

ADDENDUM NO. 2 TO CONTRACT DOCUMENTS

Project: Hyattown Pumping Station
Hazen and Sawyer Project No. 30961-010

DATE: April 5, 2016

Owner: DAVIDSON WATER, INC.

To: ALL BIDDERS

Bidders for the above named project shall take note of the following changes, additions, deletions, clarifications, etc., in the Contract Documents, which shall become a part of the Contract Documents, and shall be taken into consideration and be included in the Bid.

Please acknowledge receipt of Addendum No. 2 in the Bid in the space provided. Initial and circle Addendum Number where required in the Bid as evidence that the Bidder has received and reviewed this Addendum and has followed instructions outlined herein.

The return receipt requested with this communication will be deemed evidence that the Bidder has received this Addendum. Please sign, date, clearly print company name, and fax or email this sheet back to Hazen and Sawyer at (704) 357-3152 or mbenchich@hazenandsawyer.com upon receipt.

Company Name

Hazen and Sawyer
4944 Parkway Plaza Boulevard
Suite 375
Charlotte, NC 28217
Tel. No. (704) 357-3150
Fax No. (704) 357-3152

M. J. Benchich

Acknowledgement of Receipt

Michael Benchich, P.E.
HAZEN AND SAWYER

Date



DAVIDSON WATER, INC.

HAZEN AND SAWYER PROJECT #30961-010

HYATTOWN PUMPING STATION

ADDENDUM NO. 2

A. SPECIFICATIONS

Section 01470 – Entire Section

Replace Section 01470 in its entirety with Section 01470 attached to this Addendum as Attachment 1.

Section 01510 – Page 01510-4

In Article 1.01.I.1, **replace** the words “for construction purposes,” with:

“,including $\frac{3}{4}$ ” flow meter, for”

Section 01510 – Page 01510-4

In Article 1.01.I, **add** the following paragraph:

“5. Reasonable quantities of water for construction activities, such as testing and disinfecting new pipelines and storage tank, shall be provided by Owner at no charge. The Contractor shall provide his own materials to connect to the Owner’s system, where directed by the Owner, for this water supply. Refer to Section 13120 for additional details.”

Section 01520 – Page 01520-6

In Paragraph 1.04.D.3, after the word “until”, **insert** the following:

“Shutdown No. 1 has been completed and”

Section 01520 – Page 01520-6

In Paragraph 1.04.E.3, after the word “until”, **insert** the following:

“Shutdown Nos. 1 and 2 have been completed and”

Section 02276 – Page 02276-3

In Article 1.04.A, **replace** the first sentence with:

“Land disturbance activities are not authorized to begin until after all required erosion and sediment control permits are obtained by the Contractor from the State of North Carolina and local authorities, as necessary.”

Section 02276 – Page 02276-3

In Article 1.04.B, **delete** paragraphs 1 and 2 in their entirety.

Section 02276 – Page 02276-5

Delete Article 1.05 in its entirety.

Section 02276 – Page 02276-14

In Article 3.09.A, **replace** the words “the following:” with:

“guidelines set forth in the NPDES General Permit NCG 010000 (Part I Section B: Minimum Monitoring and Reporting Requirements) and with any local regulatory authorities.”

Section 02276 – Page 02276-14

In Article 3.09.B, **delete** the sentence “Copies of inspection records shall be sent to the Engineer on a monthly basis.”

Section 08330 – Page 08330-2

In Article 2.02.A, **replace** the word “aluminum” with “stainless steel”.

Section 08330 – Page 08330-2

In Article 2.02.B, **replace** the words “galvanized structural steel” with “stainless steel”.

Section 08330 – Page 08330-2

In Article 2.02.D, **replace** the words “G90 galvanized steel with baked on polyester primer” with “stainless steel”.

Section 08330 – Page 08330-3

In Article 2.02.H, **replace** the entire article with:

“H. Finish

Stainless steel with No. 4 finish.”

Section 09900 – Page 09900-11

Replace page 09900-11 with the revised page 09900-11 attached to this Addendum as Attachment 2.

Section 11100 – All Pages

Replace Section 11100 with Section 11100 attached to this Addendum as Attachment 3.

Section 15000 – Page 15000-2

In Article 2.01.D, **replace** the words “SPECIFIED OR SHOWN ON THE DRAWINGS” in both locations (second line and fourth line) with:

“INDICATED IN THE PIPING SYSTEM SCHEDULE IN SPECIFICATION SECTION 15390”

Section 15000 – Page 15000-2

In Article 2.01.D, **insert** after the word “BURIED”:

“AND CONCRETE ENCASED”

Section 15000 – Page 15000-7

Replace Article 3.01.S in its entirety with:

“All piping 8” and larger shall have Type “B” Bedding as shown on the Drawings, unless otherwise specified herein or indicated on the Drawings.”

Section 15101 – Page 15101-1

In Paragraph 2.01.A, **replace** the last sentence with:

“Butterfly valves shall be as manufactured by DeZurik, Golden Anderson, Mueller, Pratt, and Val-Matic.”

B. DRAWINGS

Drawing C10

Add existing waterline diameters and elevations as shown in the sketch attached to this Addendum as Attachment 4.

Drawing C12

Add temporary steel fencing and Note 5 as shown in the sketch attached to this Addendum as Attachment 5.

Drawing C13

In Note 2, **insert** after the word “joint”:

“, including concrete encased piping.”

Drawing C13

In the driveway culvert Call-Out, **replace** “12” with “15”.

Drawing C14

In Note 5, **insert** at the end of the last sentence:

“, including overexcavation and stone backfill.”

Drawing C14

Add the following note:

“9. All piping shall be restrained joint, including concrete encased piping.”

Drawing C14

In Detail 3 Plan, **replace** the Call-Out “See 1509206” with “Pipe penetration with Kor-n-Seal® II Series 206 or equal”.

Drawing M30

Add Call-Outs and Notes as shown in the sketches attached to this Addendum as Attachment 6.

Drawing A1

Replace the Room Schedule with the Room Schedule attached to this Addendum as Attachment 7.

Drawing D2

In Detail 0251000 (Typical Roadway Section), **replace** the Notes section with:

“NOTES:

1. The 1” asphalt concrete surface course and the tack coat shall not be placed until completion of all other work in Contract.
2. Where the roadway has been overexcavated and backfilled with ABC stone, the 10” ABC stone layer shown in this detail shall be included as part of the backfilled ABC stone.”

Drawing E20

Replace Drawing E20 with the revised Drawing E20 attached to this Addendum as Attachment 8.

Drawing E20

In Note 5, **replace** the first sentence with:

“The Owner shall furnish, install, fuel, test, and start up generator.”

C. ATTACHMENTS TO ADDENDUM NO. 2

1. Section 01470, consisting of 4 pages
2. Section 09900 – Page 09900-11, consisting of 1 page

3. Section 11100, consisting of 3 pages
4. Sketch, revises Drawing C10
5. Sketch, revises Drawing C12
6. Sketch, revises Drawing M30 (2 pages)
7. Sketch, revises Drawing A1
8. Drawing E20

- END OF ADDENDUM No. 2 -

SECTION 01470

WATERTIGHTNESS TESTING OF CONCRETE STRUCTURES

PART 1 -- GENERAL

1.01 THE REQUIREMENT

- A. It is the intent of these Specifications that all concrete work and sealing work around built-in items and penetrations be performed as required to ensure that groundwater, surface water, and water or liquids in tanks, channels and containers will not intrude into any equipment rooms, pipe galleries, habitable areas or other generally dry areas.
- B. The required watertightness shall be achieved by quality concrete construction and proper sealing of all joints and penetrations.
- C. The existing 3.0-MG Hyattown ground storage tank shall be tested for leakage by the Contractor after the tanks new 48" outlet has been constructed. The Contractor shall provide at his own expense all labor, material, temporary bulkheads, pumps, water measuring devices, etc., necessary to perform the required tests. Water for testing shall be provided by the Owner.
- D. The Owner will provide the results of a watertightness test that it conducts prior to the construction of the new 48" outlet. The Owner's test results shall be used to calculate a baseline leakage rate against which the Contractor's watertightness test results shall be compared.

1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 01400 – Quality Control
- B. Section 03300 – Cast-in-Place Concrete

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. ACI 350.1-10 - Specification for Tightness Testing of Environmental Engineering Concrete Structures

1.04 SUBMITTALS

- A. Testing procedures shall be submitted for approval prior to the test.
- B. Testing Report: Prior to placing the structure in service, submit for review and approval a detailed bound report summarizing the watertightness test data, describing the testing procedure and showing the calculations on which the test data is based.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 TEST PREPARATION

- A. The structure shall not be tested before all elements of the new 48" outlet structure which resist any portion of the retained liquid pressure are in place and the concrete has attained its specified compressive strength.
- B. Clean the exposed concrete surfaces of the structure, including the floor, of all foreign material and debris. Prior to testing, standing water in or outside of the structure that would interfere with the inspection of the exposed concrete surfaces of the structure shall be removed.
- C. The concrete surfaces and concrete joints shall be thoroughly inspected for potential leakage points. Areas of potential leakage shall be repaired before filling the containment structure with water.
- D. The new 48" outlet penetration shall be inspected. Defective or cracked concrete shall be repaired prior to testing. All structural penetrations and inlet/outlets shall be securely sealed to prevent the loss of water from the structure during the test. All structural penetrations shall be monitored before and during the test to determine the watertightness of these appurtenances. If the structure is to be filled using the inlet/outlet pipe, positive means shall be provided to check that water is not entering or leaving through this pipe once the structure is filled to the test level. Leakage at these inlet/outlets shall be repaired prior to testing. No allowance shall be made in test measurements for uncorrected known points of leakage
- E. The ground water level shall be brought to a level below the top of the base slab and kept at that elevation or at a lower elevation during the test.
- F. No backfill shall be placed against the walls or on the wall footings of the structure to be tested unless otherwise specified.

3.02 PROCEDURE

- A. The Owner shall fill the tank until the water surface is at the design maximum liquid level of 1 inch below the overflow level.
- B. The water level shall be measured once an hour for 8 hours after it has reached the initial test level.
 - 1. The test measurements shall not be scheduled for a period when the forecast is for a difference of more than 35°F between the ambient temperature readings at the times of the initial and final level measurements of the water surface. The test shall also not be scheduled when the weather forecast indicates the water surface would be frozen before the test is completed.
 - 2. The vertical distance to the water surface shall be measured to within 1/16" from a fixed point on the structure above the water surface.

3. Measurements shall be taken at the same location to reduce the probability of measurement differences.
4. The water temperature shall be recorded at a depth of 18 in. below the water surface at the start and end of the test.

3.03 EVALUATION

- A. The change in water volume in the structure shall be calculated and corrected, if necessary, for temperature.
- B. If the Contractor's calculated, temperature-corrected leakage rate is less than or equal to the Owner's baseline leakage rate, the tank shall be placed back into service.
- C. If the Contractor's calculated, temperature-corrected leakage rate is greater than or equal to the Owner's baseline leakage rate, the Contractor shall make repairs to the outlet and coordinate the scheduling of the repairs with the Owner.
- D. Regardless of the test results, the Contractor shall be responsible for making repairs to the new outlet if any leaks are subsequently detected within the warranty period.

- END OF SECTION -

**TABLE 9-1
PAINTING SCHEDULE**

SURFACE	APPLICATION	PAINTING SYSTEM & NO. OF COATS	PRODUCT REFERENCE (TABLE 9.2)	TOTAL MIN. DRY FILM THICKNESS (MILS)
<u>Concrete and Masonry</u>				
Masonry walls	All new structures	See Specification 07180	----	----
Concrete floors and walls	All new structures	See Specification 03350	----	----
<u>Metals</u>				
Interior and exterior nonsubmerged (gloss)	All new pumps, motors and mechanical equipment, piping, etc.	1 coat epoxy polyamide primer	104	4-6
		1 coat epoxy polyamide	102	4-6
		1 coat aliphatic polyurethane	115	3-5
Steel door frames, structural steel, misc. metals (steel)		1 coat epoxy polyamide	102	5-8
		1 coat aliphatic polyurethane	115	3-4

SECTION 11100

PUMPS INSTALLATION, TESTING, AND STARTUP – CONTRACTOR REQUIREMENTS

PART 1 -- GENERAL

1.01 THE REQUIREMENT

- A. The Contractor shall coordinate with the Pump Manufacturer and provide installation, testing, and start up work as specified herein to make fully operational all Owner-furnished pumping equipment, complete with all necessary accessories, in compliance with the Contract Documents.
- B. The Pump Manufacturer is Charles R. Underwood Pumps, of 2000 Boone Trail Road, Sanford, NC 27330. Refer to Appendix A for detailed information for the Owner-furnished pumping equipment. The Contractor is responsible for providing any and all materials, equipment, and components not provided by the Pump Manufacturer but required for a complete installation.

PART 2 -- PRODUCTS

2.01 OWNER FURNISHED EQUIPMENT

- A. Owner will furnish to the Contractor:
 - 1. Vertical pumps
 - 2. Pump cans
 - 3. Pressure gauges for vertical pumps
 - 4. Air relief/vacuum (AR/V) valves on pump cans and pump discharge piping
- B. Pump Manufacturer will install vertical pumps, pressure gauges, AR/V valves, and will assist in can installation as described in Appendix A.
- C. Contractor is responsible for coordinating the installation, testing, and commissioning of the pumps and associated appurtenances, and to provide all labor, equipment, materials, and tools required to comply with the specifications herein if not so provided in the Pump Manufacturer's scope of services.

PART 3 -- EXECUTION

3.01 PUMP MANUFACTURER SERVICES

- A. At the Owner's cost, the Pump Manufacturer will provide the following services during construction:
 - 1. Install pumps and motors, including pump delivery and off-loading. The Pump Manufacturer will provide a crane and operator for pump installation.
 - 2. Inspect and assist pump can placement and alignment prior to concrete pour.

3. Provide and install plywood covers for the cans to protect the inside prior to pump installation.
 4. Furnish air release/vacuum valves for Contractor to install.
 5. Provide Owner training services.
 6. Conduct pump field testing.
 7. Conduct pump vibration testing.
 8. Conduct pump startup services.
 9. Furnish pump and motor O&M manuals.
 10. Other miscellaneous services as stipulated in Appendix A.
- B. Contractor shall bear the costs of all other work not listed above but required to install, test, and start up the pumps in accordance with these specifications.
- C. Contractor's costs to coordinate with the Pump Manufacturer shall be borne completely by the Contractor.

3.02 INSTALLATION

- A. Drains: All gland seals, air valves, and drains shall be piped to the nearest floor drain, properly supported with brackets.
- B. Concrete shall not be poured around the pump cans until the Pump Manufacturer has inspected and approved the pump can placement and alignment.

3.03 FIELD TESTING

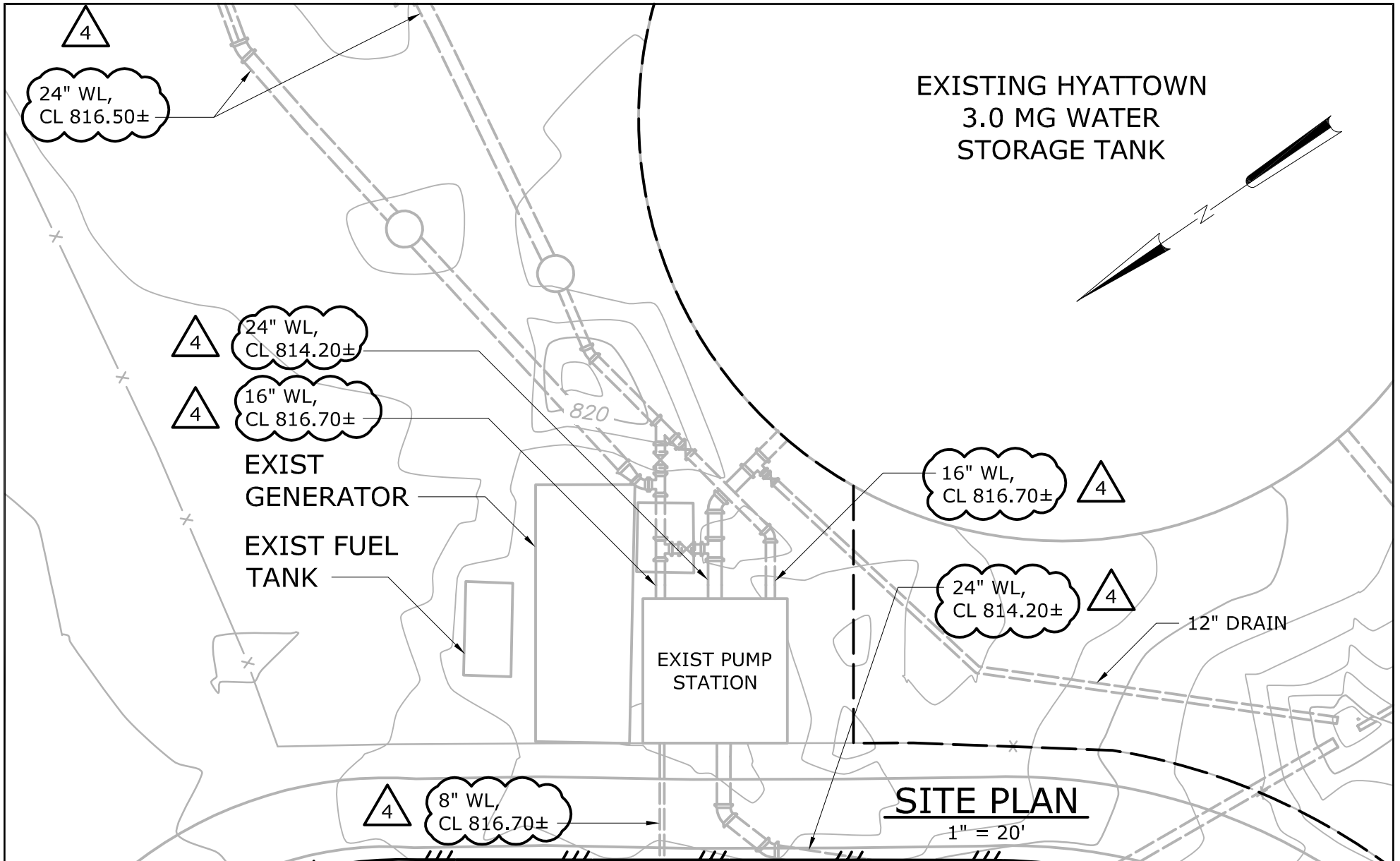
- A. Field testing shall be conducted to demonstrate the following:
1. The pumps have been properly installed and are in proper alignment.
 2. The pumps operate without overheating or overloading of any parts and without objectionable vibration. Vibration shall be within the Hydraulic Institute limits, or Pump Manufacturer's limits if more stringent.
 3. The pumps can meet the specified operating conditions. All pumps shall be checked at maximum speed for a minimum of four points on the pump curve near the specified operating points for capacity, head, and amperage. The rated motor nameplate current shall not be exceeded at any point.
- B. Field testing shall be conducted for all pumps serving the Welcome pressure zone before the pumps serving the Glen Anna pressure zone. Pumps shall be first tested one at a time and then operated together as a group for 24 hours.

- C. During field testing, the pumps shall take suction from the existing Hyattown ground storage tank through the new 48" tank outlet and suction piping. Pump discharge shall be routed back to the existing Hyattown ground storage tank.
1. The Contractor shall furnish and install temporary piping which connects to the discharge main at the new flow meter vault, is routed along the ground, and discharges into the ground storage tank through the tank's manway hatch. The temporary piping connection in the flow meter vault shall be made by removing the permanent magnetic flow meter and connecting the discharge main flange.
 2. The temporary piping and appurtenances shall be new, unused, and suitable for potable water. The Contractor shall disinfect and pressure test the temporary line and appurtenances prior to conducting the field tests. The Contractor shall provide pipe supports as required.
 3. The Contractor shall furnish, install, and provide power to a calibrated, strap-on ultrasonic flow meter, approved by the Engineer, to measure real-time flow rate during the testing. The flow meter shall indicate flow in gallons per minute (gpm) and shall be able to measure flows between 0 – 8,000 gpm. The Contractor shall coordinate with the Pump Manufacturer to determine the location(s) for the flow meter.
 4. The Contractor shall furnish and install on the temporary piping a throttling flow control butterfly valve to modulate pumped flow and head when checking pump(s) for consistency with its submitted performance curve.
- D. After field testing is complete, the permanent magnetic flow meter shall be reinstalled.

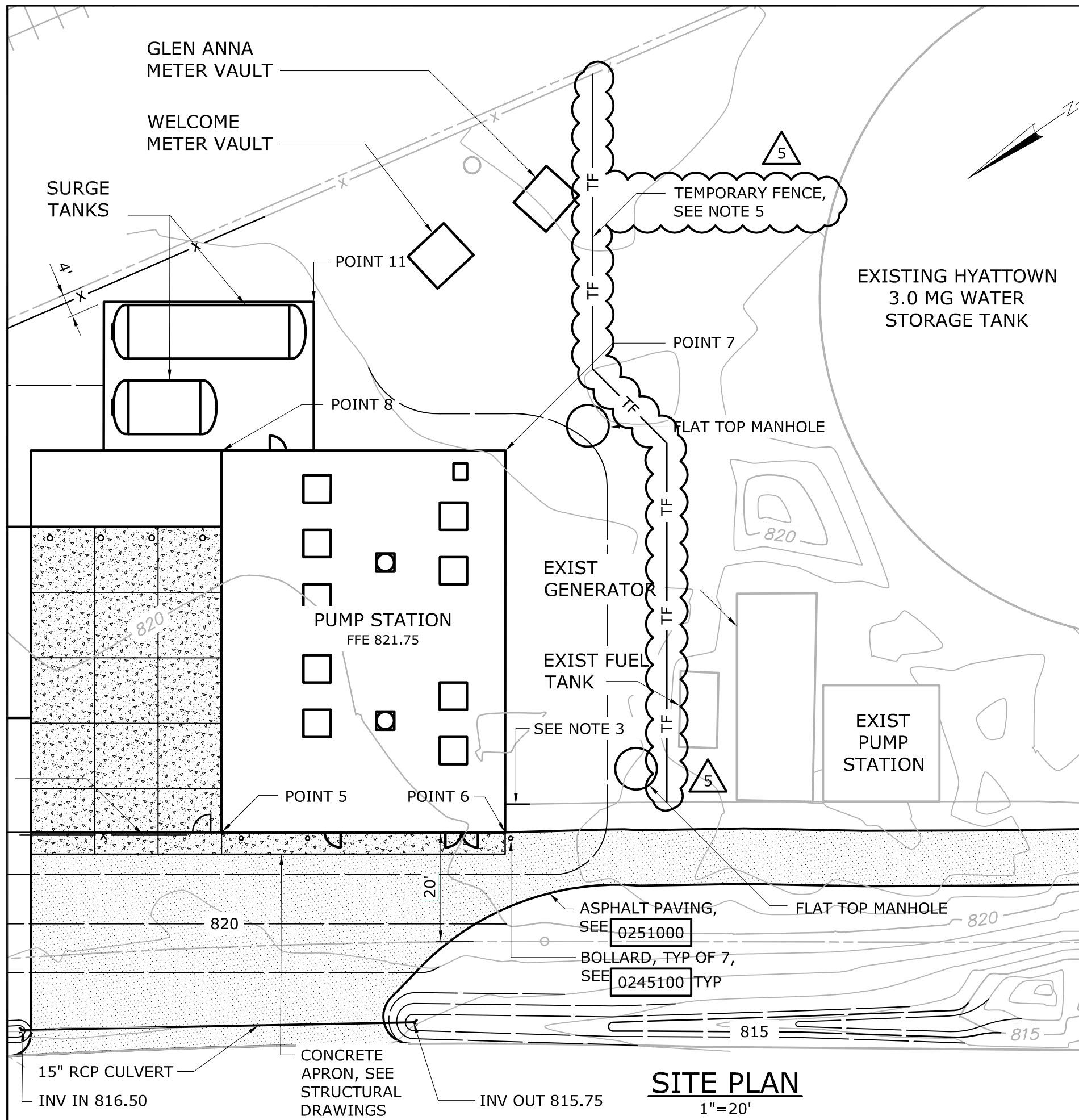
3.04 PUMP START UP

- A. Prior to starting up the pumps to actual service, the Contractor shall be required to perform the following:
1. Complete all testing for all equipment, piping, and appurtenances included in the piping system, including, but not limited to, pumps, pump motors, piping, valves, instrumentation. Surge tanks shall be installed, but their operational testing shall not be conducted until the pumps have been started up.
 2. Complete the discharge main connection work to the existing transmission main as described in Shutdown Nos. 2 and 3.
 3. For each flow meter vault, furnish and maintain on standby a 24"x24" tee, temporary 24" piping, couplings and adapters as required to connect the existing pumping station discharge mains to the new discharge mains. In the event the new pumps do not function as intended during startup, at the Engineer's direction, the Contractor shall reconnect the existing pumping station to the existing transmission main(s) at the new flow meter vault(s) by removing the flow meter(s) and using the standby materials.

- END OF SECTION -



ADDENDUM NO. 2	DATE 4-5-16	DAVIDSON COUTY NORTH CAROLINA	H & S JOB NUMBER 30961-010	REFER TO CONTRACT DRAWING NUMBER C10
ATTACHMENT NO. 4	BY MJB	DAVIDSON WATER INC. HYATTOWN PUMP STATION IMPROVEMENTS	CONTRACT NUMBER -	SHEET 1 OF 1



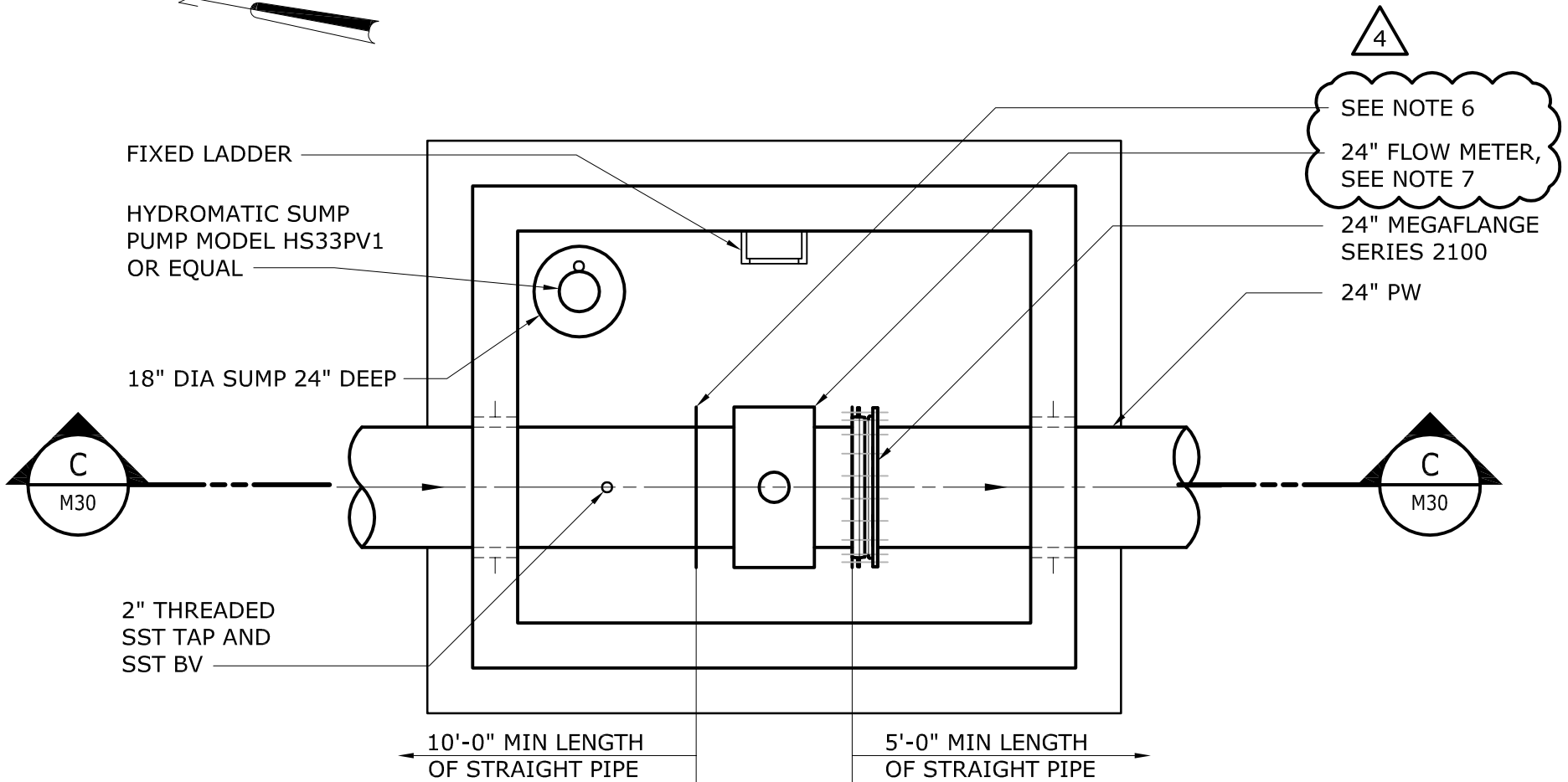
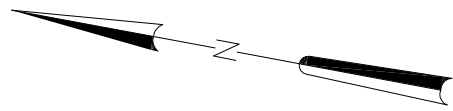
NOTES:

1. ALL EXISTING UTILITIES MAY NOT BE SHOWN. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATED FROM BEST AVAILABLE DATA. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES.
2. BASIS OF BEARING NC GRID NAD 83 (2001) ADJUSTMENT. THE PROJECT COORDINATES ARE GROUND BASED (LOCALIZED) COORDINATES DERIVED FROM REAL-TIME GPS OBSERVATIONS. THE VERTICAL DATUM IS NAVD 88. VERTICAL BENCHMARK, SHOWN ON THIS DRAWING, IS VERIFIED AGAINST NCGS STATION "WHISTLE".
3. TERMINATE FENCE AT BUILDING.
4. CONTRACTOR SHALL NOT PERFORM ANY GRADING ACTIVITIES WITHIN THE COLONIAL PIPELINE EASEMENT W/ OUT A COLONIAL PIPELINE REPRESENTATIVE PRESENT, CONTACT BRUCE SHIPMAN AT 336-451-9976 FOR COORDINATION.
5. PROVIDE TEMPORARY STEEL FENCING TO SECURE EXISTING OPERATIONS DURING CONSTRUCTION. RELOCATE TEMPORARY FENCING AS REQUIRED BY CONSTRUCTION ACTIVITY. PROVIDE 20 FT GATE IN TEMPORARY FENCING AND COORDINATE LOCATION WITH OWNER. HEIGHT OF TEMPORARY FENCE TO MATCH EXISTING FENCE.

SITE PLAN

1"=20'

ADDENDUM NO. 2	DATE 4-5-16	DAVIDSON COUTY NORTH CAROLINA	H & S JOB NUMBER 30961-010	REFER TO CONTRACT DRAWING NUMBER C12
ATTACHMENT NO. 5	BY MJB	DAVIDSON WATER INC. HYATTOWN PUMP STATION IMPROVEMENTS	CONTRACT NUMBER —	SHEET 1 OF 1



BOTTOM PLAN

3/8" = 1'-0"

ADDENDUM NO. 2	DATE 4-5-16	DAVIDSON COUTY NORTH CAROLINA	H & S JOB NUMBER 30961-010	REFER TO CONTRACT DRAWING NUMBER M30
ATTACHMENT NO. 6	BY MJB	DAVIDSON WATER INC. HYATTOWN PUMP STATION IMPROVEMENTS	CONTRACT NUMBER -	SHEET 1 OF 2

NOTES:

1. ROUTE ACCESS DOOR DRAINS TO SUMP.
2. CONTRACTOR SHALL COORDINATE OVERALL SLAB DIMENSIONS WITH EQUIPMENT REQUIREMENTS.
3. GEOTECHNICAL ENGINEER SHALL VERIFY SUITABILITY OF SUBGRADE PRIOR TO PLACING STONE.
4. SEE DETAIL 1/M30 AND SPECIFICATION SECTION 13207.
5. INSULATE AND HEAT TRACE SURGE TANKS AND ALL ABOVE GROUND PIPING. SEE SPECIFICATION SECTIONS 15290 AND 15391.

6. LOCATION OF TIE IN FOR TEMPORARY PIPING DURING PUMP TEST. SEE SECTION 11100 FOR DETAILS.

7. FURNISH 24"x24" TEE AND COUPLING/ADAPTER PIECES AND KEEP ON SITE AS STAND-BY TO REPLACE FLOW METER TO CREATE AN EMERGENCY CONNECTON TO EXISTING PUMPING STATION DISCHARGE LINE. PROVIDE FITTINGS AND PIECES FOR EACH FLOW METER VAULT. SEE SECTION 11100 FOR DETAILS.



ADDENDUM NO. 2	DATE 4-5-16	DAVIDSON COUTY NORTH CAROLINA	H & S JOB NUMBER 30961-010	REFER TO CONTRACT DRAWING NUMBER M30
ATTACHMENT NO. 6	BY MJB	DAVIDSON WATER INC. HYATTOWN PUMP STATION IMPROVEMENTS	CONTRACT NUMBER -	SHEET 2 OF 2

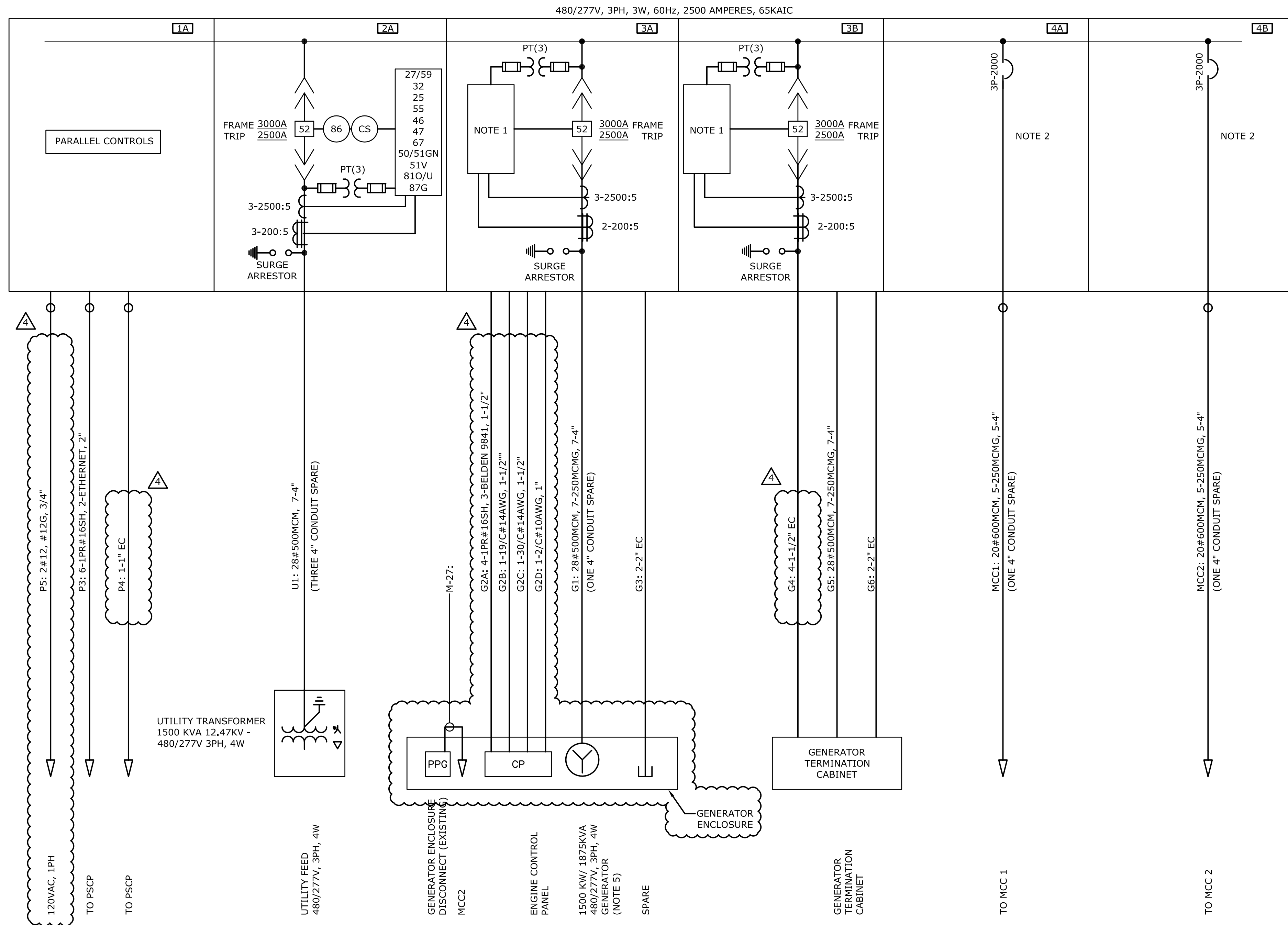
ROOM SCHEDULE

ROOM	DESCRIPTION	FLOOR		BASE		WALL-NORTH		WALL-EAST		WALL-SOUTH		WALL-WEST		CEILING		HEIGHT	REMARKS
		SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH	SUBSTRATE	FINISH		
1	PUMP ROOM	CONCRETE	SEALER	CONCRETE	SEALER	CMU	LAWR	CMU	LAWR	CMU	LAWR	CMU	LAWR	CONCRETE	MFR	15'-4"	

LAWR LIQUID APPLIED WATER REPELLANT

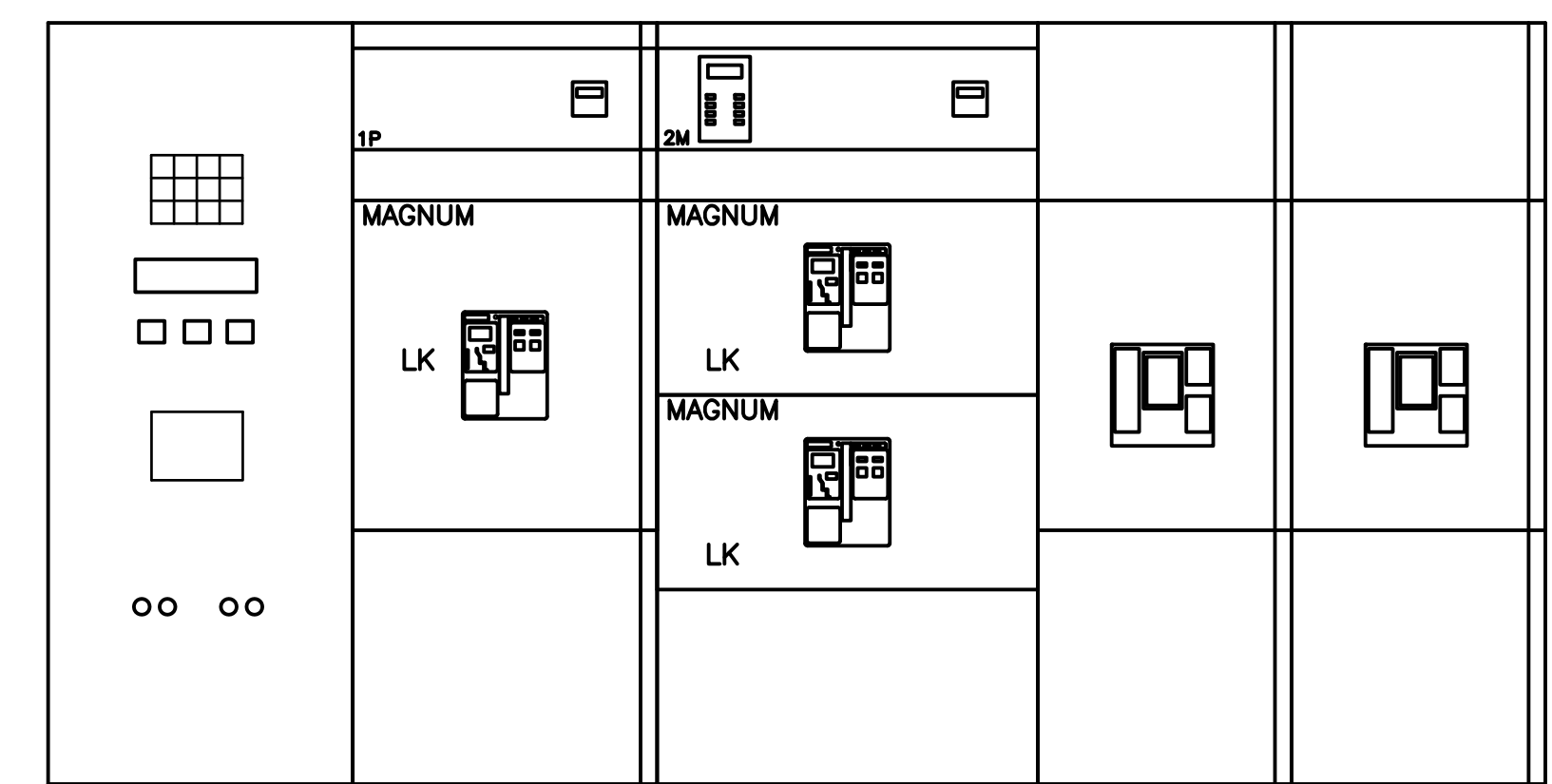


ADDENDUM NO. 2	DATE 4-5-16	DAVIDSON COUTY NORTH CAROLINA	H & S JOB NUMBER 30961-010	REFER TO CONTRACT DRAWING NUMBER A1
ATTACHMENT NO. 7	BY MJB	DAVIDSON WATER INC. HYATTOWN PUMP STATION IMPROVEMENTS	CONTRACT NUMBER -	SHEET 1 OF 1



MAIN SWITCHGEAR, MSWGR ONE-LINE DIAGRAM
NOT TO SCALE

- NOTES:**
1. MSWGR FURNISHED UNDER SEPARATE CONTRACT, INSTALLED UNDER THIS CONTRACT.
 2. MCC1 AND MCC2 FURNISHED UNDER SEPARATE CONTRACT, INSTALLED UNDER THIS CONTRACT.
 3. MSWGR FURNISHED UNDER SEPARATE CONTRACT AND INSTALLED UNDER THIS CONTRACT.
 4. UTILITY TRANSFORMER PROVIDED BY DUKE ENERGY. PAD GROUNDING & SECONDARY CABLE & CONDUIT UNDER THIS CONTRACT.
 5. GENERATOR SYSTEM FURNISHED BY OWNER, CONTRACTOR SHALL PROVIDE GENERATOR PAD, CABLE AND CONDUIT AS INDICATED.
 6. CONTRACTOR RESPONSIBLE FOR ALL CABLE TERMINATIONS.
 7. GENERATOR TERMINATION CABINET CONDUITS SHALL STUB UP IN A 12" X 24" AREA.



MSWGR FRONT ELEVATION
NOT TO SCALE

File: \\SERVER\ENR\HAYATTOWN & SAVERS\HAYATTOWN PS IMPROVEMENTS\ELECTRICAL\DWG\E20.dwg
 Plot Date: 2016/04/01 11:28:11 AM
 Plot: 2016/04/01 11:28:11 AM
 By: BLANSON

REV	ISSUED FOR	DATE	BY
4	MSWGR CONDUIT CHANGES	4-1-16	RWS
3	CONSTRUCTION	3-8-16	RWS
2	BUILDING PERMIT REVIEW	2-26-16	RWS
1	REGULATORY REVIEW	1-20-16	RWS

PROJECT ENGINEER:	R. W. STURGILL
DESIGNED BY:	R. W. STURGILL
DRAWN BY:	R. W. LAWSON
CHECKED BY:	-

ISSUED FOR CONSTRUCTION

STURGILL ENGINEERING PA
C-1210
ONE SOUTH MAIN ST.
LEXINGTON, NC 27292
(336) 238-1249 PH.
(336) 236-6393 FAX

DAVIDSON COUNTY
NORTH CAROLINA

DAVIDSON WATER INC.
HYATTOWN PUMP STATION IMPROVEMENTS

SYSTEM ONE-LINE DIAGRAM

DATE:	APRIL 2016
HAZEN NO.:	30961-010
CONTRACT NO.:	1
DRAWING NUMBER:	E20