITION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 8
DRAWN BY: P.F.	DATE:					DRAWING NO. C-8	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						





SPECIAL NOTES

EXISTING PUMP CAPACITY (32,000 GPM) SHALL BE MAINTAINED DURING CONSTRUCTION BY MEANS OF TEMPORARY STAND-BY PUMPS. TEMPORARY STAND-BY PUMPS, WITH AUTOMATIC AND MANUAL START/STOP, TO BE OPERATED AND MAINTAINED BY CONTRACTOR AT ALL TIMES (24 HOURS PER DAY-7 DAYS A WEEK).

PS 110 PROPOSED SITE PLAN

SCALE: 1" = 5'

LAND USE TABLE

TOTAL SITE AREA (UP-LAND): 4,785 SF (0.11 ACRES)  
AREA OF PROJECT FOOTPRINT IN THE WATER: 242 SF (0.0056 ACRES)

DATUM: N.G.V.D. 29

09/13/2024 ADDRESS M-D C COMMENTS  
09/08/2021 ADDRESS SFWMD COMMENTS  
08/10/2021 ADDRESS SFWMD COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS

DESIGN BY:	J.R.G.	DATE:	04/10/2020
DRAWN BY:	P.F.	DATE:	
CHECKED BY:	N.H.O.	DATE:	

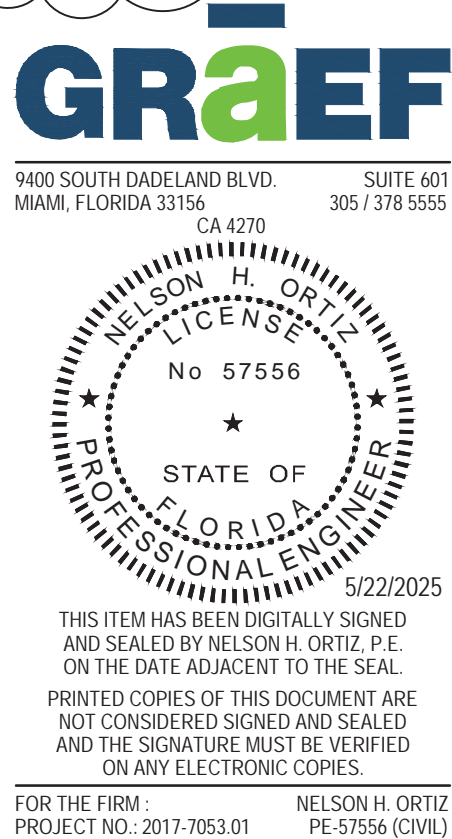
PS 110 PROPOSED SITE PLAN

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO.	17053.01	SHEET NO.	9
DRAWING NO.	C-9	OF	28
		SHEETS	

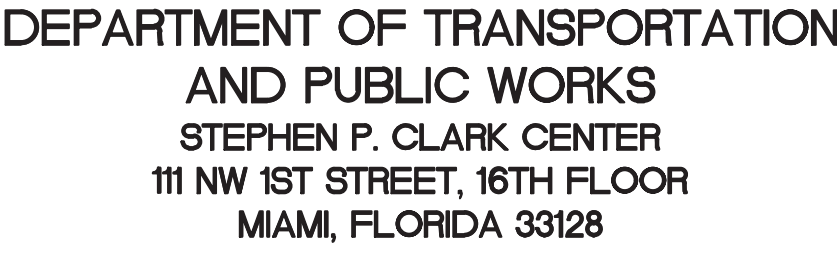






- |                    |                  |
|--------------------|------------------|
| DESIGN BY: J.R.G.  | DATE: 04/10/2020 |
| DRAWN BY: P.F.     | DATE:            |
| CHECKED BY: N.H.O. | DATE:            |

# BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT



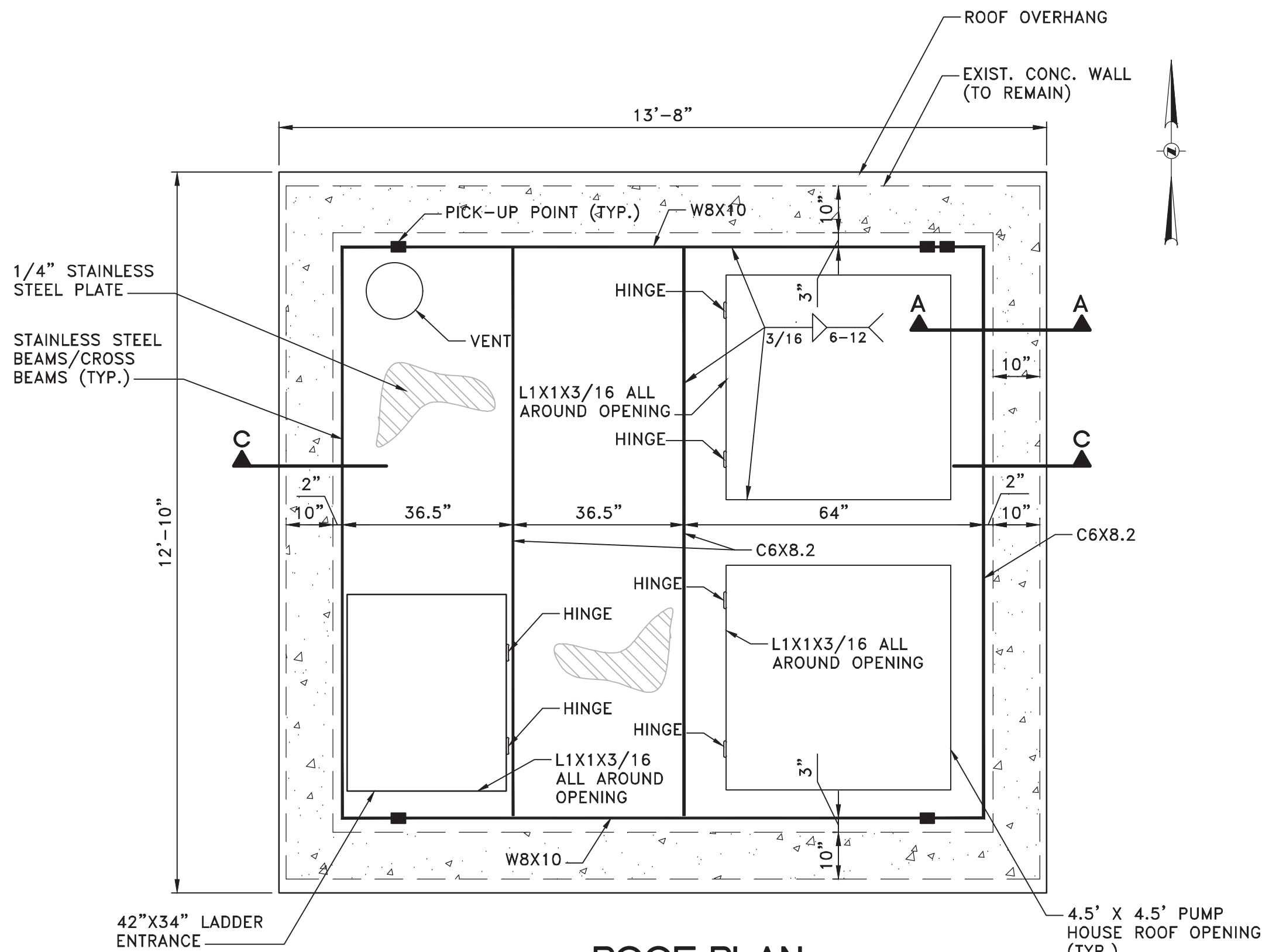
PROJECT NO. 17053.01	SHEET NO. 10	
DRAWING NO. C-10	OF 28	SHEETS



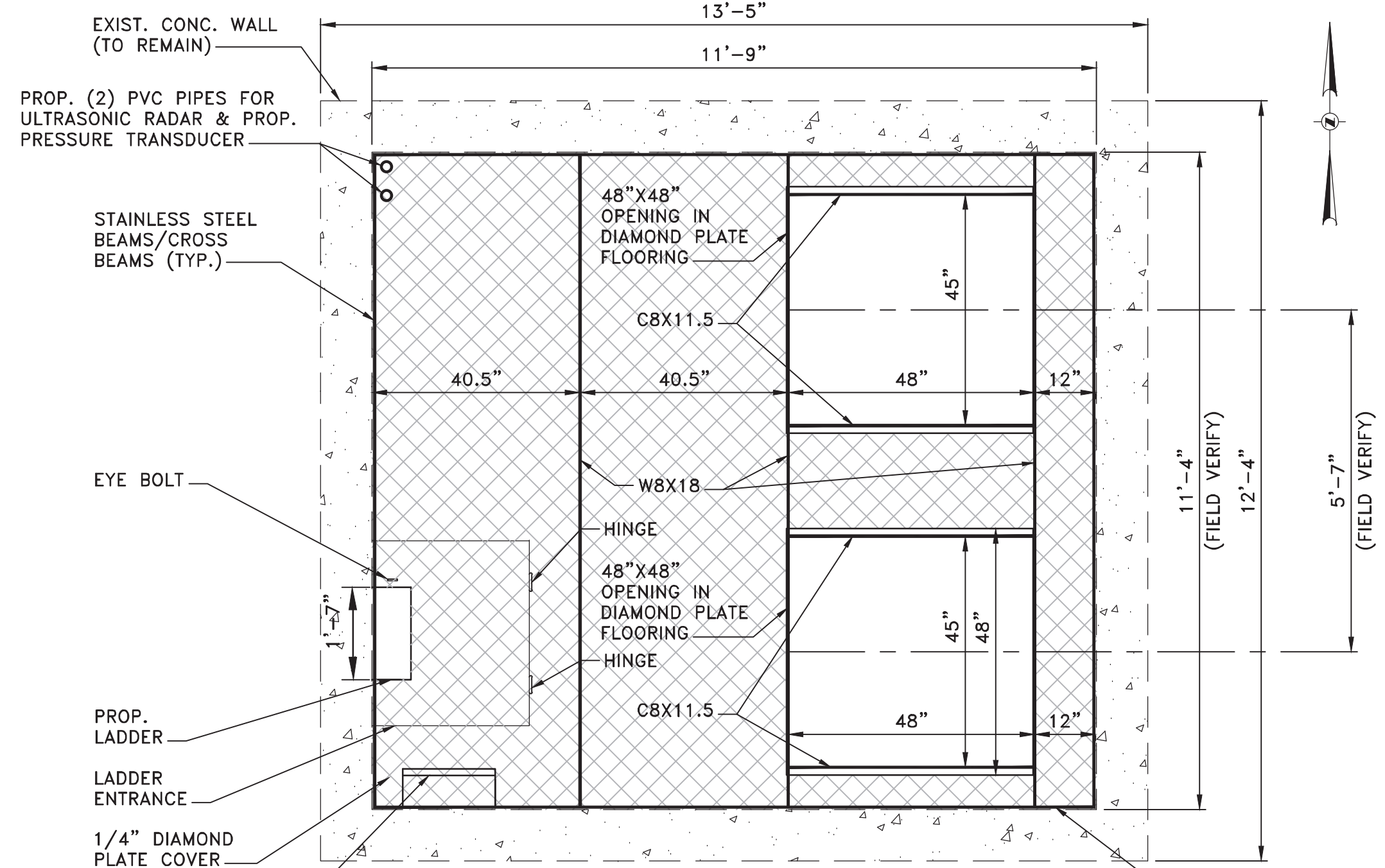


STRUCTURAL GENERAL NOTES

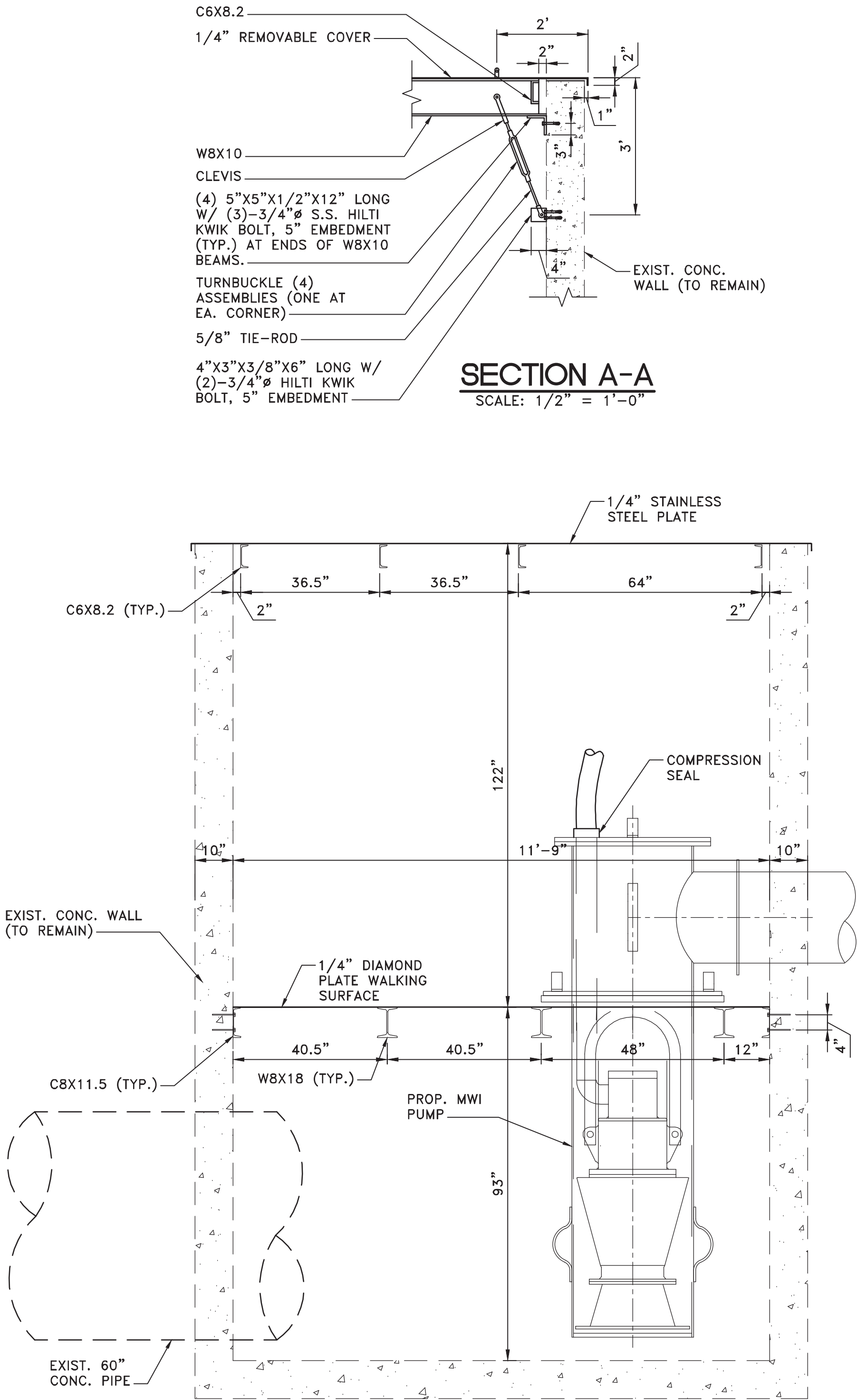
- DESIGN IS IN ACCORDANCE WITH THE STATE OF FLORIDA BUILDING CODE, 2023 EDITION.
- STAINLESS STEEL WIDE FLANGE BEAMS, CHANNELS SHALL CONFORM TO ASTM A276, ALLOY 316L.
- STAINLESS STEEL PLATES SHALL CONFORM TO ASTM A240, ALLOY 316L.
- STAINLESS STEEL BOLTS SHALL CONFORM TO ASTM F593D, ALLOY 316L.
- STAINLESS STEEL NUTS AND WASHERS SHALL CONFORM TO ASTM F594 GROUP 2, ALLOY 316L.
- ALL WELDING SHALL COMPLY WITH AWS D1.6 USING E316 ELECTRODES. ALL WELDERS TO BE CERTIFIED BY AWS.
- CONTRACTOR MUST FIELD MEASURE EXACT VAULT DIMENSIONS PRIOR TO FABRICATION OF WORKING PLATFORM AND NEW ROOF. WORKING PLATFORM MUST BE INSTALLED PRIOR TO INSTALLATION OF DISCHARGE PIPES.
- ALL LADDERS, HARDWARE, WIDE FLANGE BEAMS, CHANNELS, ANGLES, PLATES, RAILS, BRACKETS, BOLTS AND ANY FIXTURES OR SUPPORTS SHALL BE STAINLESS STEEL.
- DESIGN LOADS:  
LIVE LOADS:  
FLOOR: 40 PSF  
ROOF: 20 PSF  
WIND LOAD (ASCE 7-22)  
BUILDING RISK CATEGORY III  
BASIC WIND SPEED  $V = 180$  MPH  
EXPOSURE: D  
INTERNAL PRESSURE COEFFICIENT GCPI = +/-0.18
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE FOLLOWING ITEMS PRIOR TO FABRICATION: STRUCTURAL STEEL, STEEL PLATES, AND STEEL LADDER.



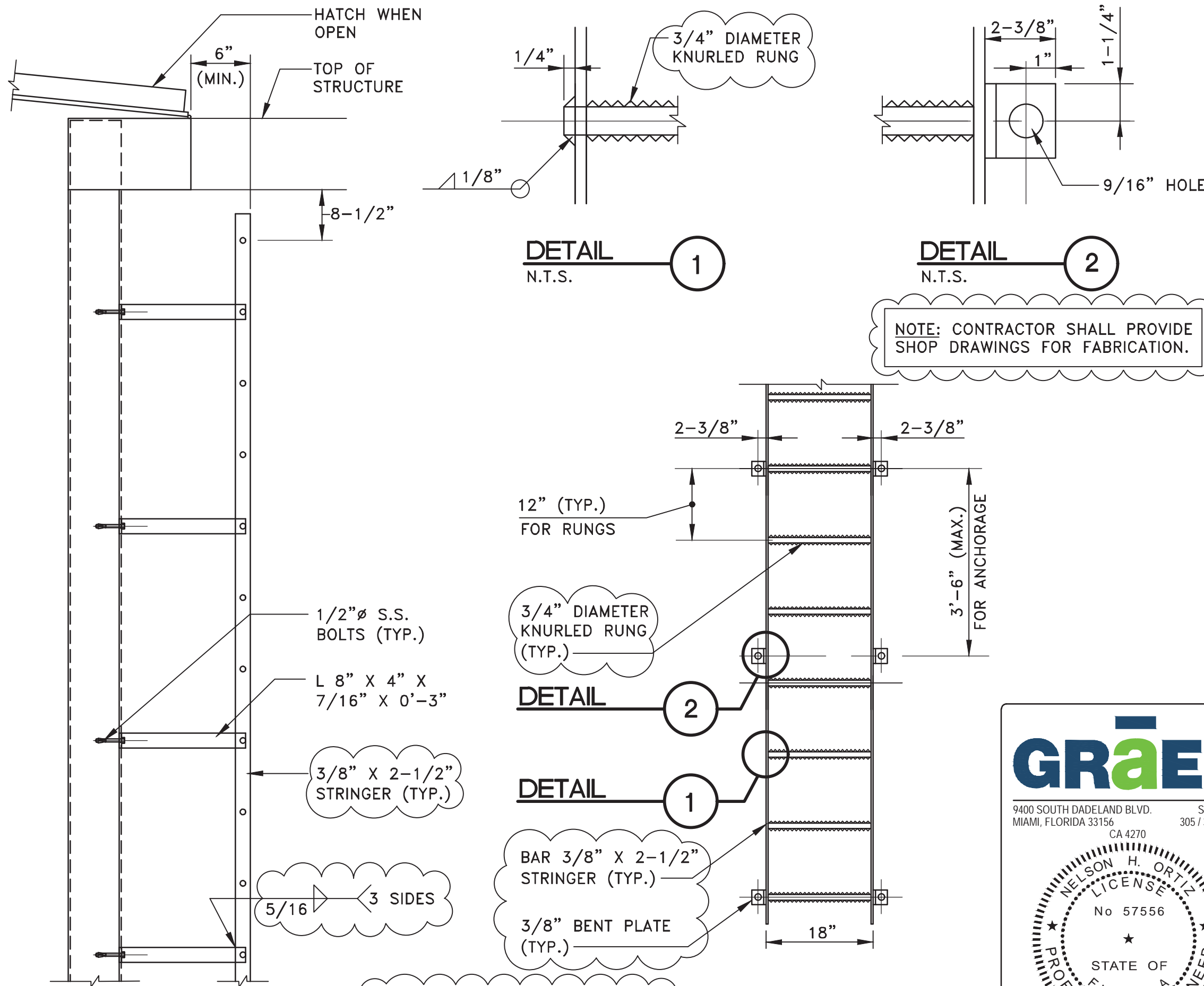
ROOF PLAN  
SCALE: 1/2" = 1'-0"



INTERMEDIATE FLOOR PLAN  
SCALE: 1/2" = 1'-0"



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



SECTION

LADDER DETAIL

ELEVATION

N.T.S.  
09/13/2024 ADDRESS M-D C COMMENTS  
12/17/2021 ADDRESS M-D C COMMENTS

DESIGN BY: J.R.G.	DATE: 04/10/2020
DRAWN BY: P.F.	DATE:
CHECKED BY: N.H.O.	DATE:

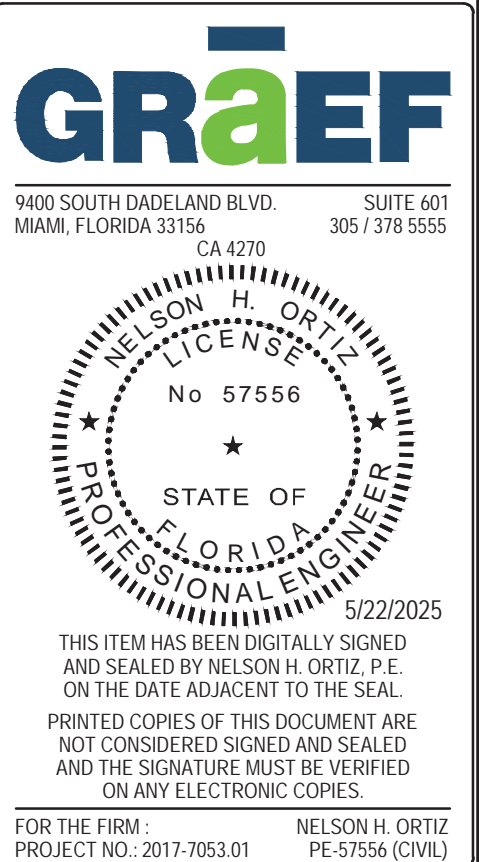
PS 110 PUMP HOUSE  
RETROFIT DETAILS

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

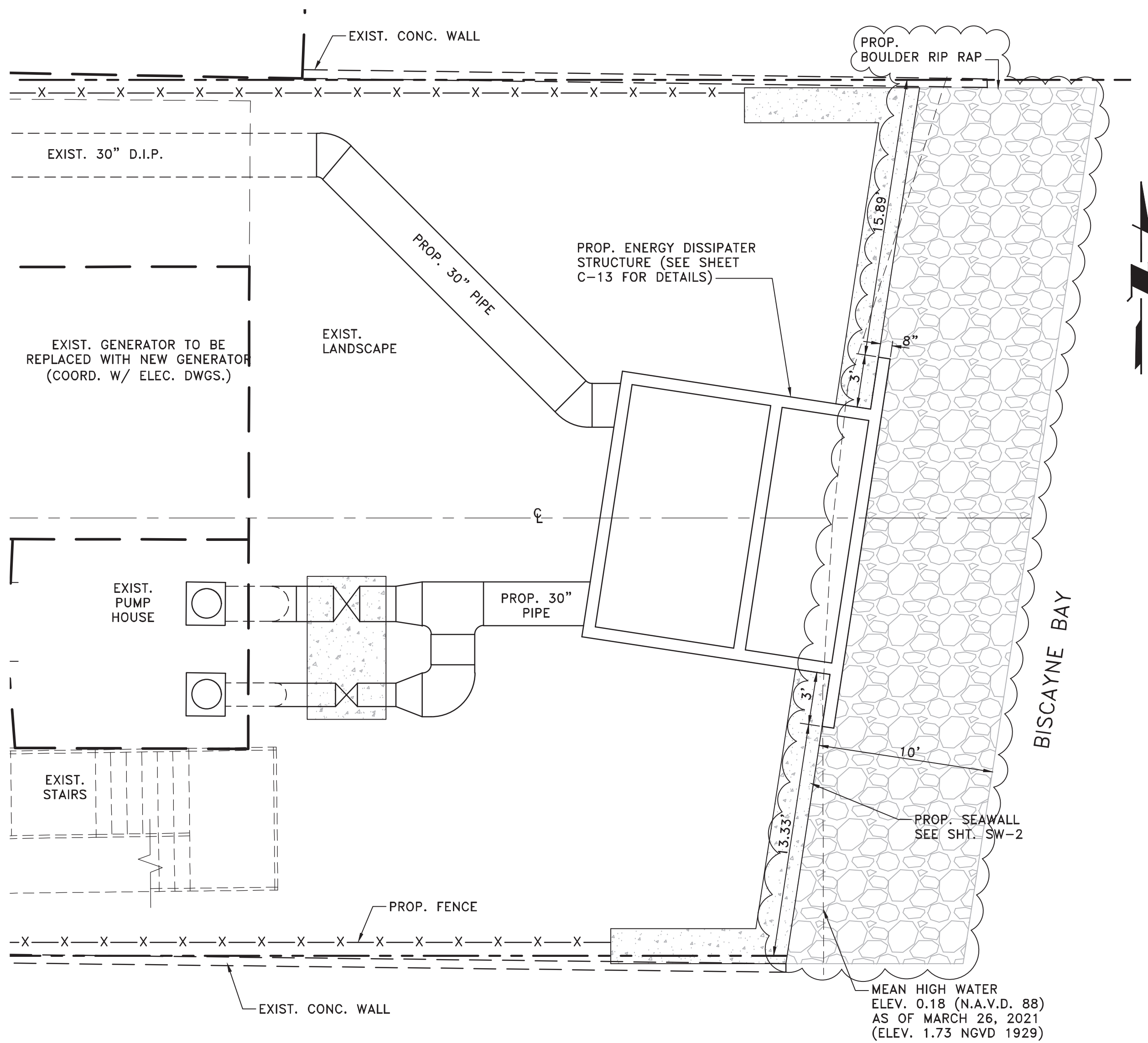
PROJECT NO. 17053.01	SHEET NO. 11
DRAWING NO. C-11	OF 28 SHEETS





## GENERAL NOTES

1. ELEVATIONS SHOWN REFER TO THE NORTH GEODETIC VERTICAL DATUM. (N.G.V.D.).
2. HORIZONTAL AND VERTICAL CONTROL SHALL BE PROVIDED BY THE OWNER'S SURVEYOR. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. IT IS THE INTENT OF THESE PLANS AND THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY WITH LOCAL, STATE, AND FEDERAL ENVIRONMENTAL PERMITS ISSUED FOR THIS PROJECT. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH AND GOVERN HIMSELF BY ALL PROVISIONS OF THESE PERMITS.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION AND COORDINATE WITH THE VARIOUS UTILITY COMPANIES TO RELOCATE, BYPASS, OR OTHERWISE ENSURE THAT UTILITY SERVICES WILL NOT BE INTERRUPTED DURING CONSTRUCTION.
6. EXISTING GRADES AND SOUNDINGS WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS, AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
7. EXISTING CONDITIONS WERE TAKEN FROM THE SURVEY PREPARED BY MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS ROADWAY ENGINEERING AND RIGHT OF WAY DIVISION, MIAMI, FLORIDA, DATED JUNE 14, 2016.

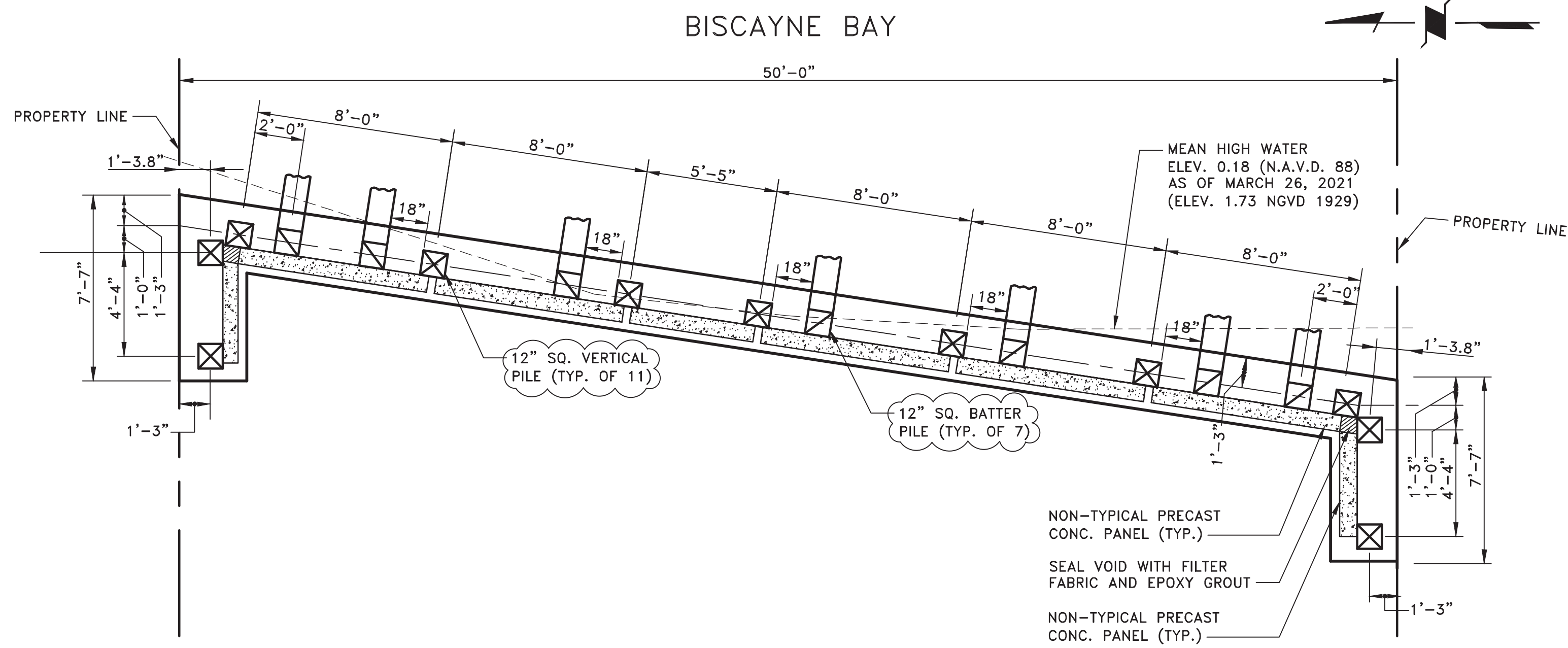


**N.E. 110 STREET PUMP STATION SEAWALL**  
SCALE: 1" = 5'

SCALE: 1" = 5'

## STRUCTURAL NOTES

3. ALL DEBRIS ASSOCIATED WITH CLEARING SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR.
2. CONCRETE PILES SHALL BE DRIVEN TO THE FOLLOWING CRITERIA:
  - A. KING PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 25 TONS AND TO A TIP ELEVATION OF ELEV.
  - B. BATTER PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 25 TONS AND A MINIMUM DEPTH OF EMBEDMENT OF FEET INTO FIRM MATERIAL.
3. CONCRETE PILES SHALL BE 12" SQUARE PRECAST PRESTRESSED PILES, AS DETAILED IN THESE DRAWINGS.
4. SHOP DRAWINGS FOR ALL REBAR SHALL SHOW THE ACTUAL MILL MARK ON THE REBARS MEETING ASTM A615
5. SPLICES IN REINFORCING STEEL BARS SHALL BE A MINIMUM OF 36 BAR DIAMETERS EXCEPT WHERE DIMENSIONED OTHERWISE.
6. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS DETAILED IN THESE DRAWINGS. WHERE THIS COVER IS NOT DIMENSIONED, USE THE SAME AS DIMENSIONED FOR SIMILAR ITEMS. WHERE THERE ARE NO SIMILAR ITEMS THAT INDICATE THE AMOUNT OF COVER, 3 INCHES OF COVER SHALL BE PROVIDED.
7. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL PRECAST UNITS AND SHALL NOT PROCEED WITH THE MANUFACTURE OF THESE ITEMS PRIOR TO RECEIVING APPROVAL OF THE ENGINEER.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL DIMENSIONS PRIOR TO CASTING ANY NON-TYPICAL CONCRETE PANELS. RE-CASTING OF ANY NON-TYPICAL CONCRETE PANEL DUE TO A DISCREPANCY IN DIMENSIONS SHALL AT THE CONTRACTOR'S EXPENSE.
9. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4", OR AS SHOWN.
10. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A LIGHT BROOM FINISH.
11. EXPANSION JOINTS SHALL BE PREFORMED BITUMINOUS MATERIAL CONFORMING TO ASTM D1751 AND LOCATED AS SHOWN IN THESE DRAWINGS.
12. NO CONSTRUCTION JOINTS, OTHER THAN SHOWN, SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
13. ALL BACKFILL WHICH MAY BE REQUIRED FOR THE PROJECT WILL BE ACQUIRED FROM OFF-SITE SOURCES. CONTRACTOR SHALL BEAR ALL COSTS OF TRANSPORT OF THIS MATERIAL TO AND WITHIN THE PROJECT SITE.
14. TESTING OF CONCRETE: TESTING LABORATORY WILL BE RETAINED BY THE OWNER TO VERIFY SPECIFIED CONCRETE STRENGTHS. FAILURE OF ANY CONCRETE CYLINDER TO MEET SPECIFIED REQUIREMENTS SHALL BE DEEMED NON-COMPLYING. ALL COSTS OF ADDITIONAL TESTING TO DETERMINE ADEQUACY AND/OR REPLACEMENT OF DEFECTIVE WORK SHALL BE BORNE BY CONTRACTOR.
15. SILT BARRIERS: FLOATING SILT BARRIERS SHALL BE INSTALLED AROUND ALL GRADING OPERATIONS AND AROUND PILE OPERATIONS (PREDRILLING PILE HOLES AND PILE DRIVING), WHERE NECESSARY, SUCH THAT ALL REQUIRED TURBIDITY LIMITS AS DESIGNATED BY ENVIRONMENTAL REGULATORY AGENCIES ARE MAINTAINED.




## PILE LAYOUT PLAN

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

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

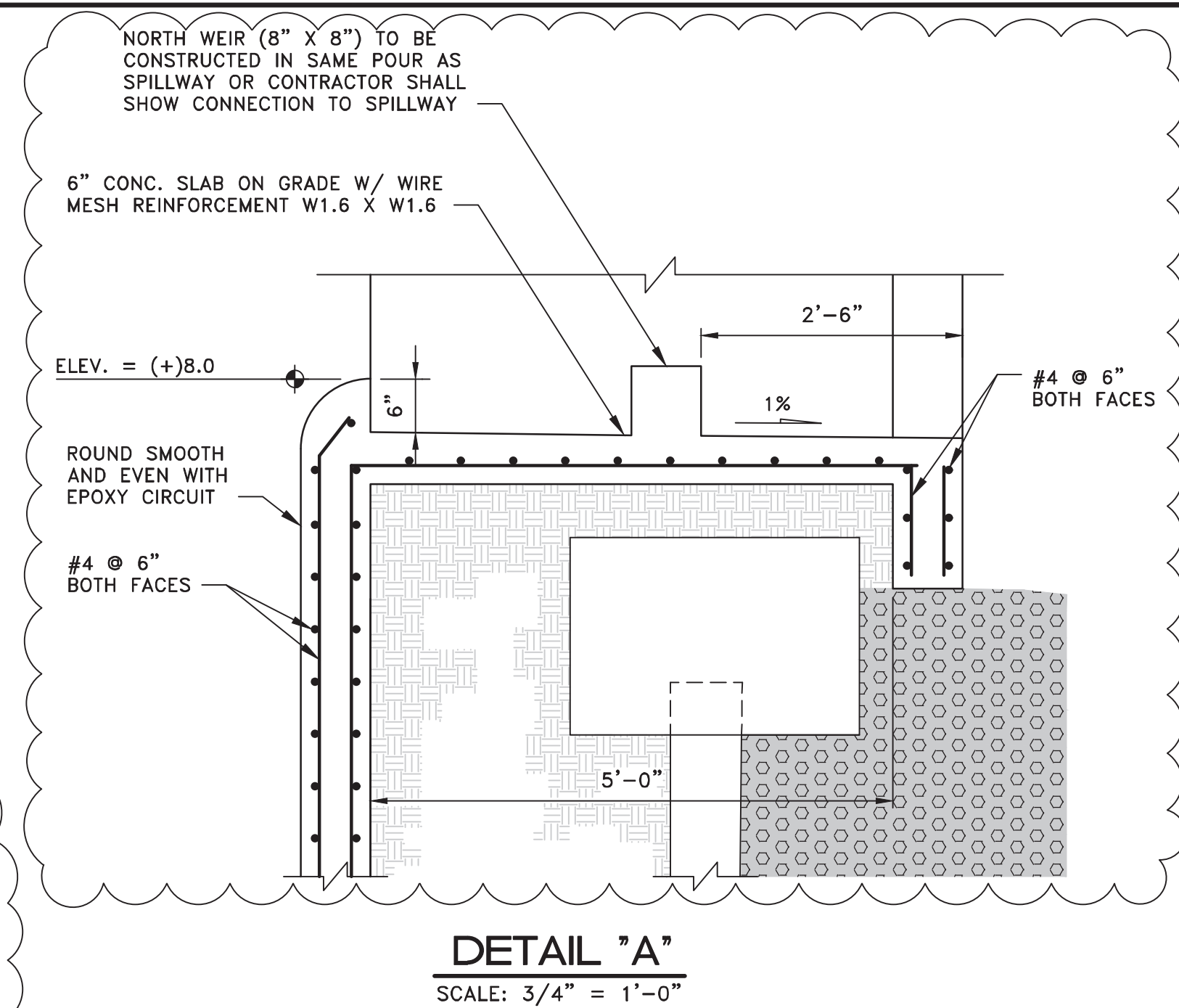
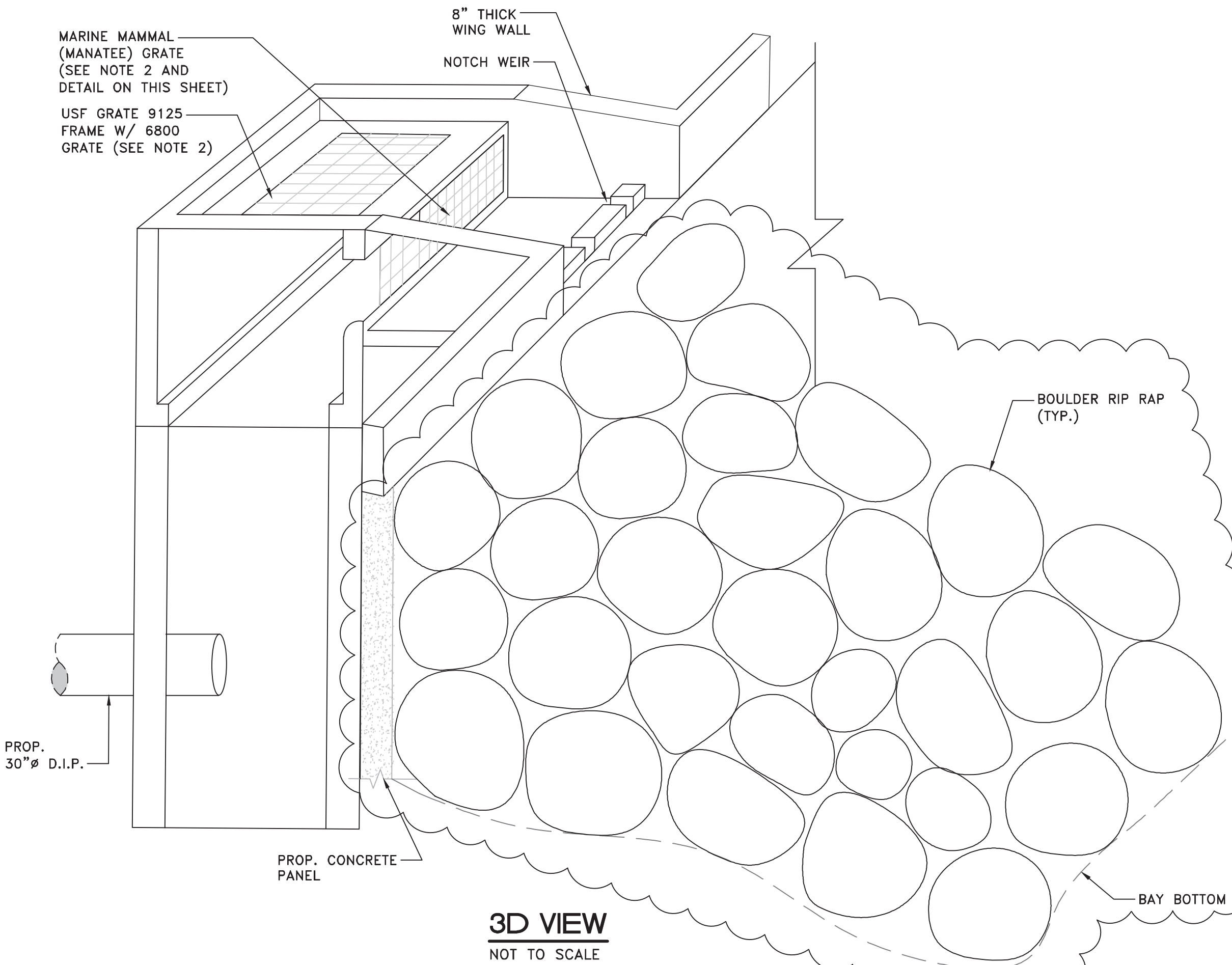
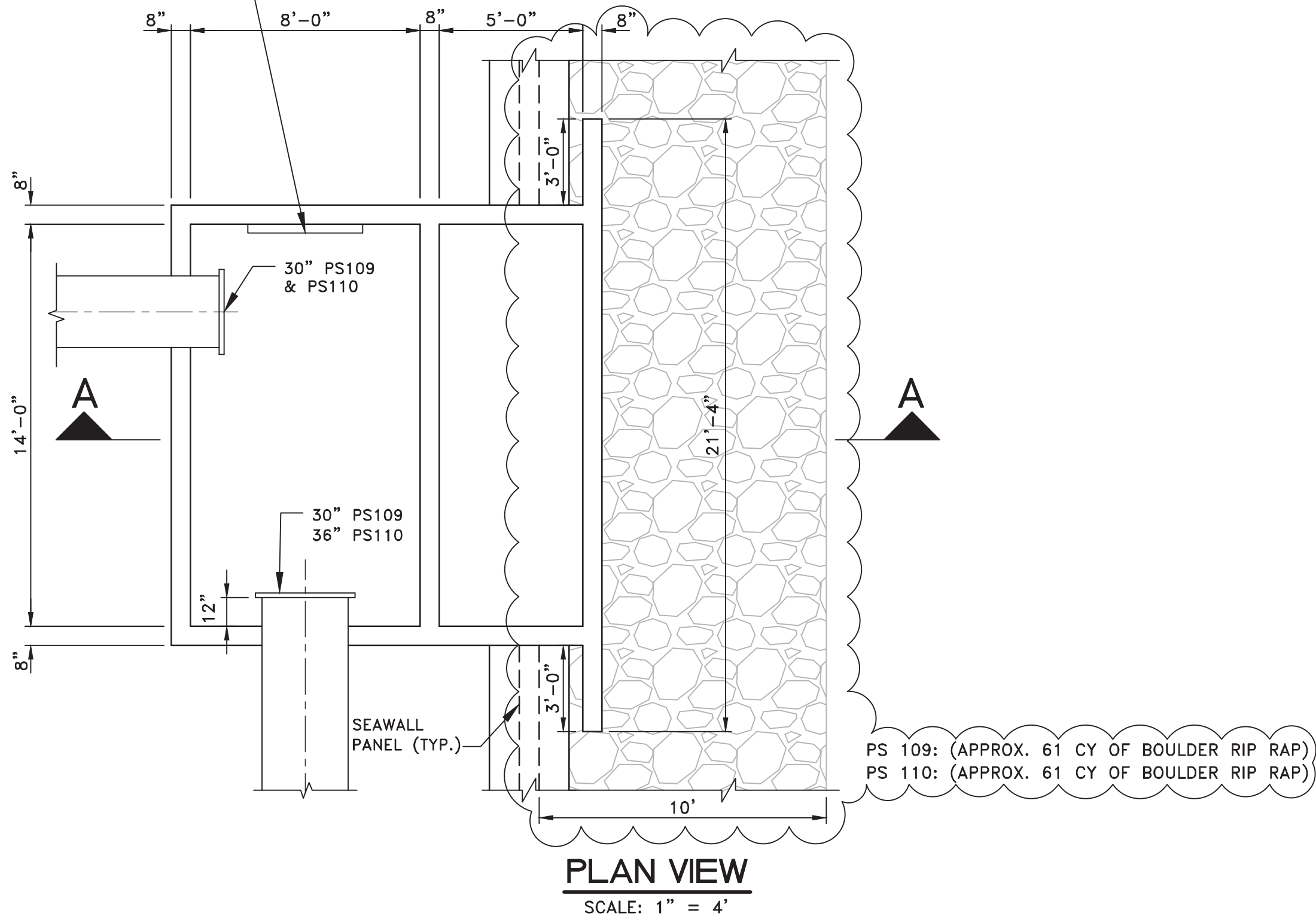
## MATERIAL AND DESIGN DATA

- A. MATERIALS:
1. CONCRETE: ( $F_c' = \text{MIN. COMPRESSIVE STRENGTH AT 28 DAYS}$ )
    - A. CAST-IN-PLACE CONCRETE..... $F_c' = 4,000$  PSI
    - B. PRECAST CONCRETE..... $F_c' = 4,000$  PSI
    - C. PRECAST PRESTRESSED CONCRETE PILES..... $F_c' = 5,500$  PSI
  2. CONCRETE PILES SHALL BE 12" SQUARE PRECAST PRESTRESSED PILES WITH FOUR  $1/2"$   $\emptyset$  270K LO-LAX STRANDS WITH #5 GAGE WIRE SPIRAL TIES.
  3. REBAR, ANY SIZES, SHALL BE GALVANIZED STEEL AND SHALL CONFORM TO ASTM A615, GRADE 60.
  4. ACCESSORIES SHALL BE ASTM A-36.
  5. GEOTEXTILE FABRIC SHALL BE NON-WOVEN POLYPROPYLENE, MIRAFI 140N OR APPROVED EQUAL AT EACH PILE LOCATION (24" MIN. WIDTH)
- B. STRUCTURAL DESIGN IN ACCORDANCE WITH THE FOLLOWING CODES AND SPECIFICATIONS:
1. THE FLORIDA BUILDING CODE (CURRENT EDITION).
  2. ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318).

DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 110 SEAWALL PLAN AND DETAILS	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT	 <b>DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS</b> STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 12
DRAWN BY: P.F.	DATE:				DRAWING NO. C-12	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:					

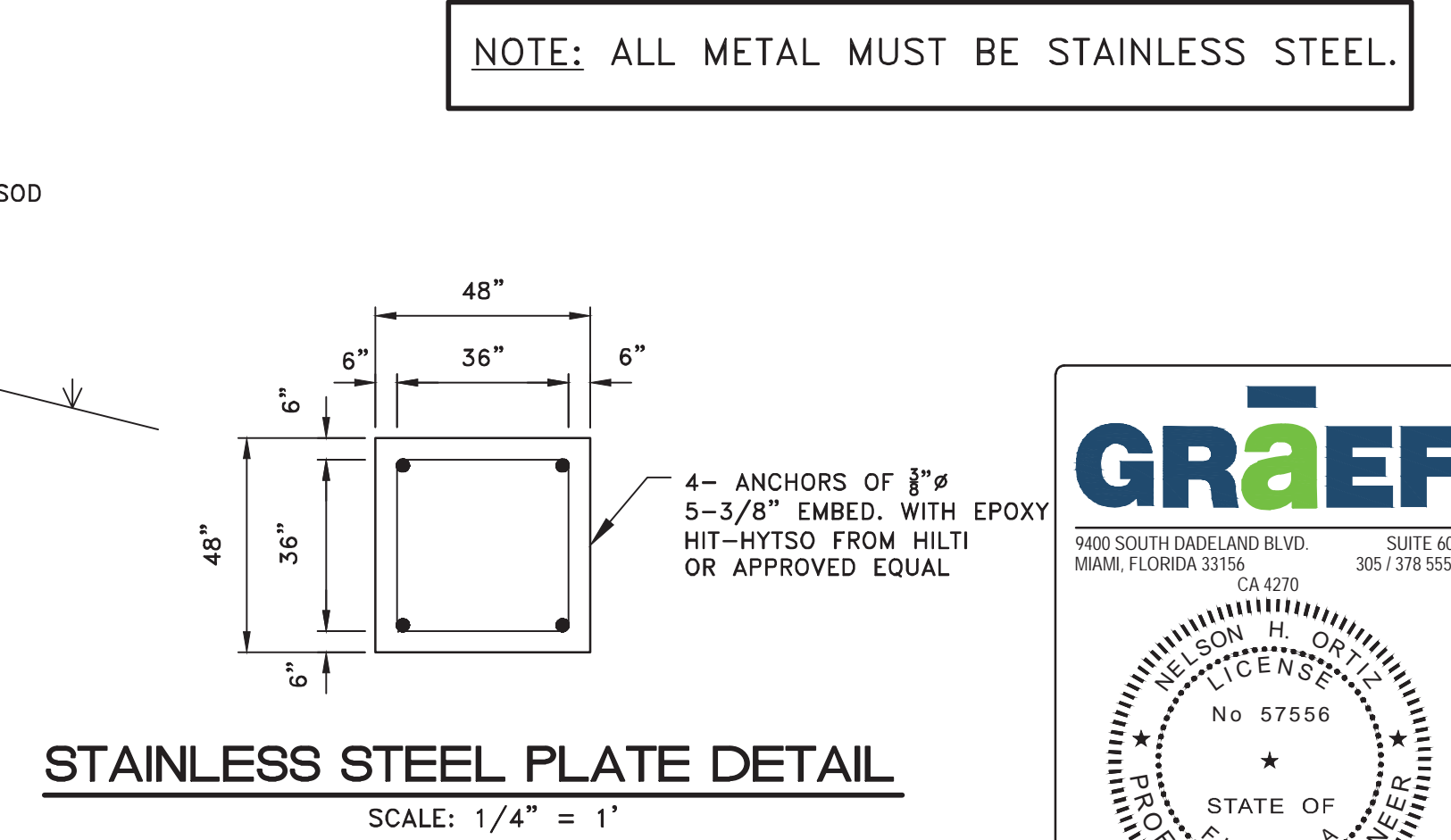
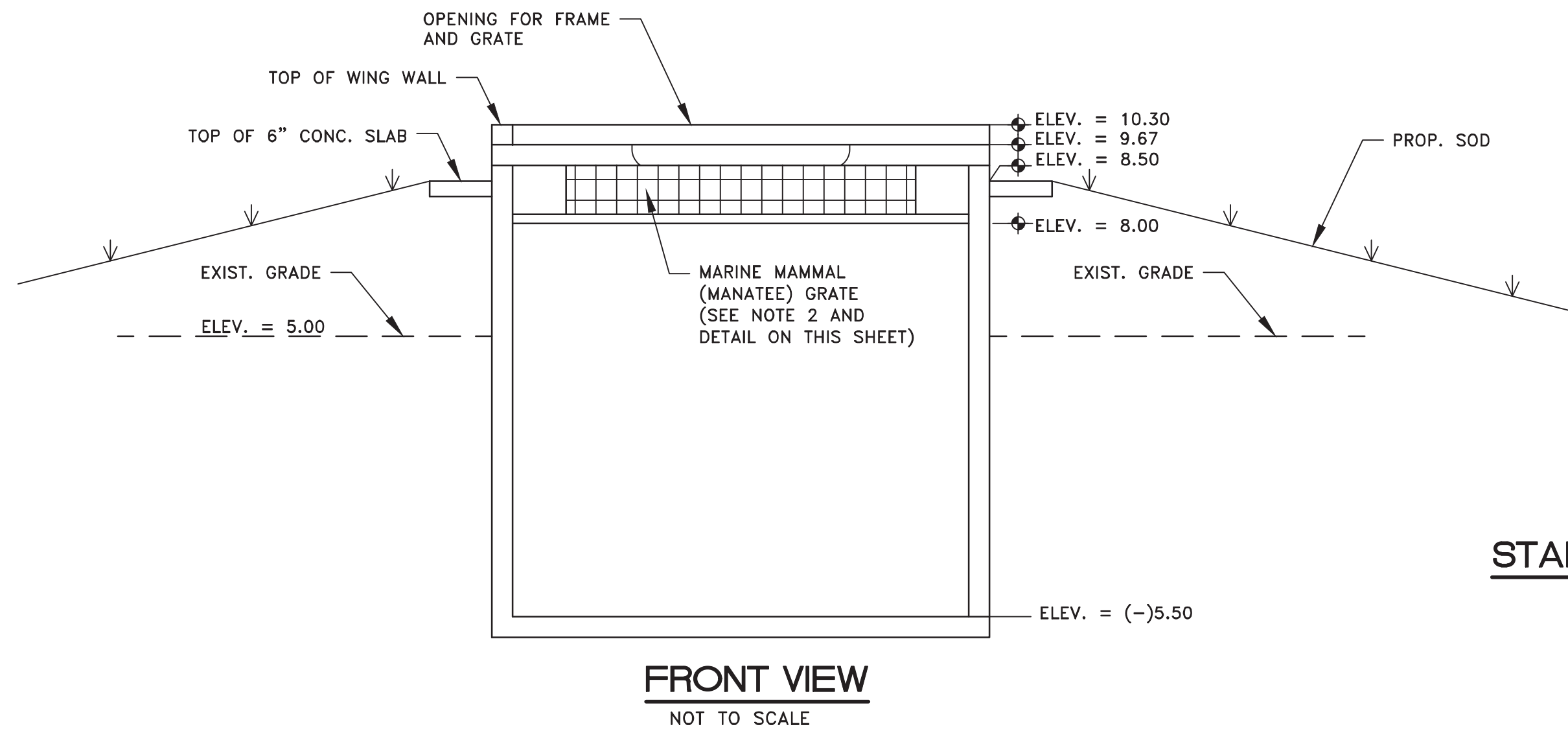
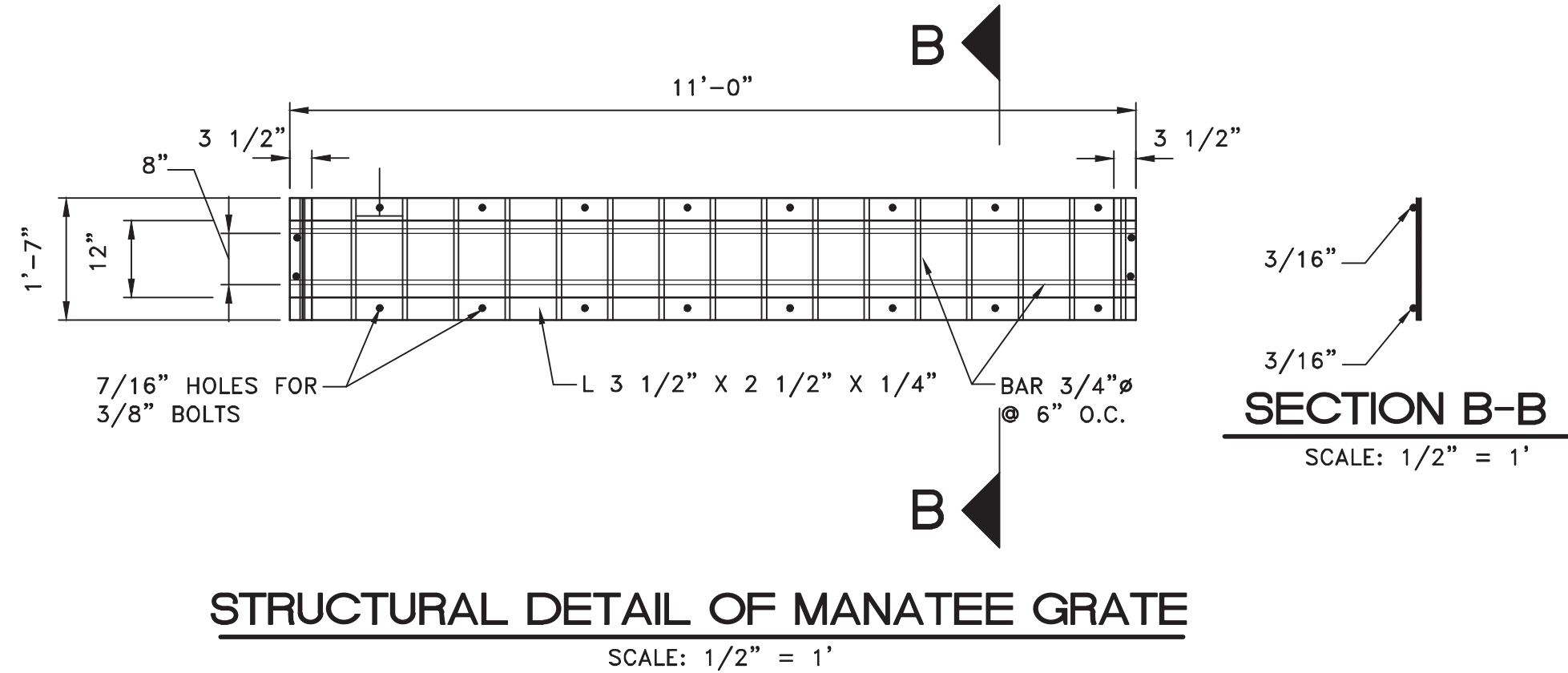
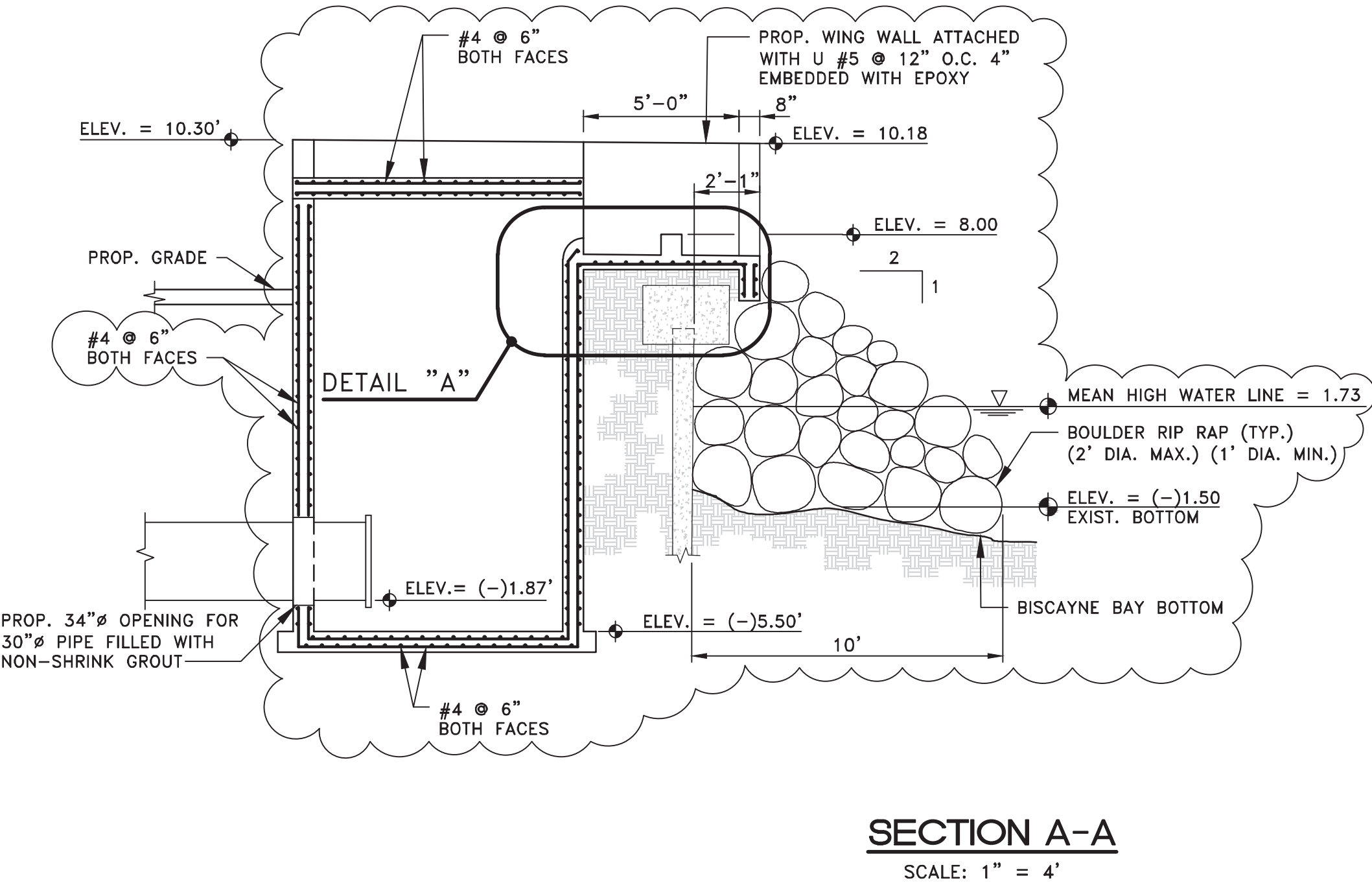


PROP. 60" X 60" STAINLESS STEEL  
PLATE INV. OF PLATE = (-)2.87'  
ANCHORED TO STRUCTURE TO BE  
DONE BY CONTRACTOR @ JOBSITE  
(REFER TO DETAIL ON THIS SHEET)



NOTE:

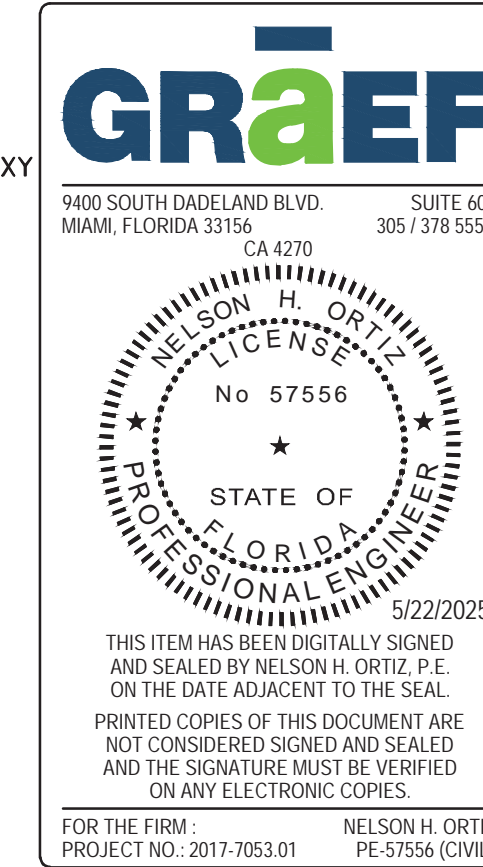
1. PRECAST DEPOT ENERGY DISSIPATING STRUCTURE OR APPROVED EQUAL CONTRACTOR TO SUBMIT SIGNED AND SEALED SHOP DRAWINGS BY SPECIALTY ENGINEER FOR ENGINEER'S APPROVAL SHOP DRAWINGS TO INCLUDE ANCHORAGE SPECIFICATIONS.
2. GRATE 6800 AND MARINE MAMMAL (MANATEE) GRATE TO BE REMOVABLE AND LOCKABLE. CONTRACTOR TO SHOW IN SHOP DRAWINGS AND SUBMIT FOR ENGINEER'S APPROVAL.



NOTE: ALL METAL MUST BE STAINLESS STEEL.

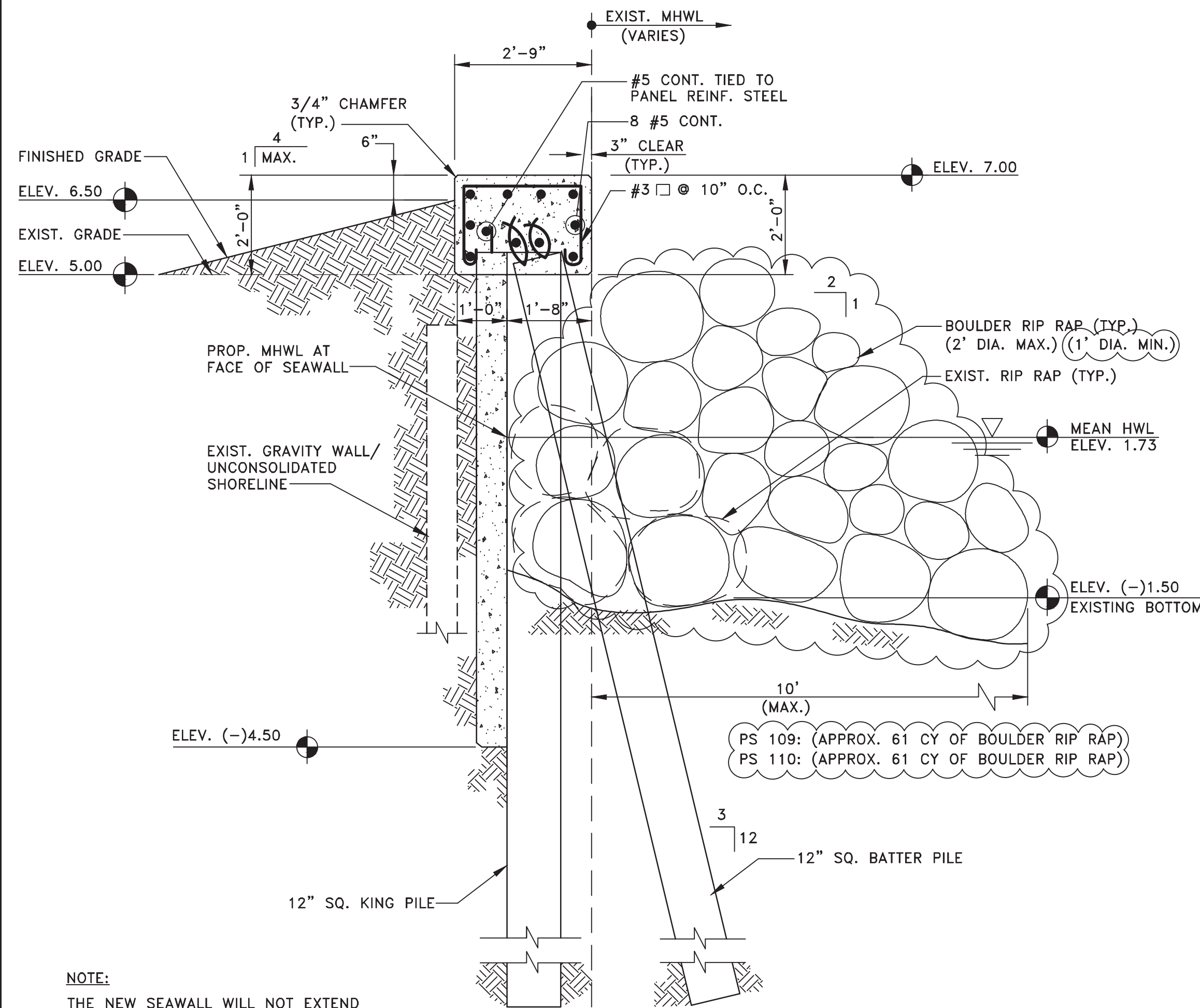
DATUM: N.G.V.D. 29

09/13/2024 ADDRESS M-D C COMMENTS  
05/22/2024 ADDRESS DERM COMMENTS  
07/20/2023 ADDRESS DERM COMMENTS  
12/17/2021 ADDRESS M-D C COMMENTS  
08/10/2021 ADDRESS SFWM D COMMENTS  
04/15/2021 ADDRESS SFWM D COMMENTS

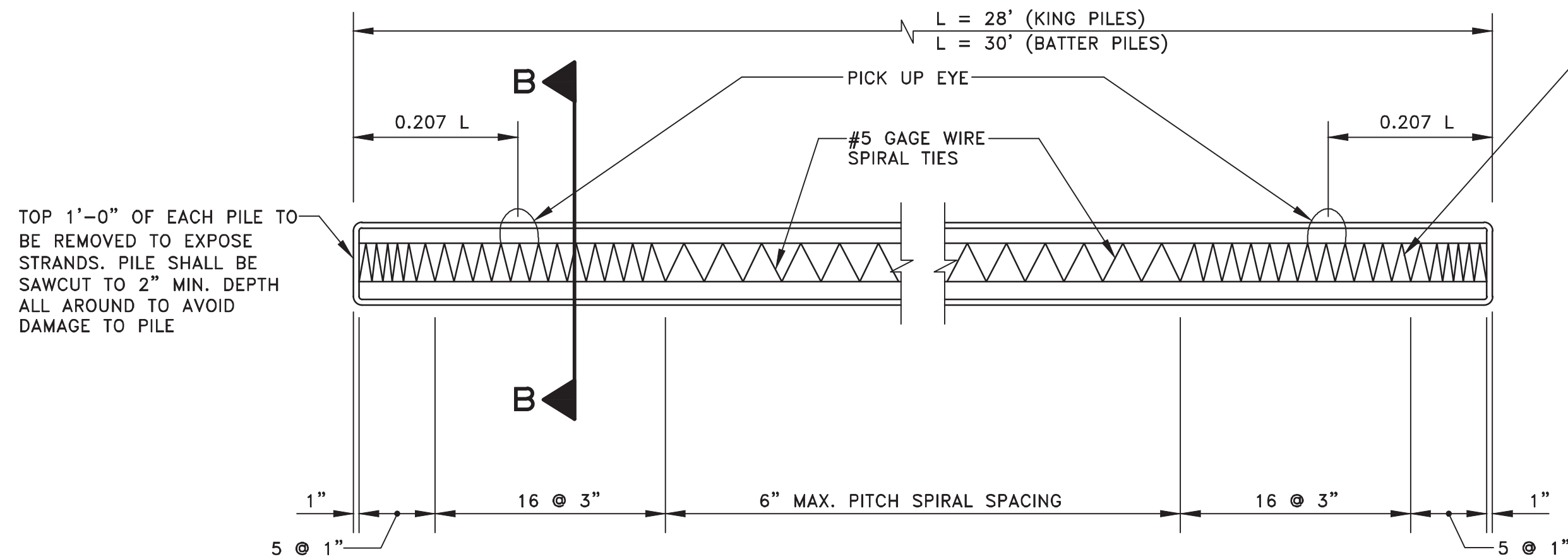


DESIGN BY: J.R.G.	DATE: 04/10/2020	ENERGY DISSIPATOR DETAILS	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 13
DRAWN BY: P.F.	DATE:					DRAWING NO. C-13	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						

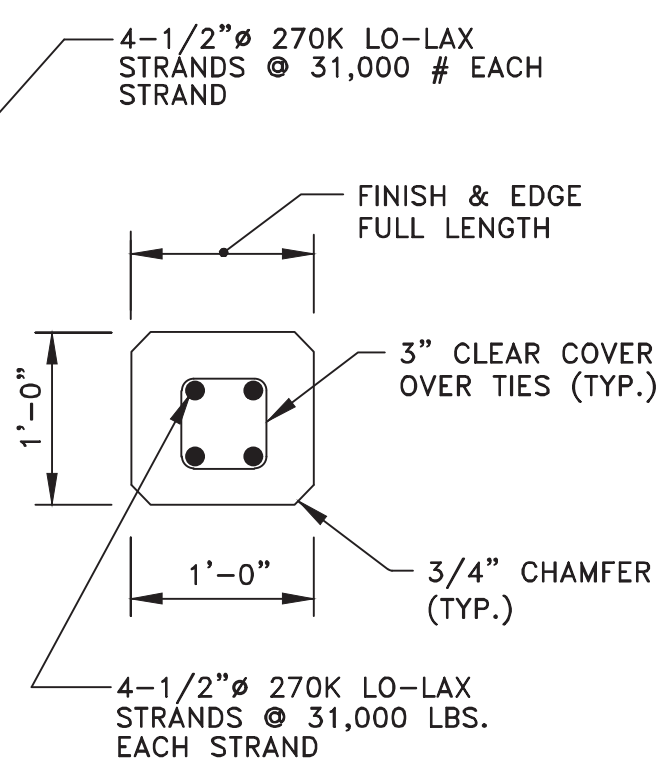




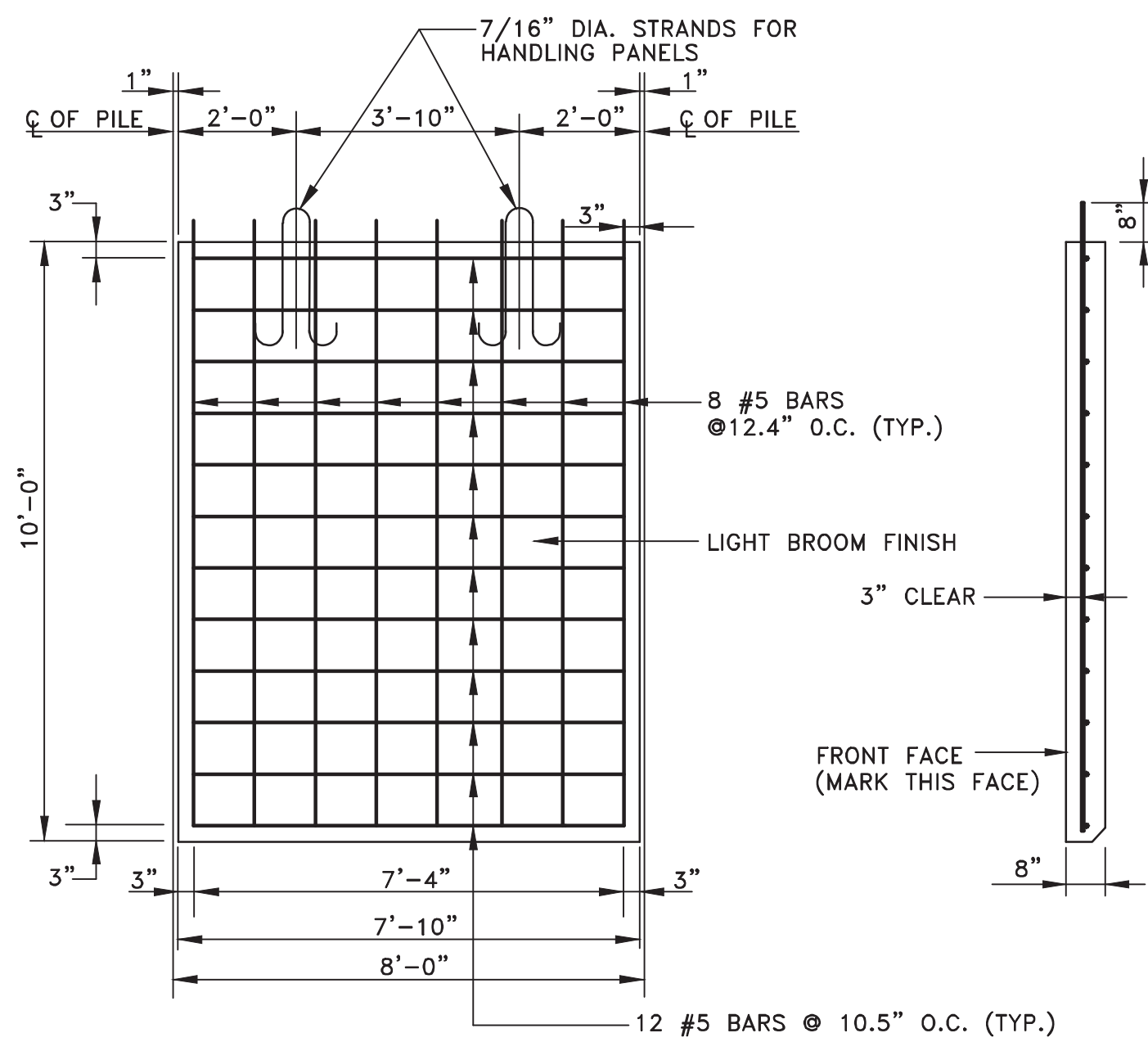
SECTION A-A  
SCALE: 1/2" = 1'-0"



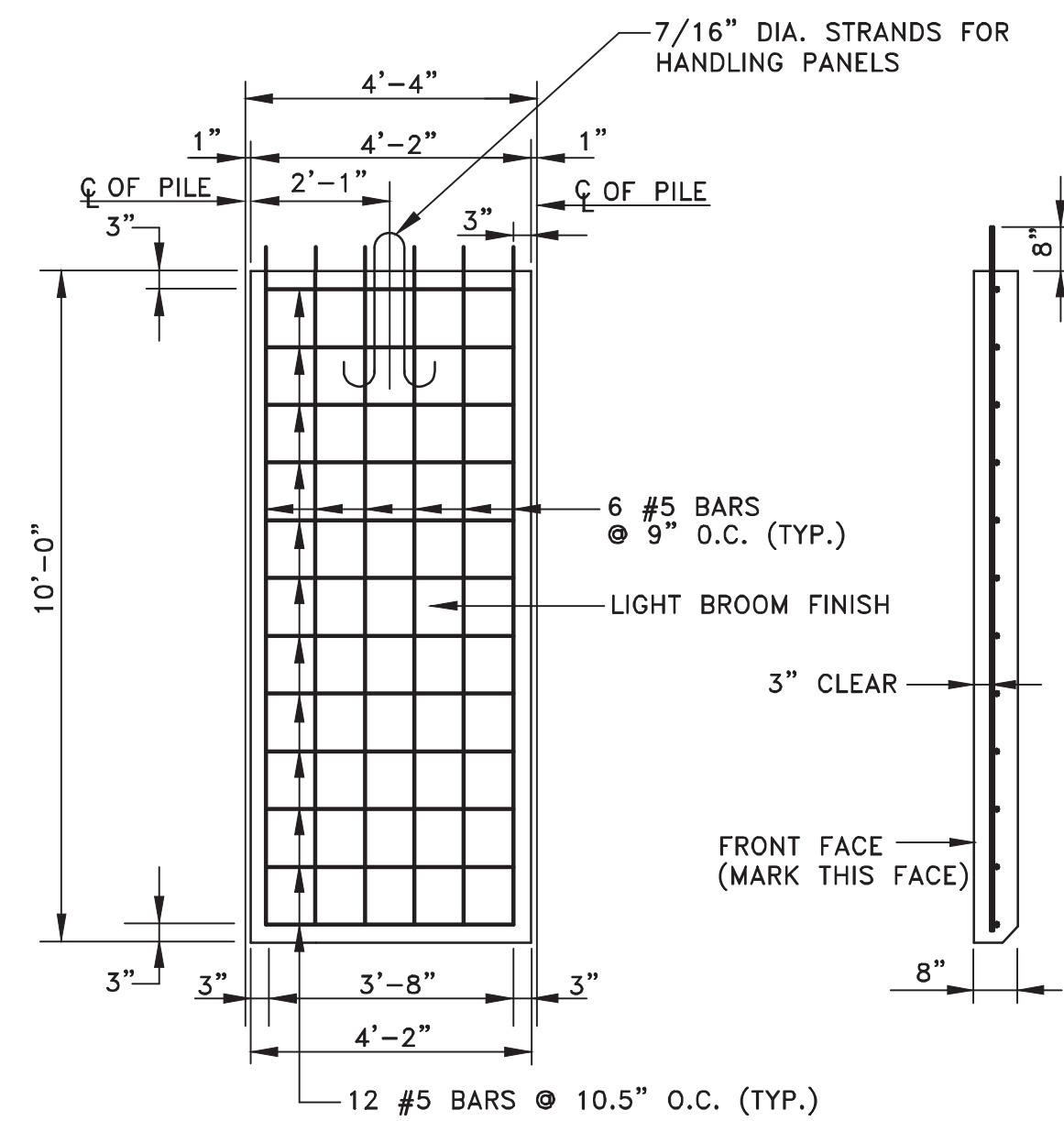
12" X 12" PRESTRESSED CONCRETE PILE  
N.T.S.



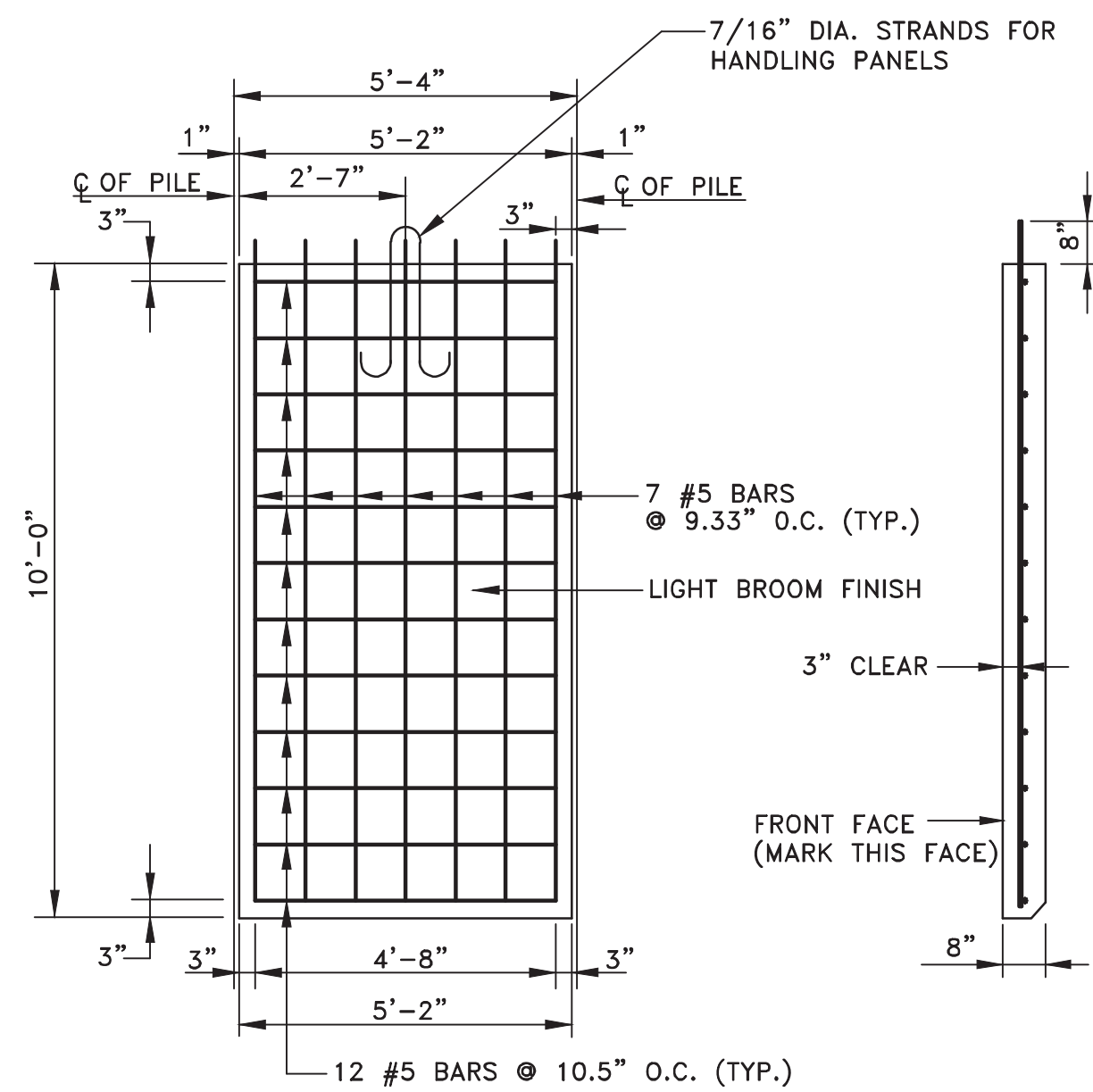
SECTION B-B  
N.T.S.



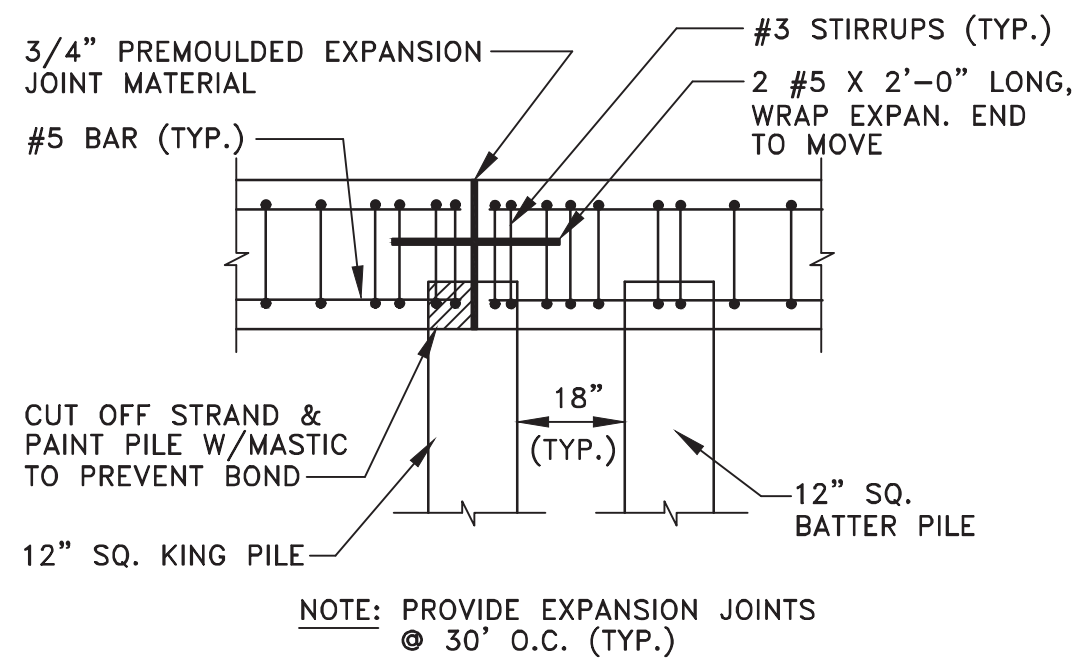
DETAIL: TYPICAL PRECAST CONCRETE PANEL  
SCALE: 3/8" = 1'-0"



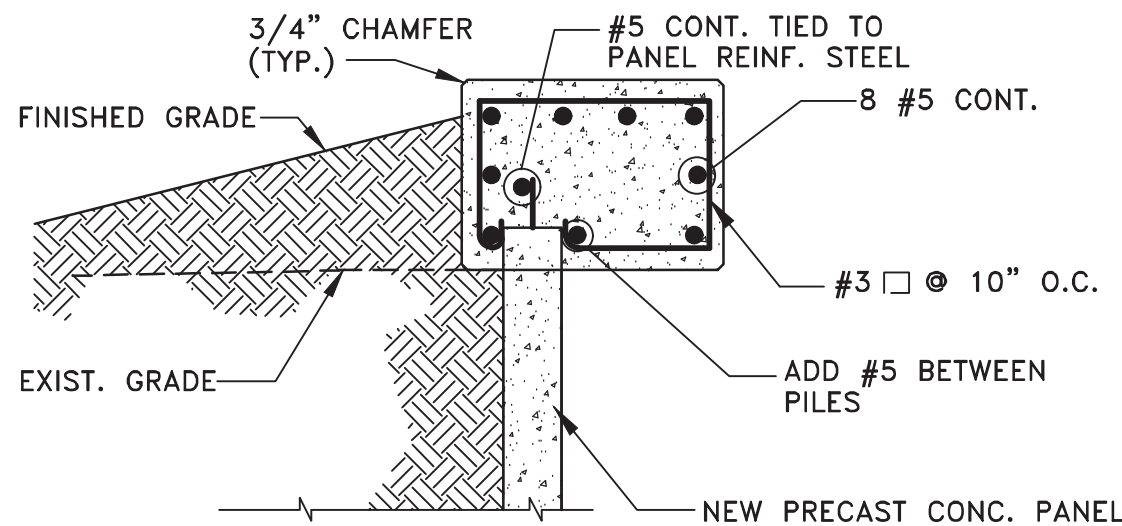
DETAIL: NON-TYPICAL PRECAST CONCRETE PANEL  
SCALE: 3/8" = 1'-0"



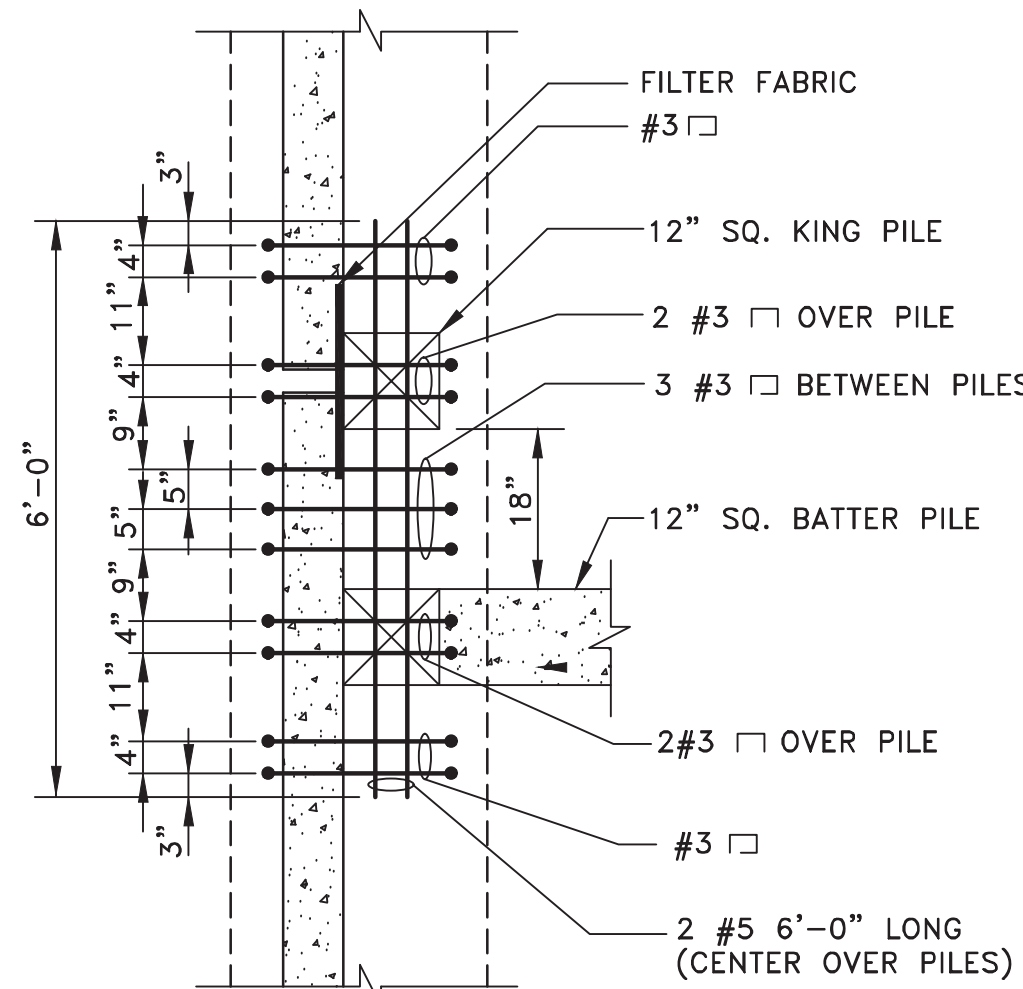
DETAIL: NON-TYPICAL PRECAST CONCRETE PANEL  
SCALE: 3/8" = 1'-0"



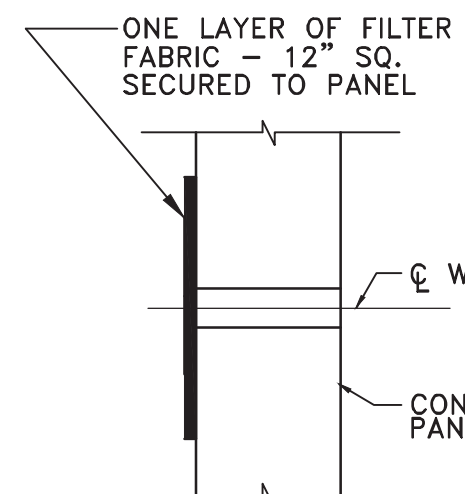
TYPICAL ELEVATION AT EXPANSION JOINT  
N.T.S.



TYPICAL CAP SECTION BETWEEN PILES  
N.T.S.



PLAN: ADDED REINF. @ PILES  
SCALE: 1/2" = 1'-0"



WEEP DETAIL  
N.T.S.

DATUM: N.G.V.D. 29

DESIGN BY: J.R.G.	DATE: 04/10/2020
DRAWN BY: P.F.	DATE:
CHECKED BY: N.H.O.	DATE:

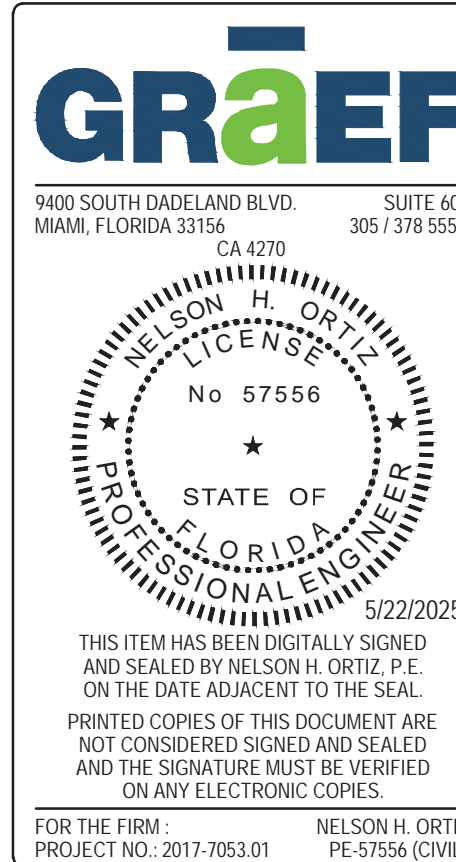
SEAWALL DETAILS AND SECTIONS

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



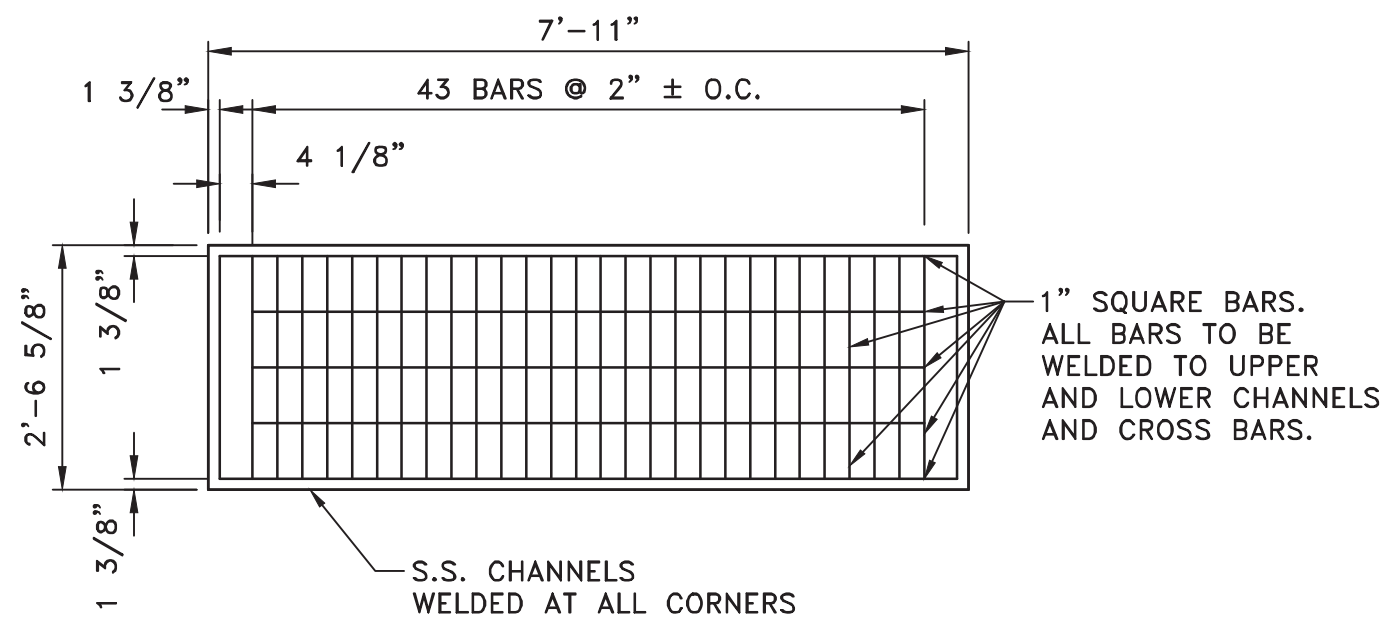
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO. 17053.01	SHEET NO. 14
DRAWING NO. C-14	OF 28 SHEETS

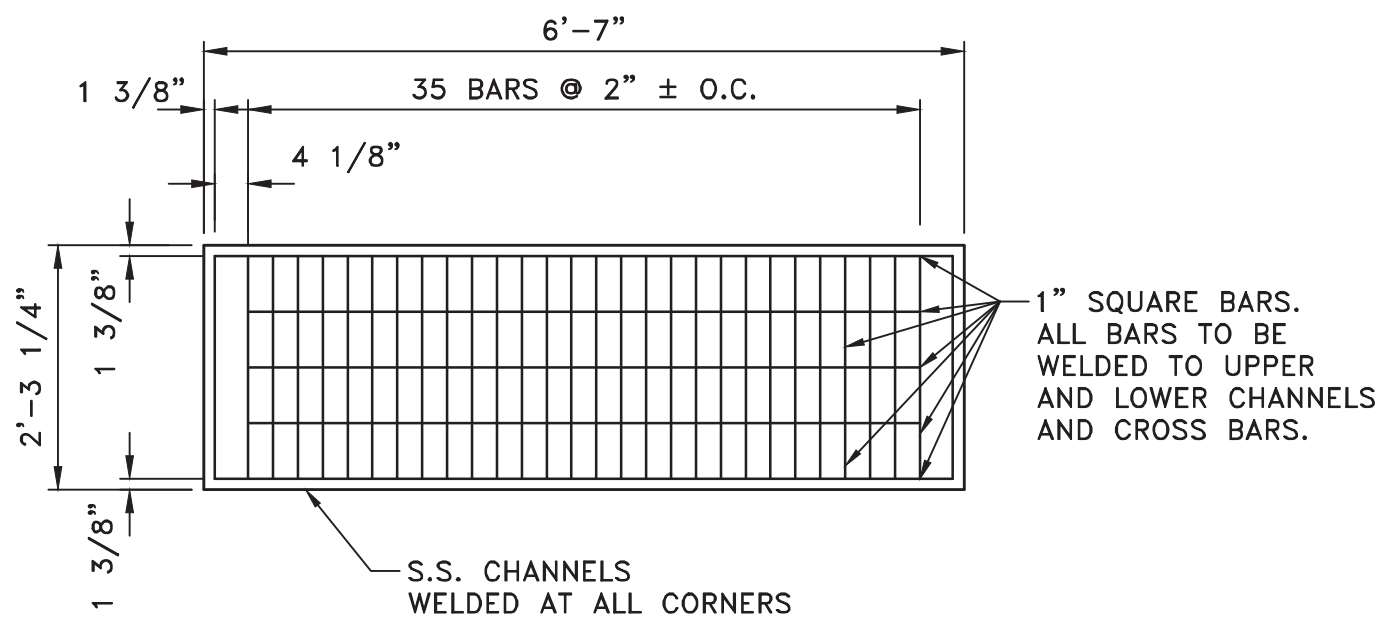


09/13/2024 ADDRESS M-D C COMMENTS  
07/20/2023 ADDRESS DERM COMMENTS  
08/10/2021 ADDRESS SFWMD COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS

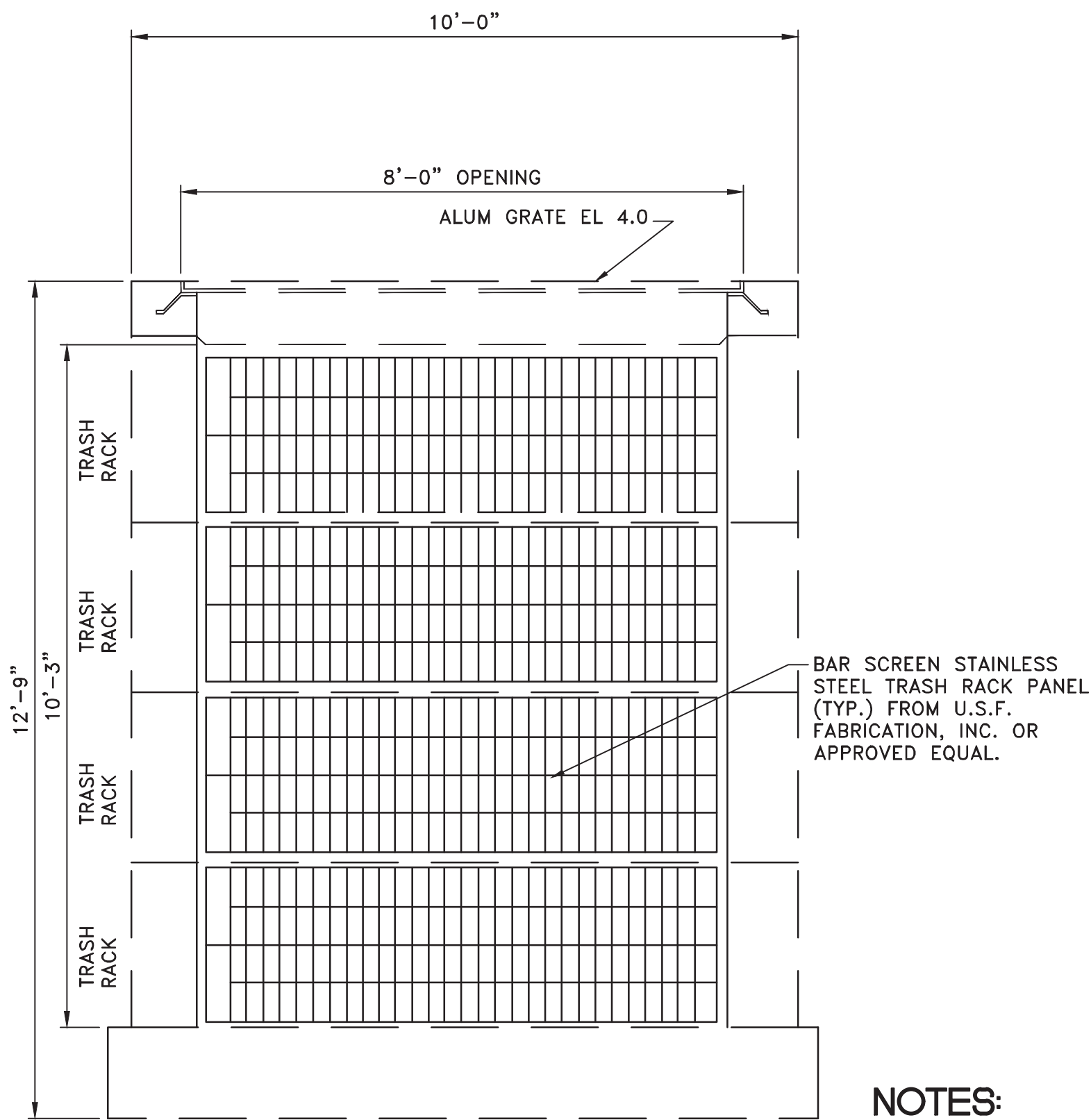




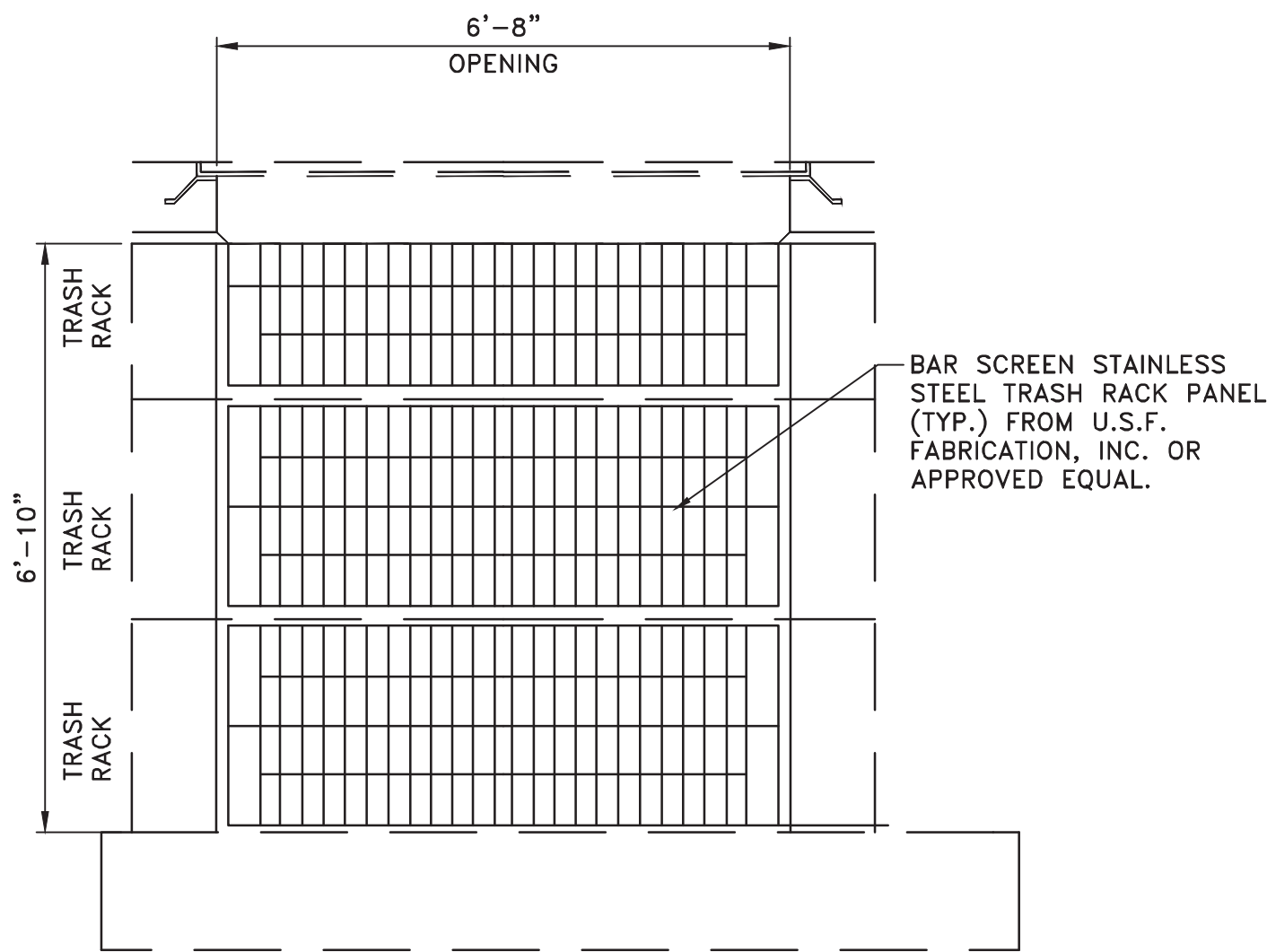
P.S. 109 TRASH RACK DETAIL  
N.T.S.



P.S. 110 TRASH RACK DETAIL  
N.T.S.



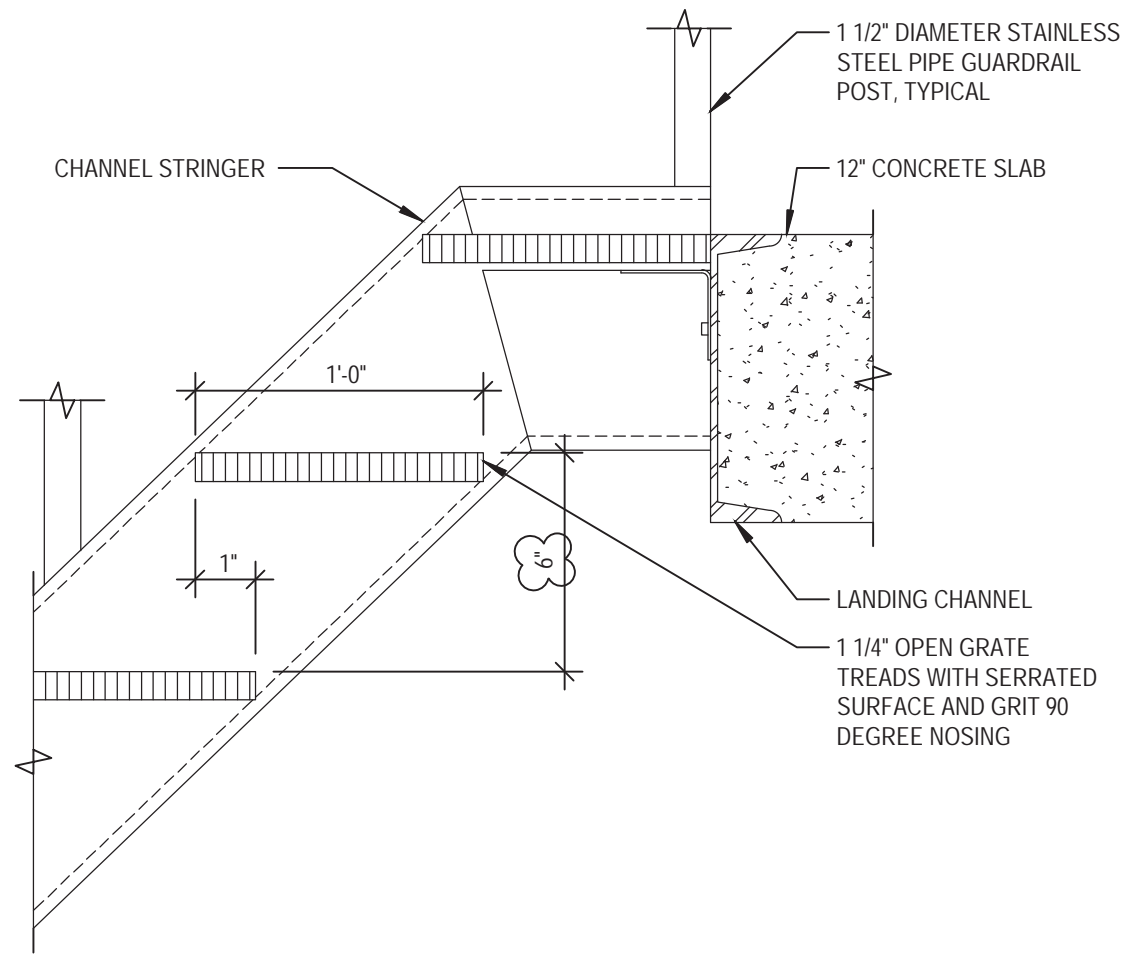
P.S. 109 STAINLESS STEEL TRASH RACK  
SCALE: 1/2" = 1'



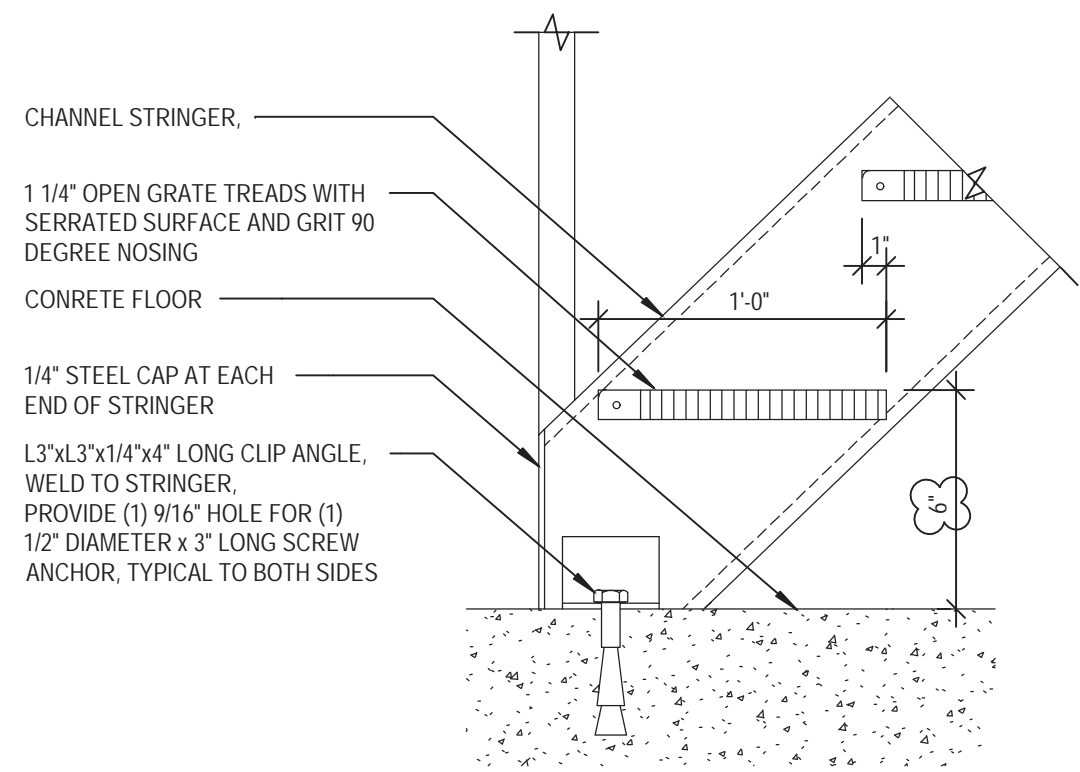
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SCALE: 1/2" = 1'

NOTES:

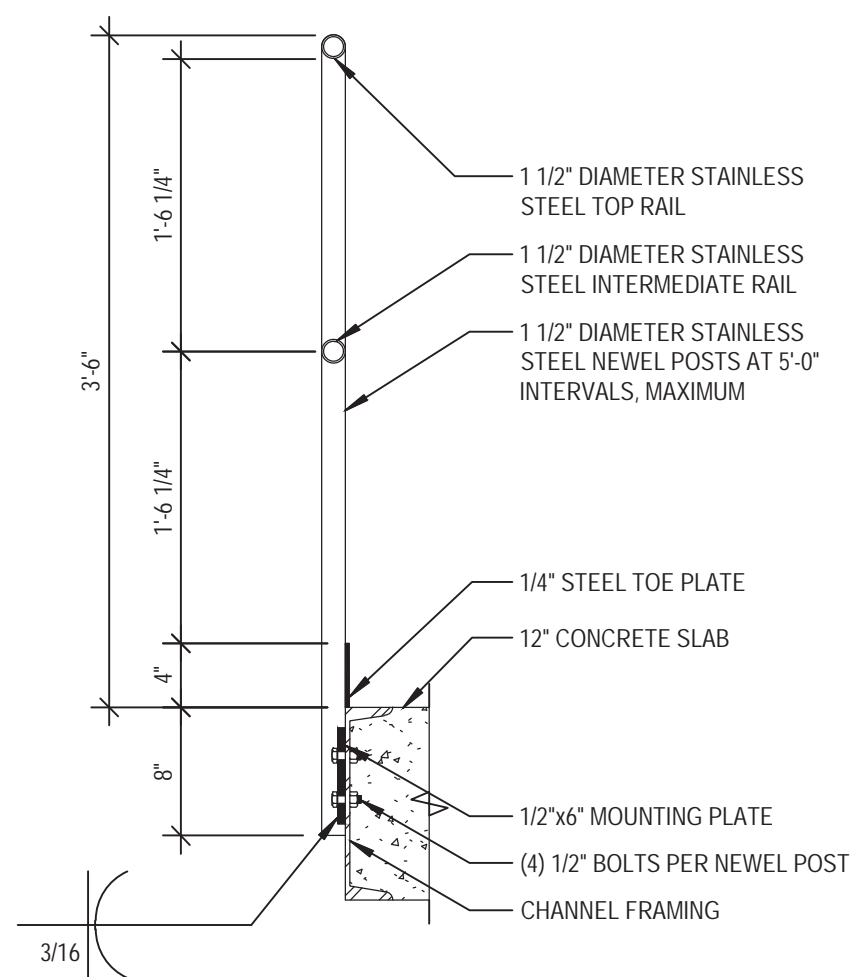
1. SHOP DRAWINGS OF TRASH RACK MUST BE PROVIDED BY CONTRACTOR FOR APPROVAL BY ENGINEER PRIOR TO FABRICATION.



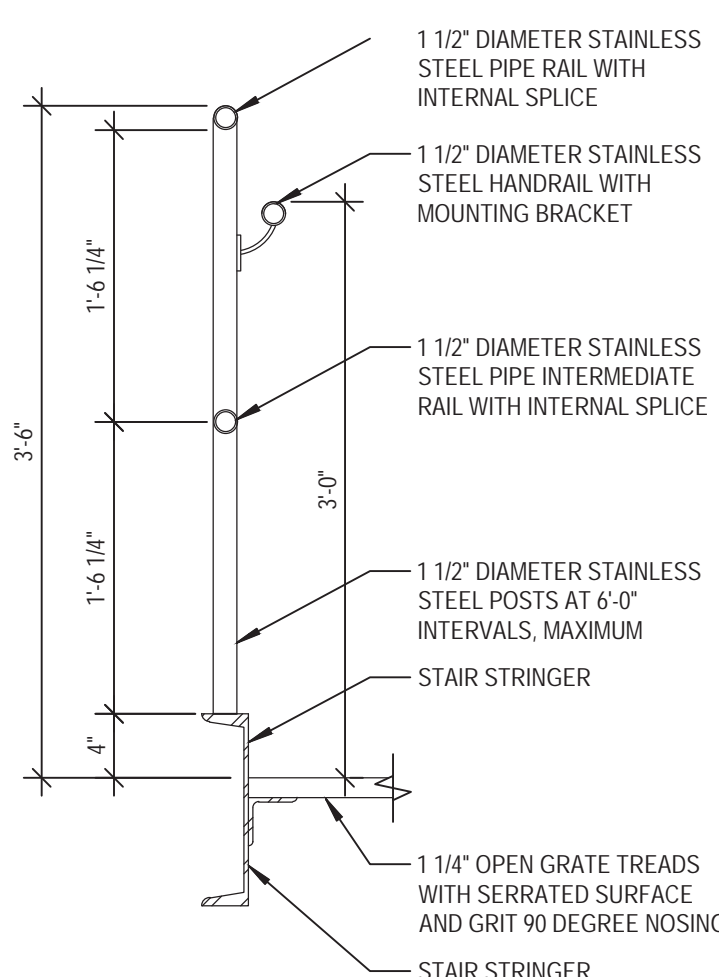
GRATE TREADS WITH OPEN RISERS  
AT LANDING CONNECTION DETAIL  
SCALE: 1-1/2" = 1'-0"



GRATE TREADS WITH OPEN RISERS  
FLOOR CONNECTION DETAIL  
SCALE: 1-1/2" = 1'-0"



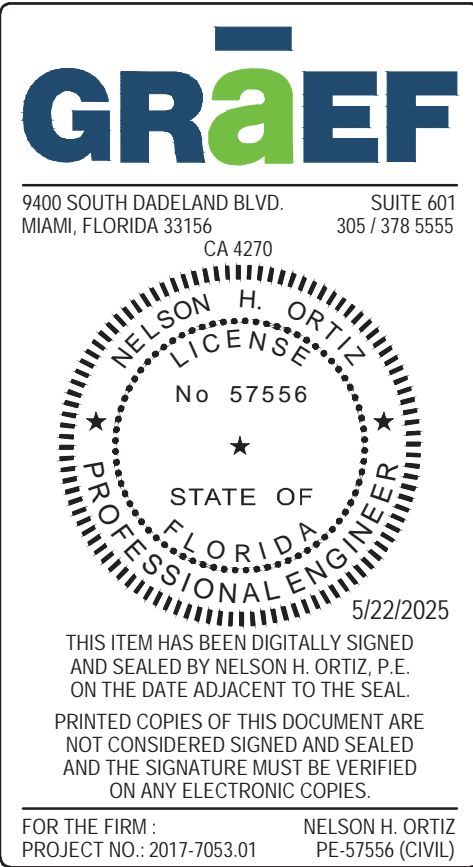
SIDE MOUNTED PIPE GUARDRAIL SECTION  
SCALE: 1" = 1'-0"




STAIR GUARRAIL AND HANDRAIL SECTION  
SCALE: 1" = 1'-0"

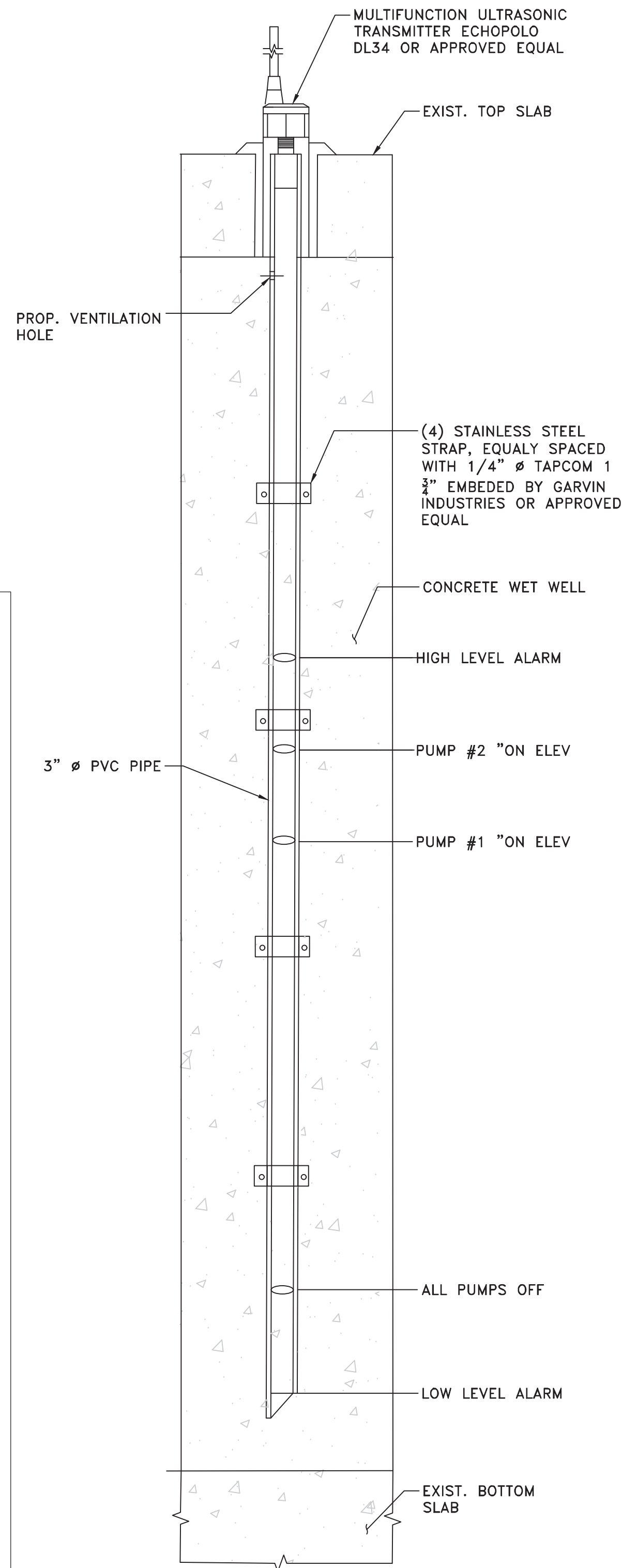
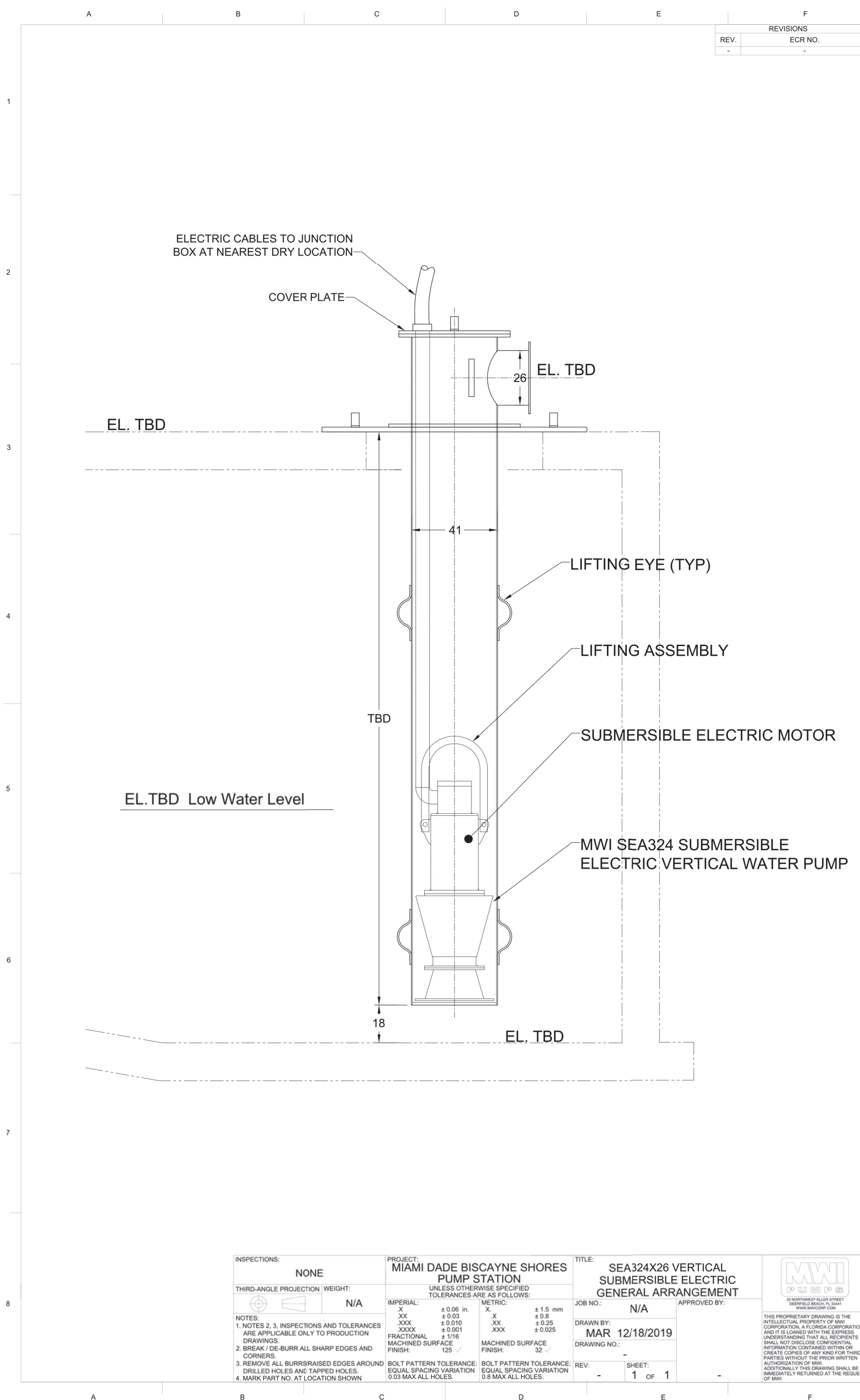
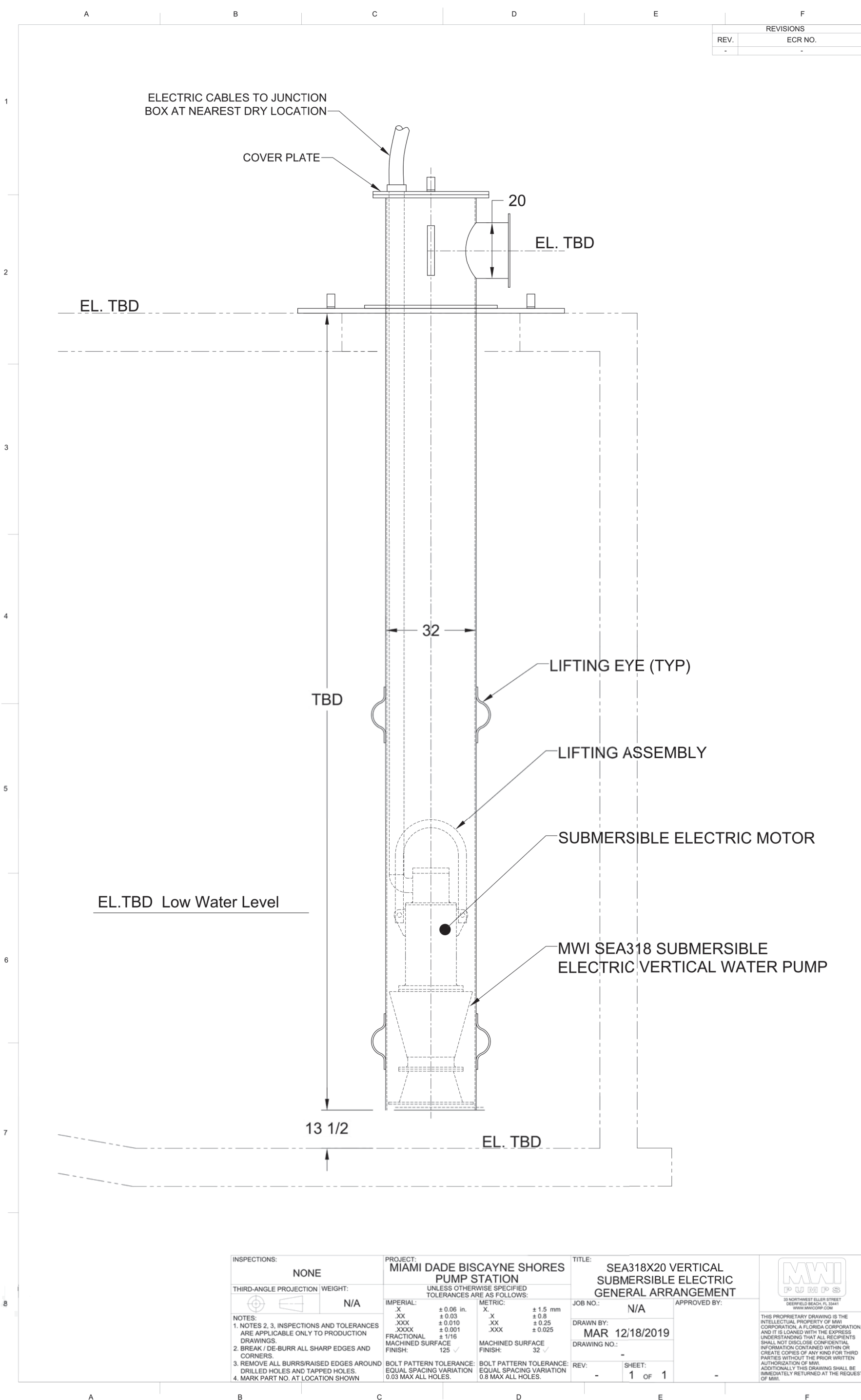
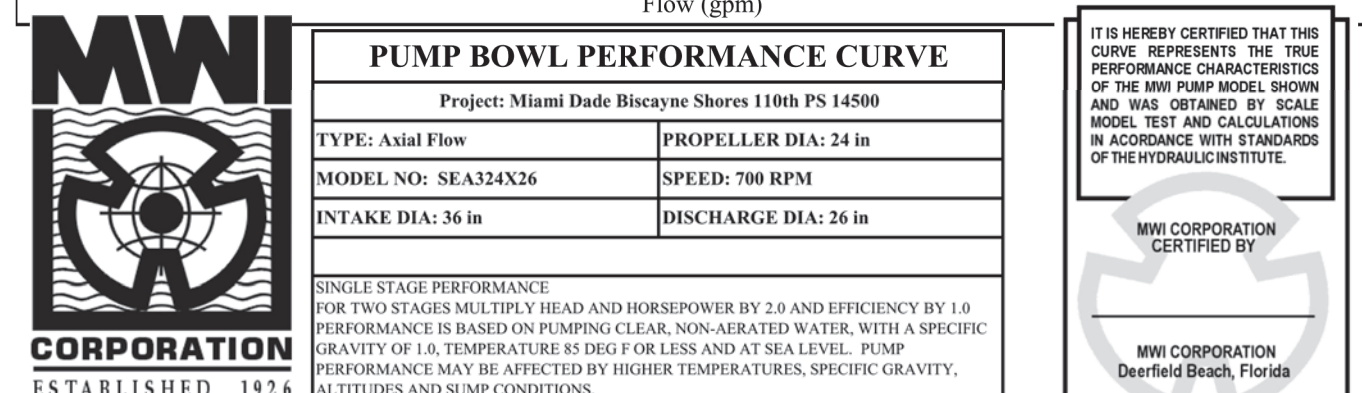
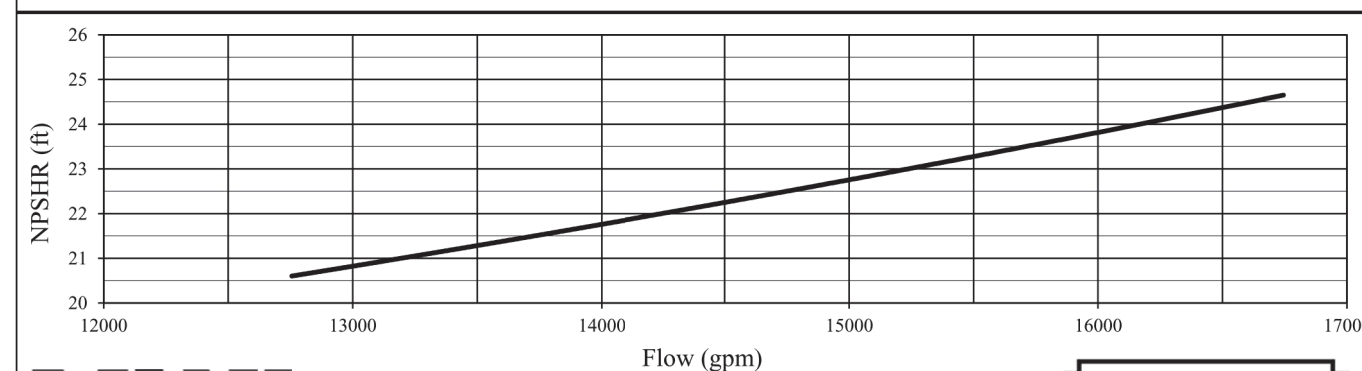
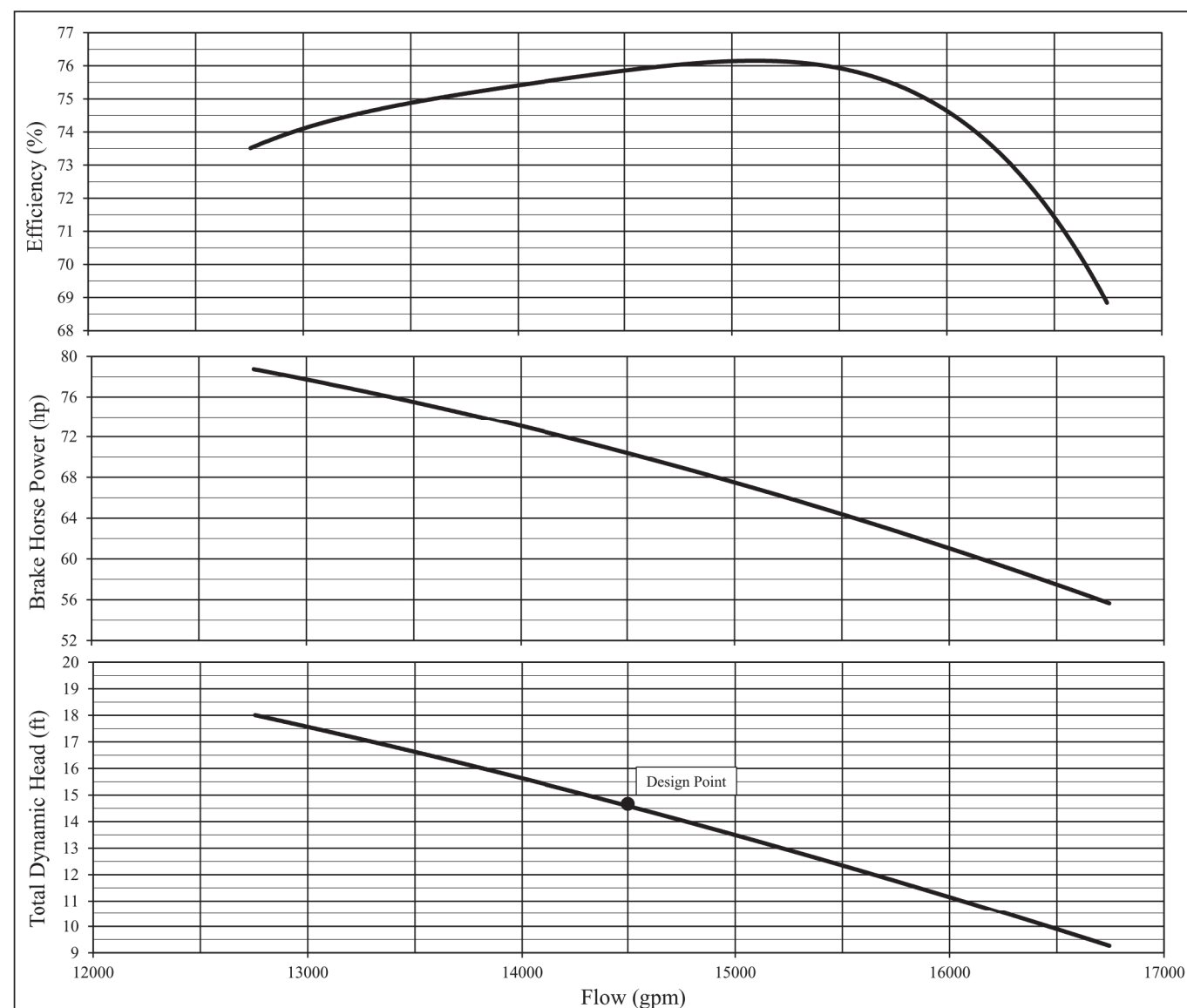
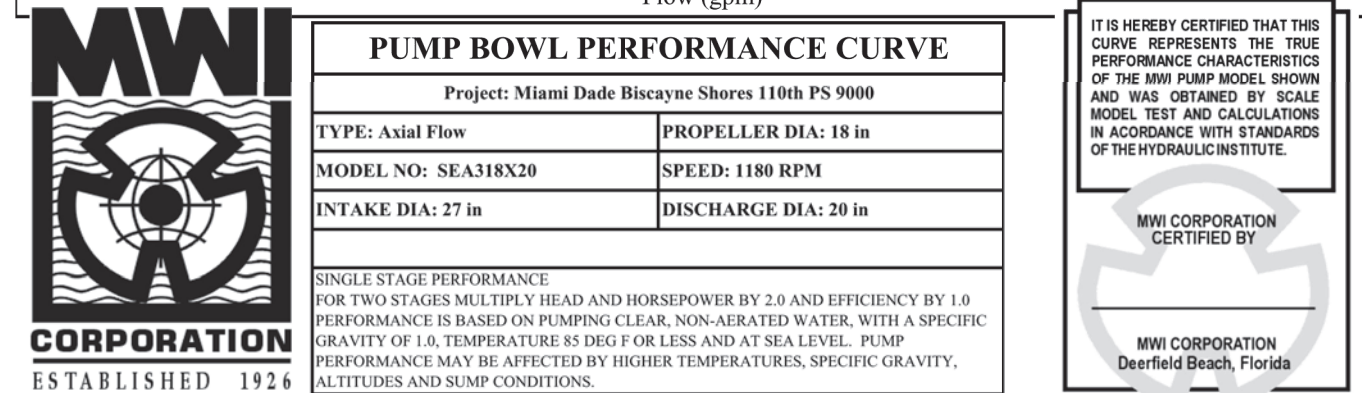
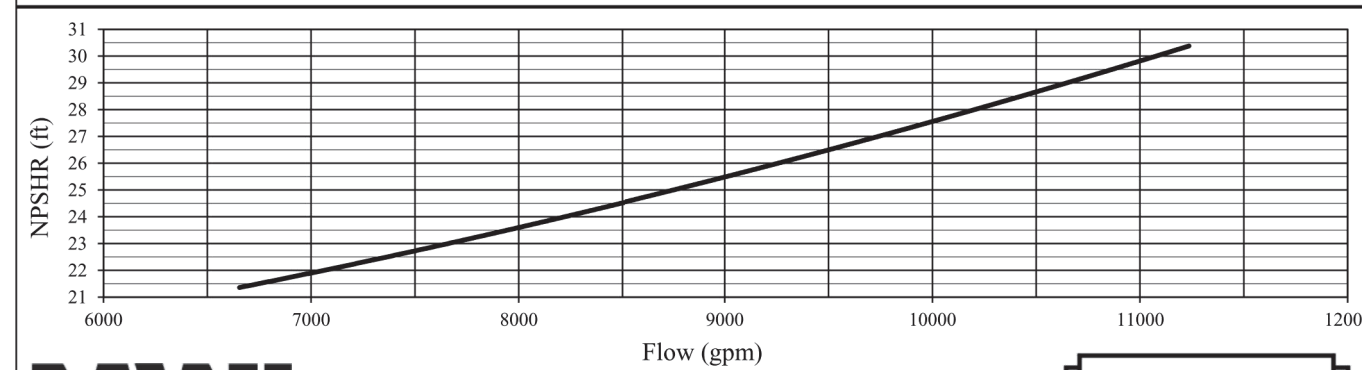
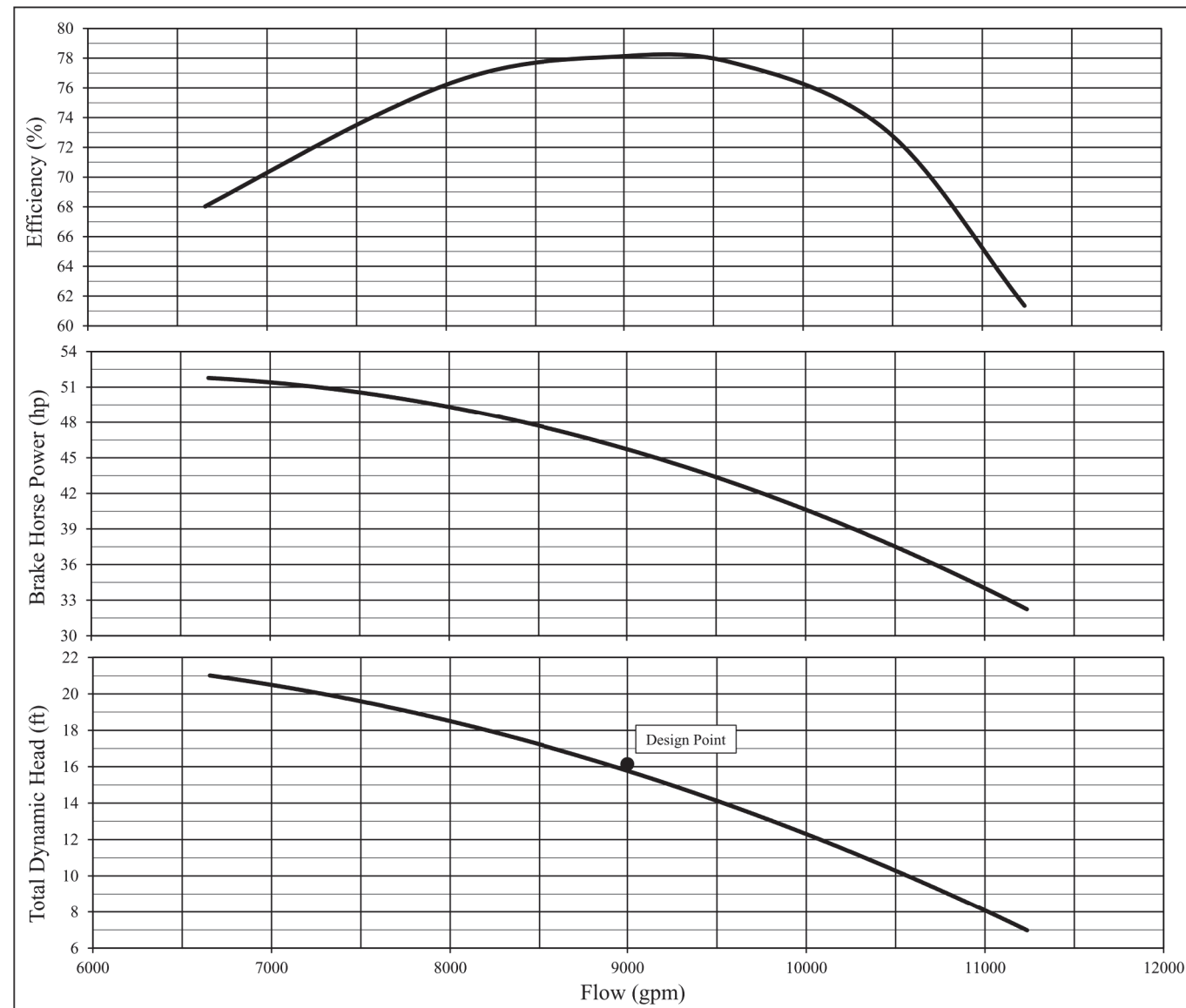
NOTE: CONTRACTOR SHALL PROVIDE  
SHOP DRAWINGS FOR FABRICATION.

12/17/2024 ADDRESS M-D C COMMENTS  
09/13/2024 ADDRESS M-D C COMMENTS

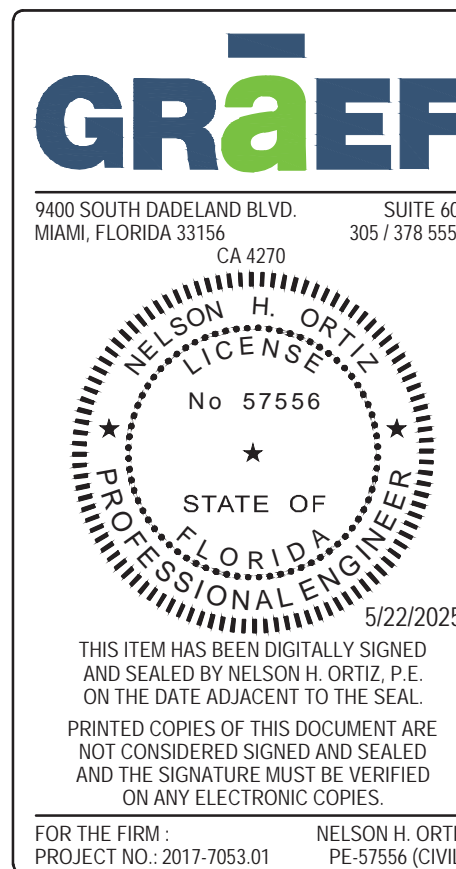


DESIGN BY: J.R.G.	DATE: 04/10/2020	TRASH INTERCEPTOR DETAILS	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 15
DRAWN BY: P.F.	DATE:					DRAWING NO. C-15	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						

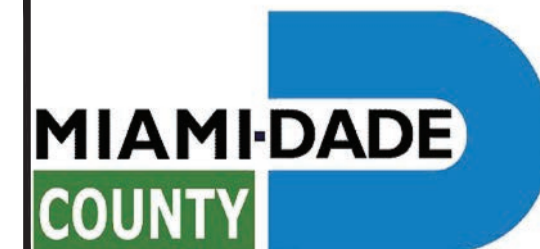


**ULTRASONIC TRANSMITTER DETAIL**

N.T.S



DESIGN BY: J.R.G.	DATE: 04/10/2020
DRAWN BY: P.F.	DATE:
CHECKED BY: N.H.O.	DATE:

**MISCELLANEOUS DETAILS & NOTES****BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT**

**DEPARTMENT OF TRANSPORTATION  
AND PUBLIC WORKS**  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO. 17053.01	SHEET NO. 16
DRAWING NO. C-16	OF 28 SHEETS

100% SUBMITTAL



A. GENERAL NOTES

ENVIRONMENTAL CONTROL FEATURES AS PROVIDED IN PLANS ARE TO BE INSTALLED AT ALL AREAS OF EXCAVATION OR FILL FOR DRAINAGE SYSTEM OR STRUCTURE CONSTRUCTION PRIOR TO SUCH EXCAVATION OR FILL. INLET ENTRANCES ARE ALSO TO BE PROTECTED FROM SILTATION AS DETAILED IN THE FDOT STANDARDS.

ALL ENVIRONMENTAL CONTROL FEATURES ARE TO BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN ACCORDANCE WITH FDEP'S NPDES REQUIREMENTS. THE CONTRACTOR MUST ENSURE THAT ALL EROSION CONTROL FEATURES FUNCTION PROPERLY AT ALL TIMES.

ALL EROSION AND MATERIAL DEPOSITS MUST BE CONTAINED WITHIN THE PROJECT LIMITS.

CONTRACTOR'S SUBMITTALS: THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING THE FOLLOWING ITEMS TO FDEP IN ORDER FOR THE NPDES PERMIT TO BE PROCESSED:

IF THIS SWPPP IS ADOPTED BY THE CONTRACTOR, THE SWPPP SHEETS AND OTHER PLAN SHEETS SHALL BE INCLUDED BY REFERENCE IN THE NOTICE OF INTENT (NOI) SUBMITTAL. THE CONTRACTOR MAY ELECT TO SUBMIT A REVISED SWPPP THAT IS IN COMPLIANCE WITH THE STORM WATER REGULATIONS AT 40 CFR 122.26(B)(14) AND STATE WATER QUALITY STANDARDS. SIGNED CONTRACTOR CERTIFICATION FORMS (2). THESE FORMS MUST BE SIGNED BY BOTH THE PRIME CONTRACTOR AND SUB-CONTRACTOR (IF APPLICABLE) PERFORMING SOIL-DISTURBING ACTIVITIES. HAZARDOUS MATERIAL SPILL CONTROL PLAN. STAGING AREAS, STOCKPILE LOCATIONS AND STABILIZATION PRACTICES. BRIDGE CONSTRUCTION METHOD AND SEQUENCING (IF APPLICABLE). DEWATERING PLAN (IF APPLICABLE).

NO SOIL DISTURBING ACTIVITIES CAN BE CONDUCTED UNTIL THE NPDES PACKAGE HAS BEEN MAILED TO THE FDEP.

ANY DAMAGED OR INEFFECTIVE BAGS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION OF ROCK BAG INSTALLATION IS AS MENTIONED IN EROSION CONTROL PLANS. THE PROJECT ENGINEER MAY SPECIFY OTHER AREAS AS NECESSARY.

DITCH BOTTOM INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. ROCK BAGS SHALL BE INSTALLED AROUND INLET TOP.

COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH ROCK BAGS TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.

CURB INLETS ALSO SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION BY METHODS STATED IN "SECTION 1D4" FDOT STANDARDS SPECIFICATIONS FOR BRIDGE AND ROAD CONSTRUCTION.

STOCKPILED MATERIALS SHALL NOT BE LEFT IN EROSION PRONE AREAS UNLESS PROTECTED BY COVER AND/OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

INSPECTION OF EROSION CONTROL MEASURES AND CONDITION OF ADJACENT PROPERTIES SHALL BE PERFORMED DAILY BY THE CONTRACTOR'S REPRESENTATIVE AND THE PROJECT ENGINEER. DEFICIENCIES SHALL BE NOTED AND CORRECTED.

ANY OFFSITE SEDIMENT DISCHARGE TO A MUNICIPALLY SEPARATE STORM SEWER SYSTEM ARISING FROM THE CONTRACTOR'S ACTIVITIES SHALL HAVE EROSION CONTROLS PROVIDED FOR THOSE INLETS.

THE AGGREGATE LAYER OF ALL CONSTRUCTION ENTRANCE GRAVEL BEDS MUST BE AT LEAST 6 INCHES THICK. IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA. THE LENGTH OF THE ENTRANCE MUST BE AT LEAST 50 FEET. THE ENTRANCE MUST WIDEN AT ITS CONNECTION TO THE ROADWAY IN ORDER TO ACCOMMODATE THE TURNING RADIUS OF LARGE TRUCKS.

B. SITE DESCRIPTION

1. CONSTRUCTION ACTIVITY:  
CLEARING AND DEMOLITION; DRAINAGE AND UTILITY INSTALLATION, NEW BUILDING, LAND DEVELOPMENT.

PROJECT LIMITS:  
MIAMI-DADE COUNTY PS 109 AND 110 LOCATED IN BISCAYNE SHORES BETWEEN N. BAYSHORE DRIVE AND BISCAYNE BAY.

PROJECT DESCRIPTION:

REPLACE EXISTING PUMPS AT PS 110 AND DISCONNECT ELECTRIC DEPENDANCY AT PS 109 FROM PS 110. SEAWALL REPLACEMENT AT BOTH SITES WITH CONCRETE PILE AND PANEL AND INSTALLATION OF NEW DISSIPATOR STRUCTURES. CONSTRUCTION OF NEW GENERATOR HOUSE AND REPLACEMENT OF ROOF AND FLOOR OF EXISTING PUMP HOUSE.

2. MAJOR SOIL DISTURBING ACTIVITIES:

DEMOLITION; CLEARING; EXCAVATION FOR STORMWATER FACILITIES, PARKING, AND OTHER UTILITIES.

3. TOTAL PROJECT AREA: 0.324 ACRES  
TOTAL AREA TO BE DISTURBED: 0.324 ACRES

4. LOCATIONS OF DRAINAGE AREAS AND OUTFALLS:  
SEE ATTACHED PLAN.

5. THE DRAINAGE SYSTEM RECEIVING WATER IN THE EVENT OF A MAJOR STORM EVENT WILL BE BISCAYNE BAY AT LATITUDE AND LONGITUDE 25°52'37.0"N / 80°09'50.0"W AND 25°52'34.2"N / 80°09'50.2"W.

6. AREA OF DISCHARGE FOR THIS PROJECT IS ACRES = 14,424 SF

7. SOILS ARE CLASSIFIED AS URBAN LAND AND QUALITY OF DISCHARGE IS LIMEROCK FILL AND SAND.

8. LATITUDE AND LONGITUDE OF DIRECT DISCHARGE POINTS ARE 25°52'37.0"N / 80°09'50.0"W AND 25°52'34.2"N / 80°09'50.2"W.

C. CONTROLS

NARRATIVE – SEQUENCE OF SOIL DISTURBING ACTIVITIES AND IMPLEMENTATION OF CONTROLS.

1. CLEARING AND DEMOLITION
2. CONSTRUCTION OF REPLACEMENT SEAWALL AT PS 109 AND PS 110.
3. REPLACEMENT OF PUMPS AT PS 110.
4. CONSTRUCTION OF NEW GENERATOR HOUSE.
5. REPLACEMENT OF FLOOR AND ROOF OF EXISTING PUMP HOUSE.

PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, ALL EROSION CONTROLS MUST BE IMPLEMENTED.

1. TEMPORARY STABILIZATION:  
DISTURBED PORTIONS OF THE SITE (E.G. EMBANKMENT AT TEMPORARY RAMPS) WHERE CONSTRUCTION ACTIVITY CEASES FOR AT LEAST 21 DAYS, SHALL BE STABILIZED WITH TEMPORARY SOD OR TEMPORARY SEEDING AND MULCHING NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA.

PERMANENT STABILIZATION: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

EROSION AND SEDIMENT CONTROLS:

- (1) STABILIZATION PRACTICES:
- \_\_\_\_\_ TEMPORARY SODDING
  - \_\_\_\_\_ TEMPORARY GRASSING
  - ☒ PERMANENT SODDING, SEEDING OR SEED & MULCH
  - \_\_\_\_\_ TEMPORARY MULCHING
  - \_\_\_\_\_ ARTIFICIAL COVERING
  - \_\_\_\_\_ BUFFER ZONES
  - \_\_\_\_\_ PRESERVATION OF NATURAL RESOURCES

OTHER:

- (2) STRUCTURAL PRACTICES:
- \_\_\_\_\_ SAND BAGGING
  - ☒ SILT FENCES
  - \_\_\_\_\_ ROCK BAGS
  - \_\_\_\_\_ BERMS
  - \_\_\_\_\_ DIVERSION, INTERCEPTOR, OR PERIMETER DITCHES
  - \_\_\_\_\_ PIPE SLOPE DRAINS
  - \_\_\_\_\_ FLUMES
  - ☒ ROCK BEDDING AT CONSTRUCTION EXIT
  - \_\_\_\_\_ TIMBER BEDDING AT CONSTRUCTION EXIT
  - \_\_\_\_\_ DITCH LINER
  - \_\_\_\_\_ SEDIMENT TRAPS
  - \_\_\_\_\_ SEDIMENT BASINS
  - ☒ STORM INLET SEDIMENT TRAP
  - \_\_\_\_\_ STONE OUTLET STRUCTURES
  - \_\_\_\_\_ CURBS AND GUTTERS
  - ☒ STORM SEWERS
  - ☒ VELOCITY CONTROL DEVICES
  - ☒ TURBIDITY BARRIER
  - \_\_\_\_\_ RIP RAP

2. DESCRIPTION OF STORM WATER MANAGEMENT:

THE STORMWATER MANAGEMENT SYSTEM CONSISTS OF RAINWATER LEADERS THAT CONVEY STORMWATER INTO CATCH BASINS, AND EXFILTRATION TRENCHES THAT TREAT THE WATER QUALITY REQUIREMENTS.

OTHER CONTROLS

- (1) WASTE DISPOSAL:  
IN APPROVED OFFSITE AREAS PROVIDED BY THE CONTRACTOR.
- (2) OFFSITE VEHICLE TRACKING:
- ☒ HAUL ROADS DAMPENED FOR DUST CONTROL
  - ☒ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
  - ☒ EXCESS DIRT ON ROAD REMOVED DAILY
  - ☒ STABILIZED CONSTRUCTION ENTRANCE
3. OTHER:
- (1) SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION OF A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.
- (2) FERTILIZERS AND PESTICIDES: FERTILIZER TO BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. IF STORED ON-SITE, STORAGE WILL BE IN COVERED SHED. THE CONTENT OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEPARATE PLASTIC BIN TO AVOID SPILLS.
- (3) NON-STORM WATER DISCHARGE (INCLUDING SPILL REPORTING) THE CONTRACTOR IS RESPONSIBLE FOR REPORTING SPILLS TO MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER). DEWATERING IS NOT ANTICIPATED.

4. REMARKS:

IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED OR HAZARDOUS SPILLS OCCUR DURING CONSTRUCTION THE MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) SHALL BE CONTACTED AT THEIR HOTLINE: (305) 372-6955.

APPROVED STATE, LOCAL PLANS, OR STORM WATER PERMITS: MIAMI-DADE COUNTY BUILDING DEPARTMENT, MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS AND MIAMI-DADE COUNTY RER.

D. MAINTENANCE

ITEM:  
SILT FENCE

MAINTENANCE:  
ALL CONTROLS SHALL BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES DURING CONSTRUCTION. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF BEING NOTED IN CONTRACTOR'S DAILY INSPECTION REPORT.

CONSTRUCTION ENTRANCE

WHEN THE CONSTRUCTION ENTRANCE GRAVEL BEDS BECOME LOADED WITH SEDIMENTS, REWORK BEDS TO DISPLACE SEDIMENT LOAD AND RE-ESTABLISH EFFECTIVENESS OF THE GRAVEL BEDS.

ALL CONTROLS SHALL BE MAINTAINED IN PROPER WORKING ORDER AT ALL TIMES DURING CONSTRUCTION. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF BEING NOTED IN CONTRACTOR'S DAILY INSPECTION REPORT.

E. INSPECTION

THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL FEATURES AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM OF 0.5" OR GREATER. IN ADDITION, A DAILY REVIEW OF THE LOCATION OF SILT FENCES SHALL BE MADE IN AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CHANGED THE NATURAL CONTOUR AND DRAINAGE RUNOFF. IN ORDER TO INSURE THAT SILT FENCES AND OTHER EROSION CONTROL DEVICES ARE PROPERLY LOCATED FOR EFFECTIVENESS. A FORM ACCEPTABLE TO THE FDEP WILL BE USED TO REPORT ALL INSPECTION FINDINGS AND CORRECTIVE ACTIONS TAKEN AS A RESULT OF THE INSPECTION. EACH INSPECTION REPORT SHALL BE SIGNED AND SUBMITTED WEEKLY TO THE PROJECT ENGINEER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF BEING NOTED IN CONTRACTOR'S INSPECTION REPORT.

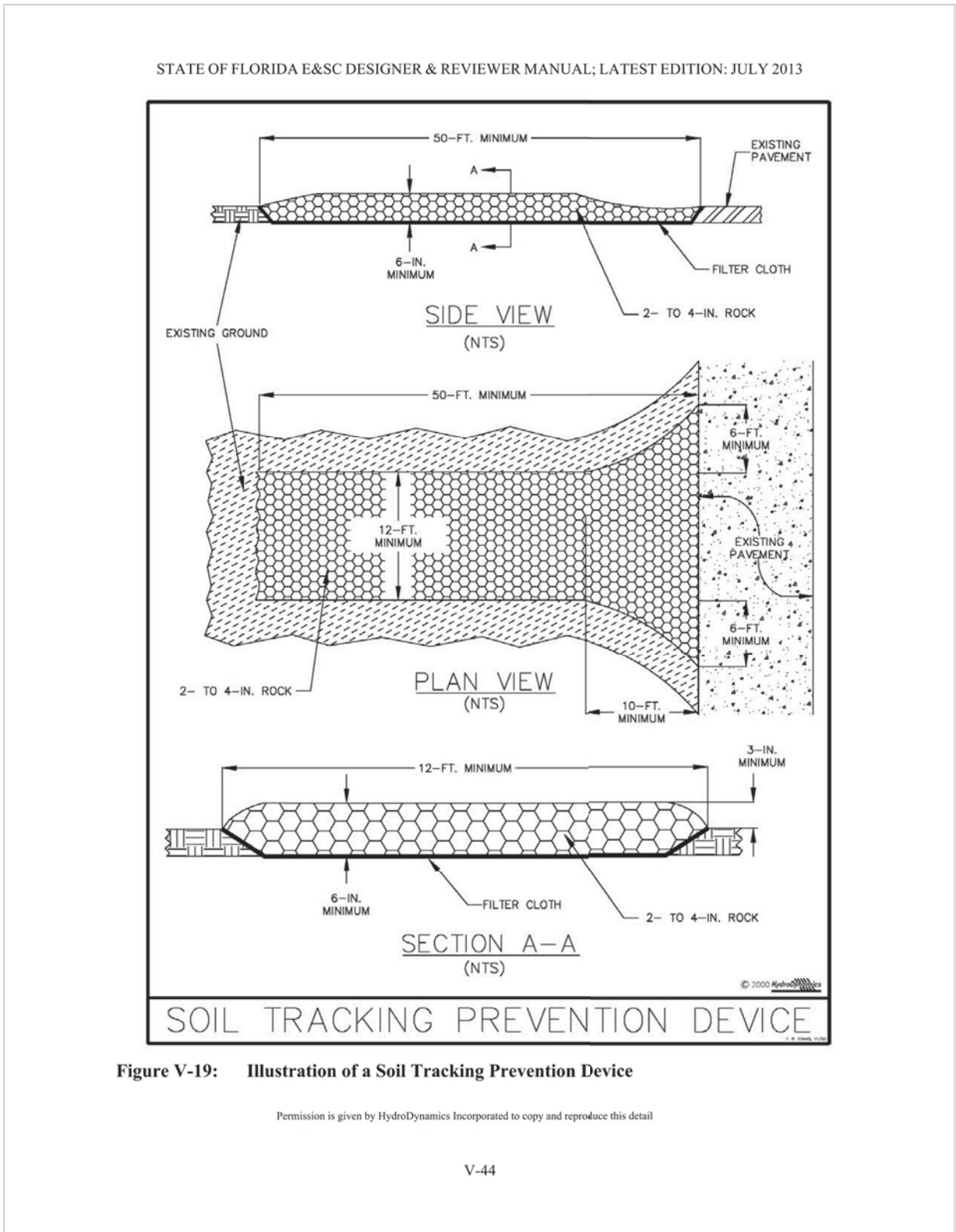
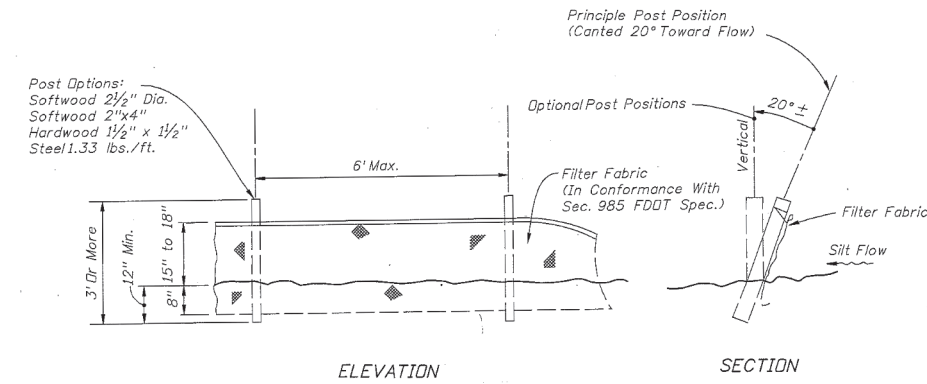


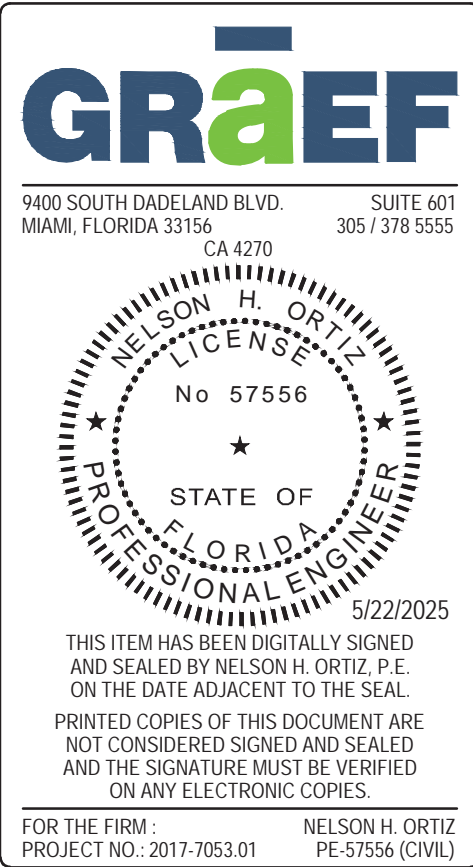
Figure V-19: Illustration of a Soil Tracking Prevention Device


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V-44

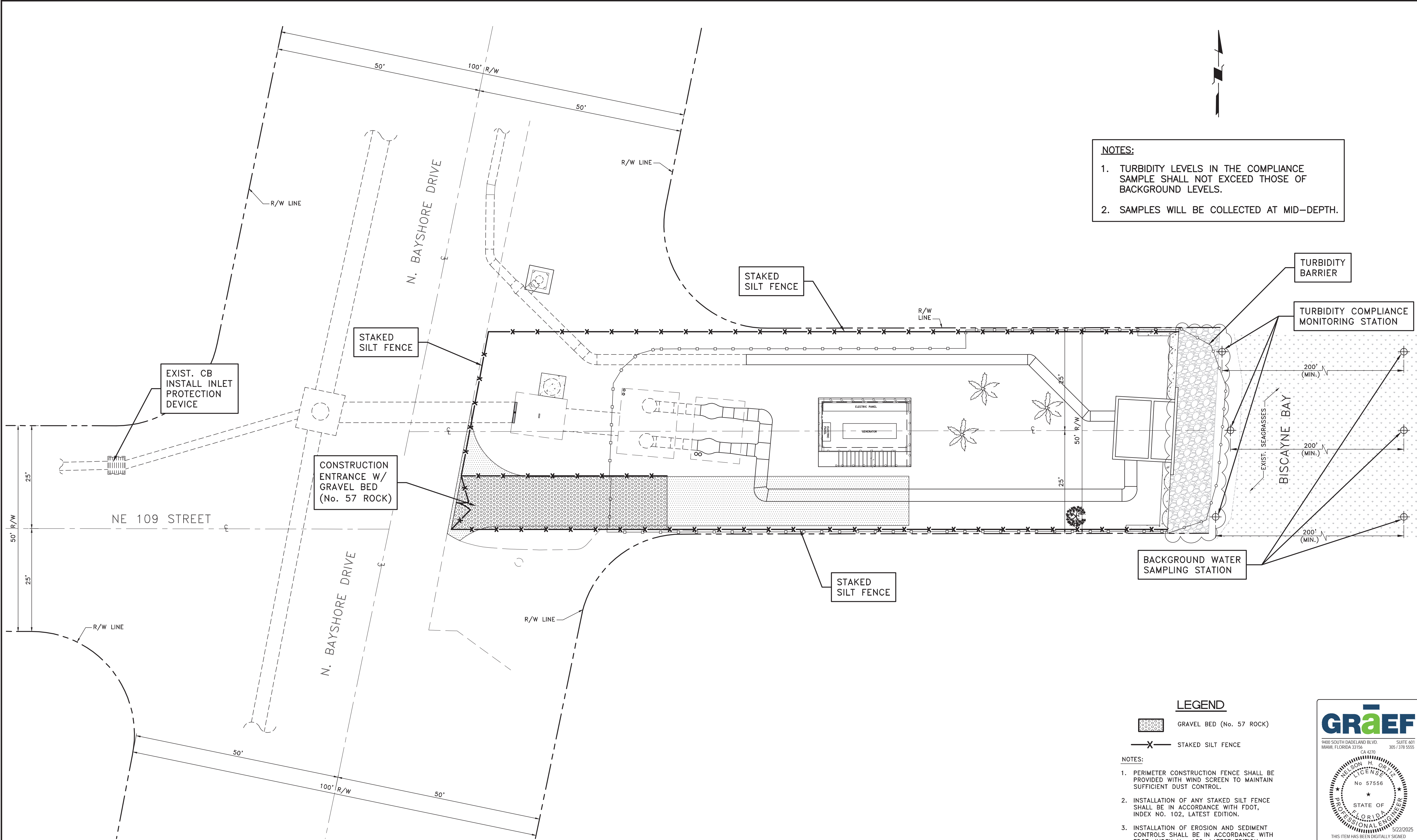


TYPE III SILT FENCE DETAIL  
(FDOT INDEX 102) N.T.S.

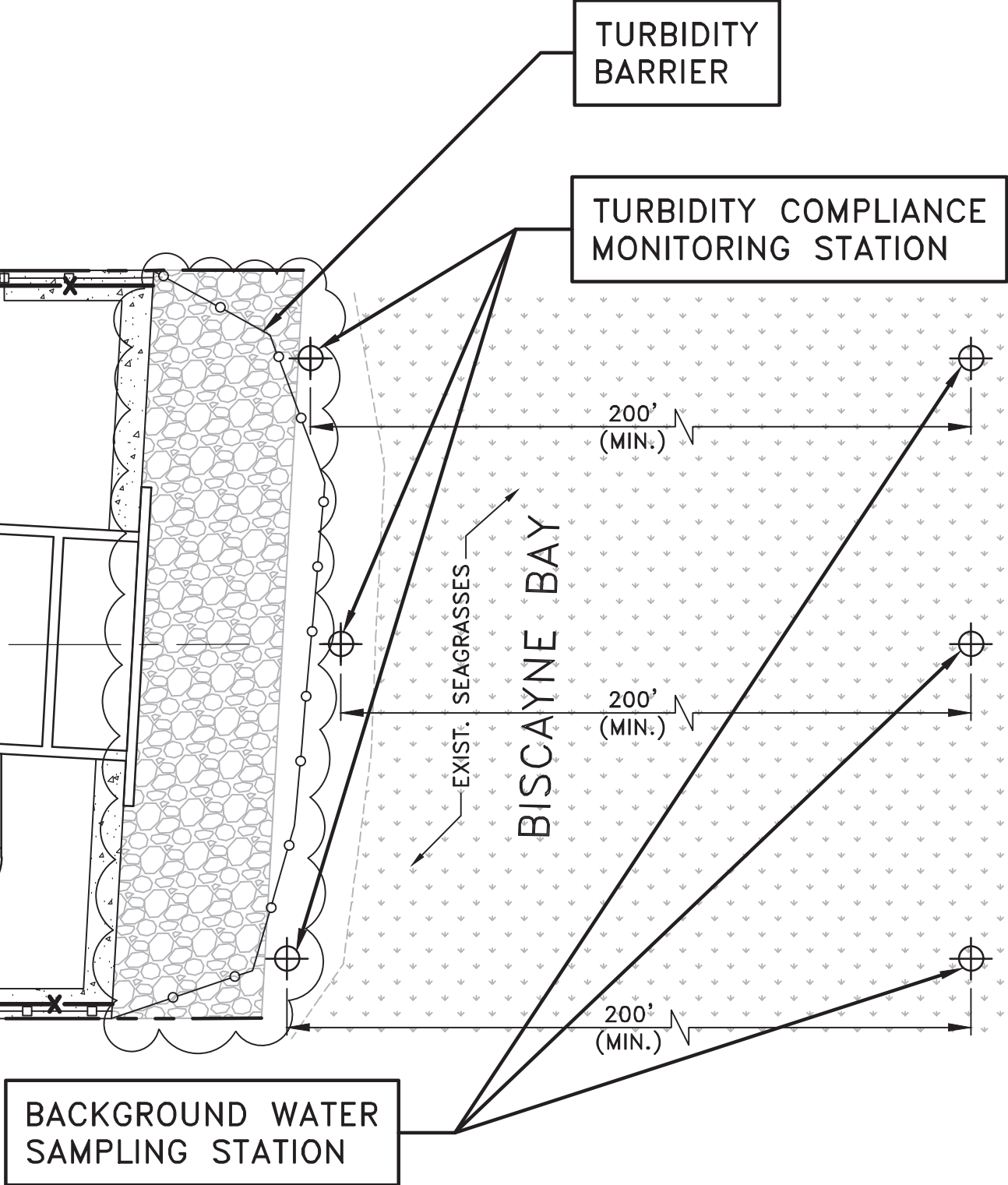


DESIGN BY: J.R.G.	DATE: 04/10/2020	STORMWATER POLLUTION PREVENTION PLAN DETAILS AND NOTES	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 17
DRAWN BY: P.F.	DATE:					DRAWING NO. C-17	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						





- NOTES:**
1. TURBIDITY LEVELS IN THE COMPLIANCE SAMPLE SHALL NOT EXCEED THOSE OF BACKGROUND LEVELS.
  2. SAMPLES WILL BE COLLECTED AT MID-DEPTH.



- LEGEND**
- GRAVEL BED (No. 57 ROCK)
  - STAKED SILT FENCE

- NOTES:**
1. PERIMETER CONSTRUCTION FENCE SHALL BE PROVIDED WITH WIND SCREEN TO MAINTAIN SUFFICIENT DUST CONTROL.
  2. INSTALLATION OF ANY STAKED SILT FENCE SHALL BE IN ACCORDANCE WITH FDOT, INDEX NO. 102, LATEST EDITION.
  3. INSTALLATION OF EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH FDOT, INDEX NO. 102, LATEST EDITION.

09/13/2024 ADDRESS M-D C COMMENTS  
08/10/2021 ADDRESS SFWMD COMMENTS  
04/15/2021 ADDRESS SFWMD COMMENTS

**GrāEF**

9400 SOUTH DADELAND BLVD.  
MIAMI, FLORIDA 33156

SUITE 401  
305 / 378 5555


CA 4270

NELSON H. ORTIZ  
LICENSE  
No 57556  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

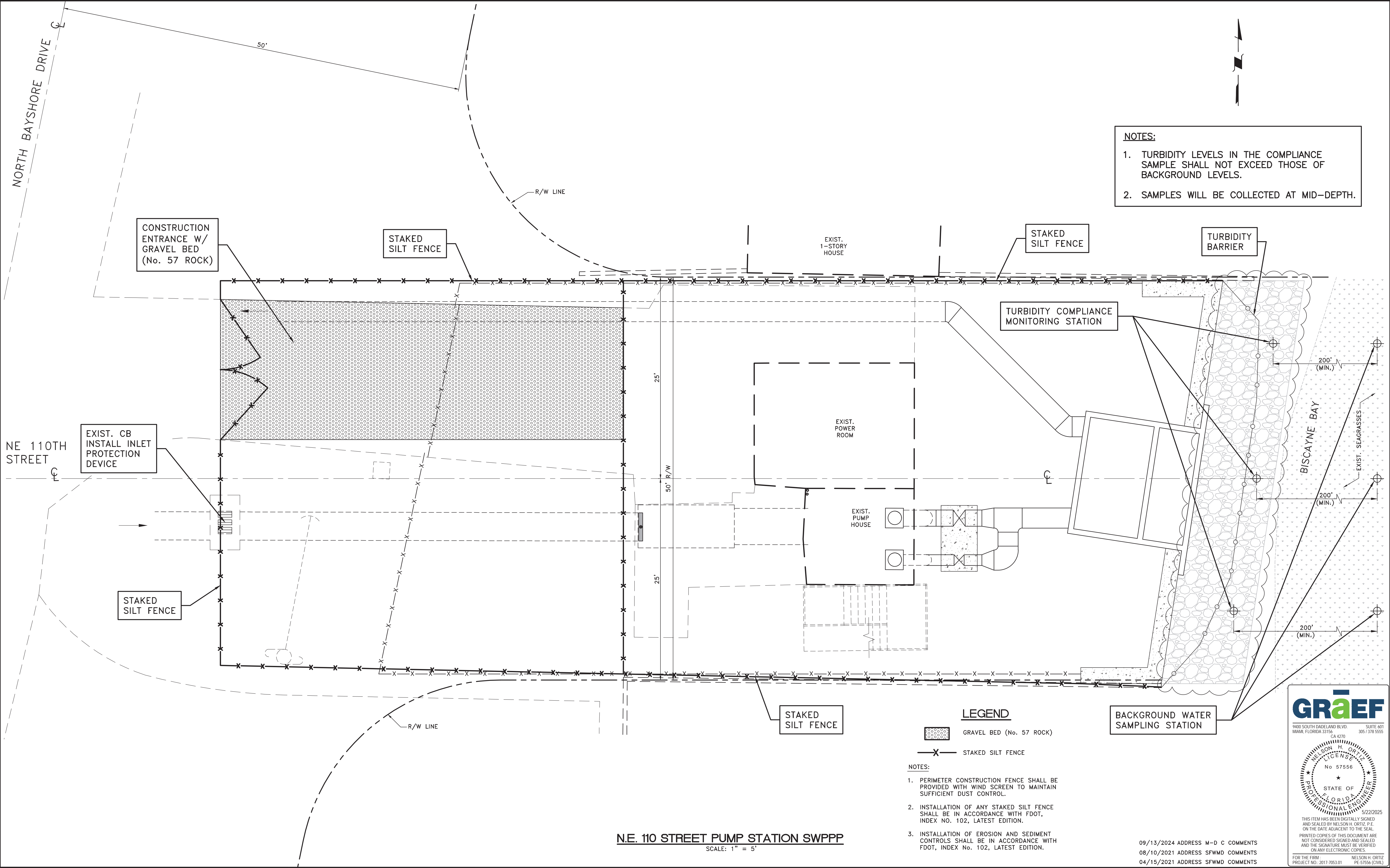
5/22/2025

THIS ITEM HAS BEEN DIGITALLY SIGNED  
AND SEALED BY NELSON H. ORTIZ, P.E.  
ON THE DATE ADJACENT TO THE SEAL.  
PRINTED COPIES OF THIS DOCUMENT ARE  
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AND THE SIGNATURE MUST BE VERIFIED  
ON ANY ELECTRONIC COPIES.

FOR THE FIRM: NELSON H. ORTIZ  
PROJECT NO.: 2017-7053.01 P.E. 57556 (CIVIL)

DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 109 STORMWATER POLLUTION PREVENTION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 18
DRAWN BY: P.F.	DATE:					DRAWING NO. C-18	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						





- NOTES:**
1. TURBIDITY LEVELS IN THE COMPLIANCE SAMPLE SHALL NOT EXCEED THOSE OF BACKGROUND LEVELS.
  2. SAMPLES WILL BE COLLECTED AT MID-DEPTH.

- LEGEND**
- GRAVEL BED (No. 57 ROCK)
  - STAKED SILT FENCE

- NOTES:**
1. PERIMETER CONSTRUCTION FENCE SHALL BE PROVIDED WITH WIND SCREEN TO MAINTAIN SUFFICIENT DUST CONTROL.
  2. INSTALLATION OF ANY STAKED SILT FENCE SHALL BE IN ACCORDANCE WITH FDOT, INDEX NO. 102, LATEST EDITION.
  3. INSTALLATION OF EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH FDOT, INDEX No. 102, LATEST EDITION.

BACKGROUND WATER SAMPLING STATION

**N.E. 110 STREET PUMP STATION SWPPP**  
SCALE: 1" = 5'

**GrāEF**  
9400 SOUTH DADELAND BLVD.  
MIAMI, FLORIDA 33156  
CA 4270

SUITE 601  
305 / 378 5555

NELSON H. ORTIZ  
LICENSE  
No 57556  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

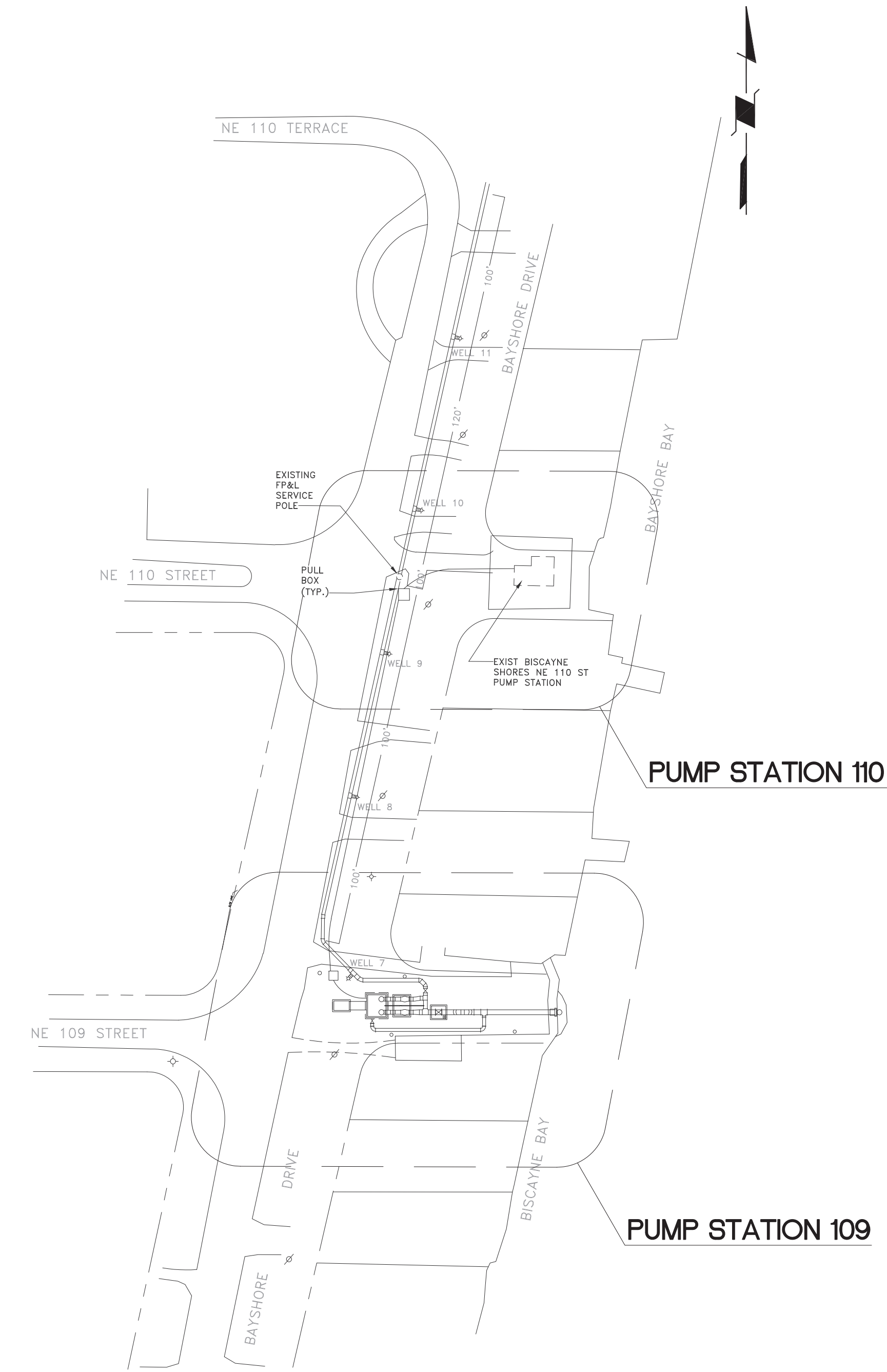
5/22/2025  
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AND SEALED BY NELSON H. ORTIZ, P.E.  
ON THE DATE ADJACENT TO THE SEAL.  
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ON ANY ELECTRONIC COPIES.

FOR THE FIRM:  
PROJECT NO. 2017-7063.01

NELSON H. ORTIZ  
P.E. 57556 (CIVIL)

DESIGN BY: J.R.G.	DATE: 04/10/2020	PS 110 STORMWATER POLLUTION PREVENTION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 19
DRAWN BY: P.F.	DATE:					DRAWING NO. C-19	OF 28 SHEETS
CHECKED BY: N.H.O.	DATE:						





SITE LOCATION PLAN  
SCALE: NONE

GENERAL DEMOLITION NOTES

1. PROVIDE ELECTRICAL DEMOLITION WORK NECESSARY TO INSTALL NEW WORK. ELECTRICAL CONTRACTOR SHALL RE-ROUTE AND RECONNECT ANY CIRCUITS THAT REMAIN IN USE BUT INTERFERE WITH NEW CONSTRUCTION.
2. MAINTAIN CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN OR PORTIONS THEREOF AFFECTED BY NEW WORK.
3. ALL MATERIALS REMOVED UNDER DEMOLITION, AND NOT TO BE RE-USED OR NOT TO BE RELOCATED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE.
4. CONTRACTOR SHALL EXERCISE CARE IN REMOVING DEMOLITION ITEMS AND SHALL REPAIR OR REPLACE AT HIS COST ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.
5. DRAWINGS ARE BASED ON EXISTING PLANS AND FIELD INVESTIGATION WITHOUT DEMOLITION. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS AND SHALL EXAMINE ALL RELATED DRAWINGS TO AVOID CONFLICTS. FAILURE TO REVIEW ALL CONTRACT DOCUMENTS AND/OR VISIT THE SITE WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM ALL WORK REQUIRED AT NO ADDITIONAL COST TO THE OWNER.

GENERAL ELECTRICAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES, ORDINANCES AND STANDARDS.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO BE FULLY COGNIZANT WITH ALL CODE SECTIONS AS THEY APPLY TO THE WORK/INSTALLATION AT HAND WHETHER OR NOT SHOWN ON THE DRAWINGS BUT REQUIRED BY CODE. IF ANY DISCREPANCY ARISES BETWEEN ANY DESIGN ISSUES AND CODE REQUIREMENTS, CONTRACTOR MUST ADHERE TO THE MOST STRINGENT REQUIREMENT.
3. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS AND BOXES REQUIRED TO MAKE A COMPLETE INSTALLATION IN ACCORDANCE WITH THE NEC.
4. IF CONFLICTS ARISE IN LOCATING WIRING DEVICES, ELECTRICAL EQUIPMENT, DISCONNECTS, PANELBOARDS, OR OTHER MISCELLANEOUS ELECTRICAL EQUIPMENT, DUE TO FIELD CONDITION OR IMPROPER FIELD COORDINATION, THEN THE CONTRACTOR SHALL BRING THE ISSUE TO THE A/E FOR RESOLUTION, AND SHALL RELOCATE THE ITEM AT NO EXTRA COST TO THE OWNER.
3. THE CONTRACTOR SHALL EVALUATE FIELD CONDITIONS BY VISITING THE SITE PRIOR TO BIDDING/STARTING WORK. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES PRIOR TO ROUGH-IN.
4. CONTRACTOR SHALL FURNISH AND INSTALLING ALL ELECTRICAL SYSTEMS EQUIPMENT, COMPONENTS, MATERIALS AND CONTROLS FOR A COMPLETE WORKING SYSTEM IN ACCORDANCE WITH APPLICABLE CODES AND EQUIPMENT/SYSTEM MANUFACTURER RECOMMENDATIONS.
5. THE CONTRACTOR SHALL SATISFACTORILY REPAIR/REPLACE EQUIPMENT OR PART OF STRUCTURE DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHED AREAS SHALL BE RESTORED TO MATCH ADJACENT AREAS.
6. APPROVAL SHALL BE OBTAINED FROM THE ARCHITECT/STRUCTURAL ENGINEER, IN WRITING, PRIOR TO CUTTING OR DRILLING ANY STRUCTURAL SUPPORT MEMBER.
7. NOT USED.
8. ALL DEVICES INSTALLED OUTDOORS TO HAVE WEATHERPROOF COVERS.
8. WIRE SIZE SHALL BE 12 AWG THHN/THWN UNLESS OTHERWISE NOTED ON PLANS. CONDUCTORS 6 AWG AND LARGER SHALL BE THWN.
9. ALL CONDUCTORS SHALL BE COPPER.
10. ALL CONDUCTORS SHALL BE RUN IN PVC CONDUIT. AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH NEC 250-122 SHALL BE RUN WITH ALL FEEDERS AND BRANCH CIRCUITS. EXPOSED EXTERIOR CONDUIT SHALL BE SCHEDULE 80 PVC WITH COMPATIBLE FITTINGS.
11. ALL MATERIALS SHALL BE U.L. LISTED.
12. TYPEWRITTEN PANEL DIRECTORIES, REFLECTING WORK PERFORMED, SHALL BE FURNISHED AFTER JOB IS COMPLETED. THIS APPLIES TO NEW AND EXISTING PANELBOARDS.
13. PANELBOARDS SHALL BE PROPERLY PHASE BALANCED.
14. CONTRACTOR SHALL SEAL ALL OPENINGS WITH AN APPROVED FIRE SEAL SIMILAR TO 'OZ' FLAMESEAL.
15. ALL BRANCH CIRCUITS TO HAVE A GREEN INSULATION EQUIPMENT GROUNDING CONDUCTOR SIZED PER NEC 250.122.
16. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRING. EXPOSED CONDUIT SHALL BE RUN PERPENDICULAR (PLUMB) TO BUILDING CONSTRUCTION LINES.
17. FUSES SHALL BE DUAL ELEMENT, TIME DELAY TYPE UNLESS OTHERWISE NOTED.
18. RISERS ARE DIAGRAMMATIC IN NATURE AND DO NOT SHOW EVERY BEND, OFFSET, OR ELBOW REQUIRED FOR THE INSTALLATION.
19. ALL WIRING SHALL BE RUN WITHOUT SPLICES EXCEPT AS OTHERWISE INDICATED.
20. ALL PULL AND JUNCTION BOXES SHALL BE ACCESSIBLE AT COMPLETION OF WORK.
21. EXACT POINT AND METHODS OF CONNECTION SHALL BE DETERMINED IN FIELD.
22. ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH NECA, NEMA AND THE NEC.
23. BRANCH CIRCUIT BREAKERS SHALL BE OF THE BOLT-ON TYPE. PLUG-IN CIRCUIT BREAKERS WILL NOT BE ACCEPTED.
24. ELECTRICAL SYSTEM CONDUCTOR COLOR CODE SHALL BE AS FOLLOWS OR AS DIRECTED BY MIAMI-DADE:

	208Y/120V-3ø-4W SYSTEM	480Y/277V-3ø-4W
PHASE 'A'	BLACK	ORANGE
PHASE 'B'	RED	BROWN
PHASE 'C'	BLUE	PURPLE
NEUTRAL	WHITE	GRAY
GROUND	GREEN	GREEN W/YELLOW STRIPE

25. ALL ROUGH-IN DIMENSIONS ARE TO CENTER LINE OF DEVICE UNLESS OTHERWISE NOTED.
26. ALL CONDUCTOR SPLICES IN EXTERIOR LOCATED JUNCTION/PULL BOXES EXPOSED TO THE WEATHER SHALL BE WEATHER SEALED WITH AN APPROVED METHOD SUCH AS 3M SCOTCHLOCK CONNECTOR EPOXY SEALING PACKS OR SIMILAR.
27. WHEN ITEMS ARE REQUIRED BY LOCAL, STATE OR NATIONAL CODES, CONTRACTOR SHALL INCLUDE THEM WHETHER SHOWN ON THE DRAWINGS OR NOT.

DRAWING INDEX

- E-0 SITE LOCATION, LEGEND AND NOTES
- E-1 PS 110 EXISTING SITE CONDITIONS / DEMOLITION PLAN
- E-2 PUMP STATION 110 ELECTRICAL DEMOLITION PLAN
- E-3 PUMP STATION 110 ELECTRICAL NEW WORK PLAN
- E-4 PUMP STATION 109 SITE CONDITIONS / DEMOLITION PLAN
- E-5 PUMP STATION 109 ELECTRICAL NEW WORK PLAN
- E-6 POWER RISER DIAGRAMS
- E-7 PANEL SCHEDULES AND GENERATOR SPECIFICATIONS

BUILDING CODES

FFPC FLORIDA FIRE PREVENTION CODE CHAPTER 69A-60 (8TH EDITION)  
NFPA 110 LIFE SAFETY CODE(2019 EDITION)  
NFPA 1 FIRE CODE (2021 EDITION)  
NFPA 70 NEC (2020 EDITION)  
NFPA 30 (2018 EDITION)

GENERATOR NFPA 110 LABLING

CLASS: 30  
TYPE: 60  
LEVEL: 2

GENERATOR NOTES

GENERATORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 37(STANDARDS FOR THE INSTALLATION AND USE OF STATIONARY COMBUTIONENGINES AND GAS TURBINES & NFPA 70 ,1:11.7.1.

GENERATORS SHALL BE INCOMPLIANCE WITH NFPA30(2018 EDITION) FOR FLAMMABLE AND COMBUSTABLE LIQUIDS.

PROVIDE NFPA 704 PLACARD FOR DIESEL FUEL ON SITE.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	FLUORESCENT FIXTURE
	FLUORESCENT FIXTURE, BARE STRIP
	WALL MOUNTED LUMINAIRE
	EXIT LIGHT FIXTURE (CLG/WALL MTD)
	SINGLE-POLE TOGGLE SWITCH, 20A-125/277V, +48", SWITCH "o"
	THREE-WAY TOGGLE SWITCH, 20A-125/277V, +48"
	DUPLEX RECEPTACLE OUTLET, 20A-125V-3W, +18"
	JUNCTION BOX
	MOTOR, SIZE AS INDICATED
	MOTOR STARTER OR CONTROLLER
	DISCONNECT SWITCH; 3 = NUMBER OF POLES; 30 = AMP RATING; 20 = FUSE SIZE; F = FUSE SIZE RECOMMENDED BY EQUIPMENT MANUFACTURER
	LIGHTING AND APPLIANCE PANELBOARD
	DISTRIBUTION PANELBOARD
	CONDUIT RUN CONCEALED IN WALL OR CEILING
	QUADRUPLX RECEPTACLE NEMA 5-20R, 20A-125V-3W, +18" U.O.N.
	GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE NEMA 5-20R, 20A-125V-3W, HEIGHT AS DENOTED ON PLANS.
	SINGLE RECEPTACLE OUTLET, 20A,125V,+18" UNLESS OTHERWISE NOTED
	ISOLATED GND DUPLEX RECEPTACLE (ORANGE) NEMA 5-20R, 20A, 125V,3W
	CONDUIT RUN EXPOSED
	BRANCH CIRCUIT HOMERUN. SHORT CROSSMARKS = NUMBER OF PHASE CONDUCTORS, LONG CROSSMARKS = NEUTRAL, IG = ISOLATED GROUND CONDUCTOR, FLAGGED CROSSMARK OR G = GROUND CONDUCTOR.
	FLEXIBLE CONDUIT
	DENOTES 'WEATHERPROOF' EQUIPMENT
	EMPTY CONDUIT
	ABOVE FINSHED FLOOR
	NEMA '3R' ENCLOSURE (RAINTIGHT)
	NATIONAL FIRE PROTECTION ASSOCIATION
	NOT IN CONTRACT
	MAIN LUG ONLY
	DISCONNECT SWITCH
	JUNCTION BOX
	NATIONAL ELECTRICAL CODE
	DENOTES KEY NOTE #1 SEE APPROPRIATE DWG FOR KEY NOTE DESCRIPTION.
	GROUND FAULT CIRCUIT INTERRUPTER
	ARC FAULT CIRCUIT INTERRUPTER
	COMBINATION ARC/GROUND FAULT CIRCUIT INTERRUPTER
	SURGE PROTECTION DEVICE

SCOPE OF WORK

1. PROVIDE DEMOLITION AND NEW WORK AS INDICATED BY THE PLANS.
2. MAINTAIN POWER, CONTROLS, AND COMMUNICATIONS TO INFRASTRUCTURE TO REMAIN AS REQUIRED.
3. COORDINATE THE POWER OUTAGE(S) WITH FPL PRIOR TO STARTING WORK.
4. DEVELOP A SEQUENCE OF WORK TO BE APPROVED IN WRITING BY MIAMI-DADE.
5. BUILDING PENETRATIONS SHALL BE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO ANY ROUGH-IN.
6. SEAL BUILDING ENVELOPE PENETRATIONS AND REPAIR FINISHES AS DIRECTED BY ARCHITECT.
7. COORDINATE INSTALLATION OF NEW FEEDERS AND ASSOCIATED DISTRIBUTION EQUIPMENT WITH EXISTING INFRASTRUCTURE AND MEP/FP SERVICES.
8. PROVIDE TEMPORARY BY-PASS SYSTEMS AND SERVICES AS REQUIRED TO ACCOMPLISH WORK INDICATED BY THE PLANS.
9. CONTRACTOR SHALL MAINTAIN SITE IN ORDERLY CONDITION AT THE END OF EACH DAY BY REMOVING AND DISPOSING OF CONSTRUCTION DEBRIS AND STORING EQUIPMENT AND MATERIALS IN ASSIGNED/DESIGNATED AREAS.
10. PROVIDE FULL FUEL TANKS FOR GENERATORS AFTER TESTING AND COMMISSIONING THE PROJECT.

03-14-25 REVISION 4 ADDRESS MDC COMMENTS  
08-29-24 REVISION 2 ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

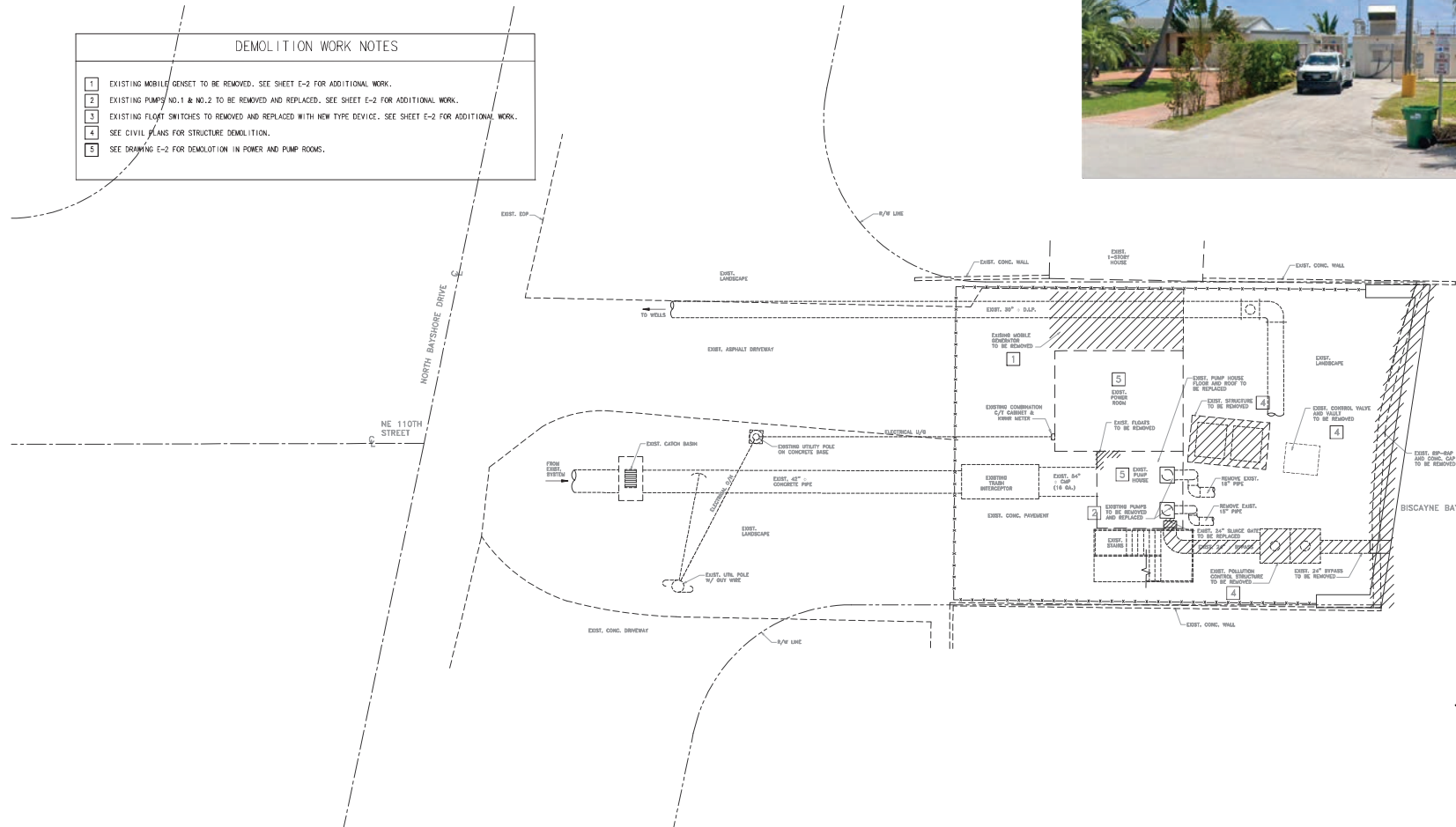
DESIGN BY: A.E.W.	DATE: 12/16/19	SITE LOCATION, LEGEND, AND NOTES	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		TRANSPORTATION AND PUBLIC WORKS DEPARTMENT STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 1
DRAWN BY:	DATE:					DRAWING NO. E-0	OF 17 SHEETS
CHECKED BY: A.E.W.	DATE:						

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# Electrical Plans Revised by Addendum No. 12

- DEMOLITION WORK NOTES**
- 1 EXISTING MOBILE GENSET TO BE REMOVED. SEE SHEET E-2 FOR ADDITIONAL WORK.
  - 2 EXISTING PUMPS NO. 1 & NO. 2 TO BE REMOVED AND REPLACED. SEE SHEET E-2 FOR ADDITIONAL WORK.
  - 3 EXISTING FLOAT SWITCHES TO BE REMOVED AND REPLACED WITH NEW TYPE DEVICE. SEE SHEET E-2 FOR ADDITIONAL WORK.
  - 4 SEE CIVIL PLANS FOR STRUCTURE DEMOLITION.
  - 5 SEE DRAWING E-2 FOR DEMOLITION IN POWER AND PUMP ROOMS.



**PS 110 EXISTING SITE CONDITIONS / DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"

02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19	PS 110 EXISTING SITE CONDITIONS / DEMOLITION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT	 <b>TRANSPORTATION AND PUBLIC WORKS DEPARTMENT</b> STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. <b>2</b>
DRAWN BY:	DATE:				DRAWING NO. <b>E-1</b>	OF 17 SHEETS
CHECKED BY: A.E.W.	DATE:					

**HN & GS ENGINEERS**  
HUPSEY • NICOLAIDES • GARCIA • STANLEY  
CONSULTING ENGINEERS  
MIAMI, FLORIDA 33156 (305) 270-9035 Fax (305) 265-5891  
FL GA Lic. # 444

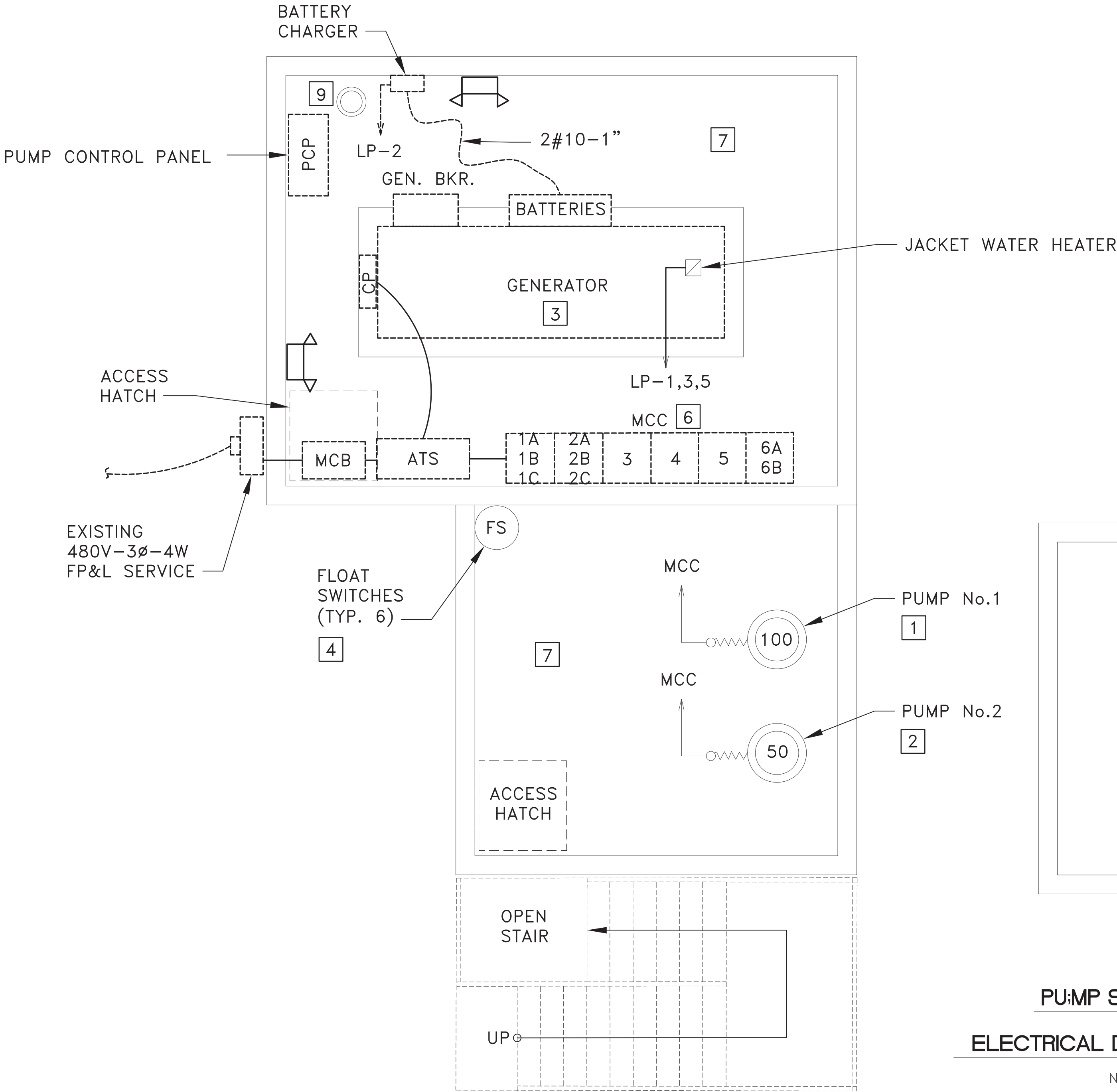
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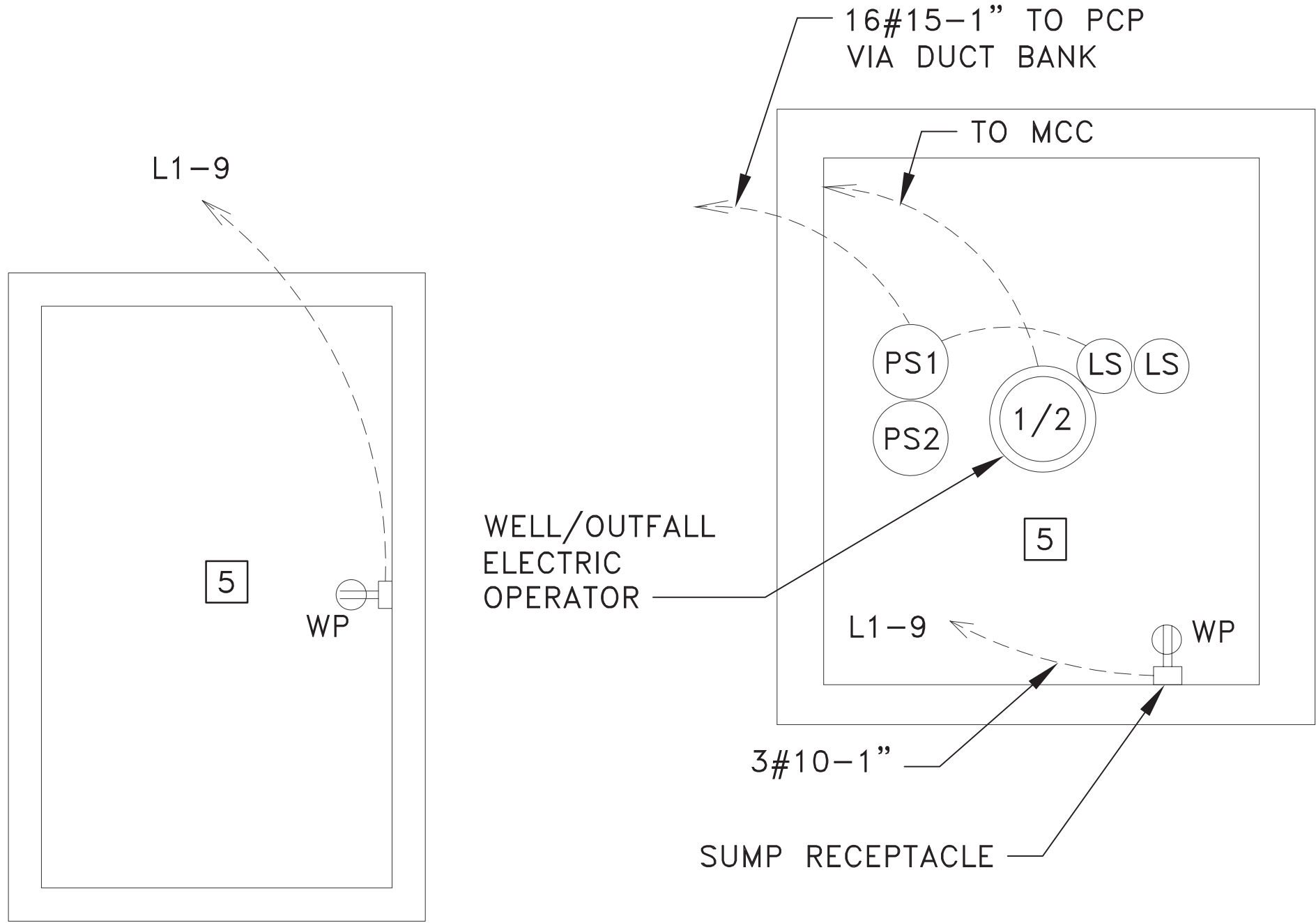
MCC DEVICES

- 1A INCOMING SECTION (MLO) TO REMAIN.
- 1B CIRCUIT MONITOR TO REMAIN.
- 1C EXISTING 110TH ST PUMP 2 STARTER TO REMAIN.
- 2A EXISTING SPD TO REMAIN.
- 2B LIGHTING PANEL LP
- 2C TRANSFORMER
- 3 EXISTING 109TH ST PUMP 1 STARTER TO BE DELETED PROVIDE BLANK COVER PLATE
- 4 EXISTING 110TH ST PUMP 1 STARTER TO REMAIN.
- 5 EXISTING 109TH ST PUMP 2 STARTER TO BE DELETED PROVIDE BLANK COVER PLATE
- 6A EXISTING MOTORIZED VALVE 110TH ST DISC SWITCH TO BE DELETED PROVIDE BLANK COVER PLATE
- 6B EXISTING MOTORIZED VALVE 109TH ST DISC SWITCH TO BE DELETED PROVIDE BLANK COVER PLATE



DEMOLITION WORK NOTES

- 1 EXISTING PUMP NO. 1, 100HP-480V-3Ø. REMOVE PUMP, FEEDER AND CONTROL BACK TO SOURCE. PROVIDE NEW AS INDICATED ON DRAWING E-3. SEE POWER RISER DIAGRAM DRAWING E-7 FOR ADDITIONAL WORK.
- 2 EXISTING PUMP NO. 2, 50HP-480V-3Ø. REMOVE PUMP, FEEDER AND CONTROL BACK TO SOURCE. PROVIDE NEW AS INDICATED ON DRAWING E-3. SEE POWER RISER DIAGRAM DRAWING E-7 FOR ADDITIONAL WORK.
- 3 EXISTING DETROIT DIESEL 300KW DIESEL GENSET. DRAIN FUEL AND SAVE FOR REUSE IN NEW GENSET. REMOVE GENSET COMPLETE WITH OUTPUT FEEDER, CONTROL WIRING, ASSOCIATED APPURTENANCES BACK TO SOURCE. SEE DRAWING E-3 AND E-7 FOR NEW WORK.
- 4 REMOVE EXISTING FLOAT SWITCHES (QUANTITY TO BE VERIFIED ON SITE). MAKE PROVISIONS FOR NEW EQUIPMENT AS REQUIRED. SEE DRAWING E-3 FOR NEW WORK.
- 5 EXISTING STRUCTURES TO BE REMOVED. SEE CIVIL PLANS FOR WORK. REMOVE POWER AND LOW VOLTAGE WIRING BACK TO SOURCE OR LAST DEVICE TO REMAIN ACTIVE. SEE DRAWING E-3 FOR NEW WORK.
- 6 EXISTING MCC TO REMAIN.SEE DRAWING E-3 FOR NEW WORK.
- 7 REMOVE EXISTING NORMAL AND EMERGENCY LUMINAIRES, IN PUMP HOUSE AND ELECTRICAL ROOM, INCLUDING ALL WIRING AND CONTROLS BACK TO SOURCE. PROVIDE NEW AS INDICATED IN NEW WORK, SEE DRAWING E-3 AND E-7.
- 8 EXISTING PUMP CONTROL PANEL. REMOVE COMPLETE WITH ALL CONTROL POWER AND CONTROL WIRING. ABANDON UNDERGROUND CONDUITS IN PLACE, SEAL ENDS AT FLOOR AND WALL PENETRATIONS AS DIRECTED.
- 9 REMOVE EXISTING VENTILATION FAN, STORE FOR SAFEKEEPING AND REINSTALL IN NEW WORK.



08-29-24 REVISION 2 ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19
DRAWN BY:	DATE:
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PUMP STATION 110  
ELECTRICAL DEMOLITION PLAN

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



TRANSPORTATION AND  
PUBLIC WORKS DEPARTMENT  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO. 17053.01	SHEET NO. 3
DRAWING NO. E-2	OF 17 SHEETS

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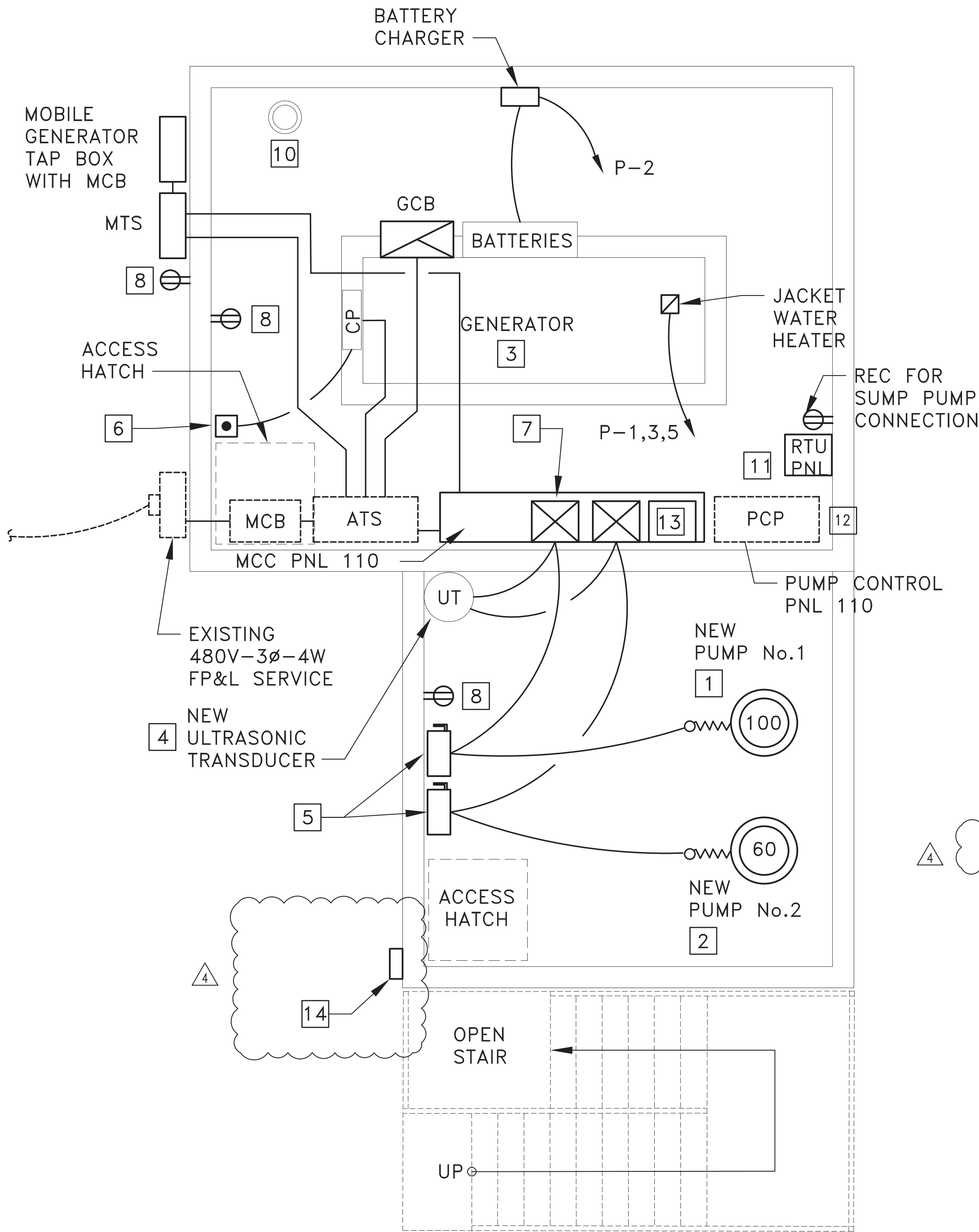


GENERAL NOTES:

PROVIDE PLACARD SIGNAGE FOR FUEL SUPPLY PER NFPA 704.

ALL ELECTRICAL WIRING AND EQUIPMENT TO BE IN ACCORDANCE WITH NFPA 70 PER FFPC 101:9.1.2.

SITE IS AN UNMANNED PUMP STATION WITH NO FIRE ALARM SYSTEM. CONNECT GENERATOR MODBUS RTU TO PUMP STATION REMOTE TELEMENTARY PANEL FOR OFF SITE MONITORING. TO COMPLY WITH FFPC:9.1.3.2.



POWER PLAN

NEW WORK NOTES

- 1 NEW PUMP NO. 1, 100HP-480V-3Ø. PROVIDE NEW SOFT START STARTER. PROVIDE NEW FEEDER TO NEW PUMP CONTROL PANEL 110. SEE POWER RISER DIAGRAM FOR SPECS.
- 2 NEW PUMP NO. 2, 60HP-480V-3Ø. PROVIDE NEW SOFT START STARTER. PROVIDE NEW FEEDER TO NEW PUMP CONTROL PANEL 110. SEE POWER RISER DIAGRAM FOR SPECS.
- 3 NEW GENSET 200KW-480V-3Ø-4W. SEE SHEET E-7 FOR DETAILS. TRANSFER DIESEL FUEL FROM TEMPORARY CONTAINER TO NEW GENSET BASE TANK. NEW GENERATOR TO BE PROVIDED WITH NEW DOUBLE WALL TANK.
- 4 NEW ULTRASONIC TRANSDUCER. FINAL CONNECT AS REQUIRED.
- 5 200A-3P-600V-NFSS-NEMA 4X
- 6 GENERATOR EMERGENCY POWER OFF (EPO) PUSHBUTTON IN NEMA 4X WEATHER PROOF ENCLOSURE. MOUNT EPO ADJACENT ACCESS HATCH AS REQUIRED.
- 7 EXISTING MOTOR CONTROL CENTER WITH SOFT START MOTOR STARTERS FOR PUMP STATION 110 PUMPS 1 & 2. DISCONNECT AND REMOVE PUMP STATION 109 MOTOR CONNECTIONS FOR PUMPS 1 & 2. LEAVE MCC SECTION AS SPARE SECTION.
- 8 RECEPTACLE WITH WEATHERPROOF COVER. MOUNT 48" AFF. CONNECT TO 1P-20A CKT BKR IN PANEL P.
- 9 SWITCH WITH WEATERPROOF COVER. MOUNT ADJACENT LADDER NEAR TOP OF ACCESS COVER. CARLON-E98TSCN-WP-COVER FOR TOGGLE SWITCH.
- 10 RE-INSTALL VENTILATION FAN. PROVIDE NEW CONTROLS AS REQUIRED. FINAL CONNECT AS REQUIRED.
- 11 RTU PANEL, CONNECT PUMP CONTROL PANEL PUMP OUTPUT AND CONNECT TO EM GEN FOR SCADA RTU OUTPUT SIGNALS.
- 12 EXISTING PUMP CONTROL PANEL TO REMAIN. REMOVE AND DISCONNECT ALL ASSOCIATED EQUIPMENT PROVIDED FOR PUMP STATION 109 PUMPS.
- 13 EXISTING MCC INTERNAL PANEL P TO REMAIN.
- 14 PROVIDE NFPA 704 PLACARD FOR DIESEL FUEL ON WALL AT STAIRS

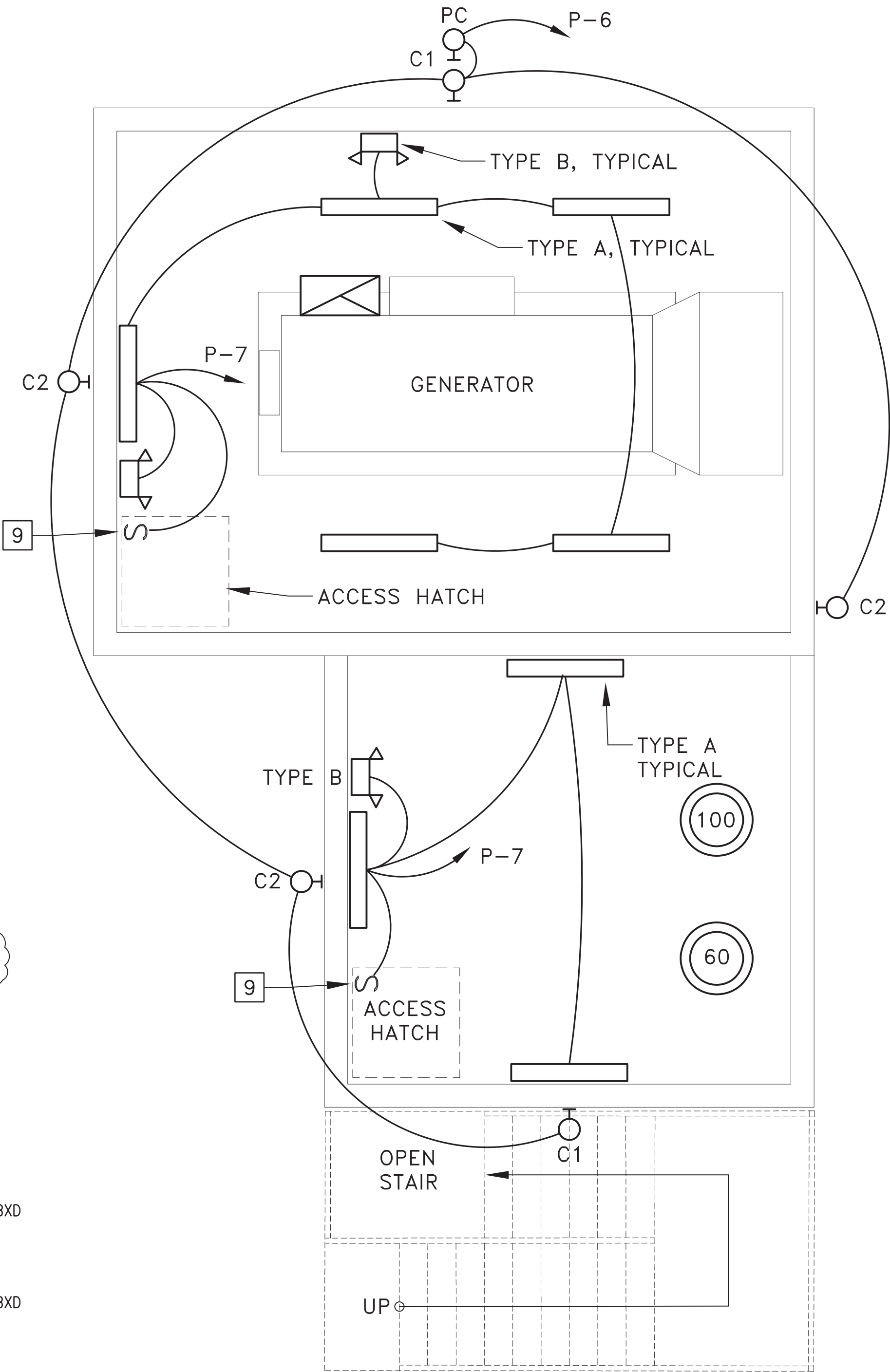
LUMINAIRE SCHEDULE

- A LITHONIA ENCLOSED GASKETED STRIPLIGHT  
FEM L48 4000LM LPAFL MD 120 35K 90CRI  
WLFEND2 STSL - 120V-23.8W
- B LITHONIA EMERGENCY LIGHT  
MLTU MR - 120V-6W
- C1 LITHONIA WALL PACK  
WDGE2 LED P5 35K 80CRI VF MVOLT AWS DDBXD  
- 120V-18W
- C2 LITHONIA WALL PACK  
WDGE2 LED P5 35K 80CRI VW MVOLT AWS DDBXD  
- 120V-18W

PUMP STATION 110

ELECTRICAL NEW WORK PLAN

N.T.S.



LIGHTING PLAN

03-14-25 REVISION 4 ADDRESS MDC COMMENTS  
01-06-25 REVISION 3 ADDRESS MDC COMMENTS  
08-29-24 REVISION 2 ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19
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PUMP STATION 110  
ELECTRICAL NEW WORK PLAN

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT

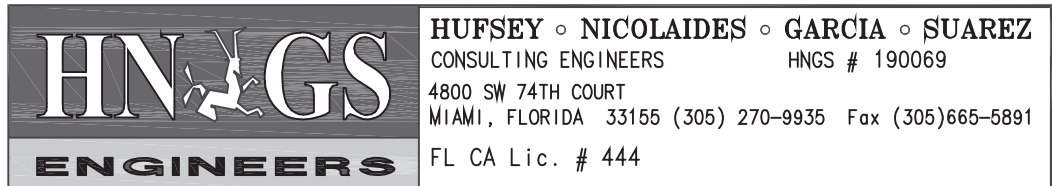


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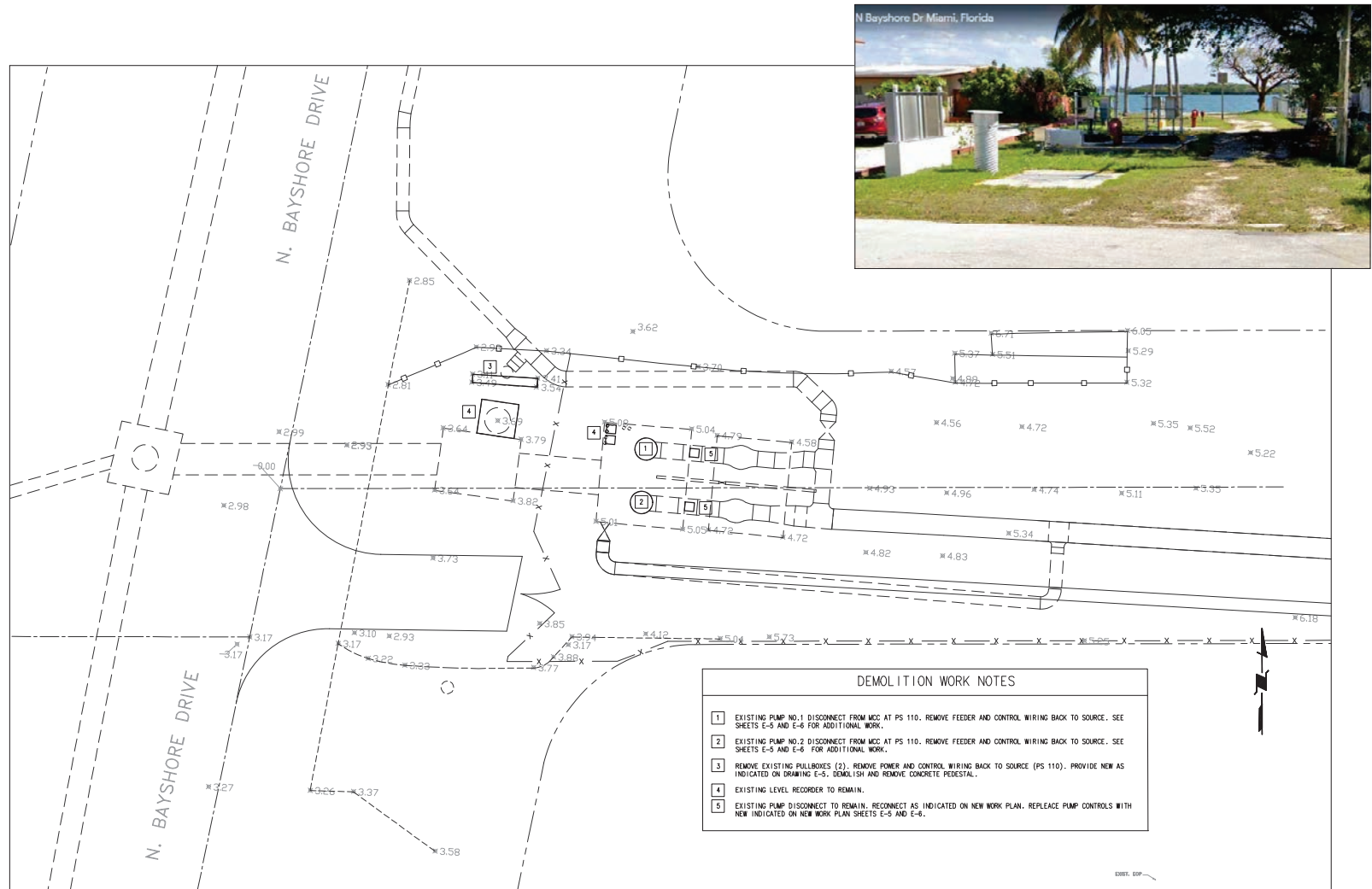
PROJECT NO. 17053.01  
DRAWING NO. E-3

SHEET NO. 4  
OF 17 SHEETS


PERMIT SET 02-02-2022



# Electrical Plans Revised by Addendum No. 12



02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19	PS 109 EXISTING CONDITIONS / DEMOLITION PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT	 <b>TRANSPORTATION AND PUBLIC WORKS DEPARTMENT</b> STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. <b>5</b>
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03-14-25 REVISION 4 ADDRESS MDC COMMENTS  
01-06-25 REVISION 3 ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19
DRAWN BY:	DATE:
CHECKED BY: A.E.W.	DATE:

PUMP STATION 109  
ELECTRICAL NEW WORK PLAN

BISCAYNE SHORES PUMP STATIONS  
No. 109 AND 110 RETROFIT



TRANSPORTATION AND  
PUBLIC WORKS DEPARTMENT  
STEPHEN P. CLARK CENTER  
111 NW 1ST STREET, 16TH FLOOR  
MIAMI, FLORIDA 33128

PROJECT NO. 17053.01

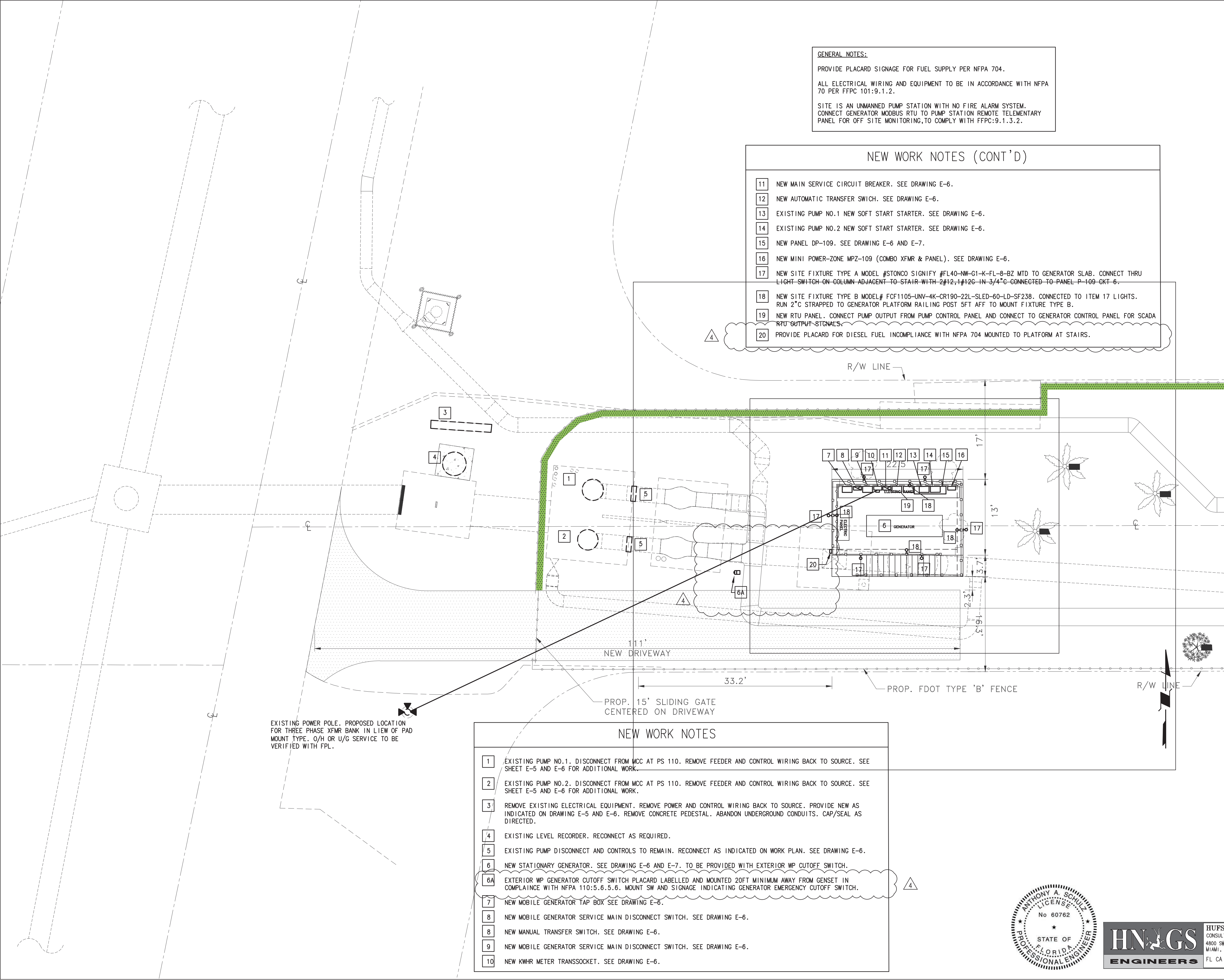
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SHEET NO. 6

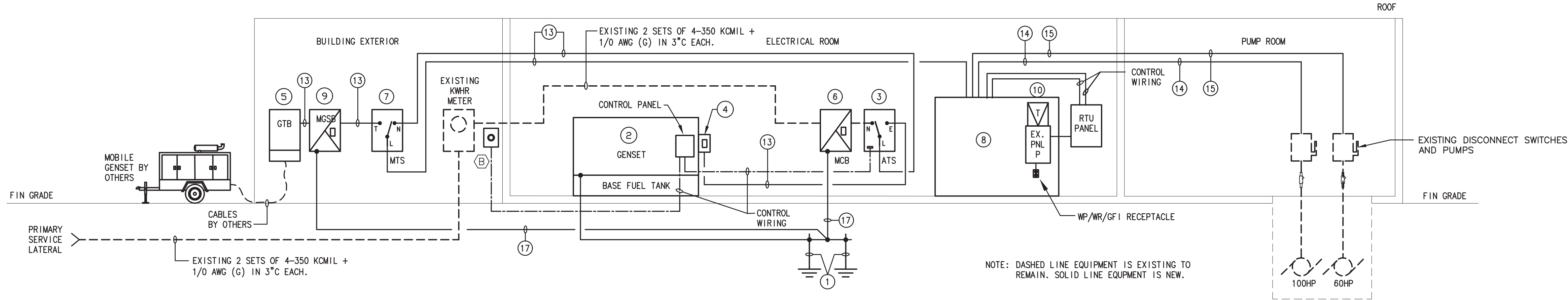
OF 17 SHEETS

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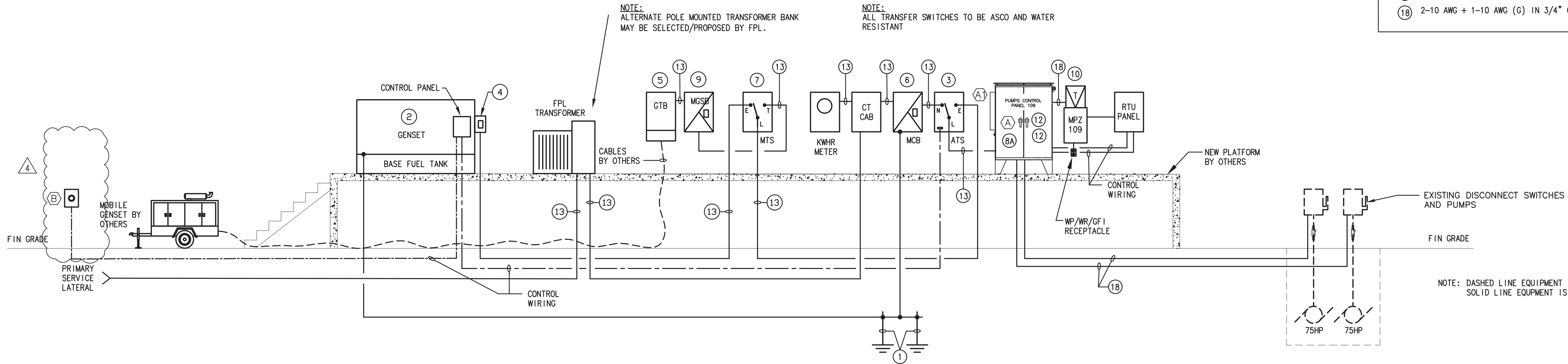


1 PS 110 POWER RISER DIAGRAM  
E-5 SCALE: NONE

GENERATOR EMERGENCY STOP ELECTRICAL CONTRACTOR REQUIRED TO SUBMIT TO ENGINEER OF RECORD SHOP DRAWINGS FOR THE LOCATION OF THE ELECTRICAL EQUIPMENTS ON THE WALL FOR APPROVAL PRIOR TO ORDERING THE EQUIPMENTS FOR PS 110 GENERATOR.

FOR PS109 OUTDOOR GENERATOR, MOUNT GENERATOR SHUT-OFF SWITCH TO A CONCRETE POST 20 FEET AWAY MINIMUM FROM GENERATOR AND PROVIDE SIGNAGE PLACARD TO POST.

NOTE: POWER RISER DIAGRAM IS DIAGRAMMATIC IN NATURE. INSTALLATION AND FINAL CONFIGURATION TO BE DETERMINED BY ACTUAL EQUIPMENT PROVIDED.

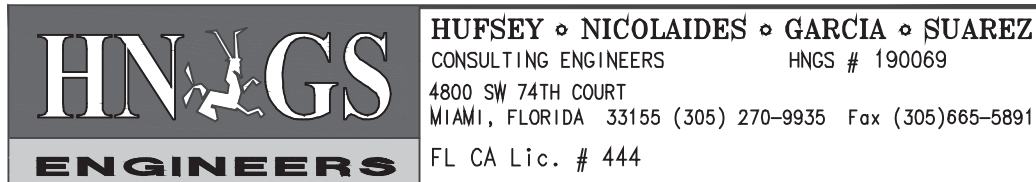


1 PS 109 POWER RISER DIAGRAM  
E-5 SCALE: NONE

NOTE: POWER RISER DIAGRAM IS DIAGRAMMATIC IN NATURE. INSTALLATION AND FINAL CONFIGURATION TO BE DETERMINED BY ACTUAL EQUIPMENT PROVIDED.


KEY NOTES

- 1-1/0 AWG TO TWO (2) COPPER CLAD STEEL GROUND RODS AND BOND TO FOUNDATION REBARS. INSTALL RODS MINIMUM SIX (6) FEET ON CENTER. PROVIDE 10" LONG BY 3/4" DIAMETER RODS.
- 200KW-480V-3P-3W EMERGENCY STAND-BY DIESEL GENERATOR WITH ALUMINUM SOUND ATTENUATED, WEATHERPROOF AND HURRICANE RESISTANT ENCLOSURE. GENSET INCLUDES A SUB-BASE FUEL TANK PROVIDING 24 HOURS RUN TIME.
- NEW AUTOMATIC TRANSFER SWITCH (ATS) 3P-400A-480V, 45KAIC IN NEMA 4X ENCLOSURE.
- 3P-400A-600V-45KAIC GENERATOR MOUNTED CIRCUIT BREAKER.
- GENERATOR TAP BOX. 400A-3P-3W IN NEMA 4X ENCLOSURE. PROVIDE WITH FEMALE KAM-LOC CONNECTORS. POWERTRON SERIES 400 OR APPROVED EQUAL.
- NEW MCB - 400A-3P-480V IN NEMA 4X ENCLOSURE.
- MANUAL TRANSFER SWITCH (MTS) 3P-400A, 480V, IN NEMA 4X ENCLOSURE.
- EXISTING MOTOR CONTROL CENTER MCC TO REMAIN.
- PUMP CONTROL PANEL 109 BY OTHERS TO BE FURNISHED WITH MAIN 3P-400A BREAKER, 3P-175A BREAKER FOR PUMP #1 AND 175A BREAKER FOR PUMP #2. FURNISH 2P-30A FOR MINI-POWER ZONE. FURNISH SOFT START STARTERS SIZED PER MANUFACTURER'S RECOMMENDATION. PROVIDE HOA SWITCHES, PUMP HR METERS AND LED PUMP RUNNING INDICATORS AND PUSH TO START BUTTONS. CONTROL PANEL TO COMPLY WITH MDC PUBLIC WORKS STANDARDS. PROVIDE CONTROL PANEL AC UNIT.
- MGSB (MOBILE GENSET SERVICE BREAKER) - 400A-3P-480V IN NEMA 4X ENCLOSURE.
- EXISTING MCC INTERNAL TRANSFORMER AND PANEL P TO REMAIN..
- PROVIDE STAND ALONE KWHR DEMAND METER AND CT CABINET OR COMBINATION UNIT AS REQUIRED BY FPL.
- SOFT START STARTERS WITHIN CONTROL PANEL ENCLOSURE. SIZE AND TYPE WITH ACCESSORIES AS RECOMMENDED BY PUMP MANUFACTURER. SEE DETAIL ON SHEET E-9.
- NEW 2 SETS OF 4-4/0 AWG + 2 AWG (G) IN 2.5°C EACH.
- NEW 3-4/0 AWG + 4 AWG (G) IN 2°C.
- NEW 3-1/0 AWG + 6 AWG (G) IN 2°C.
- NOT USED.
- 3-2/0 AWG + 1-6AWG (G) IN 2° C.
- 2-10 AWG + 1-10 AWG (G) IN 3/4" C.



03-14-25 REVISION 4 ADDRESS MDC COMMENTS  
01-06-25 REVISION 3ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

PERMIT SET 02-02-2022

DESIGN BY: A.E.W.	DATE: 12/16/19	PS 109 NEW WORK PLAN	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		TRANSPORTATION AND PUBLIC WORKS DEPARTMENT STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. 7
DRAWN BY:	DATE:					DRAWING NO. E-6	OF 17 SHEETS
CHECKED BY: A.E.W.	DATE:						

# Electrical Plans Revised by Addendum No. 12



## MODEL: TP200 T3 STANDBY UL2200 GENERATOR SET

ENGINE SPECIFICATIONS		ENGINE ELECTRICAL OUTPUT	
Manufacturer	Perkins	Starting motor voltage	12 volt
Model	1300-40000	Charger	55 amp alternator with 10C output
Dimensions	500, 100, 70	Rated Load Factor	1.0
Engine speed (rpm)	1800	ALTERNATOR	
Normal engine hp (1800rpm)	500	Configuration	Brushless, 12 wire, 4 pole
Cylindrical arrangement	60°	Frequency	60 Hz
Combustion system	Direct injection	Voltage regulation	+/- 1%, VRLH, Electronic, EM fitted
Aspiration	Turbocharged aftercooled	No load to full load voltage regulation	+/- 2%
Engine type	Diesel	Cooling	SEA Airflow, Flexible Duct, Direct
Rated load factor	1.0	Starting	Single
Number of cylinders	6	Manufacturer	Marathon
Displacement (in³)	420 (6.76)	Model	420C4200
Bore and Stroke (inches)	4.13 x 5.1 (105 x 129)	Load alternator	One Step, 100% per VRLH 100
Cooling	Water cooled	Condition	NEMA 4E & 4D for rating 100
Oil sump	100	Oil sump	100
Starting	Electric Plug	Oil sump	100
Compressor ratio	16.1:1	Oil sump	100
Air cleaner type	Medium duty type	Oil sump	100
Exhaust silencer (dB)	75	Oil sump	100
Oil filter	100	Oil sump	100
Oil filter	100	Oil sump	100

CONTROLS AND OPERATIONS (100 AMP)		CONTROLS AND OPERATIONS (100 AMP)	
Rated output (kW) at 100% load	13.0 (17.5)	Manufacturer (Model)	Bestor (DSC 30000)
Starting System	Manual/Remote	MFC 10 Controller Model	10
Autofill System	Engine Driven	MFC 10 Controller Model	10
Maximum Allowable Oil Temperature (°F)	240 (122)	Operating power consumption	6.52 VDC Average load 14.20
Maximum Allowable Oil Temperature (°F)	240 (122)	Communications	US 100 & 4 C/A, C2.2, 414
Oil consumption (liters per hour)	0.4 (0.1)	Oil consumption (liters per hour)	0.4 (0.1)
Oil consumption (liters per hour)	0.4 (0.1)	Oil consumption (liters per hour)	0.4 (0.1)
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## MODEL: TP200 T3 STANDBY UL GENERATOR SET

SPECIFICATION SHEET	
Power	200.0 250.0
Power	180 275
Power	180 275

Rating Definitions: Rated for 1000 hrs.  
Standby rating is applicable to 1000 hrs. per year. No maintenance is required at this rating. Prime rating is for up to 1000 hrs. per year. No maintenance is required at this rating. Prime rating is for up to 1000 hrs. per year. No maintenance is required at this rating.

Standard Features:  
TradeWinds Power Corp. (TPC) PERKINS diesel powered generator sets are UL2200 approved self contained standby generator packages complete with mounted auto control panel, 100 AMP alternator, oil separator, exhaust silencer, and other accessories mounted on a steel base frame. All TPC systems and components are prototype, tested and tested within a purpose built packaging, manufacturing, and test facility.

Engine:  
PERKINS model 1100C (PTM) 1-cylinder diesel engine designed to provide economic and reliable operation at prime and standby duties, featuring the key power 1000 RPM by the power generation industry.

Starting System:  
Starting system features a 12-volt battery, 100 AMP alternator, and 100 AMP battery charger. The 100 AMP alternator is designed to provide the power generation industry, the 100 AMP alternator is designed to provide the power generation industry.

Oil and Filter Changes:  
Oil and filter changes are required every 100 hours of operation. The oil and filter changes are required every 100 hours of operation.

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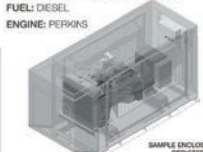
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## MODEL: TP200 T3 STANDBY UL GENERATOR SET



Automatic Engine Controller (AEC) 2000:  
Automatic engine controller with starting display of all functions. Maintenance free, navigation key with large LCD display.

Engine Controller:  
Engine controller with 100 AMP alternator, 100 AMP battery charger, and 100 AMP battery charger.

Engine Controller:  
Engine controller with 100 AMP alternator, 100 AMP battery charger, and 100 AMP battery charger.

Engine Controller:  
Engine controller with 100 AMP alternator, 100 AMP battery charger, and 100 AMP battery charger.

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Engine Controller:  
Engine controller with 100 AMP alternator, 100 AMP battery charger, and 100 AMP battery charger.

Engine Controller:  
Engine controller with 100 AMP alternator, 100 AMP battery charger, and 100 AMP battery charger.

VOLTAGE: 480/277V 3PH 4W BUS: 400A MAIN: CIRCUIT BREAKER MAIN SIZE: 400A OPTION: SPD		TYPE: SIEMENS P3 CIRCUITS: AS NOTED MOUNT: SURFACE LOCATION: SERVICES		PANEL DP-110		PANEL COVER SHALL BE MARKED "DANGER: POTENTIAL ARC FLASH HAZARD" PANEL IAC: 42,000 SVMM	
LT	LOAD DESCRIPTION	BKR	WIRING AND CONDUIT	CONNECTED VA	WIRING AND CONDUIT	BKR	LOAD DESCRIPTION
P 1	PUMP NO. 1	3	215 215	34333 21329	34333 21329	3	PUMP NO. 2
L 1		-	-	-	-	-	-
L 2		-	-	-	-	-	-
L 3		-	-	-	-	-	-
M 3	PANEL P TRANSFORMER	2	300 315/100.54PC	5000	5000	410-1100	300 SPD
L 1	17 SPACE	1	-	-	-	-	-
L 2	18 SPACE	1	-	-	-	-	-
L 3	19 SPACE	1	-	-	-	-	-
L 4	20 SPACE	1	-	-	-	-	-
L 5	21 SPACE	1	-	-	-	-	-
L 6	22 SPACE	1	-	-	-	-	-
L 7	23 SPACE	1	-	-	-	-	-
CONNECTED VA				60692	60692	50000	
TOTAL CONNECTED VA				475066	TOTAL CONNECTED A: 213		PANEL REQUIRED AMPACITY: 344





Department of Regulatory and Economic Resources  
Plan Review & Development Approval Division  
1185 SW 26<sup>th</sup> Street Suite 124  
Miami, Florida 33175-2464  
T 786-315-2800 F 786-315-2919  
miamidade.gov

GENERATOR FUEL CONSUMPTION WORKSHEET

Facility: **MIAMI DADE CO. PUMP STA 109&110** Process/Permit #: \_\_\_\_\_  
Address: \_\_\_\_\_ Folio Number #: \_\_\_\_\_  
Date: **09/11/2024** Reviewed by: **Yuriel Diaz**

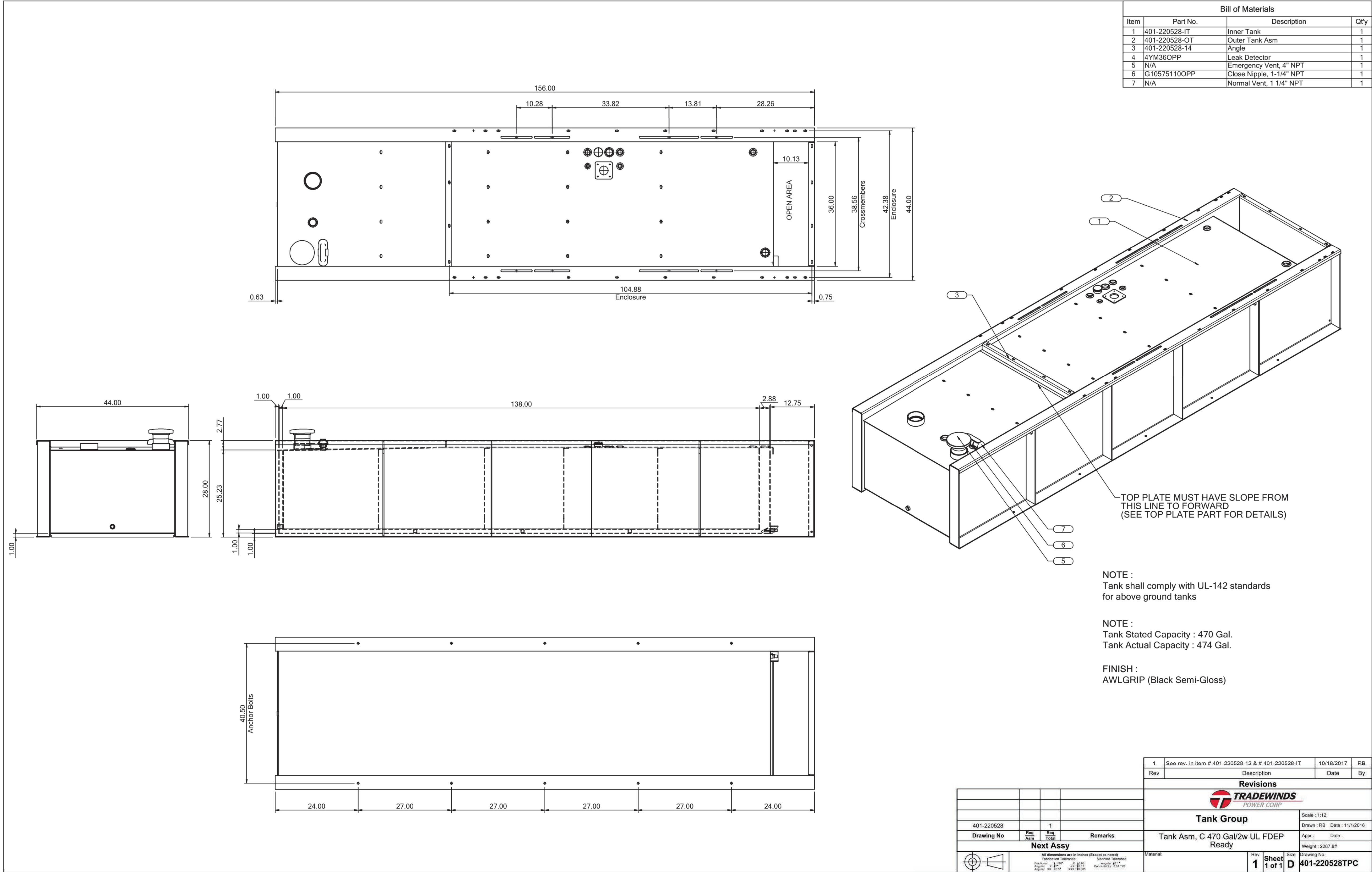
<b>GENERATOR</b>	
1. Type of Fuel:	<input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Gasoline <input type="checkbox"/> Propane <input type="checkbox"/> Natural Gas
2. Number of Generators: (include new and existing for entire site)	New: <b>1 per site</b> Existing: <b>0</b>
3. Fuel Consumption of all Emergency Generators at full (100%) load (Table 1):	<b>15.6 GAL/HR AT 100%</b>
4. Exercise time: (hour / week)	<b>0.25 HR/WEEK</b>
5. Annual Fuel Usage (gal / yr):	<b>203 GALS/YR</b>
6. Is (5) greater than any of the following amounts? <input type="checkbox"/> Yes. <b>5000</b> . State and County Air Permit Applications need to be completed. Contact Air Facilities Section at 305.372.6925 for instructions. <input checked="" type="checkbox"/> No. Go to line 7.	
7. Potential Annual Fuel Consumption (gal / yr):	<b>7,800 GAL/YR</b>
8. Is (7) greater than any of the following amounts? <input type="checkbox"/> Yes. <b>5000</b> . County Air Permit Application needs to be completed. <input checked="" type="checkbox"/> No. Go to line 9.	
9. Is there any other source of air emissions? <input type="checkbox"/> Yes. <b>5000</b> . County Air Permit Application needs to be completed. <input checked="" type="checkbox"/> No. Resubmit your plans w/completed worksheet or make an appt. 786.315.2800 to see an AIR Reviewer.	

Table 1: List of Generators*					
No.	Manufacturer	Model	kW	Fuel	Fuel Consumption @ full (100%) load
1	Tradewind	TE200	200	Diesel	15.8 gal/hr
2					
3					
4					
5					
Total				15.6 gal/hr	gal/hr

The information provided above is true to the best of my knowledge and corresponds to the referenced project site.

**Anthony Schulz PE**  
Name in Print Responsible Party / Title  
Signature

- NOTE:
- 1- TANK SIZE IS 474 GALLONS
  - 2- FUEL TYPE IS DIESEL
  - 3- TANK IS A STEEL DOUBLE WALL UL142
  - 4- ALL APPLICABLE EQUIPMENT WILL BE FDEP APPROVED.
  - 5- ALL GENERATOR TANKS WILL BE NEW.
  - 6- TANK TO BE MANUFACTURED BY TRADEWINDS POWER CORP.
  - 7- OVERFILL EQUIPMENT IS MANUAL OPERATION.
  - 8- INTERSTITIAL SPACE LEAK DETECTION IS WIRED TO THE GENERATOR CONTROL PANEL AND CONNECTED REMOTELY WITH THE SCADA INTERFACE CONNECTION. CONTROL PANEL TO SOUND ALARM UPON LEAK DETECTION.



File Name : 401-220528

NOTE :  
Tank shall comply with UL-142 standards  
for above ground tanks

NOTE :  
Tank Stated Capacity : 470 Gal.  
Tank Actual Capacity : 474 Gal.

FINISH :  
AWLGRIP (Black Semi-Gloss)

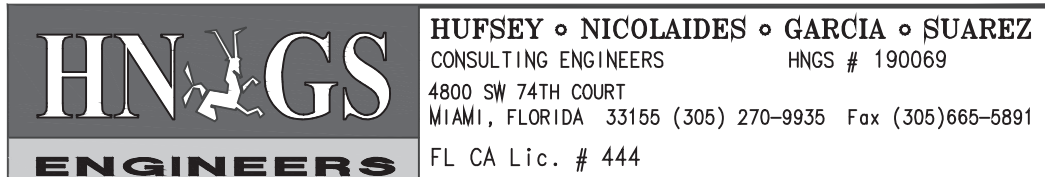
1	See rev. in item # 401-220528-12 & # 401-220528-IT	10/18/2017	RB
Rev	Description	Date	By
<b>Revisions</b>			
<b>TRADEWINDS POWER CORP</b>			
<b>Tank Group</b>		Scale : 1:12	
Tank Asm, C 470 Gal/2w UL FDEP Ready		Drawn : RB Date : 11/1/2016	
Appr : _____		Date : _____	
Weight : 2287 lb			
Material:	Rev <b>1</b> Sheet <b>1 of 1</b>	Size <b>D</b>	401-220528TPC

401-220528	1	
Drawing No	Req. Ass'y	Req. Total
Next Assy		
All dimensions are in inches (except as noted)		
Fabrication Tolerances	Machine Tolerances	
± 0.015" ± 0.005" ± 0.002" ± 0.001" ± 0.0005"	± 0.005" ± 0.002" ± 0.001" ± 0.0005"	



2

NEW SHEET



PERMIT SET 02-02-2022

08-29-24 REVISION 2 ADDRESS MDC COMMENTS  
02-04022 REVISION 1 ADDRESS MDC COMMENTS

DESIGN BY: A.E.W.	DATE: 12/16/19	GENERATOR TANK DRAWING	BISCAYNE SHORES PUMP STATIONS No. 109 AND 110 RETROFIT		TRANSPORTATION AND PUBLIC WORKS DEPARTMENT STEPHEN P. CLARK CENTER 111 NW 1ST STREET, 16TH FLOOR MIAMI, FLORIDA 33128	PROJECT NO. 17053.01	SHEET NO. <b>9</b>
DRAWN BY:	DATE:					DRAWING NO. <b>E-8</b>	OF 17 SHEETS
CHECKED BY: A.E.W.	DATE:						

100% SUBMITTAL