



CITY OF HAVELOCK

Post Office Box 368
Havelock, NC 28532

INVITATION TO BID

Pursuant to North Carolina General Statutes §143-131, the City of Havelock invites informal bids on the following:

Bids must be submitted in accordance with the attached specifications. Bids must include an itemized schedule (including quantity, unit price and total) for each work element. Bids can be submitted by mail, email, fax or hand delivered. Cover sheets, envelopes, etc. should be clearly marked with the words:

*“City of Havelock,
Bryan Pump Station Relocation”*

Address Bids to: Lee Tillman, Director of Finance
City of Havelock
P.O. Box 368
1 Governmental Ave.
Havelock, NC 28532
Fax: 252-447-0126
Email: Bids@havelocknc.us

Bids will be accepted until **2:00 PM (EST) on Thursday, May 25, 2023** at which time they will be reviewed in the office of the City Finance Director. Quotes are not subject to public inspection until the contract is awarded. The bids are good for 75 days after opening. The winning bidder will be issued a Notice To Proceed (NTP) along with a Purchase Order. The performance period is 180 calendar days from the NTP.

Bidders are cautioned not to submit bids until the proposed requirements and specifications have been carefully examined. It will be considered that bidders will have satisfied themselves as to the accuracy of the specifications. No proposal will be considered unless prices are submitted for all items requested in any section. The City reserves the right to change the amount of quantities.

All bids submitted should be to the desired specifications. Any exceptions to the specifications will be evaluated based on the best interest of the City. Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and bidder will be held responsible therefore. Deviations shall be explained in detail. The bidder shall not construe this paragraph as inviting deviation or implying that any deviation will be acceptable.

The names of certain brands or makes denote quality standard in the article desired, but do not restrict bidders to the specific brand, make or manufacturer named. They are meant to convey to prospective bidders the general style, type, character and quality of the article desired.

The successful bidder on all construction contracts will be required to conduct the operation in accordance with all Federal, State, and Municipal health and safety rules, regulations and laws applicable to the operation. The successful bidder may be asked to provide the City with a copy of the company's safety plan prior to commencing work. For all projects over \$30,000, a general contractor's license must be furnished to the City if applicable.

Certificate to Transact Business in North Carolina: As a condition of contract award, each out-of-State Vendor that is a corporation, limited-liability company or limited-liability partnership shall have received, and shall maintain throughout the term of The Contract, a Certificate of Authority to Transact Business in North Carolina from the North Carolina Secretary of State, as required by North Carolina law. A contract requiring only an isolated transaction completed within a period of six months, and not in the course of a number of repeated transactions of like nature, shall not be considered as transacting business in North Carolina and shall not require a Certificate of Authority to Transact Business.

The City will not sell bid packages. Plans, specifications, and addenda may be viewed and obtained online at www.havelocknc.us. Click on: “Bid on a Contract”; “Current Bids”. The Bidder’s List is maintained by Vendor Registry. Registration for the Bidder’s List is made online at www.havelocknc.us. Click on: “Bid on a Contract”; “Vendor login/Registration”.

N.C.G.S. (North Carolina General Statutes), specifically §160A-20.1(b), prohibit the City from entering into contracts with contractors and subcontractors who have not complied with the requirement of Article 2 or Chapter 64. The Contractor shall submit the E-Verify Affidavit, located in the Bid Proposal section, with their bid. Bids that do not include this Affidavit will be considered non-responsive.

N.C.G.S 147-86.42-84 requires that contractors with a North Carolina Local Government must not utilize any subcontractor found on the State Treasurer’s Iran Divestment list or Companies Boycotting Israel list. The referenced lists can be found on the State Treasurer’s website at the address www.nctreasurers.com and will be updated every 180 days.

The City of Havelock reserves the right to reject any or all proposals and to purchase items from the state contract in the efforts to award the contract to the bidder it deems to be for the best interest of the City.

MODIFICATION AND WITHDRAWAL OF BIDS. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids. A request to withdraw a bid may be made to the Owner within 72 hours after Bids are opened in accordance with NCGS § 143-129.1 Requests to withdraw a Bid will be subject to the requirements of NCGS §143-129.1 and in the sole discretion of the City of Havelock Finance Officer.

This institution is an equal opportunity provider, and employer.

Contact person(s) for information on this bid:

For questions in regards to the bid specifications, the City requires and only responds to questions submitted in writing and sent via email to fmatar@hazenandsawyer.com: **and cc:** Bids@havelocknc.us

Questions must be received by **2:00 PM (EST) on Thursday, May 18, 2023**. If questions are received, the City will respond no later than **2:00 PM (EST) on Monday, May 22, 2023**.

This is the 4th day of May 2023

Published: Vendor Registry May 4, 2023

CITY OF HAVELOCK

Lee W. Tillman
Director of Finance



**STATE OF NORTH CAROLINA
AFFIDAVIT
CITY OF HAVELOCK**

I, _____ (the individual attesting below), being duly authorized by and on behalf of _____ (the entity hereinafter "Employer") after first being duly sworn hereby swears or affirms as follows:

1. Employer understands that E-Verify is the federal E-Verify program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program used to verify the work authorization of newly hired employees pursuant to federal law in accordance with NCGS §64-25(5).
2. Employer understands that Employers Must Use E-Verify. Each employer, after hiring an employee to work in the United States, shall verify the work authorization of employee through E-Verify in accordance with NCGS §64-26(a).
3. Employer is a person, business entity, or other organization that transacts business in the State and that employs 25 or more employees in this State. (mark Yes or No)
 - a. YES _____, or
 - b. NO _____
4. Employer's subcontractors comply with E-Verify, and if Employer is the winning bidder on this project, Employer will ensure compliance with E-Verify by any subcontractors subsequently hired by Employer.

This _____ day of _____, 20_____.

Signature of Affiant: _____

Print or Type Name: _____

State of North Carolina County of _____

Signed and sworn to (or affirmed) before me, this the

_____ day of _____, 20_____.

Signature of Notary

Printed Name of Notary

Bid Sheet

Base Bid: _____

NC Sales Tax: _____

Delivery Cost (if applicable): _____

Total Cost to City: _____

Bids must include an itemized schedule by quantity, unit price and total for each work element.

Company Name: _____

Company Address: _____

Contact Person: _____

Telephone Number: _____

Email Address: _____

NC Contractor's License Type and Number: _____

Number of Addendums Acknowledged (circle one): N/A 1 2 3 4

As of the date listed below, the vendor or bidder listed above is compliant with N.C.G.S. 147-86.42-84, the Iran Divestment Act and the Companies Boycotting Israel Act.

Authorized Signature: _____

Print Name of Authorized Signature: _____

Title: _____

Address Bid to: Lee Tillman, Director of Finance
 City of Havelock
 P.O. Drawer 368
 1 Governmental Avenue
 Havelock, NC 28532
 Bids@Havelocknc.us

Please indicate the Bid name on the outside of the envelope.



Project Scope

Relocation of Bryan Pump Station in accordance with the scopes attached for each pump station.

A submission of a bid for the project shall constitute confirmation that the Contractor has inspected the site and facilities to be demolished, and is familiar with site conditions and scope or work required for project completion as described.

Project Duration

Upon the receipt of Notice to Proceed, the project must be completed within the following durations:

Substantial Completion: One hundred fifty (150) consecutive calendar days

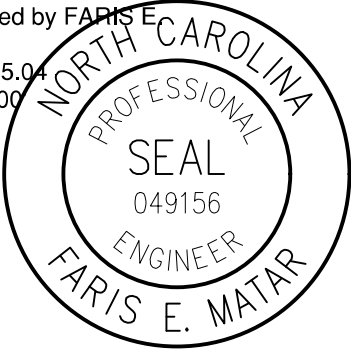
Final Completion: One hundred Eighty (180) consecutive calendar days

The contractor agrees to pay the owner \$300 per day in liquidated damages for each day beyond the durations described above for interim and final completion.

ATTACHMENT 1

**BRYAN PUMP STATION REPAIRS
SCOPE OF WORK**

Digitally signed by FARIS E.
MATAR
Date: 2023.05.04
08:38:09-04'00



Havelock, NC
Bryan Pump Station Relocation
Scope of Work

1. Summary of Work

- A. The Bryan Pump Station is located near 139 Bryan Blvd in Havelock, NC. The project will include abandoning the existing pump station and installing a new pump station as a replacement approximately 100' North of the current location. Work for this project will include the installation of the new 4 foot influent manhole, new duplex pump station housed in a 5 foot FRP manhole with its associated piping, valves, control panel(s), and electrical conduit and wiring. Bypass pumping will be required from the upstream manhole to the discharge manhole, shown on Figure 1, to allow for the installation of the new influent manhole and pump station.
- B. Figure 1 shows the general area and Sheet M1 describes the required pump station work. Figure 2 provides a detail of the influent manhole.

2. General Information

- A. The site shall be secured at the end of each work day and when no personnel are onsite.
- B. Obstruction to nearby residential driveways shall be minimized.
 - 1. Contractor shall coordinate access to driveways with nearby residents and provide regular construction updates throughout the duration of the project
 - 2. Work hours shall be limited to M-F 8:00 AM to 5:00 PM
- C. Contractor shall be responsible for traffic control for the duration of bypass pumping operations.
- D. Contractor is responsible for obtaining any required construction permits.
- E. Contractor is responsible for restoring all disturbed areas to their original condition, including nearby private concrete and/or asphalt driveways.
- F. New pump station shall be constructed inside the road right-of-way (ROW) which extends approximately 25 feet from the centerline of Bryan Blvd. Disturbance to the road drainage ditch and culvert shall be avoided or regraded around the pump station.
 - 1. Contractor shall review City easements to ensure all construction work is performed within the utility easement boundary and road ROW.

3. Materials

- A. General
 - 1. Contractor shall perform field survey to verify all pipe locations and elevations prior to commencement of construction work.
 - 2. Pump station control panel shall be suitable for a residential area with a discrete design, similar to that of the West End Pump Station. (Example photo attached as part of this package)
- B. Salvage of Equipment and Materials
 - 1. The following items from the existing pump station shall be salvaged and retained as Owner's property:
 - i. Pump

- ii. Valves
 - iii. Davit crane with base
 - iv. Aluminum Hatch
 - v. Electrical Items
 - 1. Vendor panel, antenna, remote I/O rack
 - 2. Equipment to be retained by Owner shall be removed in a manner to prevent damage, and properly stored until turnover to the Owner.
- C. PVC Pipe (gravity sewer)
- 1. PVC pipe shall be SDR26 as manufactured by JM Eagle or equal.
- D. PVC Pipe (for pressure pipe)
- 1. PVC pipe and fittings shall be manufactured in accordance with ASTM D1785, D1784 and F441, "normal impact" pipe, Schedule 40 or 80 as specified.
 - 2. Fittings used with this pipe shall be socket type or flanged type as indicated on the Drawings. Plastic piping shall be installed in full accordance with the manufacturer's recommendations for the specific installation. No field bending or distortion of the pipe will be permitted.
 - 3. PVC pipe shall be Type 1 Grade 1 conforming to ASTM D1784 and D1785. Fittings shall conform to the following standard specifications:
 - i. Socket Type: (Schedule 40); ASTM D2466
 - ii. Socket Type: (Schedule 80); ASTM D2467
 - 4. Provide flanged fittings of the same material as the specified pipe and material conforming to ANSI B16.5 at all valves and equipment except at true (double) union valves. Flange gaskets shall be natural rubber or other material fully compatible with the fluid being conveyed. Flange bolts shall be type 316 stainless steel minimum.
 - 5. Solvent cement for socket type joints shall conform to ASTM D2564 for PVC pipe and fittings. Solvent cement for chemical service shall be Weld-On 724 as manufactured by IPS Corporation, or equal.
- E. PVC Swing Check Valves
- 1. Swing check valves shall be single-disc design with pivoting swing arm/disc clapper assembly and flanged ends. Valves shall be full flow, gravity operated, and suitable for either horizontal or vertical applications. Valves shall be capable of top entry to facilitate cleaning and repair without removal from the line. Swing check valves shall be pressure rated for 150 psi at 70°F.
 - 2. Valve bodies, bonnets, swing arms, and discs shall be constructed of PVC or CPVC. O-ring seals and shutters shall be EPDM.
 - 3. Swing check valves shall be manufactured by Asahi/America, IPEX, Hayward Flow Control, or equal.
- F. PVC Ball Valves
- 1. Ball valves shall be true union design with flanged, socket, or threaded ends. All valves shall be full-port design and allow for bi-directional flow. Valve stems shall contain double o-ring seals. Valves shall have removable handles and integrally molded mounting features for actuator installation. Ball valves shall be rated for a minimum pressure of 150 psi at 70°F.

2. Valve bodies, stems, balls, and unions shall be constructed of PVC or CPVC. PVC valve bodies shall be constructed of PVC which shall meet or exceed the requirements of cell classification 12454 according to ASTM D1784. CVPC valve bodies shall be constructed of CPVC which shall meet or exceed the requirements of cell classification 23447 according to ASTM D1784.
 3. Ball valves shall be manufactured by Asahi/America, Nibco/Chemtrol, IPEX, Hayward Flow Control, Plastomatic, or equal.
4. Concrete
 - A. General: Cast-in-place concrete according to ACI 318/318R, ACI 350R, and the following:
 1. Cement: ASTM C 150, Type II.
 2. Fine Aggregate: ASTM C 33, sand.
 3. Coarse Aggregate: ASTM C 33, crushed gravel.
 4. Water: Potable.
 - B. Portland Cement Design Mix: 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio.
 1. Reinforcement Fabric: ASTM A 185, steel, welded wire fabric, plain.
 2. Reinforcement Bars: ASTM A 615/A 615M, Grade 60, deformed steel.
5. Precast Concrete
 - A. Concrete materials shall be as specified in Section 4.
 - B. Minimum compressive strength of concrete at 28 days shall be 5,000 psi. Minimum compressive strength of concrete at transfer of prestressing force shall be 3,500 psi.
6. Bypass Pumping
 - A. Bypass pumping will be required to allow for installation of new influent manhole and pump station. The upstream manhole, as shown in Figure 1, will require bypass pumping to the adjacent discharge manhole. The bypass system will require one duty and one standby pump capable of delivering 150 gpm at a total dynamic head of 13 feet. Contractor shall submit bypass plan to the City prior to furnishing any bypass materials.
 - B. The Contractor is required to design and furnish all materials, labor, equipment, power, fuel, fuel storage, maintenance, etc. to implement a temporary pumping system for the purpose of diverting the existing flow around the work area on a daily basis, for the duration of the project. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction. Contractor shall also be responsible for any fines imposed by local, state, and/or federal agencies for failure to maintain flows or contain spills and/or overflows.
 - C. Continuous bypass pumping is allowed in all project areas. Bypass pumping operation must be manned or be set up with floats and automatic on/off mode at all times that pumps are operating. When possible, bypass system shall be removed from service prior to rain events so that no portion of the bypass system impedes the flow of the sewer.

7. Seeding and Straw

A. The contractor shall furnish the kinds and amounts of seed to be seeded in all areas disturbed by the construction work. The quality of the seed shall conform to the following:

Type	Minimum Seed Purity (%)	Minimum Germination (%)	Maximum Weed Seed (%)
Fescue (fungus free)	98	90	1.00
Hybrid Rye	98	85	0.10
Sudan grass	98	85	0.25
Millet	98	85	0.50
Sericea Lespedeza			
Scarified	98	85	0.50
Unscarified	98	85	0.50

B. Straw used for mulch shall be small grain hay. Hay shall be undamaged, air dry, threshed straw, free of undesirable weed seed. Straw mulch is not required for seeded areas treated with a temporary soil stabilizer.

8. Package Pump Station Contractor and Vendor Responsibility

A. The Contractor shall be responsible for:

1. Installation of FRP manhole, pumps, interior piping, and the manufacturer supplied duplex pump control panel in accordance with the manufacturers recommendations.
2. Rerouting existing power feed from the existing pump station to connect to the new pump station control panel.
3. Provision of anchor bolts, mounting hardware and all ancillary equipment recommended by the manufacturer or required for a fully operational system.

B. The Vendor/Manufacturer shall be responsible for:

1. Providing a pre-piped, package pump station that meets the requirements contained herein and in the Contract Drawing.
2. Coordinating the pump station system to ensure compatibility, compliance with relevant code requirements such as the National Electrical Code, and to allow access to equipment for routine maintenance.
3. Providing a qualified technical representative during project execution and startup.

9. General Construction Sequence

The following construction sequence is a general overview of the work required and is not intended to encompass all aspects of the work. The Contractor shall perform all work required for a complete installation

- A. Coordinate all shut down and startup operations with the Owner.
- B. Contractor shall install and maintain the bypass pump systems to divert flows from the upstream manhole to the discharge manhole.
- C. Contractor shall install the new influent manhole as shown on Figure 1 and abandon sewer pipe from new manhole to existing pump station, as well as existing force main from existing pump station to discharge manhole. Existing force main in place of new pump station location shall be removed as needed.

- D. Contractor shall install new pump station as shown on M1.
- E. Backfill and compact the excavated area with #57 stone.
- F. Contractor shall have Manufacturer perform startup of the new pump station.
- G. Remove the bypass pumping systems.
- H. Contractor shall demolish the existing pump station to 4 feet below grade and fill the remaining structure with #57 stone and cover with appropriate fill soil.
- I. Seed and straw disturbed areas.



NC CGIA, Maxar, Microsoft

Legend

- Force Main
- Sewer

**Bryan Pump Station Relocation
Havelock, NC
Figure 1**



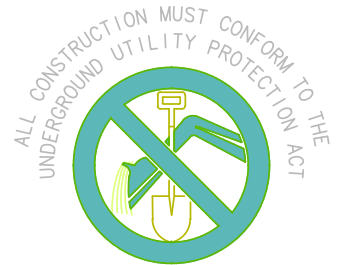
GROUT AS REQUIRED

MANHOLE COVER AND FRAME

GRADE RING AS REQUIRED
4" THICK MAX (2) PER
MANHOLE.

MANHOLE STEPS
AT 16" OC

SEE MANHOLE SCHEDULE



BEFORE YOU DIG!
CONTACT ONE-CALL CENTER
CALL 811
OR
1-800-632-4949

SLOPE 1/2" PER FT

FLOW CHANNEL
BENCH

FLEXIBLE RUBBER
SLEEVE BOOT

CLASS 'B' CONCRETE FILL

FLOW
CHANNEL

SST CLAMP

COMPACTED CRUSHED
STONE

12"

8"
TYP

MANHOLE SECTION C-33-0601

Hazen

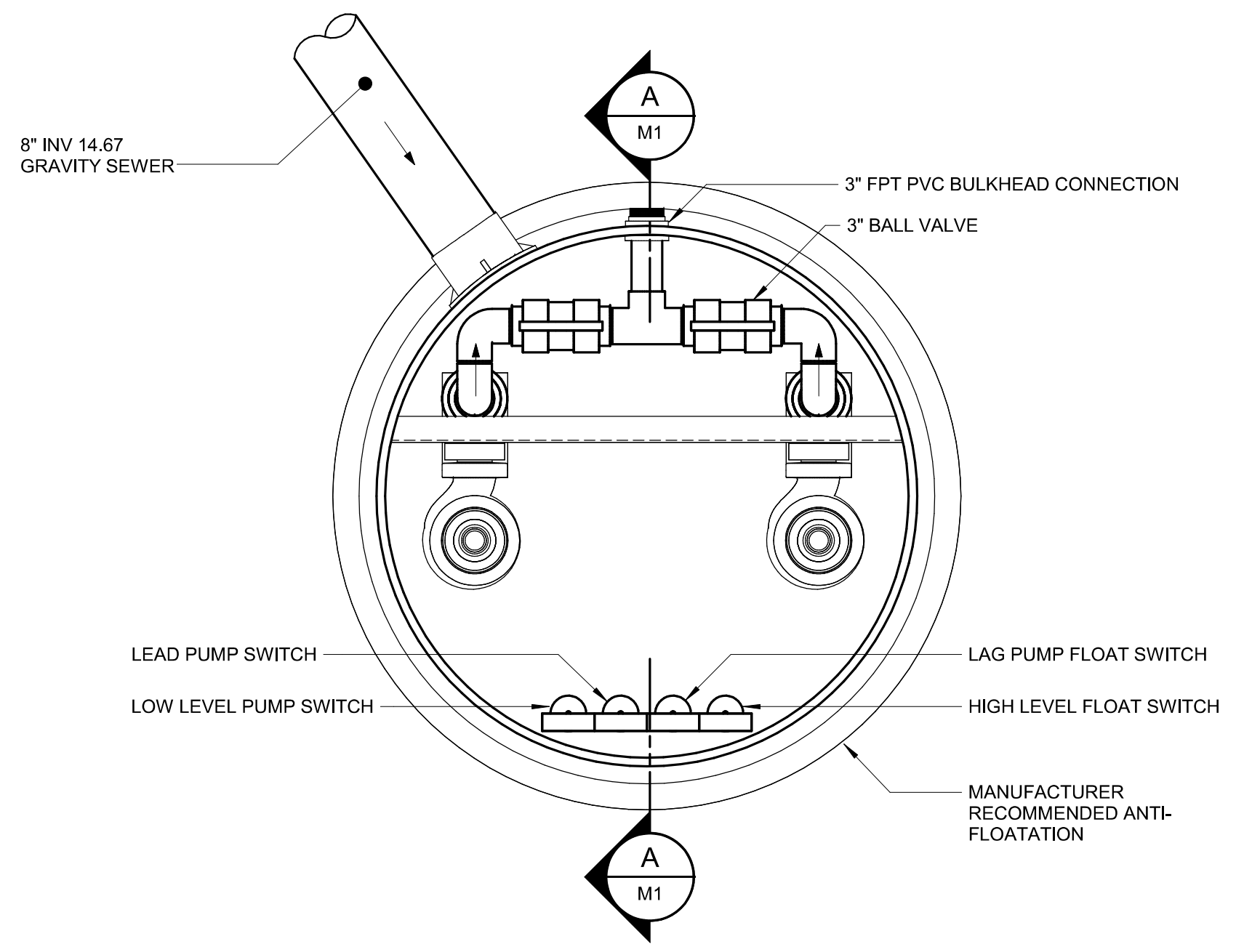
HAZEN AND SAWYER
4011 WESTCHASE BOULEVARD, SUITE 500
RALEIGH, NORTH CAROLINA 27607
LICENSE N

CITY OF HAVELOCK, NC
BRYAN PUMP STATION RELOCATION
PROJECT

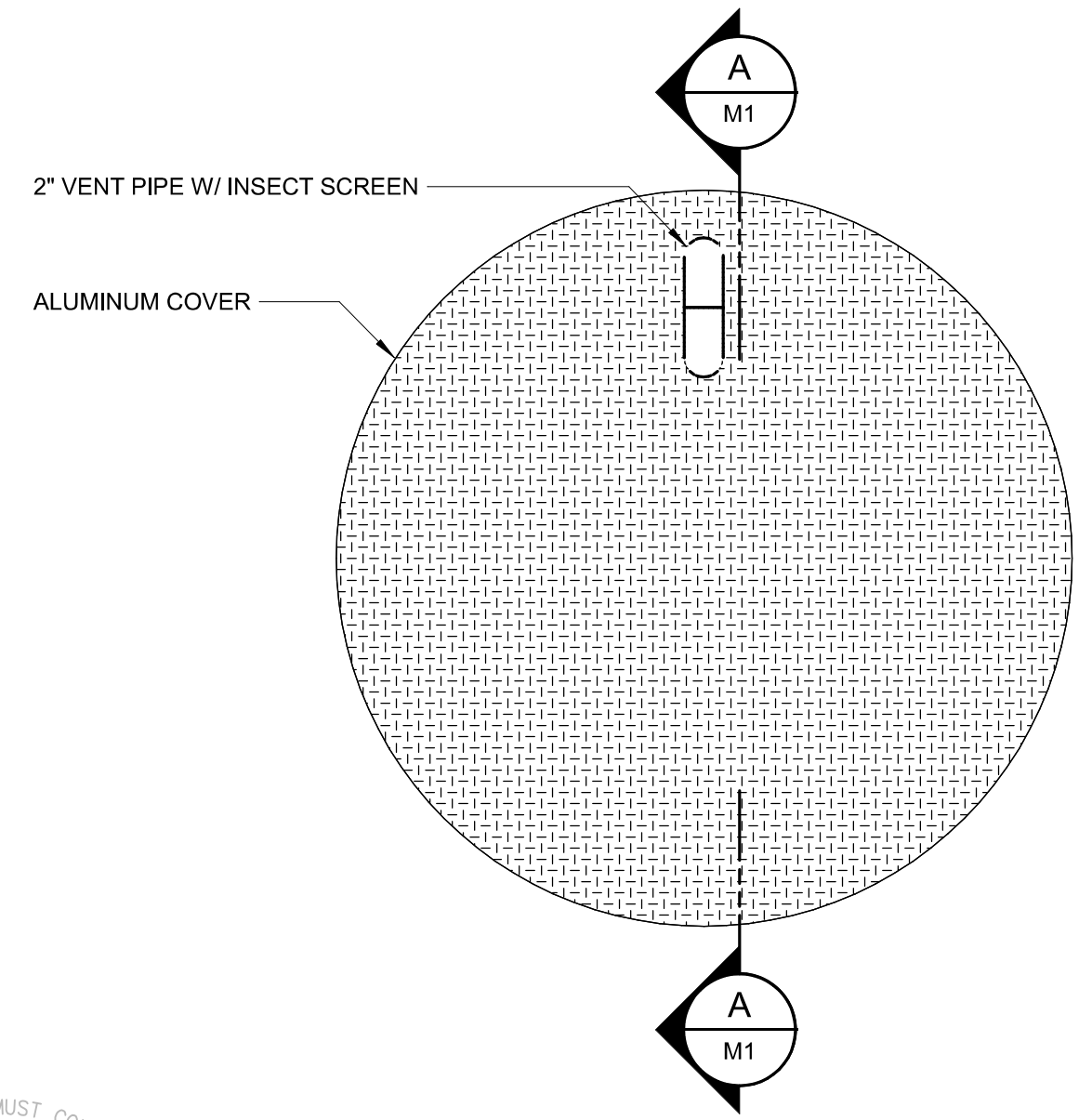
FIGURE 2

NOTES:

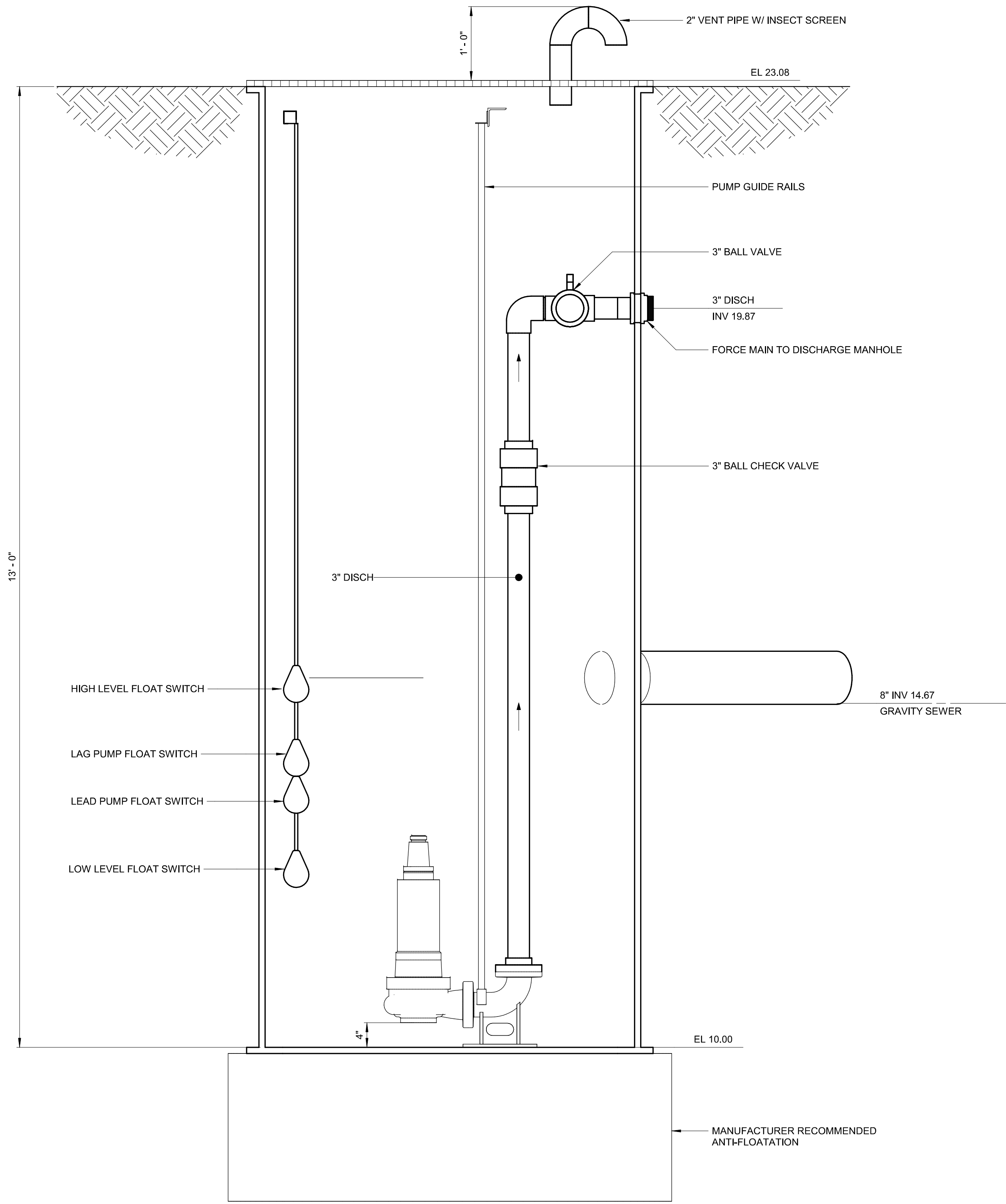
- PUMPS SHALL BE MYERS 3V OR EQUAL, AND SHALL BE CAPABLE OF 150 GPM AT 13 FEET OF TOTAL DYNAMIC HEAD.
- GUIDE RAIL SHALL BE SCHEDULE 40 STAINLESS STEEL.
- MAXIMUM ALLOWABLE MOTOR HORSEPOWER SHALL BE 1 HP. THE PUMP MOTORS SHALL BE DESIGNED FOR 230V, 60HZ, 1 PHASE OPERATION. MOTORS SHALL BE MOUNTED ON EACH PUMP AND SHALL CONFORM TO THE LATEST APPLICABLE NEMA, IEEE, AND ANSI STANDARDS FOR SUBMERSIBLE SERVICE. THE MOTORS SHALL BE RATED FOR CONTINUOUS DUTY, WITH A MINIMUM SERVICE FACTOR OF 1.15. THE MOTOR SHALL BE GUARANTEED FOR CONTINUOUS UNSUBMERGED DUTY, CAPABLE OF SUSTAINING A MINIMUM OF EIGHT (8) STARTS PER HOUR WITHOUT OVERHEATING.
- AN UPPER RADIAL AND LOWER THRUST BEARING SHALL BE REQUIRED. THE UPPER BEARING SHALL BE A SINGLE BALL / RACE TYPE BEARING. THE LOWER BEARING SHALL BE AN ANGULAR CONTACT HEAVY DUTY BALL/RACE TYPE BEARING, DESIGNED TO HANDLE AXIAL GRINDER PUMP THRUST LOADS. BOTH BEARINGS SHALL BE PERMANENTLY LUBRICATED BY THE OIL, WHICH FILLS THE MOTOR HOUSING. THE BEARING SYSTEM SHALL BE DESIGNED TO ENABLE PROPER CUTTER ALIGNMENT FROM SHUT OFF HEAD TO MAXIMUM LOAD AT 10 FEET OF TDH. THE MOTOR SHAFT SHALL BE MADE OF 400 SERIES STAINLESS STEEL AND HAVE A MINIMUM DIAMETER OF 0.670".
- THE PUMPS SHALL HAVE A DUAL SEAL ARRANGEMENT CONSISTING OF A LOWER AND UPPER SEAL TO PROTECT THE MOTOR FROM THE PUMPING LIQUID. THE LOWER SEAL SHALL BE FLUOROELASTOMER OR BUNA-N MOLDED DOUBLE LIP SEAL, DESIGNED TO EXCLUDE FOREIGN MATERIAL AWAY FROM THE MAIN UPPER SEAL. THE UPPER SEAL SHALL BE A UNITIZED SILICON CARBIDE HARD FACE SEAL WITH STAINLESS STEEL HOUSINGS AND SPRING EQUAL TO CRANE TYPE T-6A. THE MOTOR PLATE/HOUSING INTERFACE SHALL BE SEALED WITH A BUNA-N O-RING.
- THE IMPELLER SHALL BE AN CAST DUCTILE IRON IMPELLER, WITH PUMP OUT VANES ON THE BACK SHROUD TO KEEP DEBRIS AWAY FROM THE SEAL AREA. IT SHALL BE KEYPED AND BOLTED TO THE MOTOR SHAFT.
- THE PUMPS SHALL HAVE CAST IRON SUPPORT LEGS, ENABLING IT TO BE A FREESTANDING UNIT. THE LEGS WILL BE HIGH ENOUGH TO ALLOW SOLIDS AND LONG STRINGY DEBRIS TO ENTER THE CUTTER ASSEMBLY.
- FACTORY MOUNTED GUIDE RAIL SYSTEM WITH PUMP SUSPENDED BY MEANS OF BOLT-ON QUICK DISCONNECT WHICH IS SEALED BY MEANS OF NITRILE GROMMETS. THE DISCHARGE PIPING SHALL BE SCHEDULE 80 PVC AND FURNISHED WITH A CHECK VALVE AND PVC SHUT-OFF BALL VALVE. THE TANK SHALL BE WOUND FIBERGLASS, AND AN INLET HUB SHALL BE PROVIDED WITH THE SYSTEM.
- WET WELL SHALL BE CONSTRUCTED OF FRP AND SHALL INCLUDE MEANS FOR ANTI-FLOTATION. THE MANUFACTURER SHALL INCLUDE STRUCTURAL CALCULATIONS FOR FINAL PUMP STATION DESIGN SIGNED AND SEALED BY A P.E. IN THE STATE OF NORTH CAROLINA AND SHALL CONFIRM THE FRP STRUCTURE ADEQUATELY RESISTS FLOTATION WHEN IT IS TOTALLY EMPTY AND SUBJECTED TO GROUNDWATER TO THE FULL HEIGHT OF THE STRUCTURE. THE WET WELL SHALL BE COVERED BY AN ALUMINUM COVER THAT INCLUDES A LOCKABLE HINGED DOOR.
- PUMPS SHALL BE CONTROLLED BY A NEMA 4X, 240/120VAC, OUTDOOR DUPLEX CONTROL PANEL WITH THREE FLOAT SWITCHES AND A HIGH WATER ALARM. THE CONTROL PANEL SHALL INCLUDE BUT NOT LIMITED TO THE FOLLOWING: A SINGLE CIRCUIT BREAKER TYPE LOCKABLE DISCONNECT SWITCH OPERABLE FROM OUTSIDE THE CONTROL PANEL, A MOTOR CIRCUIT PROTECTOR AND FULL VOLTAGE NONREVERSING MAGNETIC STARTER FOR EACH PUMP. THE MOTOR STARTER SHALL BE NEMA SIZE 1 (MINIMUM) FOR EACH PUMP. EACH PUMP SHALL BE PROVIDED WITH A HAND-OFF-AUTO (H-O-A) CONTROL SWITCH ON THE FRONT OF THE CONTROL PANEL WITH CONTROL IN THE AUTOMATIC MODE BY FLOAT SWITCHES IN THE SUMP. THE CONTROL PANEL SHALL BE MOUNTED ON A RACK, PROVIDED WITH LIGHTING, SUITABLE FOR A RESIDENTIAL AREA WITH A DISCRETE DESIGN.
- AUTOMATIC CONTROLS FOR DUPLEX INSTALLATIONS SHALL ALSO INCLUDE AUTOMATIC ALTERNATION OF DUTY AND STANDBY PUMPS AFTER EACH SHUTDOWN. UPON REACHING THE HIGH WATER ALARM LEVEL SETPOINT, THE STANDBY PUMP SHALL TURN ON UNTIL THE HIGH WATER ALARM SETPOINT IS NO LONGER ACHIEVED. CONTROL POWER SHALL BE 120 VAC FROM ONE LEG OF THE 240/120V SERVICE. CONTROL PANEL FOR DUPLEX INSTALLATIONS SHALL INCLUDE ALARM/INDICATION LIGHTS AND LEGEND PLATES ON THE FRONT OF THE CONTROL PANEL FOR "HIGH WATER LEVEL", "CONTROL POWER ON", "PUMP 1 ON" AND "PUMP 2 ON". THE HIGH WATER LEVEL FLOAT SWITCH SHALL ACTIVATE A REMOTE "PUMP STATION HIGH WATER ALARM" THROUGH UNPOWERED AUXILIARY ALARM CONTACTS.
- THE PUMP STATION WILL BE OWNED AND OPERATED BY THE CITY OF HAVELOCK, NORTH CAROLINA.
- THE PUMP FLOATS SHALL BE SET PER THE MANUFACTURER'S RECOMMENDATIONS TO MEET PUMP MINIMUM SUBMERGENCE.
- THE PUMP STATION SHALL BE EQUIPPED WITH AN AUDIO/VISUAL ALARM WHEN THE "PUMP STATION HIGH WATER ALARM" IS ACTIVATED AND A VISUAL SIGN INSTRUCTING PEDESTRIANS TO CALL 911 IF ALARM IS SET OF.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PIPE INVERTS, LOCATIONS, MATERIALS, AND SIZES BEFORE COMMENCEMENT OF CONSTRUCTION.
- ALL CONSTRUCTION WORK SHALL ADHERE OSHA REGULATIONS PART 1926. CONFINED SPACE ENTRY SHALL ONLY BE PERMITTED BY CERTIFIED PERSONNEL WITH SAFETY PROCEDURES IN PLACE.



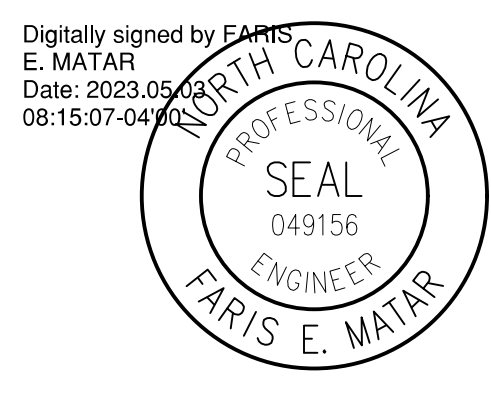
BOTTOM PLAN
3/4" = 1'-0"



TOP PLAN
3/4" = 1'-0"



SECTION A
1" = 1'-0"



Hazen
HAZEN AND SAWYER
4011 WESTCHASE BOULEVARD, SUITE 500
RALEIGH, NORTH CAROLINA 27607
LICENSE NO. : C-0381

CITY OF HAVELOCK, NORTH CAROLINA
BRYAN PUMP STATION RELOCATION
PROJECT

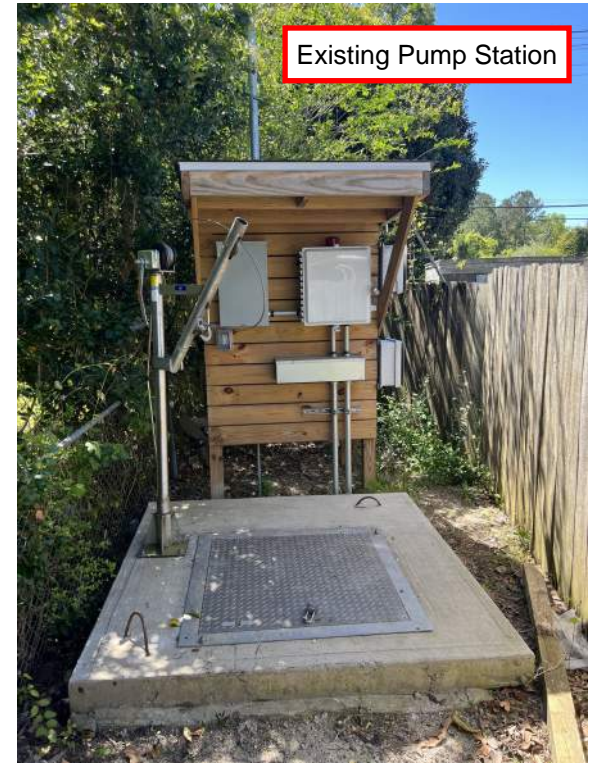
**PUMP STATION
MECHANICAL
PLANS AND SECTION**

DATE:	MAY 2023
HAZEN NO.:	30906-204
CONTRACT NO.:	1
DRAWING NUMBER:	M1

C:\Users\jellison\OneDrive - Hazen and Sawyer\DOCUMENTS\30906-204-100-PS-M1_crs.dwg 5/22/2023 1:42:10 PM

REV	ISSUED FOR	DATE	BY

PROJECT ENGINEER:	F. MATAR
DESIGNED BY:	F. MATAR
DRAWN BY:	C. TROISI
CHECKED BY:	B. PORTER
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE	0 1/2" 1"



Existing Pump Station Photos