

GENERAL NOTES:

Permitting:

1. A construction permit issued by the State of Delaware, Department of Transportation (DelDOT) is required before any work is performed within a DelDOT right-of-way. All work performed within DelDOT right-of-way or property owned by the State of Delaware shall be performed in in accordance with the most recent DelDOT Standard Specifications and Utility Manual.
2. As stated in the State of Delaware Department of Transportation (DelDOT) Utilities Manual Regulations; where sanitary sewer installation is proposed within the extents of right-of-way(s) designated for dedication to the State of Delaware the owner or developer is responsible to obtain the appropriate DelDOT utility installation permit prior to installing the sanitary sewer.

3. As stated in the State of Delaware, Department of Natural Resources and Environment Control Regulations Governing the Control of Water Pollution, the owner / developer is responsible to obtain a Wastewater Facilities Construction Permit from the DNREC Division of Water for projects anticipated to generate sewage flows more than 2,000 gallons per day. The Department will provide an approval letter to the permittee for application purposes.

Compliance with the Approved Sewer Construction or Sewer Connection Plan:

4. Sanitary Sewers shall be constructed in accordance with the most recent New Castle County Standard Specifications for Construction, special provisions, supplemental specifications, Standard Details, and the Recommended Standards for Wastewater Facilities or stricter standards identified by the Engineer.

5. Construction shall not deviate from the plans and specifications approved by New Castle County without written permission from New Castle County's Department of Public Works.

6. During construction, the Contractor must have in their possession on site, a set of construction plans bearing New Castle County's stamp of approval.

7. Upon connecting to an existing sanitary sewer lateral stub, gravity or pressurized, the installer shall be responsible to clean, repair as necessary and verify that sewer flows from the new connection are able to pass unimpeded into the New Castle County system.

8. A preconstruction meeting must be conducted before installation of sanitary sewer collector pipes or a connection to a sewer collector pipe is made. The owner / developer is responsible for scheduling the meeting. At a minimum the sewer installer, the owner/developer's representative and a representative of the general contractor or building shall attend the meeting. Contact the New Castle County Department of Public Works at 302-395-5740 to initiate scheduling.

9. The owner / developer is responsible for contacting the New Castle County Department of Public Works designated inspector and arranging for inspection of items identified at the preconstruction meeting. For items that are buried and inaccessible for verification by a surveyor for "as-built" verification. Photo documentation shall be provided to the inspector. At a minimum the following mandatory inspections are required:

- a. For pipes eight (8) inches in diameter or larger, a low-pressure air test shall be performed in accordance with Section 32.01 of The New Castle County Standard Specifications for Construction.
- b. At the NCC DPW inspector's discretion visual inspection of the pipe by CCTV PACP inspection method according to New Castle County requirements may be required to verify that the pipe installation is free of defects. The CCTV documentation shall be provided to the inspector for NCC DPW records.
- c. For pipes six (6) inches in diameter (sewer connection laterals), an installation inspection is required from the point of connection to a sewer collector pipe or an existing lateral to the edge of public right-of-way or easement.

Final acceptance inspection:

- a. All manholes must be brought to grade and have concrete collars installed.
- b. Channels must be completed in all manholes.
- c. Any inside drop pipe and appurtenances installed.
- d. All manholes and sewer pipes must be cleaned and flushed.
- e. For manholes located outside of a public right-of-way in community open space where a turf trail is proposed it shall be constructed in accordance with NCC Detail SS-MISC-2.
- f. For manholes located within a proposed roadway, stabilized roadway access is constructed for the purpose of maintaining the constructed sanitary sewer system until final paving is completed.
- g. Manhole covers on privately owned and maintained sewer systems shall not be labeled "NEW CASTLE COUNTY."

11. The owner / developer shall be responsible for obtaining approval and acceptance of the sanitary sewer system by New Castle County upon completion of construction. As-built plans signed and sealed by a Professional Land Surveyor or Professional Engineer registered in the State of Delaware must be submitted to New Castle County before acceptance. NCC DPW Policy SS-8 provides standards for as-built plan preparation and submission.

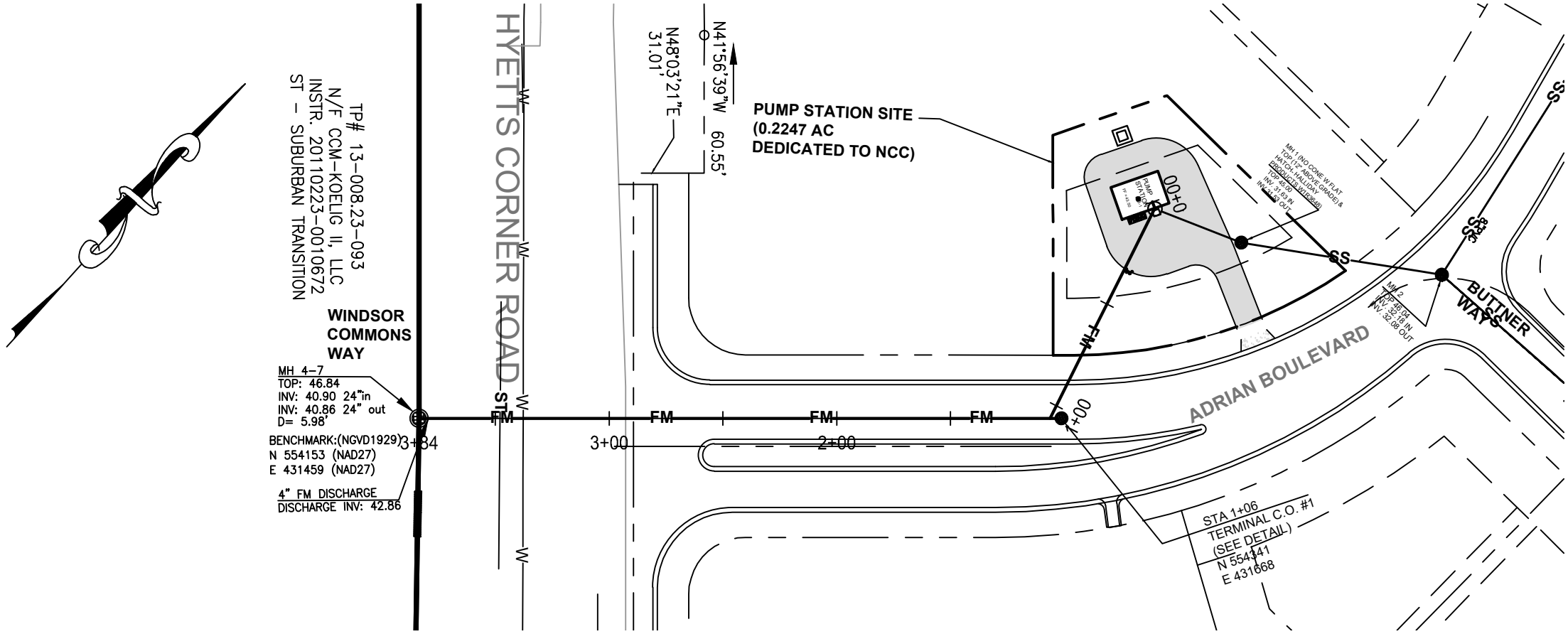
12. The owner / developer shall not place, plant, put or set any structure within the sanitary sewer easement.

13. Erosion and sediment control measures shall be in accordance with the Delaware Sediment and Stormwater Regulations, Delaware Erosion and Sediment Control Handbook and the New Castle County Drainage Code, as amended.

Supplemental Notes:

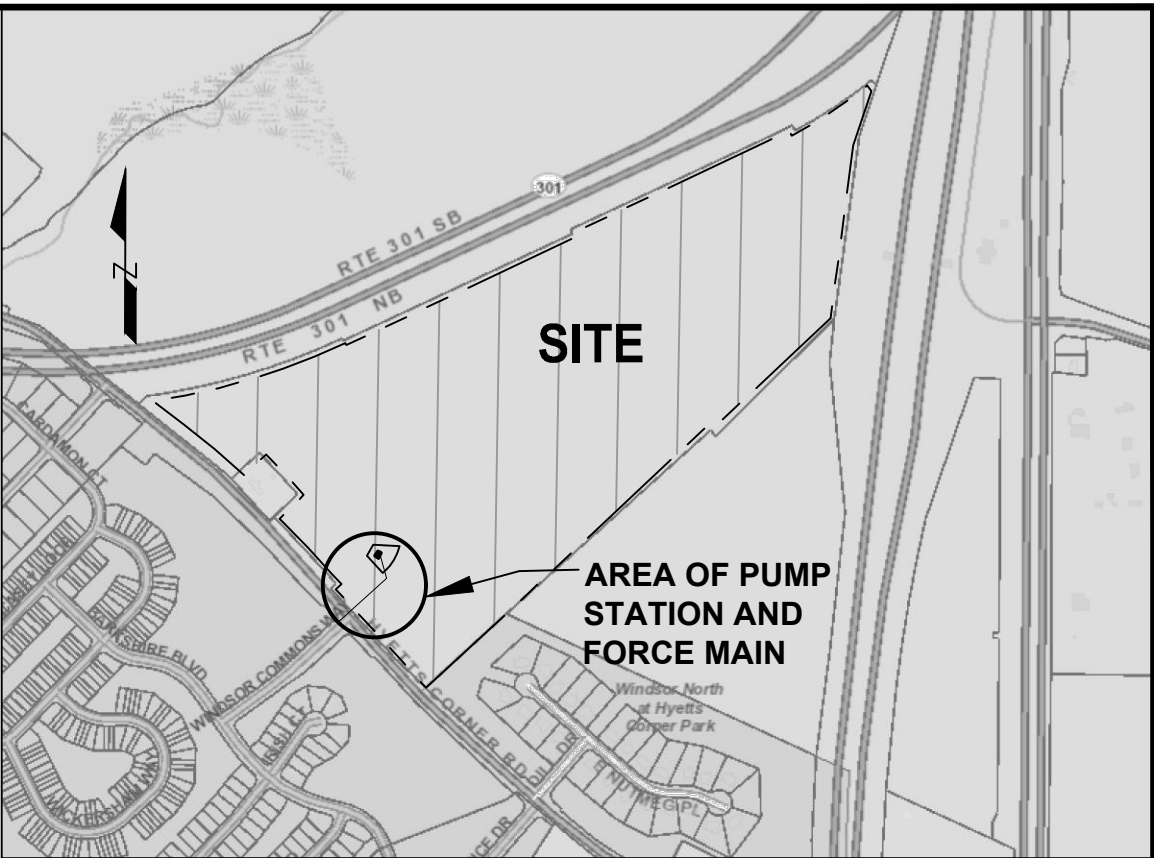
14. During the removal of the top half of the existing sanitary sewer pipe and construction of the brick benching and inflow channel within the proposed doghouse manhole, bypass pumping of sanitary sewer flows shall be done as necessary from the upstream manhole (MH ID 126501 to the downstream manhole (MH ID 16209). Traffic control for the shoulder closure (DE MUTCD TA-3A) and closure of the E.Holly Oak Drive intersection (DE MUTCD TA-20) shall be done per DelDOT MUTCD standards.

15. This plan does not contain measures for compliance with OSHA safety standards and practices.



INDEX PLAN

SCALE: 1" = 60'



LOCATION MAP
ADC MAP 18, GRID J10/K10

SCALE 1"= 800'

PLAN DATA:

1. PLAN PURPOSE: THE PURPOSE OF THIS PLAN IS TO PROVIDE INFORMATION AND DETAILS OF THE SANITARY SEWER PUMP STATION AND FORCE MAIN FOR REGULATORY APPROVAL AND CONSTRUCTION.

2. DATUM: NAD 27 DE STATE PLANE, VERTICAL DATUM: NGVD1929 (VERTICAL DATUM IS USED FOR CONSISTENCY WITH DESIGN INFORMATION USED AT THE WINDSOR NORTH, WINDSOR SOUTH, AND WINDSOR COMMONS DEVELOPMENTS. FOR CONVERSION TO NAVD88 VERTICAL DATUM, SUBTRACT 1.09 FT FROM NGVD1929 ELEVATIONS.

3. DESIGN FLOW DATA: **HYETTS LANDING:**
86 SFU X 300 GPD/SFU = 25,800 GPD (18 GPM)
25,800 GPD X 1 DAY/1,440 MIN X 4 (PF) = 72 GPM

FUTURE (POSSIBLE DEVELOPMENT OF ADJOINING PROPERTY):
25 SFU X 300 GPD/SFU = 7,500 GPD (5.2 GPM)
7,500 GPD X 1 DAY/1,440 MIN X 4 (PF) = 21 GPM

TOTAL (HYETTS LANDING PLUS POSSIBLE FUTURE DEVELOPMENT):
111 SFU X 300 GPD/SFU = 33,300 GPD (23 GPM)
33,300 GPD X 1 DAY/1,440 MIN X 4 (PF) = 93 GPM

SUBMITTALS PRIOR TO CONSTRUCTION (TO NEW CASTLE COUNTY DEPARTMENT OF PUBLIC WORKS)

SUBMISSION ID	DESCRIPTION	DESIGN STANDARD	TO BE OBTAINED FROM
BP-01	PUMP STATION BUILDING PLAN COMPLIANCE CERTIFICATION	NCC LAND USE	ENGINEER
BP-02	PUMP STATION BUILDING PLAN COMPLIANCE CERTIFICATION	NCC LAND USE	ENGINEER
BP-03	BUILDING PERMIT FOR THE PUMP STATION BUILDING	NCC LAND USE	NCC LAND USE
SC-01	SPECIFICATION FOR ALL THE CONSTRUCTION MATERIALS	DPW STANDARD SPECIFICATION	CONTRACTOR
SD-01	SHOP DRAWING FOR PUMP STATION BUILDING	DPW STANDARD SPECIFICATION	CONTRACTOR
SD-02	SHOP DRAWING FOR PUMP AND PIPE LAYOUTS	DPW STANDARD SPECIFICATION	CONTRACTOR
SD-03	SHOP DRAWING FOR PRE CAST WET WELL (SIGNED AND SEALED BY A DELAWARE REGISTERED PROFESSIONAL ENGINEER)	ASTM-C478	CONTRACTOR
SD-04	SOIL TEST REPORT FOR TEST PIT AT WET WELL LOCATION	DPW STANDARD SPECIFICATION	GEO-TECH

SEWER DETAIL TABLE (FORCE MAIN ONLY)

STREET NAME	TOTAL NUMBER OF MANHOLES	NOMINAL DIAMETER OF FORCE MAIN PIPE (IN)	TOTAL LINEAR FEET OF FORCE MAIN	PIPE MATERIAL
ADRIAN WAY	1	4	191	PVC DR-18
HYETTS CORNER ROAD	0	4	118	PVC DR-18
OFF STREET	0	4	74	PVC DR-18
TOTAL	1		383	

INDEX OF SHEETS

SHEET	PLAN
1	INDEX PLAN
2	PUMP STATION SITE PLAN
3-6	PUMP STATION PLAN AND DETAILS
7	FORCE MAIN PLAN AND PROFILE

LEGEND

EXISTING	PROPOSED
SPOT ELEVATION	(42.9)
ELEVATION CONTOUR	(43)
SANITARY SEWER	SS
FORCE MAIN	FM
STORM SEWER	ST
WATER	W
GAS	G
UG ELECTRIC	UE
ROW	
SIDEWALK	

PROFESSIONAL ENGINEER CERTIFICATION

I, TIM ANDERSON, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER WITH A BACKGROUND IN CIVIL ENGINEERING IN THE STATE OF DELAWARE AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, I CERTIFY THAT ALL OF THE INFORMATION ON THESE SANITARY SEWER DRAWINGS IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY ACCEPTED SURVEYING AND ENGINEERING STANDARDS AND PRACTICES AND BY THE NEW CASTLE COUNTY UNIFIED DEVELOPMENT CODE.. ADDITIONALLY, THE SANITARY SEWER DESIGN HAS BEEN PREPARED IN ACCORDANCE WITH AND COMPLIES WITH ALL APPLICABLE REGULATIONS, CODES, STANDARDS, GUIDELINES, LAWS, AND POLICIES, INCLUDING BUT NOT LIMITED TO CHAPTER 38 OF THE NEW CASTLE COUNTY CODE, THE DEPARTMENT OF PUBLIC WORKS POLICIES #6 AND #7, THE NEW CASTLE COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND AMENDMENTS AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.



6-16-26

DATE

CERTIFICATION OF OWNERSHIP

I, STEPHEN DEATON, HEREBY CERTIFY THAT CCM-HYETTS, LLC IS THE CURRENT LEGAL OWNER OF THE PROPERTY TO BE SEWERED AND THAT THE SANITARY SEWER WILL BE CONSTRUCTED IN ACCORDANCE WITH WITH ALL APPLICABLE REGULATIONS, CODES, STANDARDS, GUIDELINES, LAWS, AND POLICIES, INCLUDING BUT NOT LIMITED TO CHAPTER 38 OF THE NEW CASTLE COUNTY CODE, THE DEPARTMENT OF SPECIAL SERVICES POLICIES #6 AND #7, THE NEW CASTLE COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AND AMENDMENTS AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES.

STEPHEN DEATON

6-16-26

DATE

The New Castle County Department of Public Works has reviewed the documents bearing this stamp and it is a supporting document submitted hereafter subject for compliance with applicable New Castle County regulations and standards governing the project. This stamp does not constitute a warranty or endorsement by the County for the project or the project's design or construction. The County is not responsible for the project's design or construction. The County is not responsible for the project's design or construction. The County is not responsible for the project's design or construction.

Bryan Ammerman

NEW CASTLE COUNTY
DELAWARE
DEPARTMENT OF
PUBLIC WORKS

DATE: 1-25
SCALE: 1" = 30'
DRAWN BY: T.A.
CHECKED BY: T.A.

APPROVED BY:
COUNTY ENGINEER

DATE	REVISION
3-11-19	ORIGINAL
5-21-19	PER NCC
1-25-25	LOWER WET WELL
3-11-26	PER NCC
6-16-26	PER NCC

APPLICATION NO. : 2023-0128

INDEX PLAN
SANITARY SEWER PUMP STATION
AND FORCE MAIN PLAN
FOR
HYETTS LANDING

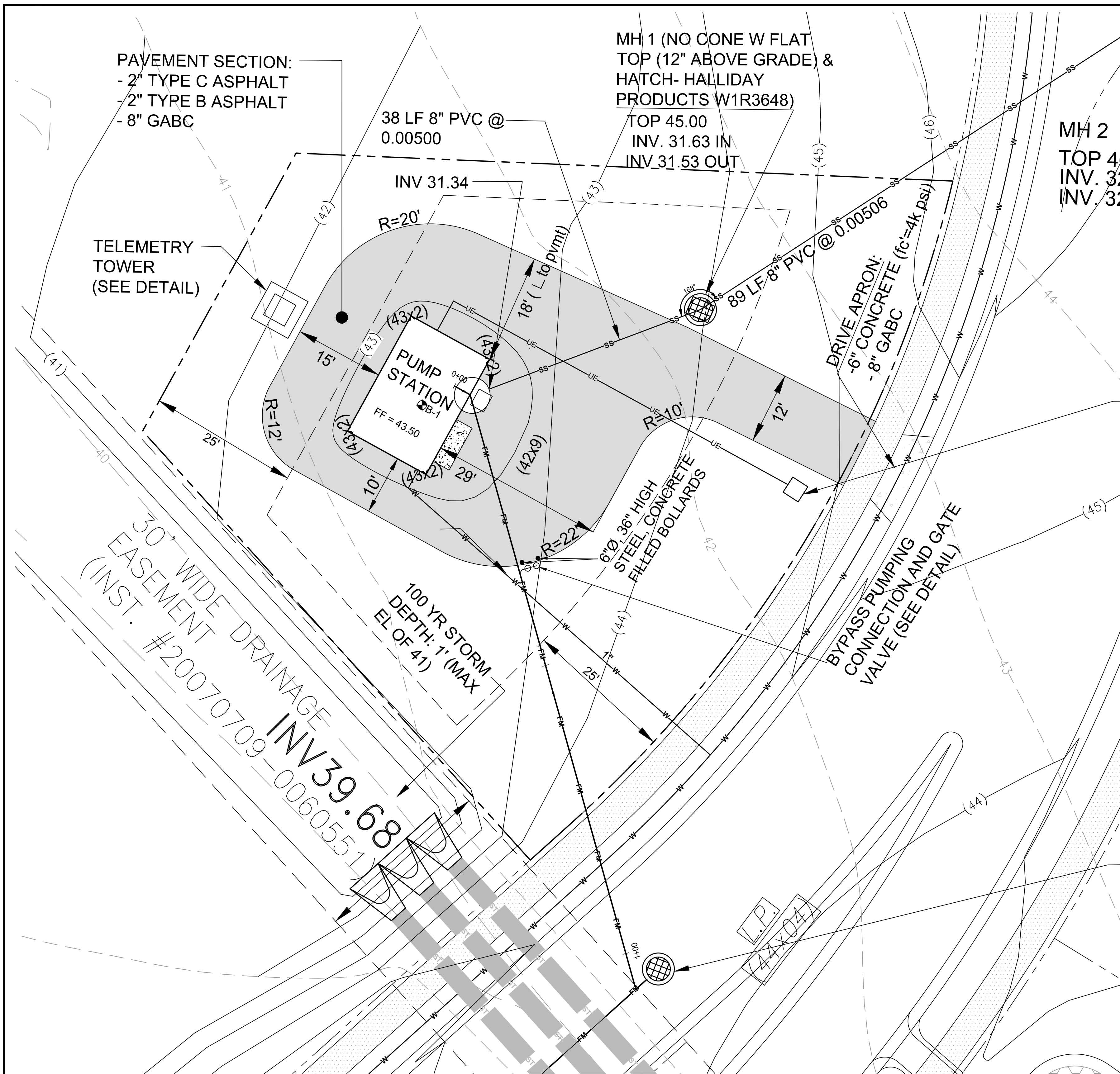
ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE
LOCATION DATA:
TP NO.: 13-005.00-009
ADDRESS: 379 HYETTS CORNER ROAD
MIDDLETOWN, DE 19709

OWNER:
CCM-HYETTS, LLC
62 ROCKFORD ROAD, SUITE 10
WILMINGTON, DE 19806
c/o: RCBA (302)-998-9463
rbatta@rcbette.com



242 MILFORD DRIVE MIDDLETOWN, DE 19709
302-540-2274 WWW.TIM-ANDERSON.COM

SCALE: 1"=60'
SHEET 1 OF 7
DWG:18024-SAN01

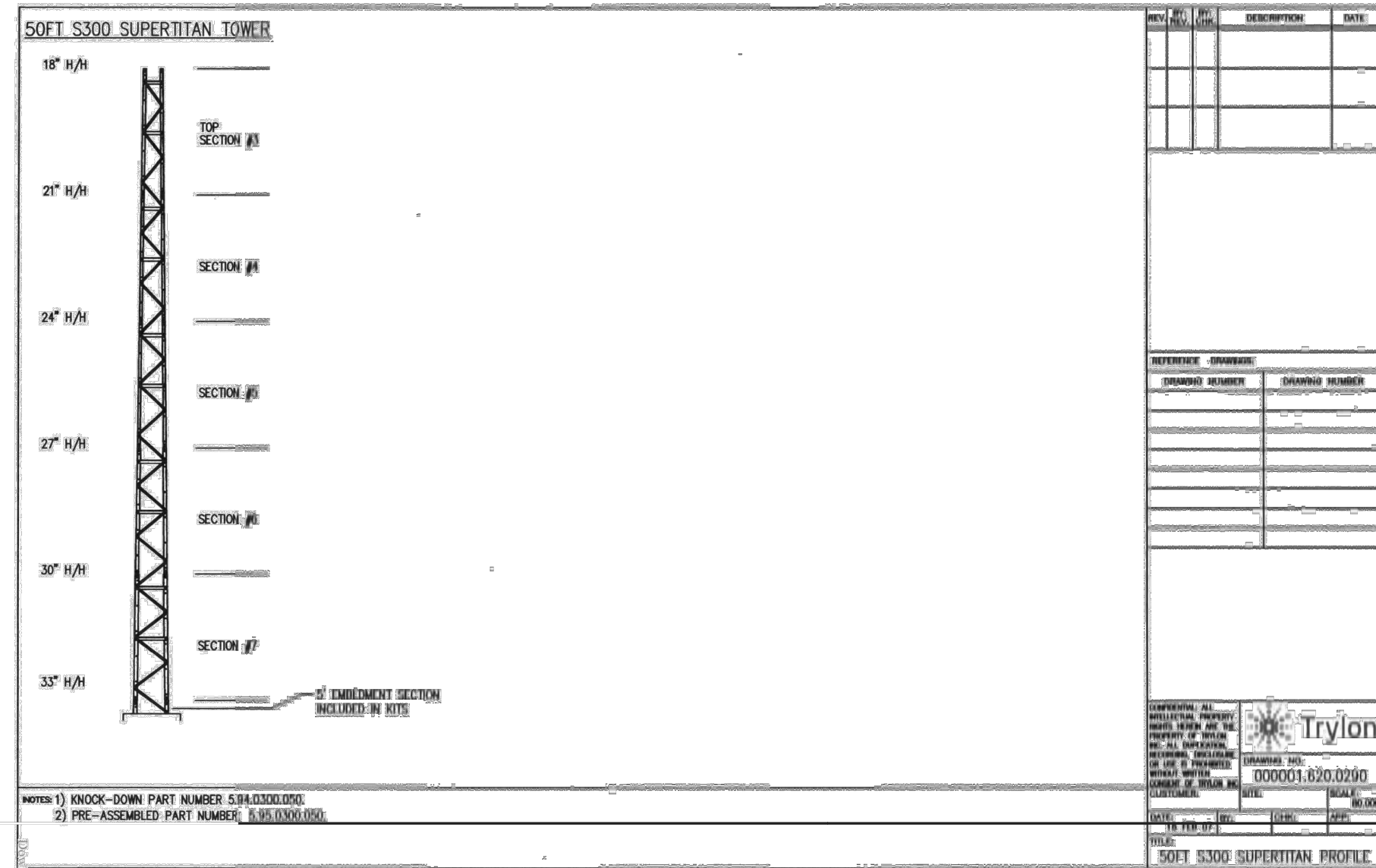


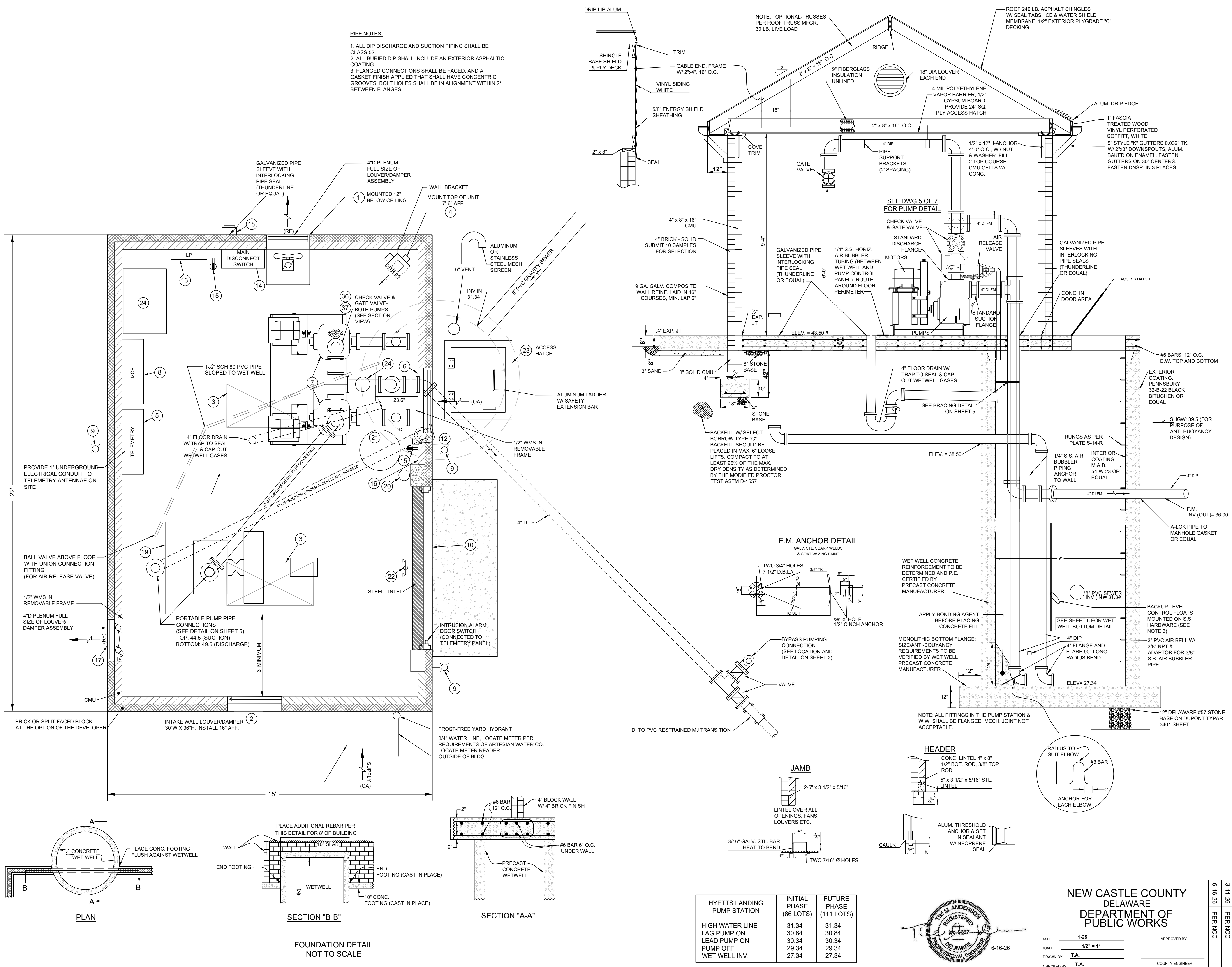
SCALE: 1" = 10'

RECOMMENDED LOCATION FOR DELMARVA POWER PAD MOUNTED TRANSFORMER. COORDINATE WITH DELMARVA POWER FOR EXACT LOCATION.

TERMINAL CLEANOUT (SEE DETAIL ON SHEET 7)

 CGC GEOSERVICES		TEST BORING B-1			Page 1 of 1				
Subsurface Evaluation Hyetts Landing Pump Station Middletown, DE CG 4319 GA		Date Started February 5, 2008 Date Completed February 5, 2008 Logged by J. Feldmann Weather Clear, 20s Driller/Agency J. Truett/CGC Geoservices		Drilling Equipment CME 55 Drilling Methods SPT, HSA Surface Elevation 41.5 feet					
		Sample Condition ☒ Retained ☐ ☐ At Completion							
Depth in feet	Surf. Elev. 41.5 ft	GRAPHIC UCS	DESCRIPTION	SAMPLES	Sample Number	Blows per 6 inches	Recovery (%)	Moisture Content (%)	Percent Passing 200 Sieve
0		ML	Moist, brown SILT, little fine to medium sand, trace clay, trace organics (roots)		S-1	4-3-4-3	2.0		
3.5	38.5	CL	Moist, light brown/ orange CLAY, some silt, trace fine sand.		S-2	2-10-12-11	2.0		
5			Moist, orange/ brown fine to coarse SAND and gravel, trace silt		S-3	2-8-12-26	1.7		
			Moist, brown/ orange fine to coarse SAND, some silt, little gravel		S-4	23-24-19-16	1.6		
			Moist, brown/ orange fine to coarse SAND, some gravel, little to some silt		S-5	6-10-10-6	1.6		
10			Moist, brown/ orange fine to coarse SAND, some gravel, little to some silt		S-6	5-9-9-8	1.5		
			Saturated brown/ orange fine to coarse SAND, trace silt		S-7	8-6-8-9	0.5		
			Saturated brown/ orange fine to coarse SAND, trace silt		S-8	6-7-2-2	1.6		
15			Saturated, brown/ orange fine to medium SAND, trace coarse sand, trace fine to medium gravel, trace silt		S-9	3-3-5-4	1.8		
		SM	Saturated, brown/ orange fine to medium SAND, trace coarse sand, trace fine to medium gravel, trace silt		S-10	3-3-4-4	1.6		
			Saturated, brown/ orange fine SAND, trace to little medium sand, trace silt						
25			Saturated, light brown/ orange fine to coarse SAND, some fine gravel, trace silt		S-11	4-4-4-2	1.0		
30	11.5		Moist, orange/ brown fine SAND, some to and silt		S-12	3-4-4-7	2.0		





- PAINTING:**
- CONCRETE MASONRY UNITS SHALL BE PAINTED W/ ONE COAT OF BLOCK FILLER AND TWO FINISH COATS.
- PUMPS AND PIPING SHALL HAVE ONE PRIME COAT AND TWO FINISH COATS, (SOME ITEMS MAY BE SHOP PRIMED).
- ALL SURFACES SHALL BE CLEAN OF RUST, DIRT, GREASE OR FOREIGN MATTER.
- PREPARATION & APPLICATION PER REQUIREMENTS OF PAINT MFG.
- 1- CONDUITS - OSHA ORANGE, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
 - 2- WATER LINES - OSHA BLUE, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
 - 3- AIR LINES - OSHA YELLOW, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
 - 4- WALLS & CEILING - BONE WHITE, SHERWIN WILLIAMS PRO INDUSTRIAL® ACRYLIC COATING
 - 5- PUMPS, PIPING, FITTINGS, DOOR, GRAY SHERWIN WILLIAMS MACROPOXY 646
 - 6- FLOOR - LIGHT GRAY, SHERWIN WILLIAMS ARMORSEAL 1K WB URETHANE FLOOR ENAMEL
 - 7- EXTERIOR MASONRY WALLS - CLEAR-SHERWIN WILLIAMS ANTI-GRAFFITI COATING

- NOTE:**
1. THE CONTRACTOR SHALL VERIFY PHYSICAL SIZES TO FIT IN THE SPACE ALLOTTED.
 2. THE CONTRACTOR SHALL SECURE PHYSICAL SIZE AND FREE AIR SPACE REQUIRED FROM THE GENERATOR MFG. & COORDINATE W/ LOUVER MFG.
 3. BACKUP LEVEL CONTROL SYSTEM SHALL INCORPORATE MERCURY ACTIVATED ACTION FLOATS FOR PUMPS OFF, LEAD PUMP ON, LAG PUMP ON, AND HIGH WATER LEVEL. ALARM FLOATS SHALL HAVE PVC OR POLYPROPYLENE HOUSING AND SHALL HAVE SUFFICIENT CORD LENGTH TO ELIMINATE THE NEED FOR A JUNCTION BOX OUTSIDE OF CABINET. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
- A SECOND HIGH WELL LEVEL ALARM FLOAT THAT BYPASSES THE PUMP CONTROL PANEL AND CONNECTS DIRECTLY TO THE TELEMETRY SYSTEM SHALL ALSO BE PROVIDED. THE SECOND HIGH WELL FLOAT SHALL BE PLACED SIX INCHES ABOVE THE BACKUP HIGH WELL FLOAT.

MATERIAL LIST	
ITEM	DESCRIPTION
1	PENN. VENTILATOR SUPPLY FAN COOK 14KPD20132, 1800 CFM @ 0.250" S.P. 1/4 HP AT 115V/1Ø, W/ WALL SLEEVE, WEATHERSHIELD MOTORIZED SHUTTER DAMPER, AND SCREENS.
2	24"x12"x4"DP INTAKE LOUVER POTORFF MODEL EPD-445, 0.7 SQ FT FREE AREA AND MOTORIZED DAMPER
3	LED LIGHT FIXTURE ENCLOSED AND GASKETED SURFACE MOUNT W/6000 LUMENS-4000 K W/ACRYLIC LENS, COLUMBIA MODEL LXEW-4-60ML-FAW-EU OR EQUAL
4	5.0 K W. WALL MOUNTED HEATER QMARK MODEL MH05-81, 208V/3Ø, 15.3 MCA W/ UNIT MOUNTED 24 VAC THERMOSTAT, WALL MOUNTING KIT MMH-5.
5	TELEMETRY - EMERSON CONTROL WAVE. SEE NCC SPECIFICATIONS
6	DIESEL PUMP WALL INTAKE LOUVER, POTORFF MODEL EOD-445, 3.5 SQ FT FREE AREA, W/120 VAC ACTUATOR, SPRING RETURN OPEN/POWER CLOSED.
7	(2) GORMAN-RUPP TA33S & SUCTION LIFT PUMPS ON COMMON BASE - SEE SHEET 5 OF 7 FOR DETAIL.
8	CONTROL PANEL (MCP) PER FUNCTIONS REQUIRED BY NCC SPECIFICATIONS
9	EXTERIOR LIGHT FIXTURE, HUBBLE MODEL PVL3-30L-U-4K-DB, WATER TIGHT & VANDAL RESISTANT W/ 4000K-3500 LUMENS & PHOTOCOLL
10	DOUBLE LEAF (2) 84"x42" x 1 1/2" THERMALLY INSULATED, FLUSH, 18 GAUGE STEEL FACE W/ 1/4 GAUGE TOP AND BOTTOM CHANNELS, POLYSTYRENE CORE, GALVANIZED EXTERIOR, PRIMED AND FINISHED WITH AN INDUSTRIAL QUALITY PAINT (COLOR SELECTED BY NCC). FRAMES SHALL BE MIN 14 GAUGE WITH THREE (3) ANCHOR JAMBS AND ONE (1) ANCHOR TO FLOOR, ANCHORS SHALL BE MIN 18 GAUGE. EACH DOOR W/ THREE (3) STAINLESS STEEL HINGES W/ SATIN FINISH, KNOB, STAINLESS STEEL DEAD BOLT LOCK SET W/ SATIN FINISH KEYS TO NCC MASTER KEY SYSTEM (SCALAGE). DOORS SHALL BE WEATHER STRIPPED & W/ ALUMINUM THRESHOLD
11	RESERVED
12	DIESEL PUMP TERMINAL BOX. REFER TO DETAIL ON SHEET 4A OF 7 FOR ADDITIONAL INFORMATION
13	ELECTRIC PANEL (L.P.) 225 A W/ 150 AMP MAIN CIRCUIT BREAKER 120 / 208 V, 3Ø, 4W, 22K AMP RMS INTERRUPTING CAPACITY, BOLT ON BREAKERS, SQUARE-D® TYPE NQ00 OR EQUAL, NEMA 3R ENCLOSURE
14	SERVICE ENTRANCE DISCONNECT SWITCH 200A, 3Ø W/ 150A FUSES W/ POSITIVE QUICK BREAK OPERATING MECHANISM, SAFETY INTERLOCKING COVER & EXTERNAL HANDLE NEMA 3R ENCLOSURE SQUARE-D® OR EQUAL PROVIDE SURGE ARRESTOR
15	CONVENIENCE DUPLEX RECEPTACLE 120V 2Ø 2 POLE 3W, GROUNDING TYPE, HUBBLE MODEL R0F503306 OR EQUAL
16	LIGHT SWITCH SINGLE POLE 2ØA, 120 / 277V BACK & SIDE WIRED W/ STN. STL. COVER, HUBBLE 1221 OR EQUAL
17	EXHAUST FAN TWIN TURBO OF TYPE MARADYNE MJR23K, 12V, 1650 CFM @ 20 S.P., W/3Øx30"x4"DP LOUVER POTORFF #EPD-445, 2.9 SQ FT FREE AREA
18	200 AMP SELF CONTAINED METER SOCKET PER DELMARVA POWER REQUIREMENTS
19	GORMAN-RUPP DIESEL PUMP MODEL T4AS - SEE SPECIFICATIONS PUMP DETAILS
20	FIRE EXTINGUISHER PENN ALL 10# MODEL 2W088 ABC RATED DRY CHEMICAL TYPE
21	55 GALLON DRUM FOR ODOR CONTROL W/1-1/4" PVC PIPE THRU FLOOR TO WET WELL
22	EXIT SIGN WITH EMERGENCY LIGHTING, THERMOPLASTIC TANDEM UNIT LED LAMPS, DAMP LOCATION MODEL
23	ACCESS HATCH TO WET WELL, HALLIDAY SERIES W/IR ACCESS DOOR WITH LOCK, MODEL # WIR3036 OR EQUAL
24	STORAGE CABINET, 36"Wx34"Hx24"D W/OUT WHEELS, BRUCE INDUSTRIAL SHOP CABINET, MODEL WG4961 OR APPROVED EQUAL
25, 35	SEE SHEET 4A FOR DIESEL PUMP EXHAUST AND MUFFLER SYSTEM.
36	CHECK VALVE, GOLDEN-ANDERSON, APCO VALVE & PRIMER, NIBCO, OR APPROVED EQUAL.
37	GATE VALVE, DUCTILE IRON W/ RUBBER COVERED GATE, FLANGED CONNECTIONS DRILLED TO AND 125 # STANDARDS, CAST IRON HAND-WHEEL 175 PSI MIN OPERATING PRESSURE, US PIPE METROSEAL 250, OR APPROVED EQUAL.

PUMP STATION PLANS AND DETAILS FOR HYETTS LANDING

ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE

DATE	REVISION
6-16-26	PER NCC
7-11-25	PER NCC
1-25-25	LOWER WET WELL
5-21-19	PER NCC
3-11-19	ORIGINAL

NEW CASTLE COUNTY DELAWARE DEPARTMENT OF PUBLIC WORKS

DATE: 1-25
SCALE: 1/2" = 1'
DRAWN BY: T.A.
CHECKED BY: T.A.

APPROVED BY: COUNTY ENGINEER

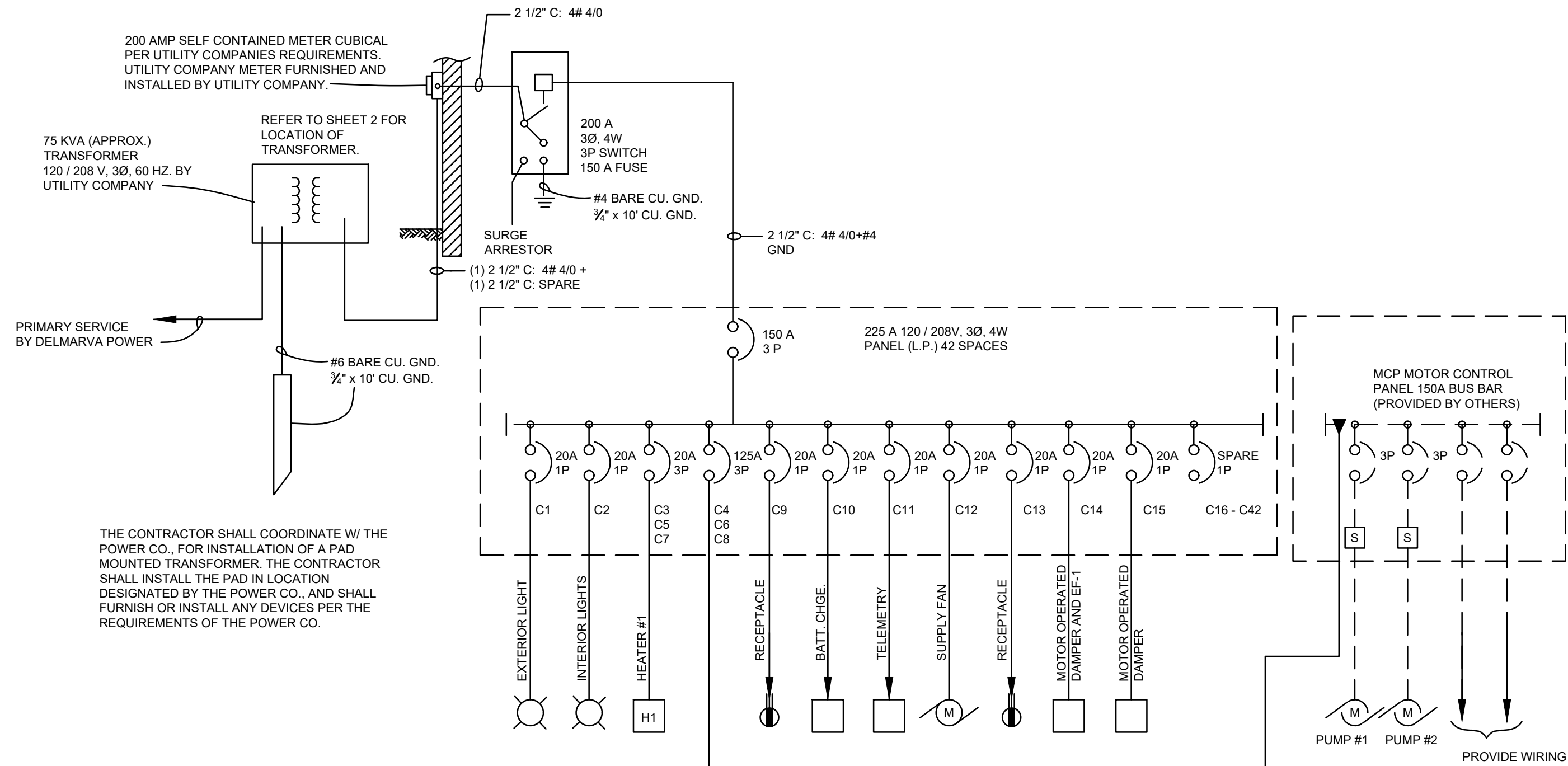
CIVIL ENGINEERING ANDERSON
242 MILFORD DRIVE MIDDLETOWN, DE 19709
302-540-2274 WWW.TM-ANDERSON.COM

SCALE: 1/2" = 1'

SHEET 3 OF 7
DWG:18024-SAN03

LEGEND

S	SINGLE POLE SWITCH (42" AFF)	FC	FLEXIBLE CONNECTION
S _T	MANUEL MOTOR STARTER W/THERMAL OVERLOADS, 48" AFF	G	GAS
+	DUPLEX RECEPTACLE	H	HIGH
+	DUPLEX RECEPTACLE (GFI)	HTR	HEATER
○	JUNCTION BOX	M	MOTOR
■	ELECTRIC PANELBOARD SURFACE MOUNTED	MOD	MOTOR OPERATED DAMPER
- - -	CIRCUIT HOMERUNS CONCEALED WITHIN THE BUILDING	OA	OUTSIDE AIR
□	FUSED DISCONNECT SWITCH	PC	PLUMBING CONTACTOR
AFF	ABOVE FINISHED FLOOR	RF	RELIEF AIR
CB	CIRCUIT BREAKER	TSP	TOTAL STATIC PRESSURE (IN W.C.)
D	DEEP	W	WIDE
EA	EXHAUST AIR	W /	WITH
EC	ELECTRICAL CONTRACTOR	WMS	WIRE MESH SCREEN
F	FAN	WP	WEATHERPROOF
		+	HOSE BIBB
		⊥	WALL HYDRANT



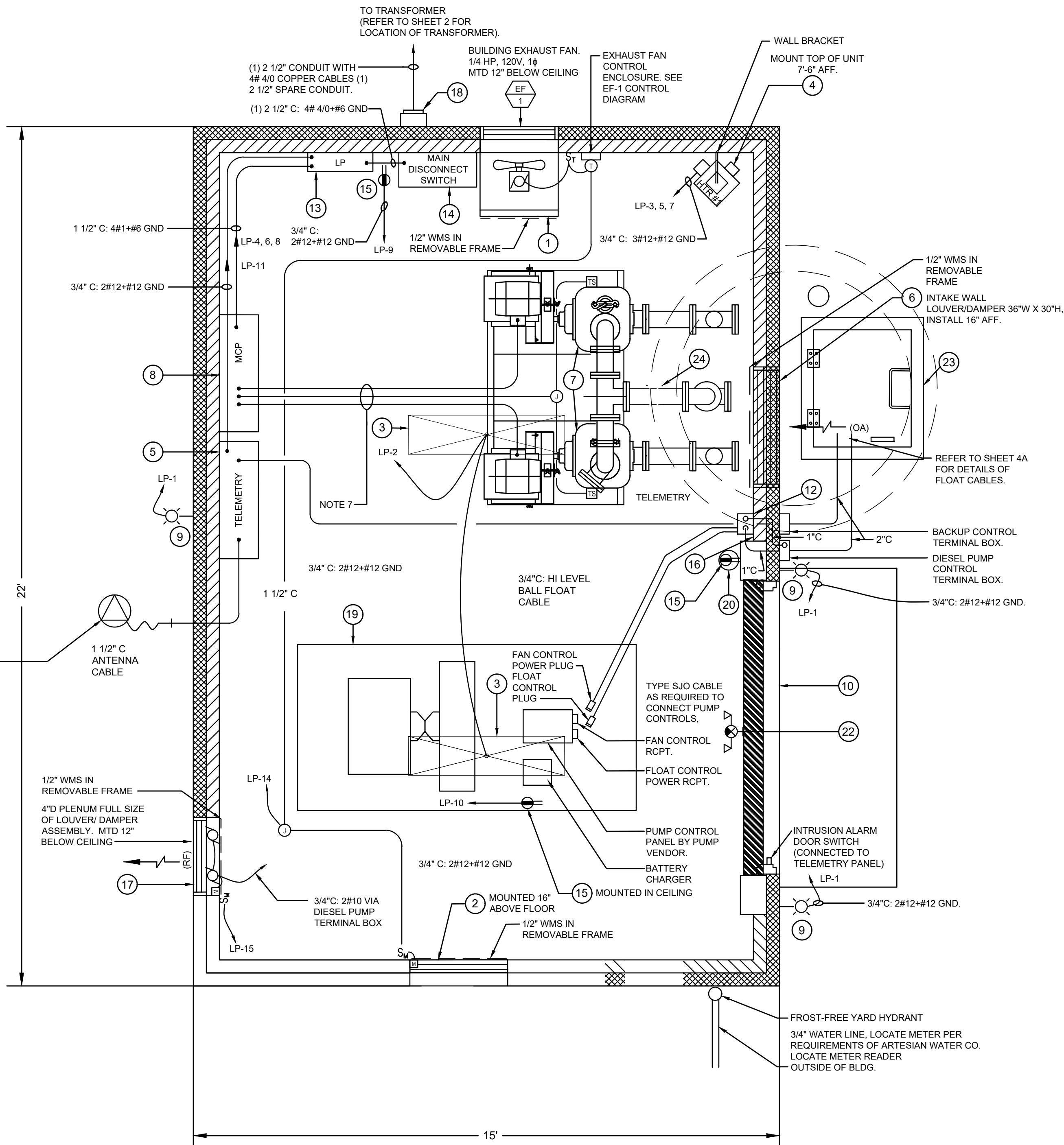
SINGLE LINE WIRING DIAGRAM
(SEE PLAN FOR WIRE SIZE)

MECHANICAL NOTES

- OPERATION: LOUVER/DAMPER SHALL REMAIN NORMALLY CLOSED THROUGH DAMPER OPERATOR. UPON LOSS OF COMMERCIAL POWER, DAMPER SHALL SPRING RETURN AND FAIL OPEN TO PROVIDE OUTSIDE AIR FOR OPERATION OF THE AIR COOLED DIESEL ENGINE DRIVEN PUMP SET.



6-16-26



ELECTRICAL NOTES

- REFER TO SHEET 3 FOR THE "MATERIAL LIST" TO COORDINATE THE IDENTIFICATION OF THE NUMBERS CIRCLED ON THE MECHANICAL/ELECTRICAL FLOOR PLAN.
- E.C. SHALL BE RESPONSIBLE FOR CONTROL WIRING FOR THE WALL LOUVERS 120V MOD'S (MOTOR OPERATED DAMPERS) TO THE DIESEL PUMP RUN CONTACTS.
- ALL CIRCUITS SHALL BE 2#12, #12 GND THHN/THWN IN 3/4" EMT CONDUIT UNLESS OTHERWISE NOTED.
- E.C. SHALL PROVIDE THE STANDARD SPARE PARTS PROVIDED BY THE VENDORS. E.C. SHALL SUPPLY 100% REPLACEMENT FOR ALL PILOT LAMPS AND FUSES. 10% OR QUANTITY OF ONE, WHICH EVER IS GREATER OF ALL TIMING AND CONTROL RELAYS.
- E.C. SHALL PROVIDE FROM EQUIPMENT VENDORS A RECOMMENDED LIST OF SPARE PARTS TO THE OWNER UPON COMPLETION OF PROJECT. E.C. SHALL ALSO PROVIDE A SPARE PARTS LIST OF EQUIPMENT HE/SHE HAS SUPPLIED OTHER THAN PROVIDED BY THE VENDOR.
- RESERVED
- PUMP CONTROL PANEL AND PUMPS ARE SUPPLIED AND INSTALLED BY OTHERS. E.C. SHALL COMPLETE ALL FINAL CONNECTIONS TO THE CONTROL PANEL. E.C. SHALL PROVIDE (2) TWO 1" PVC CONDUITS FOR THE PUMP POWER CABLES AND (1) ONE 2" PVC CONDUIT FOR THE CONTROL WIRING.
- ARC FLASH HAZARD ANALYSIS STUDY INCLUDING PANEL LABELING ARE REQUIRED AND SHALL BE IN ACCORDANCE NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE.

EXHAUST NOTES

- CONTRACTOR SHALL INSTALL THE EXHAUST SYSTEM IN CONFORMANCE WITH NFPA AND OTHER APPLICABLE CODES.

PAINTING:

CONCRETE MASONRY UNITS SHALL BE PAINTED W/ ONE COAT OF BLOCK FILLER AND TWO FINISH COATS.

PUMPS AND PIPING SHALL HAVE ONE PRIME COAT AND TWO FINISH COATS, (SOME ITEMS MAY BE SHOP PRIMED).

ALL SURFACES SHALL BE CLEAN OF RUST, DIRT, GREASE OR FOREIGN MATTER.

PREPARATION & APPLICATION PER REQUIREMENTS OF PAINT MFR.

- CONDUITS - OSHA ORANGE, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
- WATER LINES - OSHA BLUE, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
- AIR LINES - OSHA YELLOW, SHERWIN WILLIAMS INDUSTRIAL ENAMEL HS
- WALLS & CEILING - BONE WHITE, SHERWIN WILLIAMS PRO INDUSTRIAL® ACRYLIC COATING
- PUMPS, PIPING, FITTINGS, DOOR, GRAY SHERWIN WILLIAMS MACROPOXY 646
- FLOOR - LIGHT GRAY, SHERWIN WILLIAMS ARMORSEAL 1K WB URETHANE FLOOR ENAMEL
- EXTERIOR MASONRY WALLS - CLEAR-SHERWIN WILLIAMS ANTI-GRAFFITI COATING

NOTE:

- THE CONTRACTOR SHALL VERIFY PHYSICAL SIZES TO FIT IN THE SPACE ALLOTTED.
- ALL HARDWARE IN THE STATION AND WET WELL SHALL BE STAINLESS STEEL.

PLUMBING NOTES:

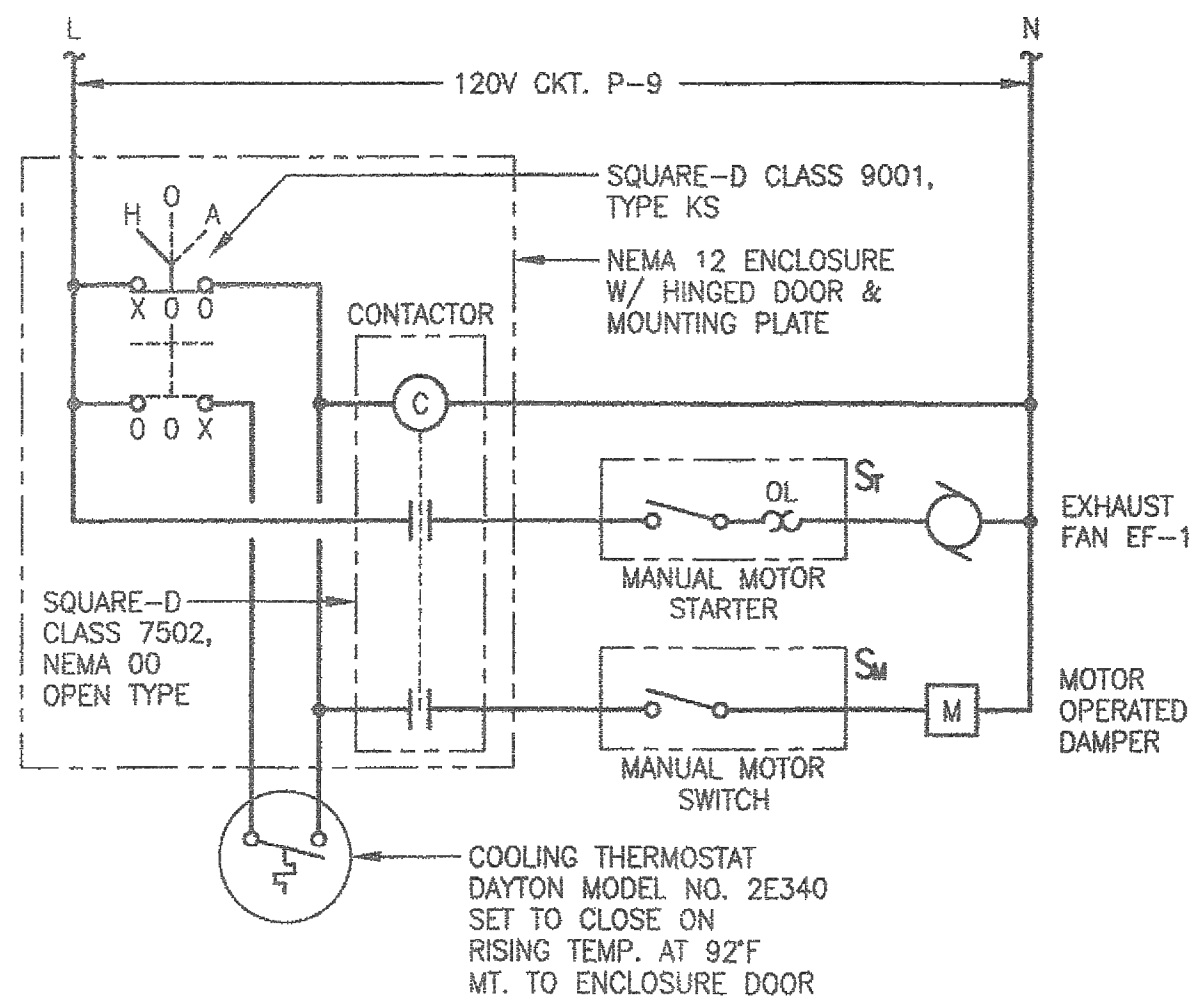
- ALL PLUMBING FIXTURES, EQUIPMENT AND MATERIALS SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE (IPC). INSTALLATION OF ALL PLUMBING FIXTURES, EQUIPMENT AND MATERIALS SHALL BE IN ACCORDANCE WITH THE IPC, STATE OF DELAWARE PLUMBING CODE AND ALL OTHER LOCAL CODES AND ORDINANCES.
- DOMESTIC WATER PIPING SHALL BE HARD-DRAWN, SEAMLESS ASTM B-88 TYPE "L" COPPER WITH SOLDER JOINT WROUGHT COPPER ANSI B-16.22 FITTINGS. VALVES SHALL BE TWO FULL PORT, BRONZE BODY, SOLDER ENDS, 600 PSI WOG RATED, COLD NON-SHOCK WITH REINFORCED TFE SEALS, 316 STAINLESS STEEL BALL, NON-BLOWOUT STEM DESIGN, NFS 61.
- SANITARY, WASTE AND VENT PIPING SHALL BE HUB-LESS CAST IRON PIPE FOR 2" AND LARGER AND COPPER DWV DRAINAGE PIPE FOR 1 1/2" AND SMALLER.
- PC TO PROVIDE AND INSTALL ALL PLUMBING FIXTURES, EQUIPMENT AND MATERIALS. ROUGH-IN ALL PLUMBING UTILITIES AND MAKE FINAL PLUMBING CONNECTIONS.

MATERIAL LIST	
ITEM	DESCRIPTION
1	PENN. VENTILATOR EXHAUST FAN COOK 14XP320132, 1580 CFM @ 0.250" S.P. 1/4 HP AT 115V/110, W/WALL SLEEVE, WEATHERSHIELD MOTORIZED SHUTTER DAMPER, AND SCREENS.
2	24"x12"x10" INTAKE LOUVER POTTORFF MODEL EFD-445, 0.7 SQ FT FREE AREA AND MOTORIZED DAMPER
3	LED LIGHT FIXTURE ENCLOSED AND GASKETED SURFACE MOUNT W/2000 LUMENS-4000K W/ ACRYLIC LENS, COLUMBIA MODEL LXEW-4-40M-FAW-EU OR EQUAL
4	5.0 K.W. WALL MOUNTED HEATER QMARK MODEL MH05-81, 208V/30, 15.3 MCA W/ UNIT MOUNTED 24 VAC THERMOSTAT, WALL MOUNTING KIT- MNB-5
5	TELEMETRY - EMERSON CONTROL WAVE. SEE NCC SPECIFICATIONS
6	DIESEL PUMP WALL INTAKE LOUVER. 36"x30"x4"DP POTTORFF MODEL EFD-445, 3.5 SQ FT FREE AREA, W/120 VAC ACTUATOR, SPRING RETURN OPEN/POWER CLOSED.
7	(2) GORMAN-RUPP 14A35-B SUCTION LIFT PUMPS ON COMMON BASE - SEE SHEET 5 OF 7 FOR DETAIL
8	CONTROL PANEL (MCP) PER FUNCTIONS REQUIRED BY NCC SPECIFICATIONS
9	EXTERIOR LIGHT FIXTURE, HUBBELL MODEL PVL3-30L-U-4K-DB, WATER TIGHT & VANDAL RESISTANT W/ 4000K-3500 LUMENS & PHOTOCELL.
10	DOUBLE LEAF (2) 84"x42" x 1 1/2" THERMALLY INSULATED, FLUSH, 16 GAUGE STEEL FACE W/ 14-GAUGE TOP AND BOTTOM CHANNELS, POLYSTYRENE CORE, GALVANIZED EXTERIOR, PRIME AND FINISHED WITH AN INDUSTRIAL QUALITY PAINT (COLOR SELECTED BY NCC). FRAMES SHALL BE MIN 14-GAUGE WITH THREE (3) ANCHOR JAMBS AND ONE (1) ANCHOR TO FLOOR. ANCHORS SHALL BE MIN 10-GAUGE. EACH DOOR W/ THREE (3) STAINLESS STEEL HINGES W/ SATIN FINISH, KNOB, STAINLESS STEEL DEAD BOLT LOCK SET W/ SATIN FINISH KEED TO NCC MASTER KEY SYSTEM (SCHLAGE) DOORS SHALL BE WEATHER STRIPPED & W/ ALUMINUM THRESHOLDS
11	RESERVED
12	DIESEL PUMP TERMINAL BOX. REFER TO DETAIL ON SHEET 4A OF 7 FOR ADDITIONAL INFORMATION.
13	ELECTRIC PANEL (LP.) 225 A W/ 150 AMP MAIN CIRCUIT BREAKER 120/208 V, 3Ø, 4W, 22K AMP RMS INTERRUPTING CAPACITY, BOLT ON BREAKERS, SQUARE "D" TYPE NOOD OR EQUAL, NEMA 3R ENCLOSURE
14	SERVICE ENTRANCE DISCONNECT SWITCH 200A, 3P W/ 150A FUSES W/ POSITIVE QUICK BREAK OPERATING MECHANISM, SAFETY INTERLOCKING COVER & EXTERNAL HANDLE NEMA 3R ENCLOSURE SQUARE "D" OR EQUAL, PROVIDE SURGE ARRESTOR
15	CONVENIENCE DUPLEX RECEPTACLE 120V 20A 2 POLE 3W, GROUNDING TYPE, HUBBLE MODEL HRF550202 OR EQUAL
16	LIGHT SWITCH SINGLE POLE 20A, 120/277V BACK & SIDE WIRED W/ STL. COVER, HUBBLE 1221 OR EQUAL
17	EXHAUST FAN TWIN TURBO OF TYPE MARADYNE MUS2K, 12V, 1650 CFM @ 20 S.P., W/ 30"x30"x4"DP LOUVER POTTORFF #EFD-445, 2.9 SQ FT FREE AREA
18	200 AMP SELF CONTAINED METER SOCKET PER DELMARVA POWER REQUIREMENTS
19	GORMAN-RUPP DIESEL PUMP MODEL 14A8 - SEE SPECIFICATIONS PUMP DETAILS
20	FIRE EXTINGUISHER PENN ALL 10# MODEL 2W088 ABC RATED DRY CHEMICAL TYPE
21	55 GALLON DRUM FOR ODOOR CONTROL W/ 1/4" PVC PIPE THRU FLOOR TO WET WELL.
22	EXIT SIGN WITH EMERGENCY LIGHTING, THERMOPLASTIC TANDEM UNIT LED LAMPS, DAMP LOCATION MODEL
23	ACCESS HATCH TO WET WELL, HALLIDAY SERIES W/IR ACCESS DOOR WITH LOCK, MODEL # WIR30308 OR EQUAL
24	RESERVED

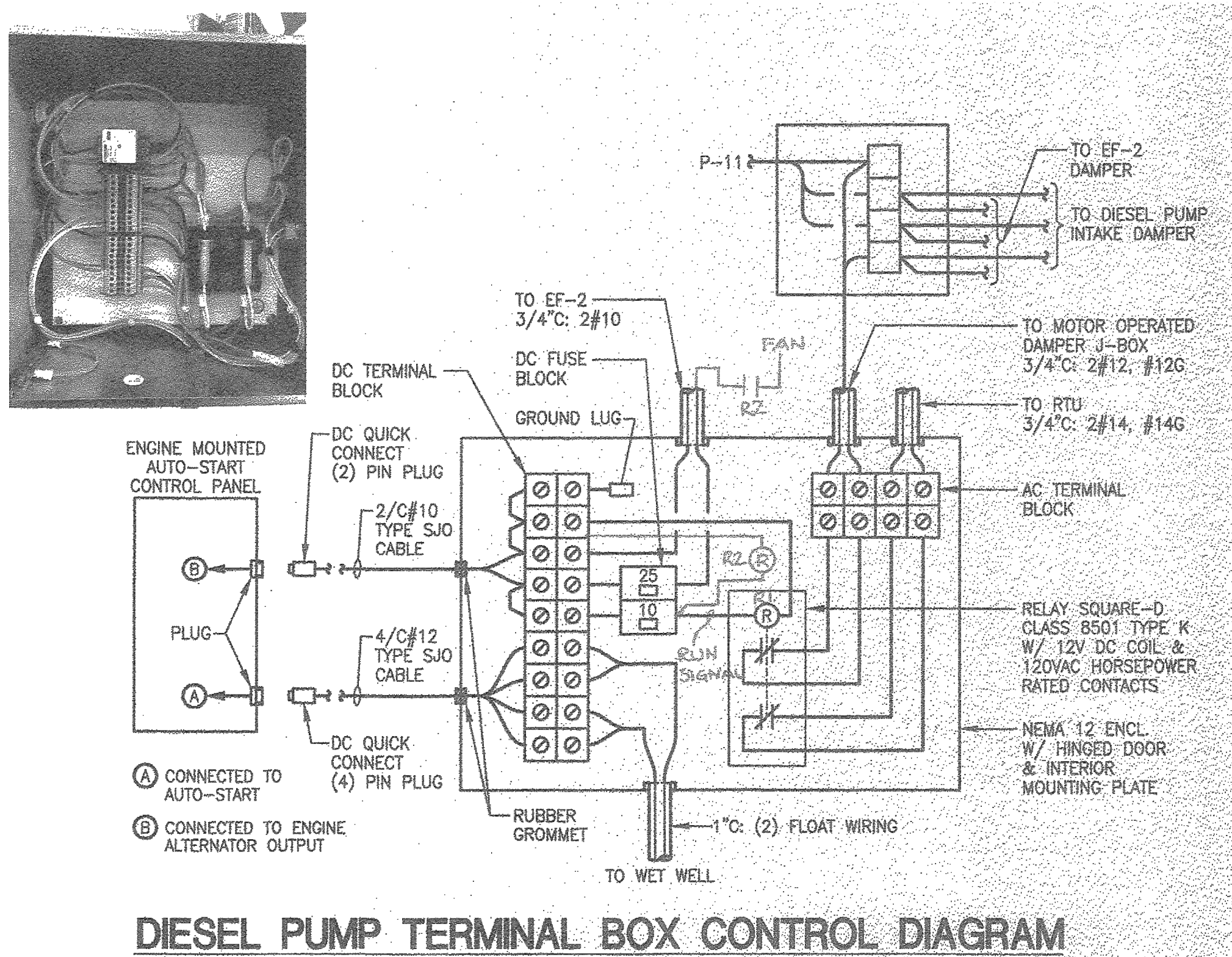
PUMP STATION PLANS AND DETAILS FOR HYETTS LANDING

ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE

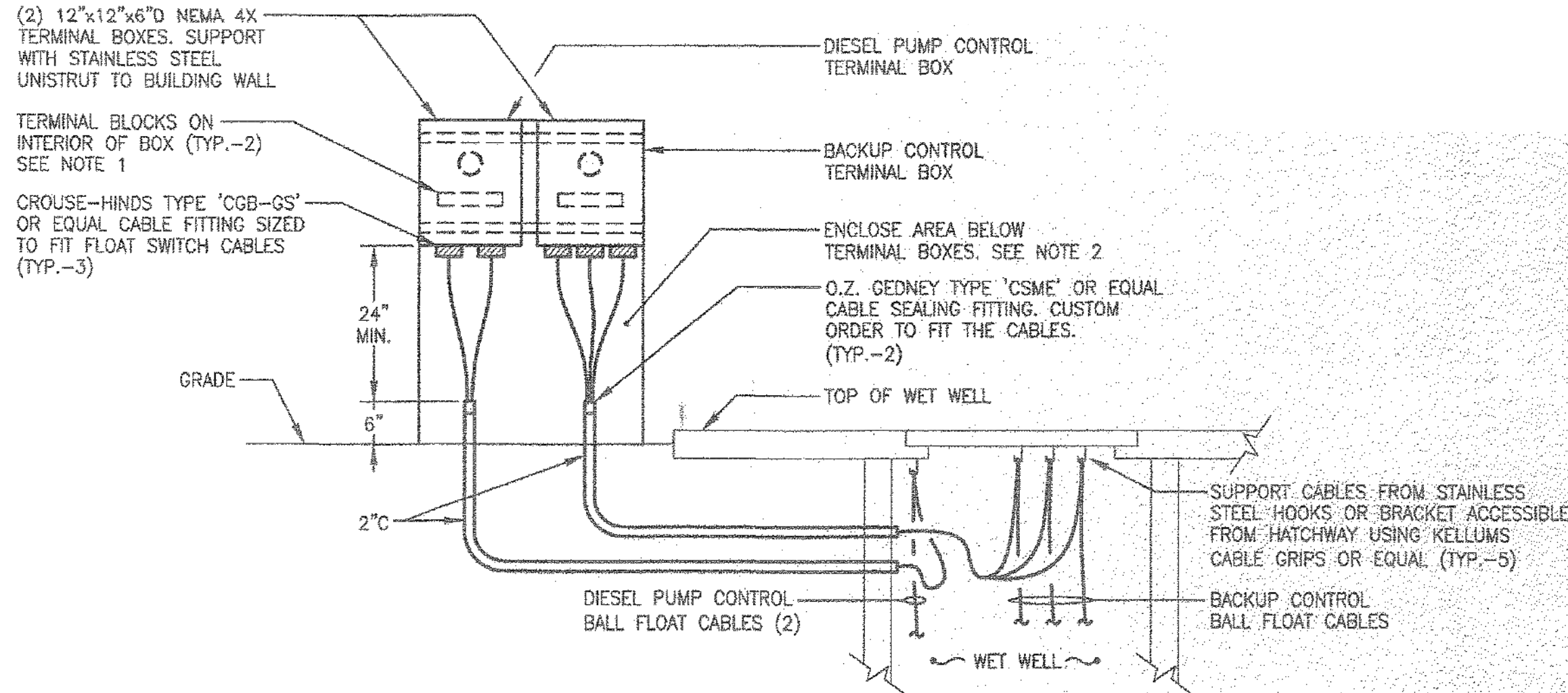
NEW CASTLE COUNTY DELAWARE DEPARTMENT OF PUBLIC WORKS		DATE 5-4-26 SCALE 1/2" = 1' DRAWN BY T.A. CHECKED BY T.A.	APPROVED BY _____ COUNTY ENGINEER
PER NCC	3-11-19 6-16-26	REVISION ORIGINAL	DATE 5-4-26
SCALE: 1/2"=1'		SHEET 4 OF 7 DWG:18024-SAN03	



EF-1 CONTROL DIAGRAM



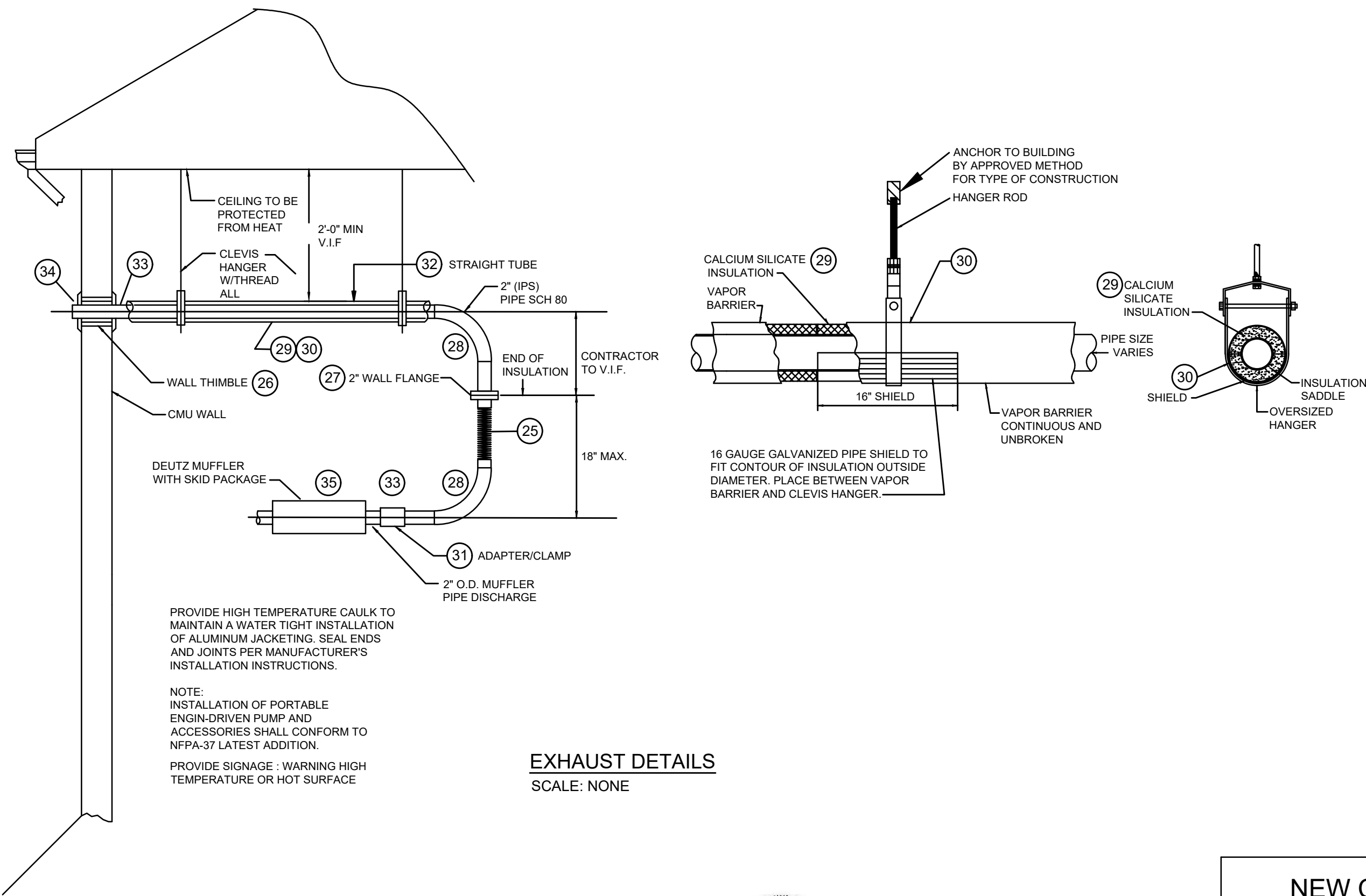
DIESEL PUMP TERMINAL BOX CONTROL DIAGRAM



BALL FLOAT TERMINAL BOX DETAIL
(2 TERMINAL BOXES)
N.T.S.

- NOTES:**
1. TERMINATE EQUIPMENT CONDUCTORS ON TERMINAL BLOCKS INSIDE OF TERMINAL BOX. PROVIDE CLASS 9080 TYPE 'G' TERMINAL BLOCK ASSEMBLIES FOR CONTROL DEVICE CABLES.
 2. AREA UNDER SPLICE BOX SHALL BE ENCLOSED WITH PERFORATED S.S. ASSEMBLY. THE STAINLESS STEEL SHALL BE TYPE 316 GAUGE (MINIMUM) WITH 5/32" HOLES ON 3/16" STAGGERED CENTERS FOR 63% OPEN AREA. ASSEMBLY SHALL BE FRAMED WITH S.S. ANGLE SUPPORTS. FRONT SCREEN SHALL BE REMOVABLE FOR ACCESS TO CABLES. ALL EDGES SHALL HAVE SMOOTH FINISH.

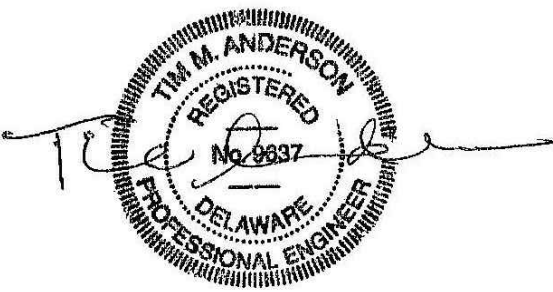
DIESEL PUMP EXHAUST/ MUFFLER MATERIAL LIST	
ITEM	DESCRIPTION
25	MIRATECH FLO2X-02TF1-120-3: CUSTOM FLEX ASSEMBLY, 2" TUBE FLANGE INLET, 2" TUBE FLANGE OUTLET, 12" OVERALL LENGTH, 2" DIAMETER, 304 STAINLESS STEEL
26	MIRATECH WTX-02-12-3: 2" 304SS WALL THIMBLE
27	MIRATECH BNFFG-02: FULL FACED FLANGE GASKET SET
28	MIRATECH ELX-02TS-02TF1-060X0060-3: CUSTOM, 304 S.S., SHORT SMOOTH 90° ELBOW, 2" TUBE STUB INLET, 2" TUBE FLANGE OUTLET, 6"X6" LEG LENGTHS (ALSO 2" FLANGE INLET, 2" SLOTTED CUFF OUTLET)
29	CALCIUM SILICATE INSULATION.
30	16 GAGE GALVANIZED PIPE INSULATION SHIELD.
31	MIRATECH TC-0200CF-0200CF: TUBE CONNECTOR
32	MIRATECH TUBE-0200-0120-3: 304 S.S. STRAIGHT TUBE
33	MIRATECH SSC-225: SURE SEAL CLAMPS
34	MIRATECH MEX-02CF-120-3: CUSTOM, 304 S.S. MITERED OUTLET, 2" SLOTTED CUFF INLET, 12" OVERALL LENGTH
35	MIRATECH M1EE0X-02TS-3-00000000: M-SERIES, INDUSTRIAL GRADE, 304 STAINLESS STEEL CYLINDRICAL SILENCER, 2" TUBE STUB END INLET, 2" TUBE STUB OUTLET



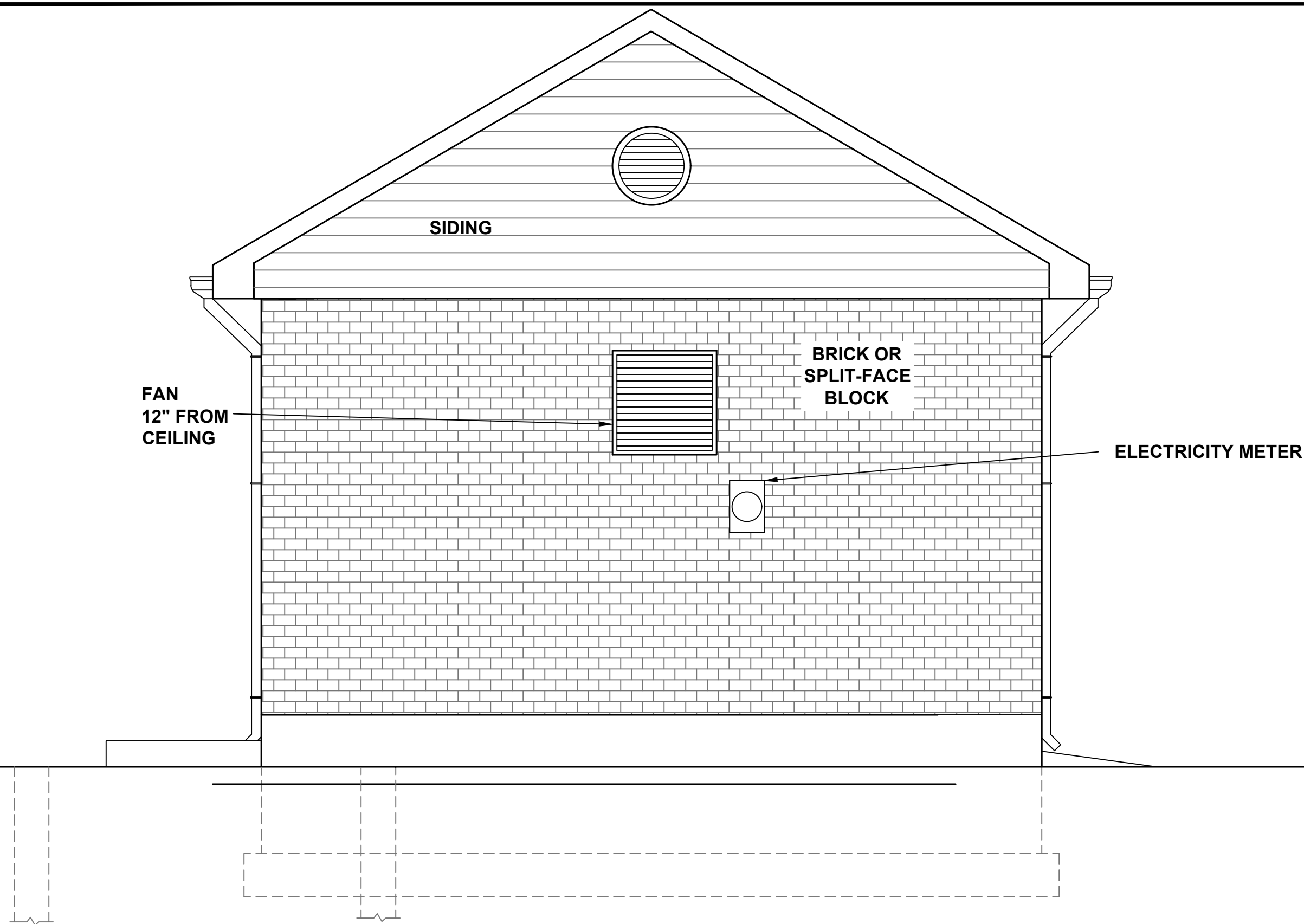
EXHAUST DETAILS
SCALE: NONE

PUMP STATION PLANS AND DETAILS
FOR
HYETTS LANDING

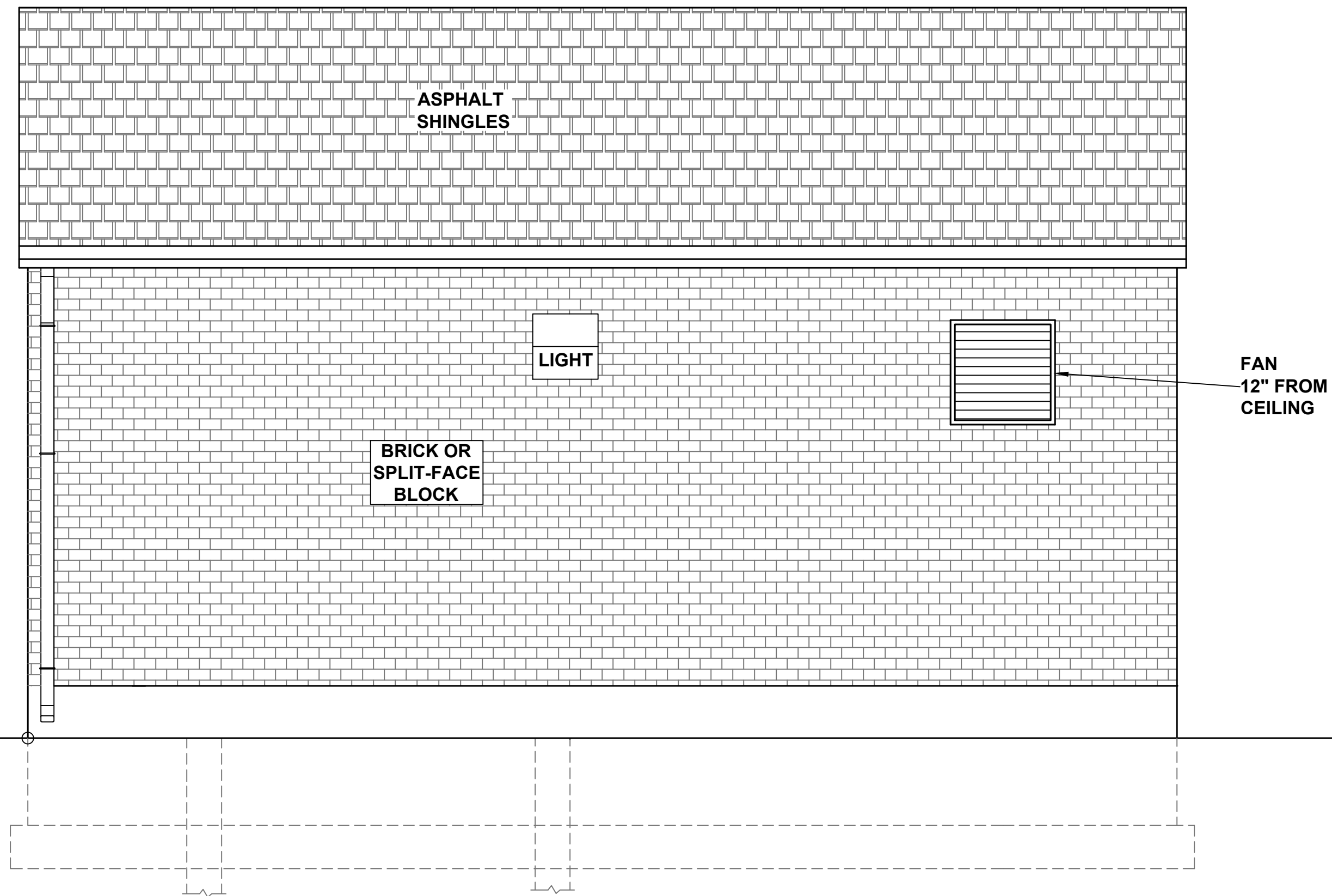
ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE



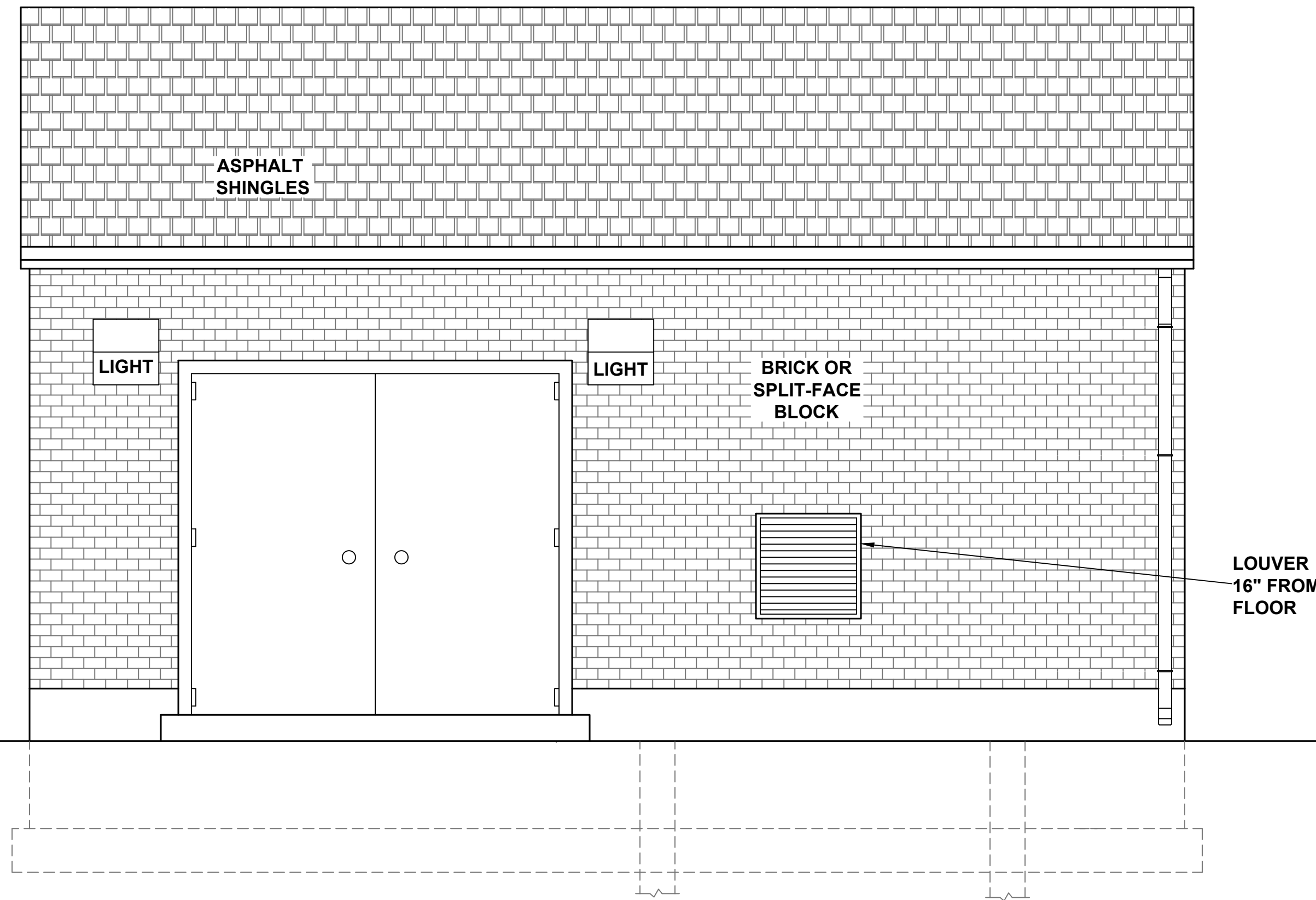
NEW CASTLE COUNTY DELAWARE DEPARTMENT OF PUBLIC WORKS		DATE 5-4-26	APPROVED BY T.A.	COUNTY ENGINEER
SCALE NOT TO SCALE	DRAWN BY T.A.	CHECKED BY T.A.	DATE 3-11-19	REVISION ORIGINAL
SCALE: NOT TO SCALE		SHEET 4A OF 7		
DWG:18024-SAN03				



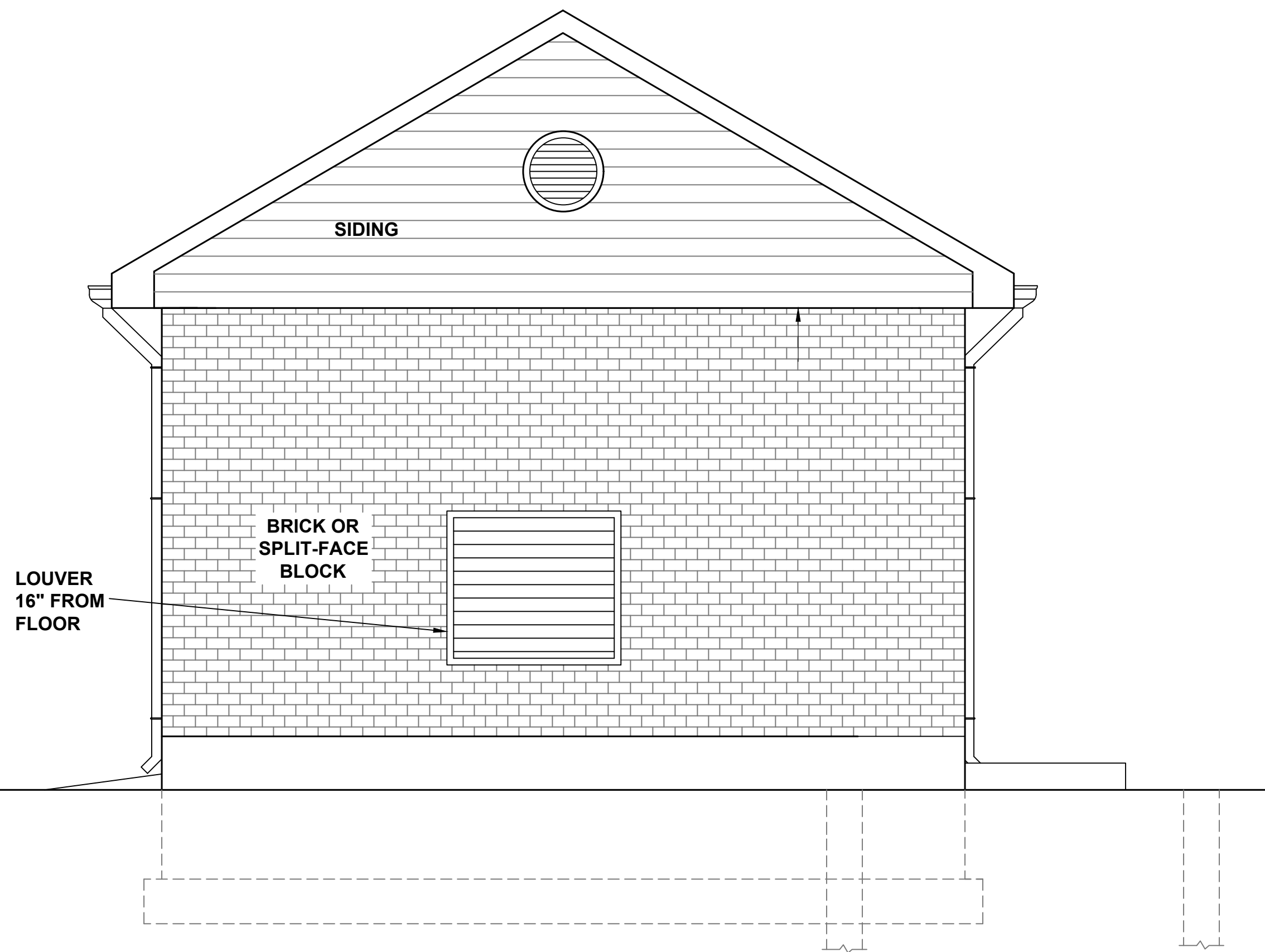
NORTH ELEVATION



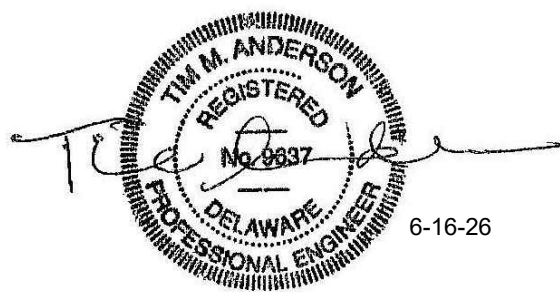
WEST ELEVATION



EAST ELEVATION



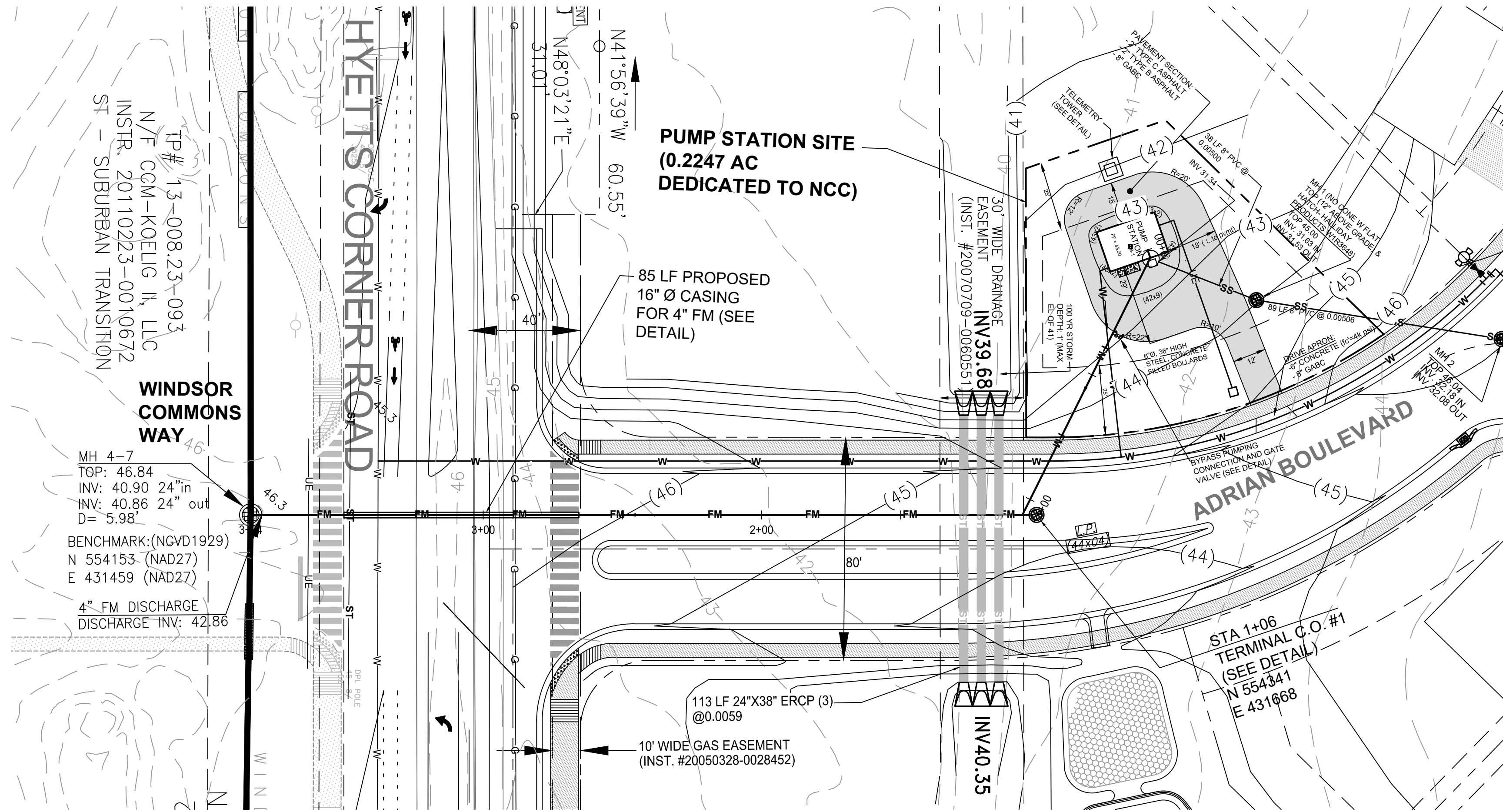
SOUTH ELEVATION



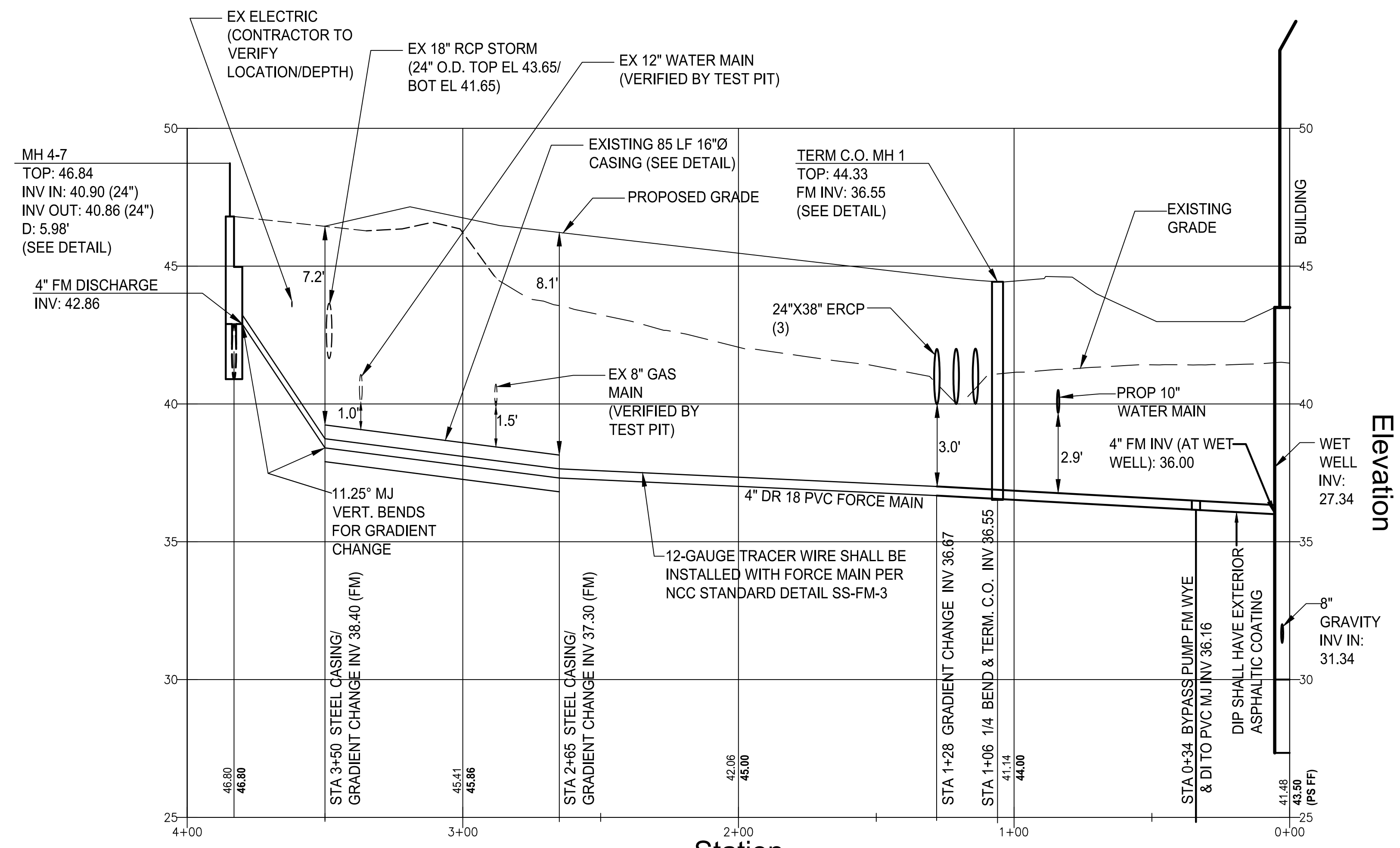
**PUMP STATION PLANS AND DETAILS
FOR
HYETTS LANDING**

ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE

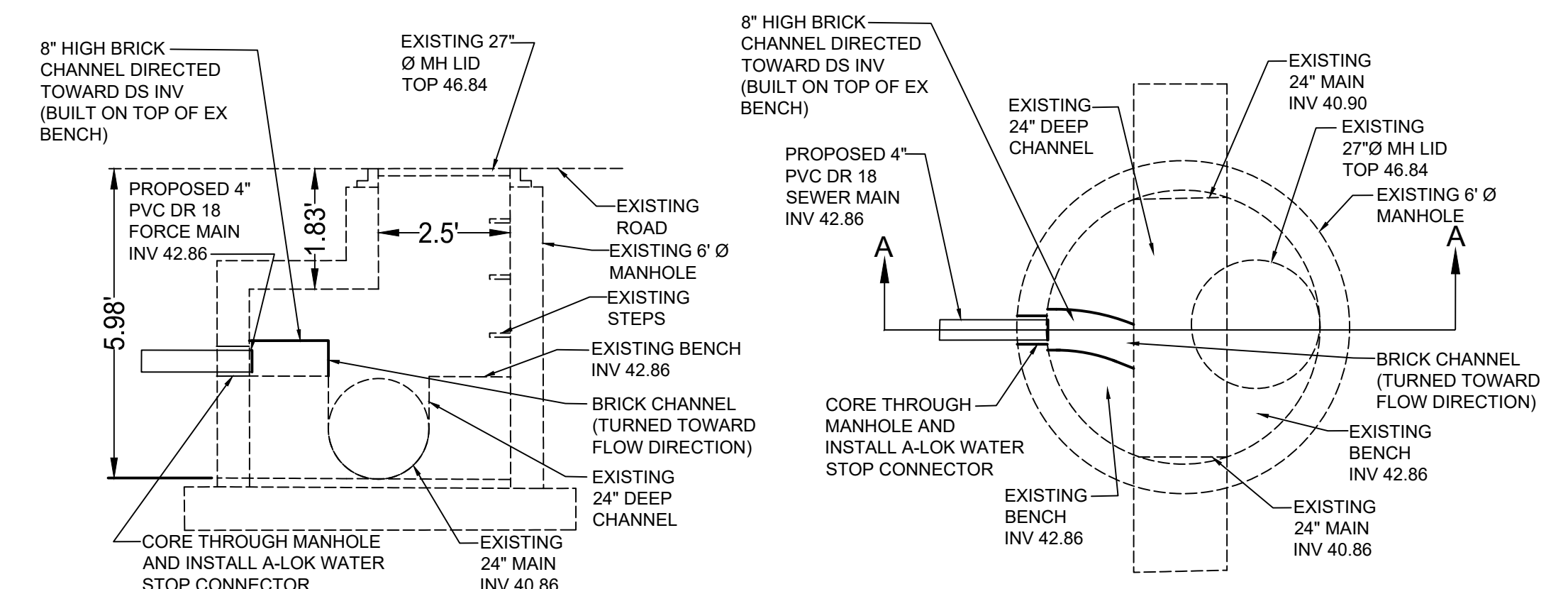
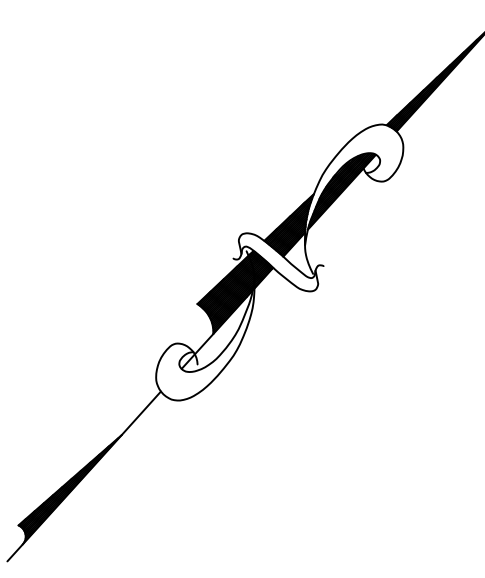
NEW CASTLE COUNTY DELAWARE DEPARTMENT OF PUBLIC WORKS		DATE 1-25	SCALE 1/2" = 1'	DRAWN BY T.A.	CHECKED BY T.A.	APPROVED BY COUNTY ENGINEER	6-16-26 PER NCC	7-11-25 PER NCC	1-25-25 PER NCC	5-21-19 PER NCC	3-11-19 ORIGINAL	DATE 3-11-19	REVISION ORIGINAL	SCALE: 1/2"=1'	SHEET 6 OF 7	DWG:18024-SAN06
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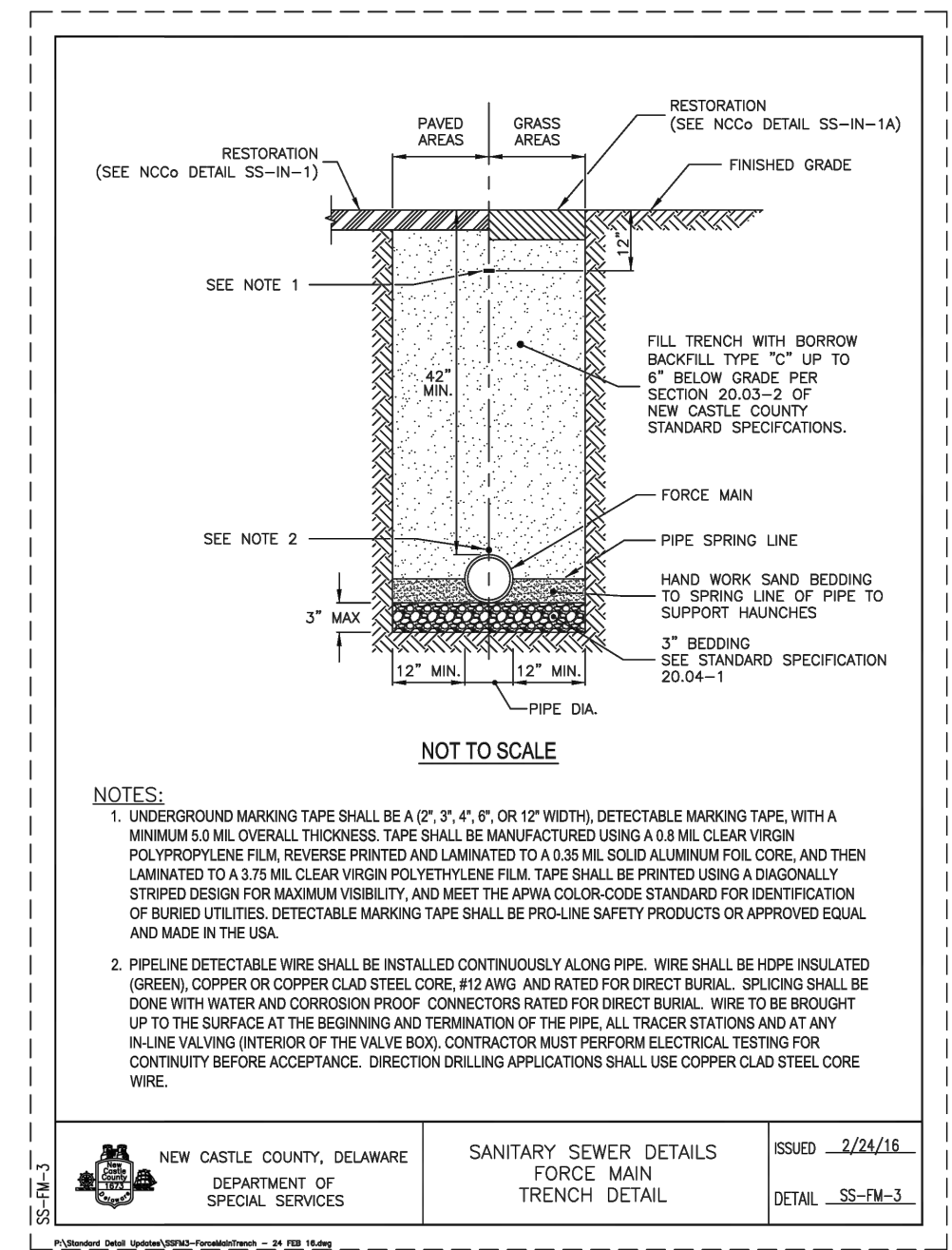
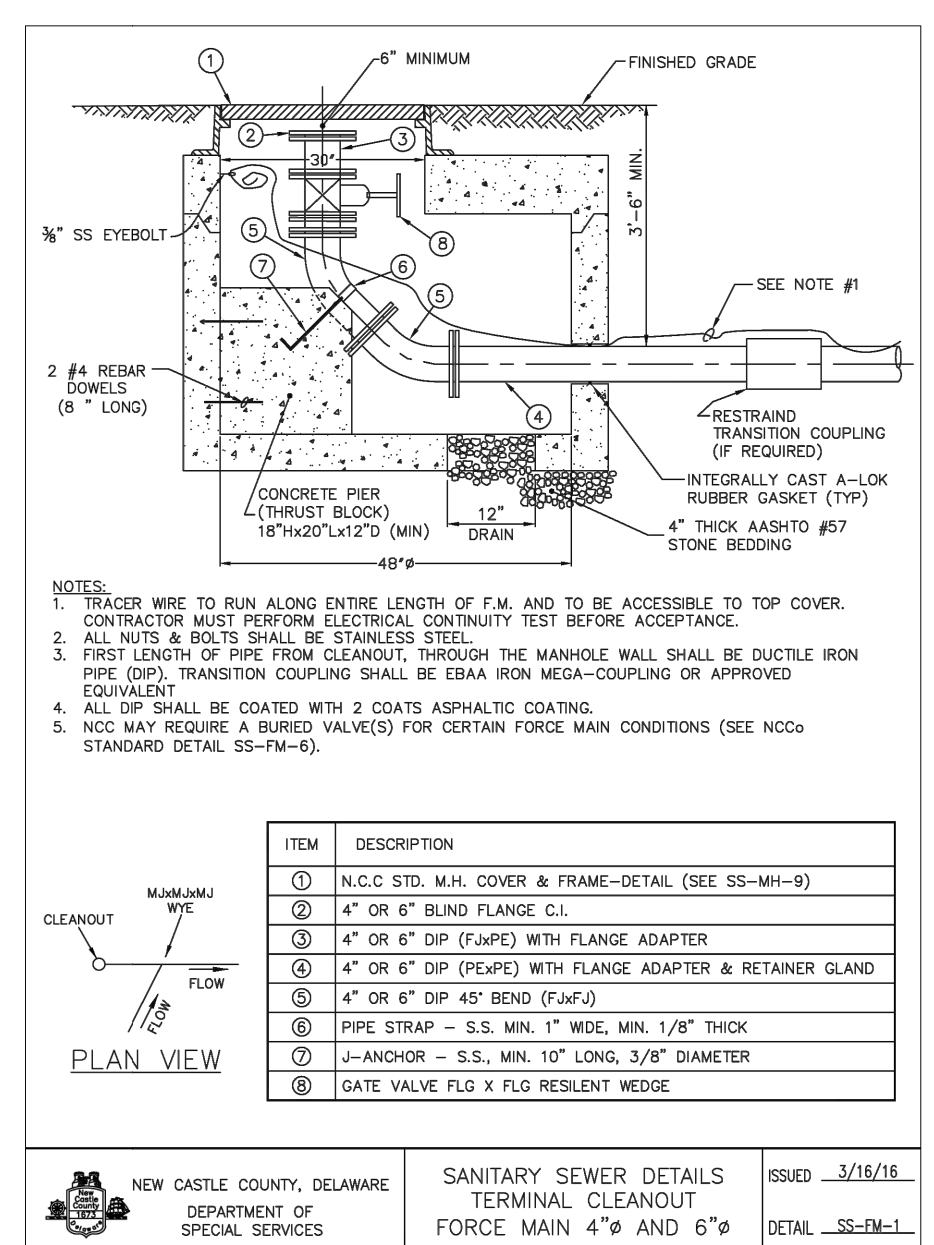
FORCE MAIN PLAN
SCALE: 1" = 30'



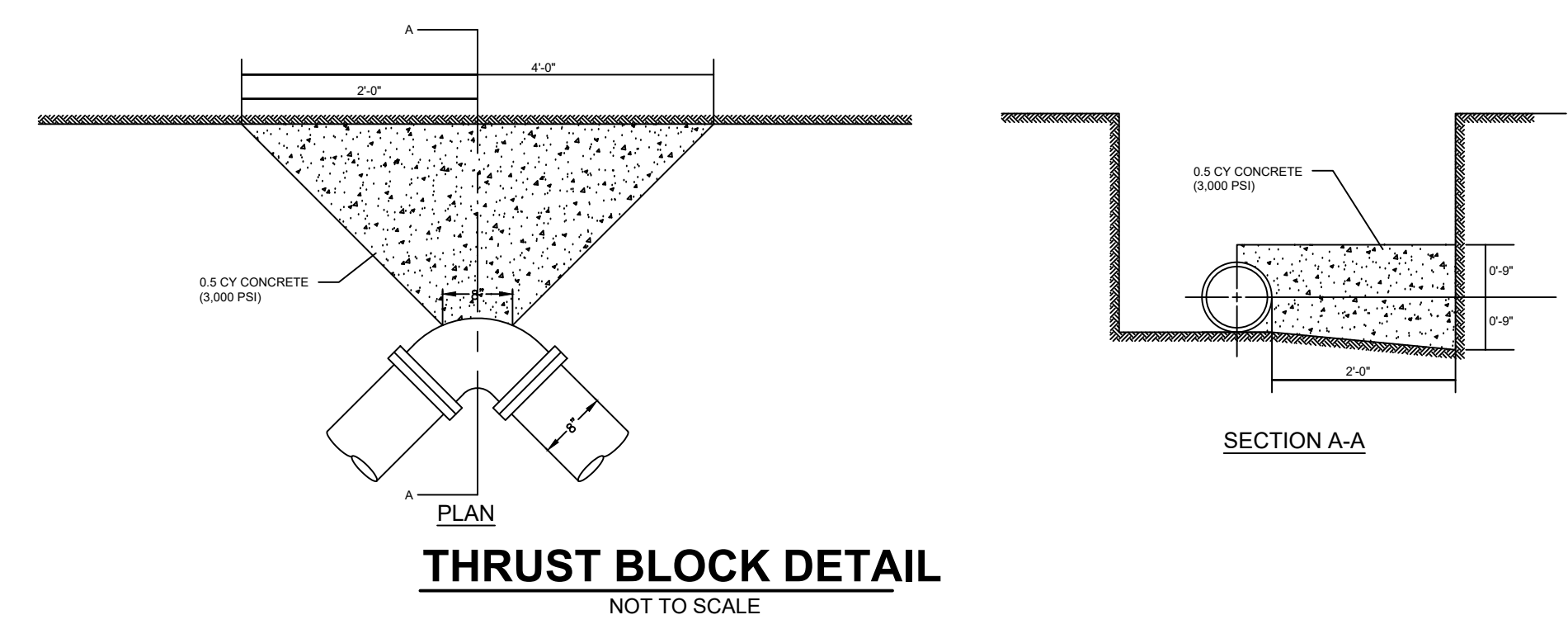
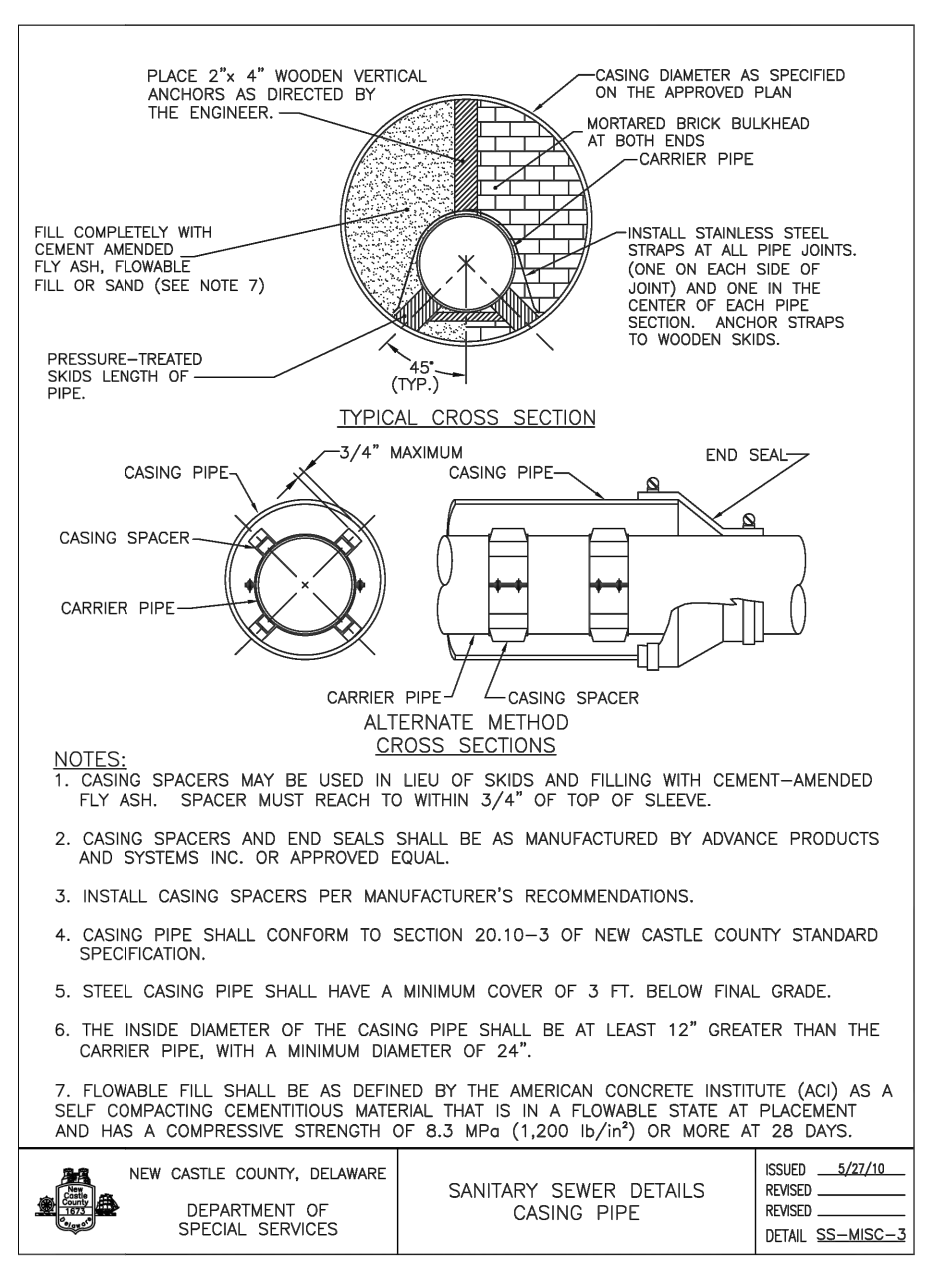
FORCE MAIN PROFILE
SCALE: Horz 1" = 30' Vert 1" = 3'



SANITARY SEWER MANHOLE TIE-IN DETAIL
NOT TO SCALE



SANITARY SEWER DETAILS
FORCE MAIN TRENCH DETAIL
ISSUED: 2/24/18
DETAIL: SS-FM-3

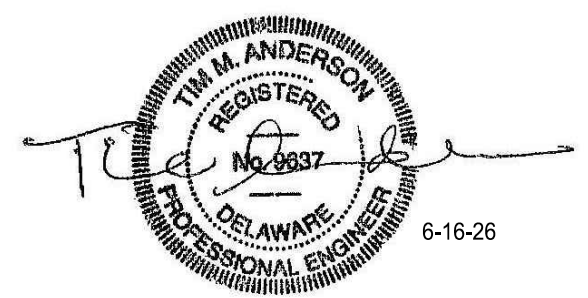


APPLICATION NO.: 2023-0128

SANITARY SEWER FORCE MAIN PLAN AND PROFILE FOR HYETTS LANDING

ST GEORGES HUNDRED, NEW CASTLE COUNTY, DELAWARE

OWNER:
CCM-HYETTS, LLC
62 ROCKFORD ROAD, SUITE 10
WILMINGTON, DE 19806



NEW CASTLE COUNTY DELAWARE DEPARTMENT OF PUBLIC WORKS		DATE	REVISION	DATE	REVISION
DATE	1-25	3-11-18	ORIGINAL	5-21-19	PER NCC
SCALE	1" = 30'	10-5-20	PER EX UTILS	10-15-20	PER EX UTILS
DRAWN BY	T.A.	1-25-25	LOWER WET WELL	7-11-25	PER NCC
CHECKED BY	T.A.	6-16-26	PER NCC		
APPROVED BY		COUNTY ENGINEER			

SCALE: 1"=30'

SHEET 7 OF 7

DWG:18024-SAN07