



Andy Beshear
GOVERNOR

TRANSPORTATION CABINET

200 Mero Street
Frankfort, Kentucky 40601

Jim Gray
SECRETARY

March 6, 2024

CALL NO. 100
CONTRACT ID NO. 241306
ADDENDUM # 1

Subject: Breathitt County, NHPP 0151 (090)
Letting March 21, 2024

- (1) Added - Traffic Management Plan - Pages 583A-583L of 649
- (2) Revised - Plan Sheets U-039, U-041, U-042, U-044, U-045, U-047

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills,

A handwritten signature in black ink that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:mr
Enclosures



Kentucky Transportation Cabinet
Division of Highway Design
TRAFFIC MANAGEMENT PLAN

County: BREATHITT Item No.: 10-376.00

Federal Project No.: NHPP 0151 090

Project Description:

IMPROVE KY FROM THE INTERSECTION OF NEW KY15/30 TO INTERSECTION OF KY 1812

Roadway Classification: Urban Rural
 Local Collector Arterial Interstate

ADT (current) 14,000 AM Peak Current _____ PM Peak Current _____ % Trucks 3.8

Project Designation: Significant Other: NOT SIGNIFICANT

Traffic Control Plan Design:

Taper and Diversion Design Speeds 35 mph KY15 (25mph Approaches)

Minimum Lane Width 10ft Minimum Shoulder Width 1ft

Minimum Bridge Width N/A

Minimum Radius 1370ft (729ft) Maximum Grade 8.00%

Minimum Taper Length 350ft (250ft) Minimum Intersection Level of Service N/A

Existing Traffic Queue Lengths N/A Projected Traffic Queue Lengths N/A

Comments:

See Roadway Plan set for additional notes regarding Lane Closure Limitations, Peak Traffic Hours Defined, Lane Closures, Temporary Signs, Pavement Markings, Pavement Edge Drop-Offs, and Blasting Operations.

All law enforcement will be undertaken by State Troopers.



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TRAFFIC MANAGEMENT PLAN

Item No. 10-376.00

Discussion:

1) Public Information Plan	
a) Prepare with assistance from <input checked="" type="checkbox"/> KYTC or <input type="checkbox"/>	
b) Identify Trip Generators Referenced	f) Railroad Involvement N/A
c) Identify Types of Road Users Referenced	g) Address Pedestrians, Bikes Mass Transit Referenced
d) Public Information Message Referenced	h) Address Timing, Frequency, Updates, Effectiveness of Plan Referenced
e) Public Information Strategies to be used Referenced	i) Police & Other Emergency Services Referenced

The Public Information Plan shall be developed with and approved by the District Public Information Officer. The District Public Information Officer shall be given a copy of the Traffic Management Plan Document and the Contractor shall ensure that it is kept current at all times.

Trip Generators.

Key trip generators along this project are:

- Breathitt County High School – off Washington Avenue
- Sebastian Elementary School– off Jett Drive
- Kentucky River Medical Center - off Jett Drive
- Access to Jackson from KY 15 is primarily via Washington avenue.

Road Users.

Primarily private cars although this is a Coal Haul route and a commercial supply corridor from the Mountain Parkway to Breathitt County and Perry County.

Due to the schools located along this route, particular consideration for School buses accessing the schools as well as planning for student pickups. If roads are to be closed, then the school district should be notified so that adjustments in student pickup and drop off routes can be implemented.



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The contractor is also to give consideration and coordinate with Breathitt Funeral Home & Monument Co located on the corridor.

The contractor should be aware of the Jackson City Fire Department located off Brewers Drive. Road closures and blasting operations should be notified to the Fire Department.

Public Information Message

KYTC District 10 public information officer:

HB Elkins
(502)764-0018
Email: hb.elkins@ky.gov

The Public information Officer will coordinate dissemination of project related impacts to the road network to the public information bodies.

The District Public information Officer shall be notified 7 days prior to placement of any advance warning using variable message signs placed for the project to ensure coordination of project messages and clarity for the local residents and businesses.

The contractor shall meet with the public information officer and establish clear lines of communication for the implementation of traffic management phasing and major milestone elements of works such as, but not limited to:

- Commencement of works
- Changes in traffic control phasing
- Closure of Lakeside Drive
- Closure of Main Street intersection with KY 15

Public Information Message

KYTC District 10 public information officer will use the following:

District Facebook page
District Website
Twitter
#KY15Project

Pedestrians, Bikes & Mass Transit

There are currently few pedestrians and cyclists on this corridor that use the highway. There are currently no specific provision for pedestrians or cyclists.



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The contractor shall monitor the traffic controls implemented for each phase of the project and assess the need for additional signing or provision that may be required to ensure safety for pedestrians and cyclists.

As pedestrian and shared use facilities are constructed, they may need to be signed as closed if they are not to be intended to be used.

This is not a Transit corridor.

Timing, Frequency, Updates, Effectiveness of Plan

The District Public Information Officer shall be notified 7 days prior to placement of any advance warning using variable message signs placed for the project to ensure coordination of project messages and clarity for the local residents and businesses.

The effective communication strategy used to convey consistent, effective and relevant information to the public will be key to the success of the project. The businesses and local residents that use this corridor will be impacted by the construction process. In recognizing this and minimizing the impacts and communicating the expected durations will be a key measure of the project success.

The contractor shall meet with the public information officer and shall present a single point of contact for the District Public Information Officer which shall be used for notification of project related public communications.

If at any time, the District Public Information Officer does not feel the public is being informed sufficiently or requires additional information, the contractor shall review adjust and change the strategy to meet the expectations of the District Public Information Officer.

The Traffic Management Plan shall be updated to reflect the revised agreed communication strategy and procedures.

Special Considerations

Due to the Blasting operations on KY 15, the Fire Department shall be notified of if traffic is to be stopped for blasting, as it may affect their response to an emergency.

Emergency Communication Strategy Shall be established if the blasting operation should cause an unforeseen closure of KY 15 that may affect, Fire and Police response times and school bus transit operations for students.



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The contractor shall monitor weather forecasts whenever working on the Kentucky River Flood defense elements for the safety of their staff and Breathitt County Residents.

Emergency procedures shall be implemented to ensure flood defenses are in place and operational if adverse weather is forecast.

The contractor shall designate an emergency FLOOD CONTROL contact that can respond and operate any flood defense equipment present or installed.



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TRAFFIC MANAGEMENT PLAN

Contact Lists (To be maintained and kept current)

District 10 Office:
473 Highway 15 South
Jackson, KY 41339
(606) 666-8841

Corbett Caudill	Chief District Engineer	Mobile:
Aric Skaggs	Project Manager	Mobile:
HB Elkins	Public Information Officer	Mobile: (606) 207-5560

Breathitt County High School
420 Court St, Jackson, KY 41339 Tel: (606) 666-7511
Contact:

Sebastian Elementary School
244 L B J Rd, Jackson, KY 41339 Tel: (606) 666-8894
Contact:

Breathitt County Fire Department
11 Fire Station Dr, Jackson, KY 41339 Tel: (606) 666-9000
Contact:

Breathitt County Fire Department 2
333 Broadway St, Jackson, KY 41339 Tel: (606) 666-9000
Contact:

Breathitt County Police Department
1137 Main St, Jackson, KY 41339 Tel: (606) 666-3805
Contact:

Breathitt Funeral Home & Monument Co.
409 KY-15, Jackson, KY 41339 Tel: (606) 666 2484
Contact:



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2) Temporary Traffic Control Plan Phase 1	
Exposure Control Measures	Positive Protection Measures
a) Is Road Closure Allowed Type: Referenced	a) Address Drop Off Protection Criteria Referenced
b) Detour Conditions Referenced	b) Temporary Barrier Requirements Referenced
c) Working Hour Restrictions Referenced	c) Evaluation of Existing Guardrail Conditions Referenced
d) Holiday or Special Event Work Restrictions Referenced	d) Address Temporary Drainage Referenced
e) Evaluation of Intersection LOS Referenced	Uniformed Law Enforcement Officers Referenced
f) Evaluation of Queue Lengths Referenced	Payment for Traffic Control*
g) Evaluation of User Costs and Incentives/Disincentives Referenced	a) Method of Project Bidding Referenced
h) Address Pedestrians, Bikes, Mass Transit Referenced	b) Special Notes Referenced
Work Vehicles and Equipment Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
<p>Comments:</p> <p>Construction Phasing plan sheets that illustrate the concepts discussed in the following notes are provided in the plan set.</p> <p>Erect signing along KY to reduce speed to appropriate construction speeds within the limits of construction; from Existing Brewers Drive to the end of the project at the intersection of KY 1812 and KY 3068. Construction in this phase will be on the northern side of KY and temporary concrete barriers will be placed to create a work area to protect workers and prevent excavated materials from fouling the existing travel way. Restriping and Temporary Pavement of the south side of KY may be needed to provide room for 2 x 11 foot lanes and 2 foot shoulders for temporary driving lanes. A third turn lane can be striped following discretion of the Engineer on site.</p>	



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Blasting times noted in Maintenance of Traffic Notes and shall comply with "Special Note for Rock Blasting" – Page 11D

It is imperative that the existing Washington Avenue west culvert Flap Gate shall be kept operational until the Washington Avenue Sluice Gate is commissioned and operational. Washington Avenue may be closed up to 14 calendar days to construct concrete pavement. This closure will only be allowed during the summer months when school is not in session. Farther information is noted in the Maintenance of Traffic Notes.

A Detour Signing Plan has been designed for closures of Jett Drive and KY 1812.

Time Limits for Road Closures noted in Maintenance of Traffic Notes of Roadway plans.

The following is constructed in this Phase:

- KY 15 widening on the north side from station 105+52 to 567+60 through both asphalt lifts
- Spillway Extension
- Lakeside Drive, Panbowl Road Extended and Panbowl Connector
- Washington Avenue West Culvert Extension and Flap Gate
- Washington Avenue East Culvert Extension and Sluice Gate
- River Channel Lining & Maintenance Access

Phase 1A:

- Milling and Overlay/Pavement wedging of Existing to match grade of widening pavement to a minimum width of 29 feet (two KY 15 westbound lanes and half of center turn lane)
- New concrete pavement on widened north side at Washington Avenue is constructed from Station 544+50 to 551+10
- 6'x6' Culvert at Mainstreet (KY 3068)
- Mainstreet (KY 3068)
- Complete spillway culvert and headwall
- Abandon existing 6'x6' Culvert
- KY 1812
- Spillway Access
- East Backwater Channel Access



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2) Temporary Traffic Control Plan Phase 2	
Exposure Control Measures	Positive Protection Measures
a) Is Road Closure Allowed Type: Referenced	a) Address Drop Off Protection Criteria Referenced
b) Detour Conditions Referenced	b) Temporary Barrier Requirements Referenced
c) Working Hour Restrictions Referenced	c) Evaluation of Existing Guardrail Conditions Referenced
d) Holiday or Special Event Work Restrictions Referenced	d) Address Temporary Drainage Referenced
e) Evaluation of Intersection LOS Referenced	Uniformed Law Enforcement Officers Referenced
f) Evaluation of Queue Lengths Referenced	Payment for Traffic Control*
g) Evaluation of User Costs and Incentives/Disincentives Referenced	a) Method of Project Bidding Referenced
h) Address Pedestrians, Bikes, Mass Transit Referenced	b) Special Notes Referenced
Work Vehicles and Equipment Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
<p>Comments:</p> <p>Construction Phasing plan sheets that illustrate the concepts discussed in the following notes are provided in the plan set.</p> <p>Travel lanes are to be switched to the North side of KY 15 on the previously constructed roadway. Concrete pavement of Washington Avenue intersection is finished in this Phase. Construction will allow for the entrance to Breathitt county high school to function at minimum one lane. When changing from one traffic pattern to another or other activities approved by the engineer on site, traffic may be halted.</p> <p>Lakeside Drive Detour, as detailed in the Detour Signing Plan, and the Main Street Detour are to be removed in this phase.</p>	



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The following is constructed in this Phase:

- Part width milling and overlay of existing KY 15 to Match Grade with Phase 1A widening
- Sidewalk on South side of KY 15
- KY River Dam Protection

Phase 2A:

Two through lanes (11 Feet) and Shoulders (2 Feet) will be maintained on the widened concrete pavement at the Washington Avenue Intersection constructed in Phase 1A

- New concrete pavement on south side of Ky 15 at Washington Avenue is constructed from Station 544+50 to 551+10 to the centerline of proposed KY 15.
- Washington Avenue approach concrete pavement from Station 48+00 to KY 15

Phase 2B:

Washington Avenue Detour to be removed

- Widening of Washington Avenue on the west side from end of concrete pavement 48+00 to school entrance Station 45+40 including sidewalk and curb and gutter.
- Temporary pavement will be added to the west side of Washington Avenue south of the school entrance to allow proposed buffer between two 10' driving lanes and secant piling construction in subsequent phases

Phase 2C:

- Secant Shaft wall (Washington Avenue)

Phase 2D:

- Milling and resurfacing of East lanes of Washington Avenue and curb and gutter and sidewalk

Phase 2E:

- Construction of the curb and gutter shared used path of west side of Washington Avenue south of the school entrance.



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2) Temporary Traffic Control Plan Phase 3	
Exposure Control Measures	Positive Protection Measures
a) Is Road Closure Allowed Type: Referenced	a) Address Drop Off Protection Criteria Referenced
b) Detour Conditions Referenced	b) Temporary Barrier Requirements Referenced
c) Working Hour Restrictions Referenced	c) Evaluation of Existing Guardrail Conditions Referenced
d) Holiday or Special Event Work Restrictions Referenced	d) Address Temporary Drainage Referenced
e) Evaluation of Intersection LOS Referenced	Uniformed Law Enforcement Officers Referenced
f) Evaluation of Queue Lengths Referenced	Payment for Traffic Control*
g) Evaluation of User Costs and Incentives/Disincentives Referenced	a) Method of Project Bidding Referenced
h) Address Pedestrians, Bikes, Mass Transit Referenced	b) Special Notes Referenced
Work Vehicles and Equipment Referenced	*Payment for traffic control items shall be in accordance with the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction
Comments:	
Final Surfacing will be constructed under traffic. Minimal closures and temporary traffic control will be used in this Phase.	



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APPROVAL:



Project Manager 9/29/2023
Date



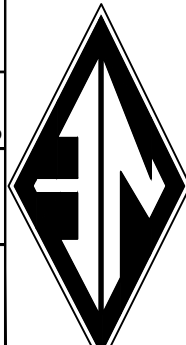
Project Delivery and Preservation Manager 9-29-23
Date



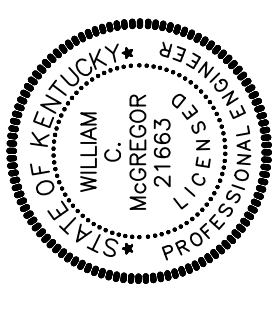
Engineering Support Manager 9/29/23
Date

FHWA Representative Date

Revisions to the TMP require review/approval by the signatories.

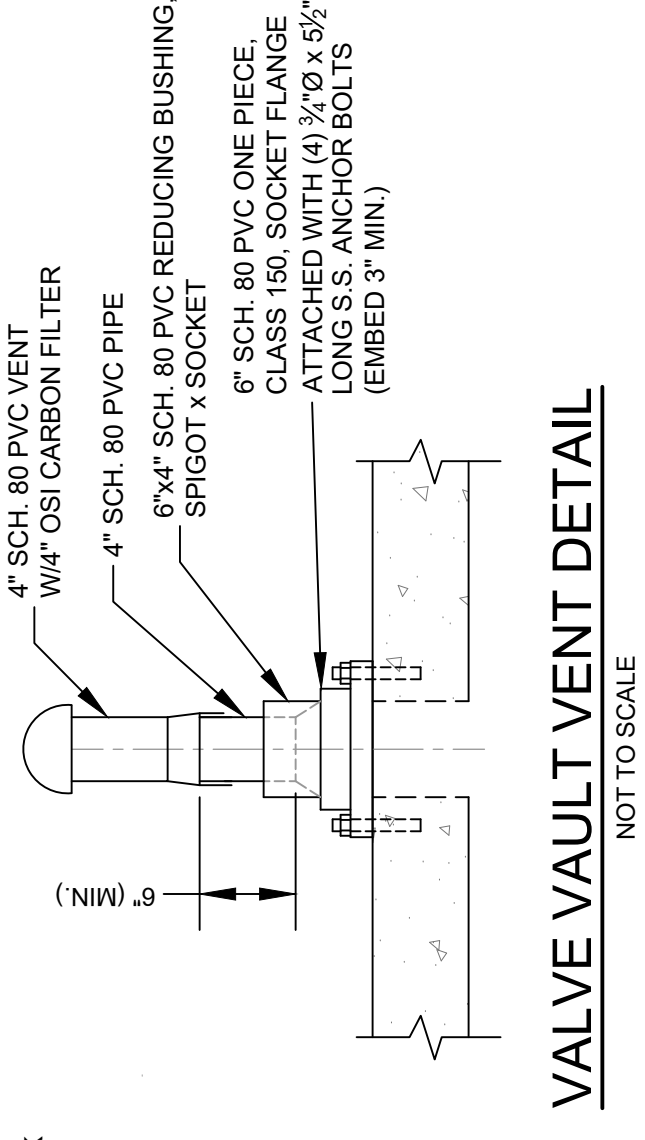
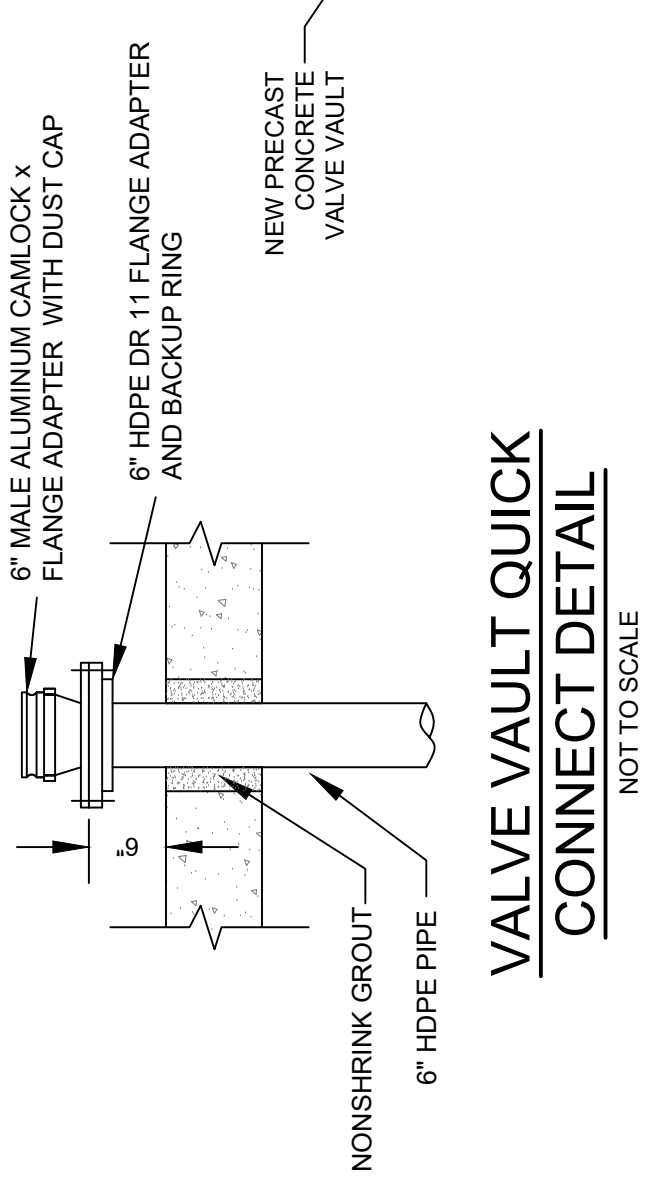
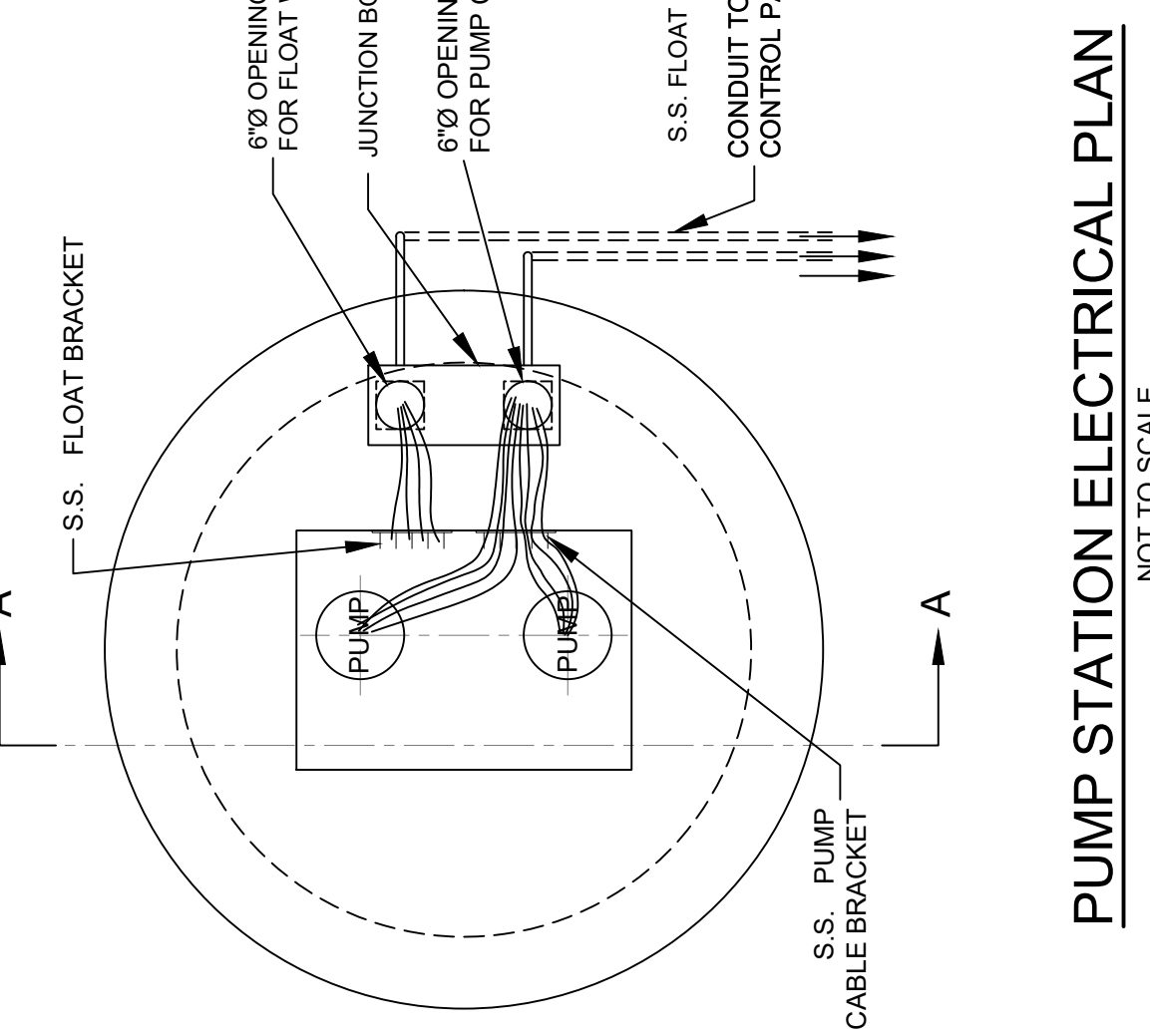
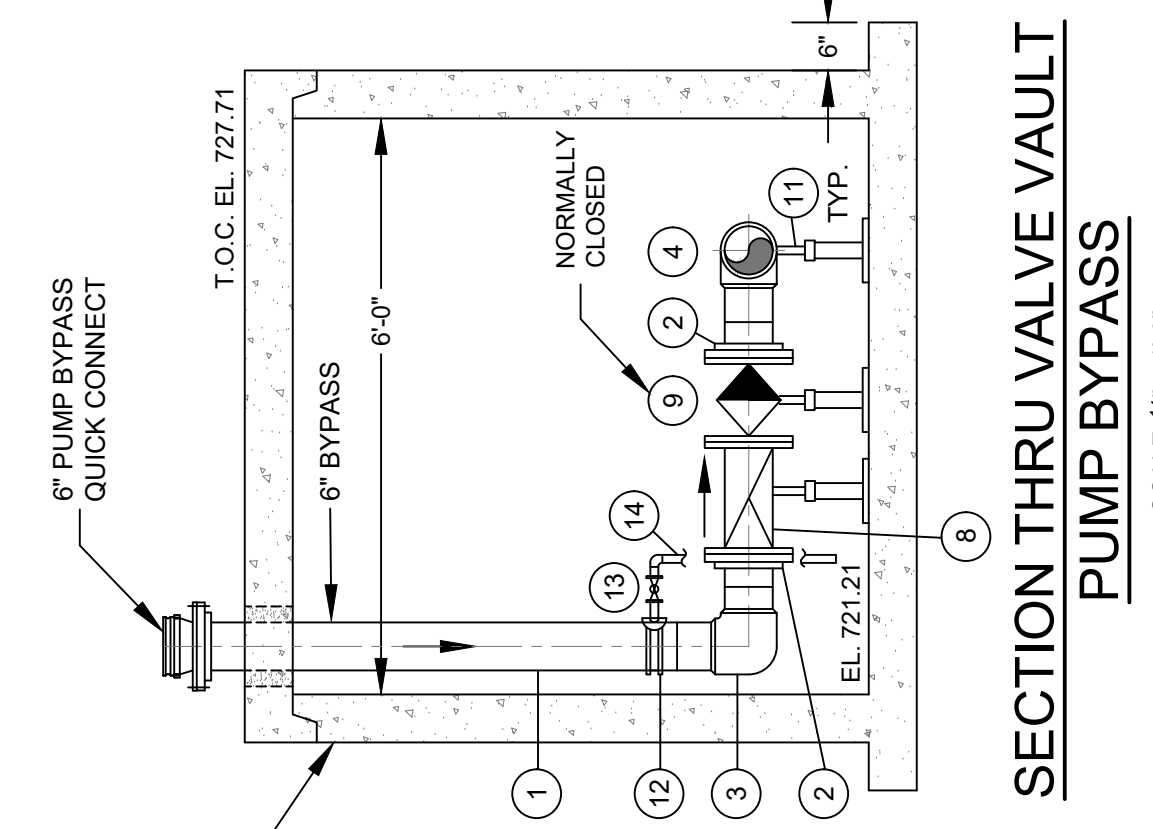
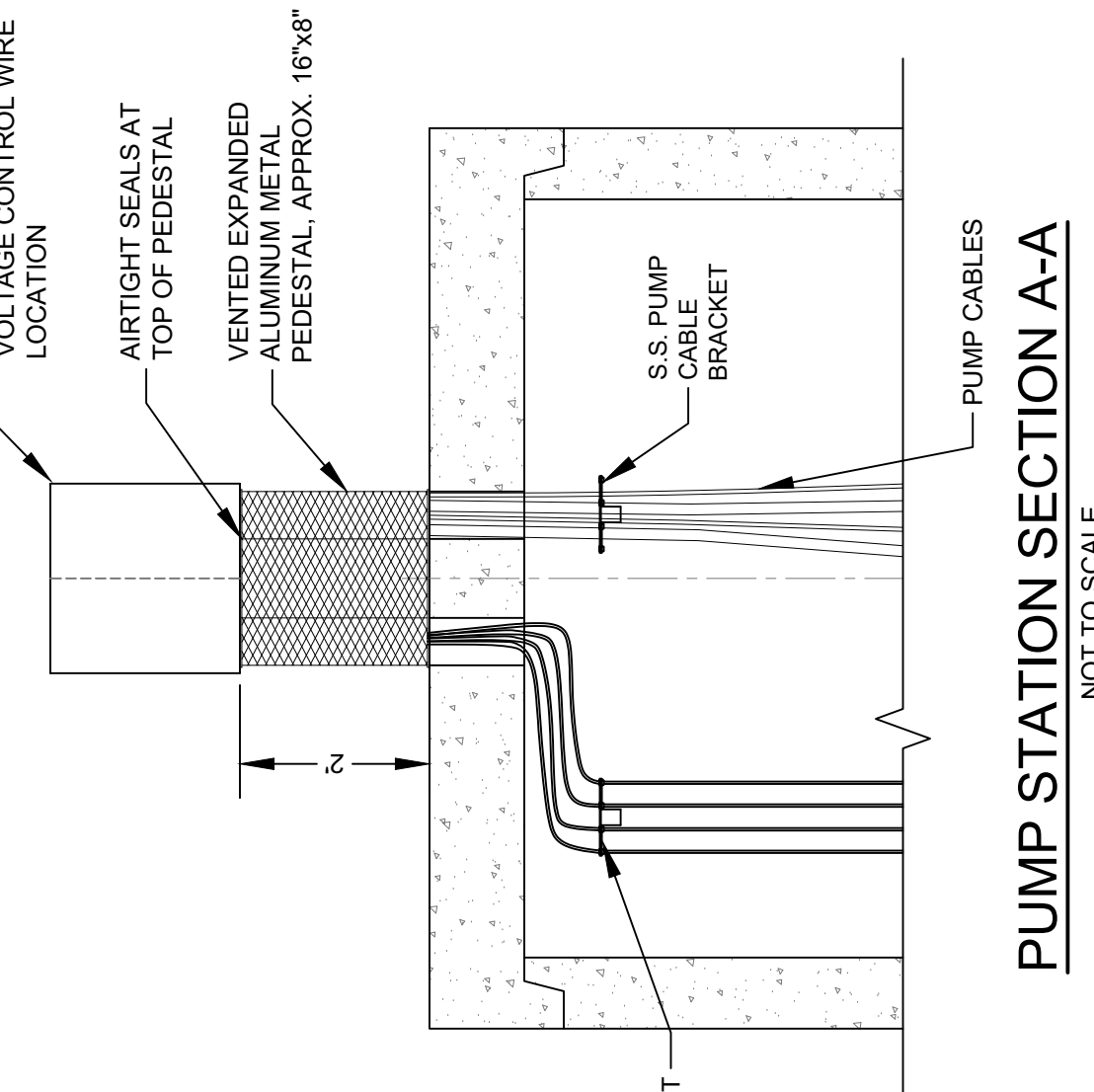


Sheet No.	U-039
City of Jackson - Utility Relocation	BREATHITT COUNTY, KY - KY15, ITEM NO. 376.00
Date	2023-08-17
Drawn By	JCM
Scale	AS SHOWN
Job No.	933.40

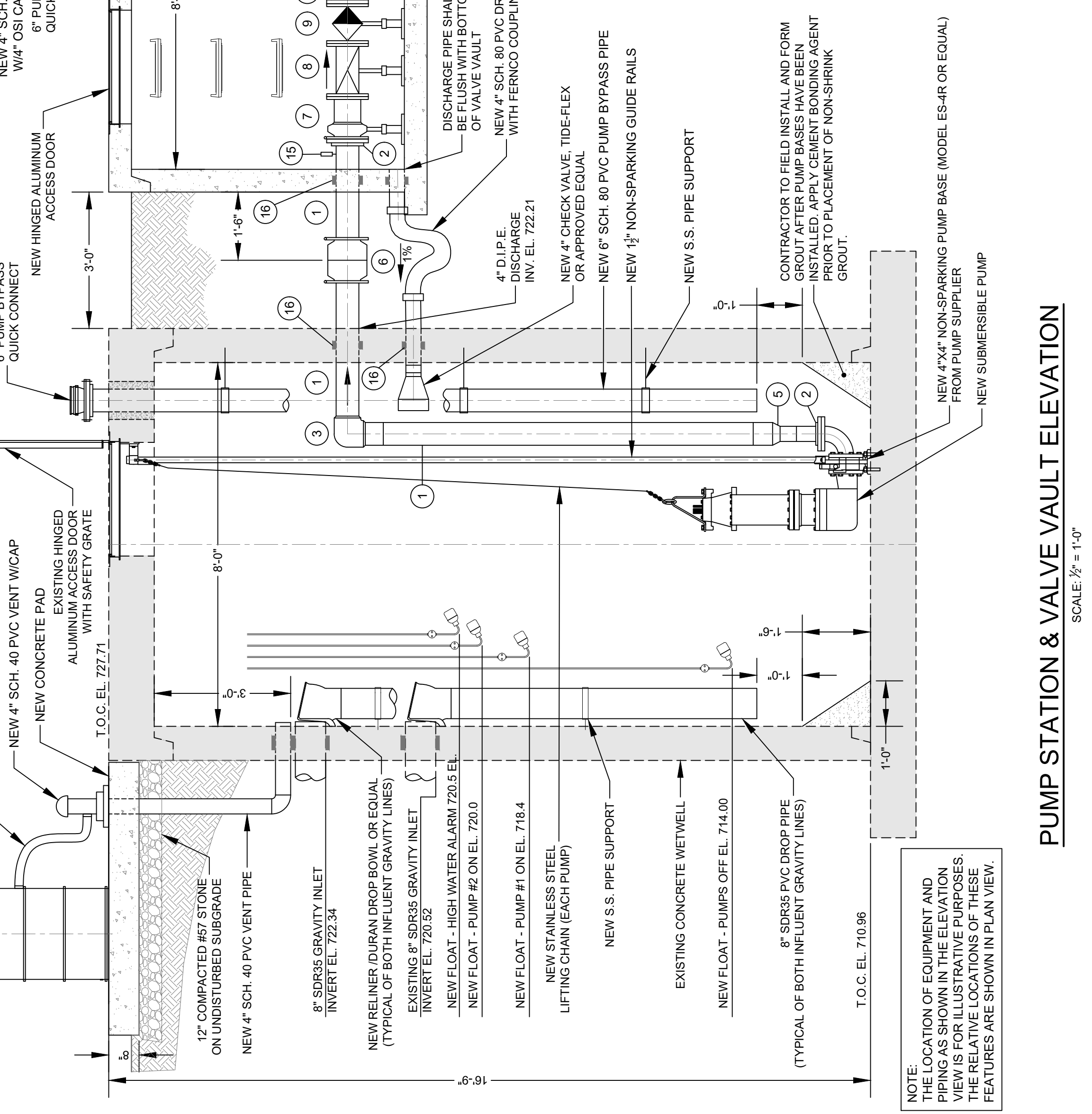
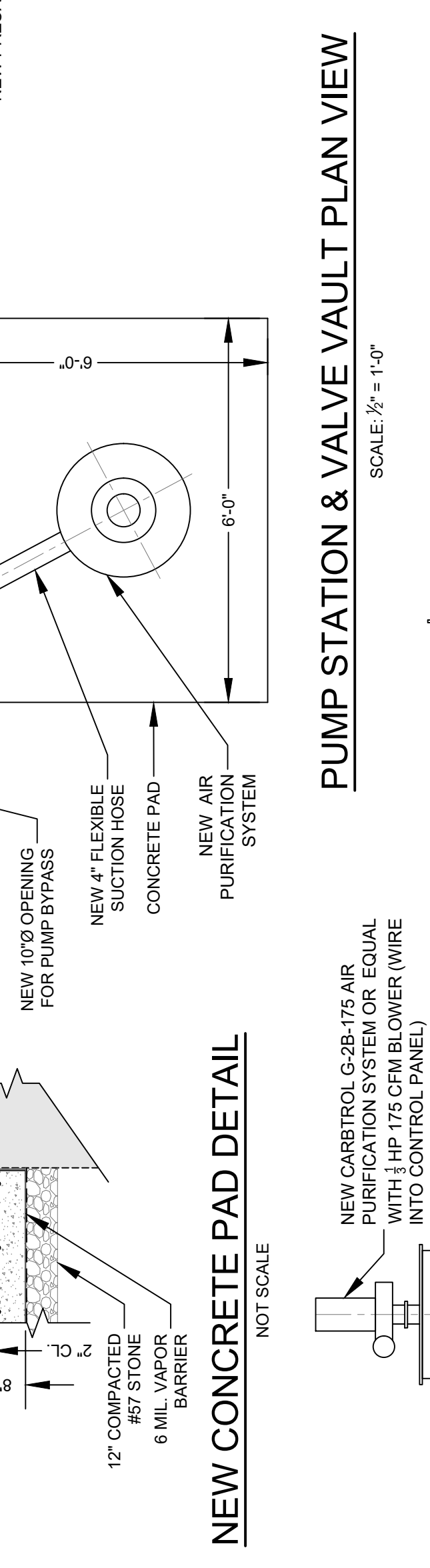
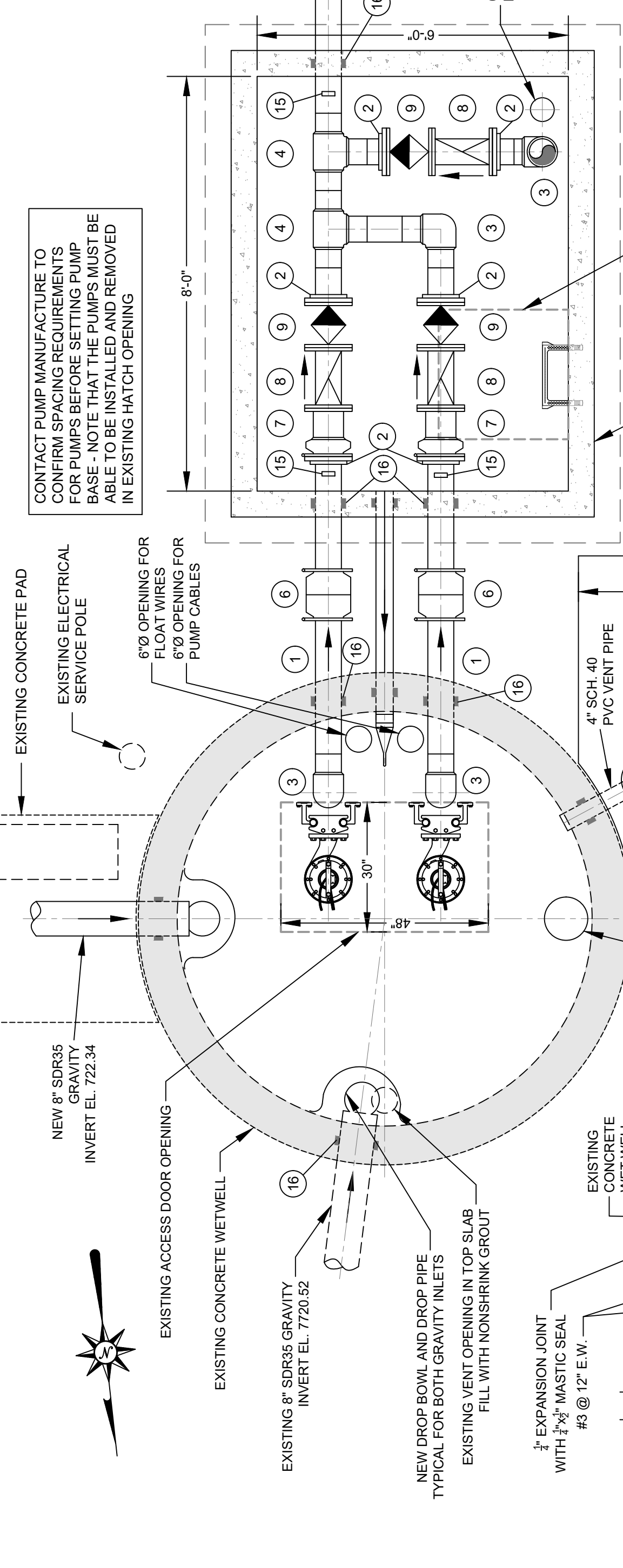
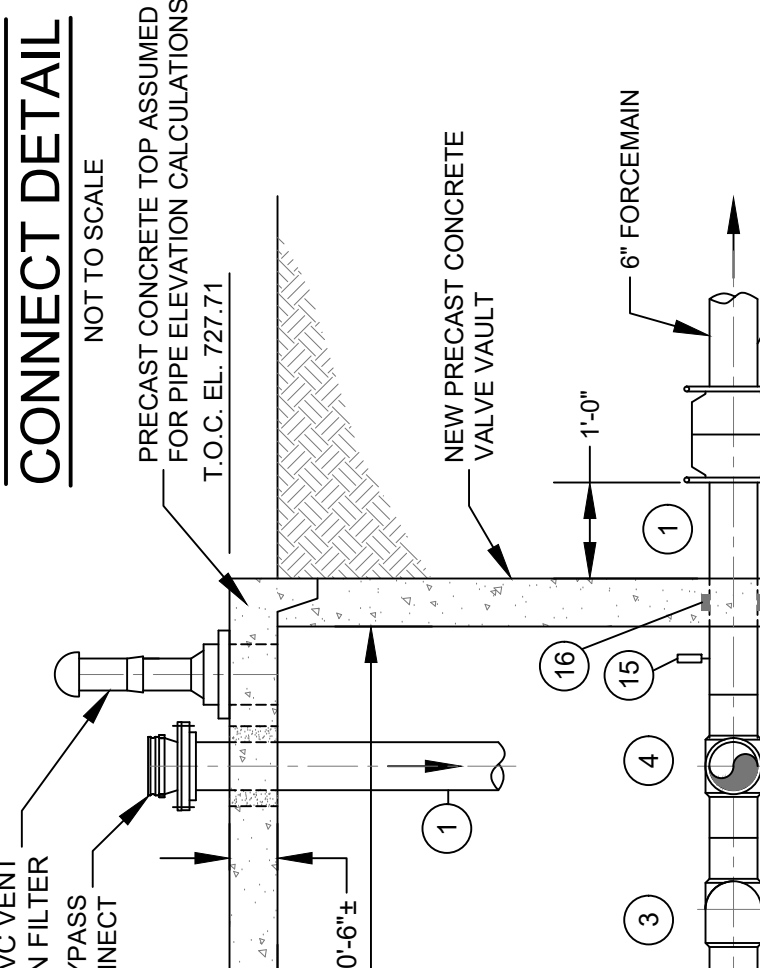
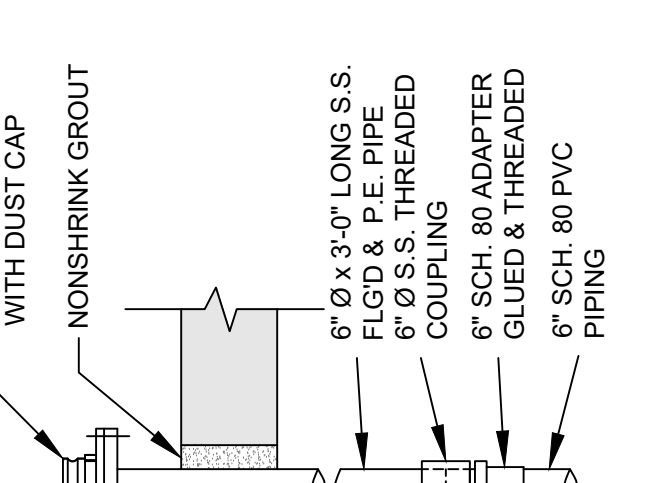
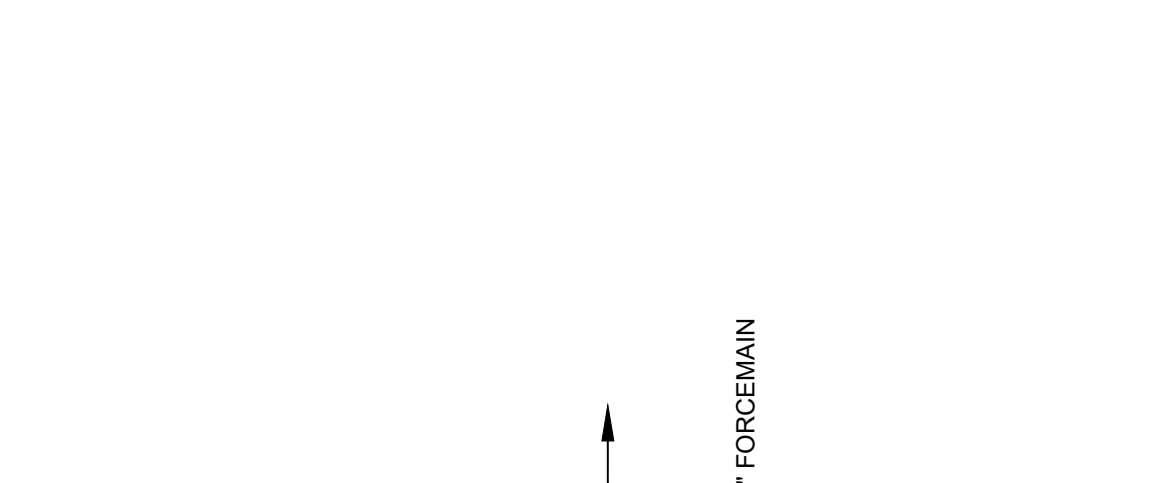


2024-02-20 ADD1, ADD GATE VALVE

DESCRIPTION	HOLY CROSS LIFT STATION
WET WELL DIAMETER (EXISTING)	8'-0"
WET WELL TOP OF TOP SLAB ELEVATION	727.71
WET WELL TOP OF BOTTOM SLAB ELEVATION	710.96
WET WELL DEPTH	16'-9"
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER
WET WELL INFLEUNT SEWER SIZE	8"
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	722.34
WET WELL MAKE & MODEL (2 PUMPS REQUIRED)	MYERS 4RX
PUMP CAPACITY	330 GPM @ 33 TDH
PUMP TYPE	SUBMERSIBLE
PUMP RPM	1750
PUMP HP	7.5
PUMP VOLTS-PHASE	230 VOLTS-3 PHASE
PUMP IMPELLER DIAMETER	7.13"
PUMP DISCHARGE	4"
PUMP 2 START ELEVATION	720.50
PUMP 1 START ELEVATION	716.40
PUMPS 1 & 2 OFF ELEVATION	714.00
VALVE VAULT SIZE-LENGTHxWIDTHxDEPTH	8'x6'x6'
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	727.71
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	720.87
FORCE MAIN SIZE	6"



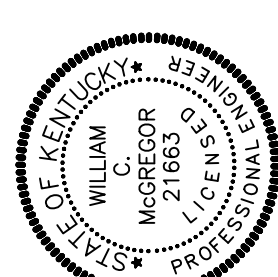
- NOTES:**
- ALL HARDWARE SHALL BE STAINLESS STEEL.
 - PIPE SUPPORTS SHALL BE S.S. OFFSET PIPE CLAMPS, NATIONAL PIPE HANGER CORP. OR EQUAL, INSTALLED WITH 1/2" STUDDED ANCHOR BOLTS, H/LIT OR EQUAL, EMBEDDED 2 1/2" AND SPACED AT 4'-0" O.C.
 - BASE PLATES FOR PIPE SUPPORTS IN VALVE BOX SHALL BE SECURED WITH S.S. ANCHOR BOLTS, H/LIT OR EQUAL, EMBEDDED 2 1/2" AND SPACED AT 4'-0" O.C.
 - GROUT OPENINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE PROTECTED FROM CONTACT WITH CONCRETE AND GROUT WITH A COAL TAR COATING OR OTHER MATERIAL APPROVED BY THE ACCESS DOOR MANUFACTURER.
 - INTERIOR OF WET WELL SHALL BE COATED PER SPECIFICATION SECTION 330000 - INTERIORS.
 - VALVES, FITTINGS, ETC. INSIDE STATION EXCEPT GUIDE RAILS SHALL BE COATED WITH AN ANTI-RUST PAINT APPROVED BY THE ACCESS DOOR MANUFACTURER. PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
 - DISCHARGE FLANGED CONNECTION TO BE VERTICAL FOR CORRECT OPERATION.
 - ACCESS HATCH MUST BE SET SUCH AS TO ALLOW GUIDE RAILS FROM PUMP TO VALVE VAULT.
 - GUIDE RAILS FOR PUMPS AND ACCESS DOOR SHALL BE DIMENSIONS OF 1/4" FLUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES.
 - DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE 3 PIECE CONSTRUCTION WITH 1/4" FLUSHING CONNECTION, 316 STAINLESS STEEL LOWER HOUSING AND DIAPHRAGM MATERIALS, 1/4" GAUGE CONNECTION AND 1/2" LOWER CONNECTION. VITON DIAPHRAGMS ARE REQUIRED ON LOW RANGE PRESSURE GAUGES. ACCEPTABLE MODELS ARE MARSH 14201, HELICOID 100-H OR EQUAL.
 - DIAPHRAGM SEALS SHALL BE "PERMANENTLY" ATTACHED TO GAUGES BY INSTALLATION OF A LEAD SEALED WIRE CONNECTING THE TWO. THIS IS TO PREVENT ACCIDENTAL LOSS OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON.
 - PHOSPHOR BRONZE BOURNOM TUBES, WHITE LAMINATED PHENOL DIALS, GAUGES SHALL BE 4.12" AND HAVE MICROFETER ADJUSTMENT OF POINTERS AND BLACK PHENOL, BLACK CAST IRON BRASS OR ALUMINUM CASE AND RING, ROTARY GEAR DRIVE, CORROSION RESISTANT, STAINLESS STEEL MOVEMENT, BLOWOUT PROTECTION AND BRONZE SOCKETS WITH WRENCH FLATS. ACCURACY SHALL BE WITHIN 1/2 OF 1% OF THE SCALE RANGE. THEY SHALL BE PRECALIBRATED (0-60 PSI/40 FT.).
 - WET WELL ACCESS DOOR OPENING 30"x48", MODEL AP0300 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USE FABRICATION INC. OR EQUAL. VALVE VAULT ACCESS DOOR OPENING 30"x30", MODEL APS300 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USE FABRICATION INC. OR EQUAL.



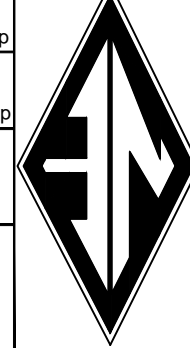
FLOOD INFORMATION
JULY 2022 FLOOD = EL. 724.1
2022 FLOOD = EL. 724.1
2022 FLOOD = EL. 724.0

NO.	DESCRIPTION
1	6" HDPE DR 11 PIPE
2	6" HDPE DR 11 FLANGE ADAPTER AND BACKUP RING
3	6" HDPE DR 11 90° BEND
4	6" HDPE DR 11 TEE
5	6"x4" HDPE DR 11 REDUCER
6	6" RESTRAINED COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL
7	6" RESTRAINED FLANGED COUPLING ADAPTER ROMAC INDUSTRIES MODEL "ALPHA FC" OR EQUAL
8	6" D.I. FLGD SWING CHECK VALVE WITH EXTERNAL LEVER & WEIGHT
9	6" D.I. FLGD GATE VALVE WITH HAND WHEEL OPERATOR
10	6" SDR21 PVC FORCE MAIN
11	ADJUSTABLE PIPE SUPPORT FOR 8" PIPE, STANDON MODEL #592 SADDLE OR EQUAL
12	1" S.S. SERVICE SADDLE
13	1" SCH. 40 PVC TRUE UNION BALL VALVE
14	1" SCH. 40 PVC TRUE UNION BALL VALVE (BYPASS DRAIN)
15	DIAPHRAGM SEAL AND PRESSURE GAGE
16	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS

NOTE:
THE LOCATION OF EQUIPMENT AND PIPING AS SHOWN IN THE ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES. THE RELATIVE LOCATIONS OF THESE FEATURES ARE SHOWN IN PLAN VIEW.

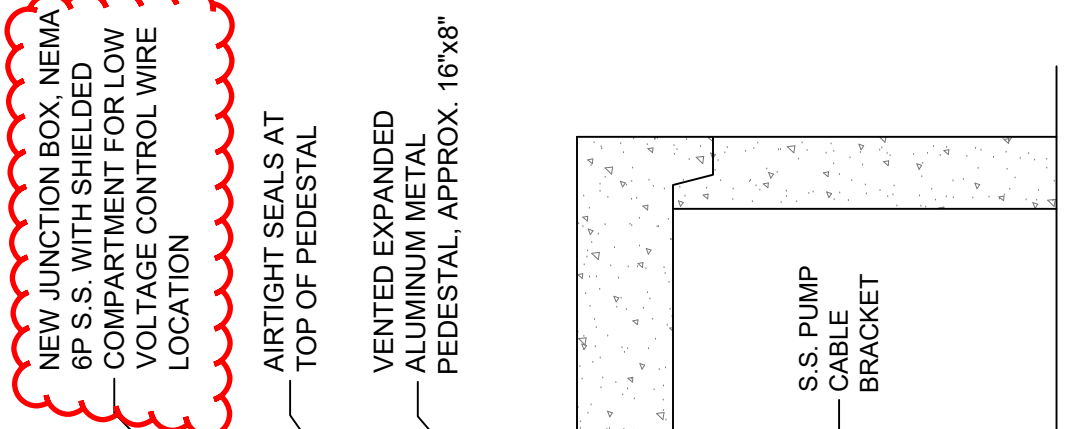


CITY OF JACKSON - UTILITY RELOCATION
BREATHITT COUNTY, KY - ITEM NO. 376.00
JOB NO. 933.40
DATE: 2023-08-17
DESIGNED BY: JCM
AS SHOWN

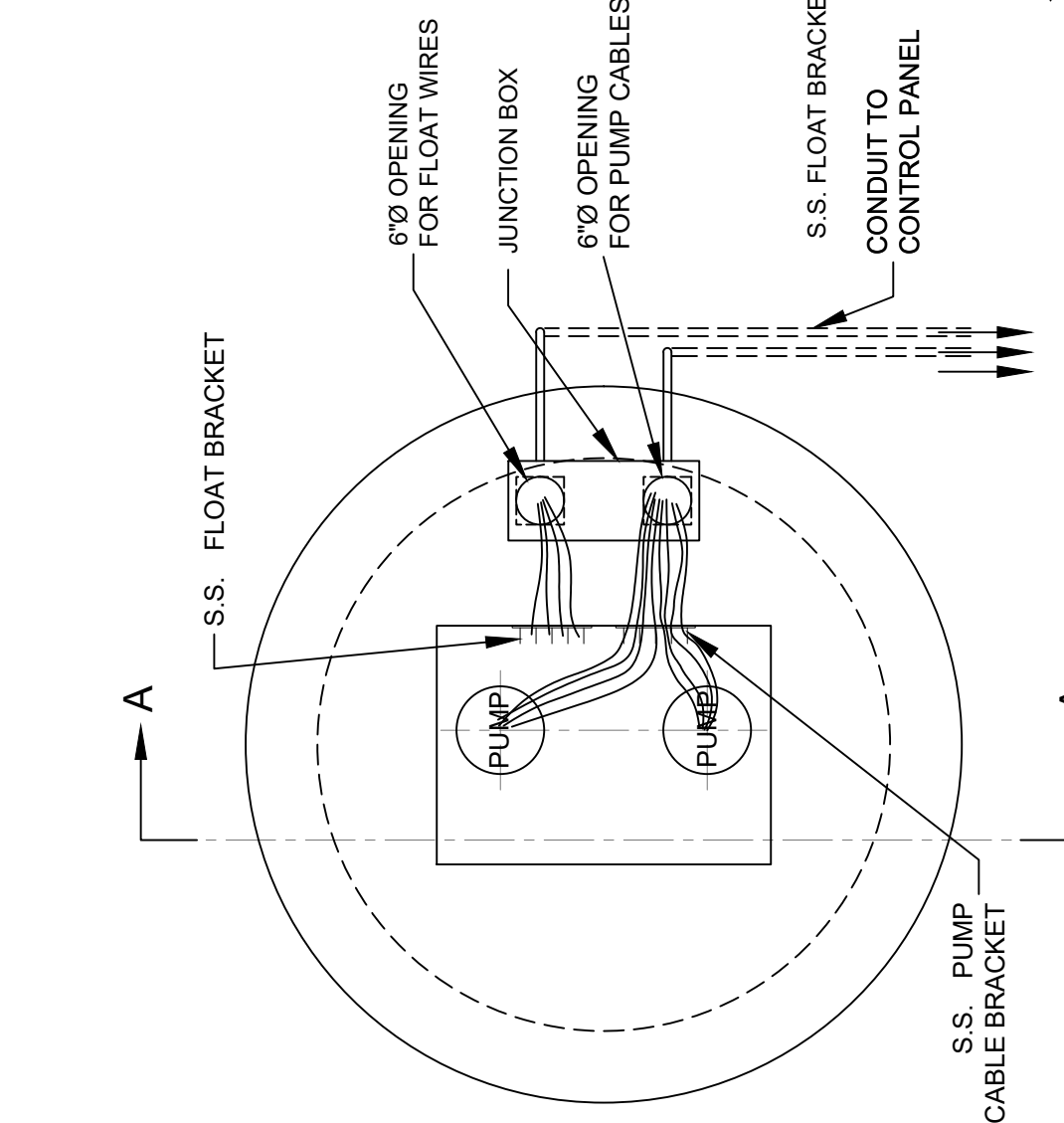


HOLY CROSS LIFT STATION REHAB DETAILS
CITY OF JACKSON
UTILITY RELOCATION
BREATHITT COUNTY, KY - KY15
ITEM NO. 10-376.00

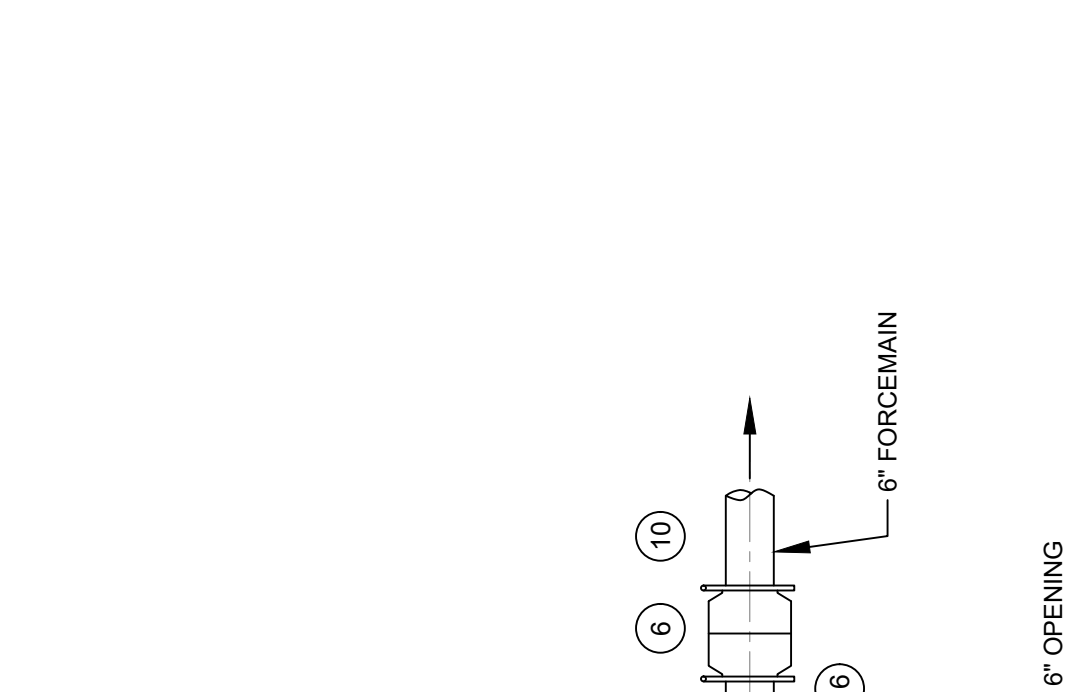
2024-02-20 ADD 1 ADD GATE VALVE



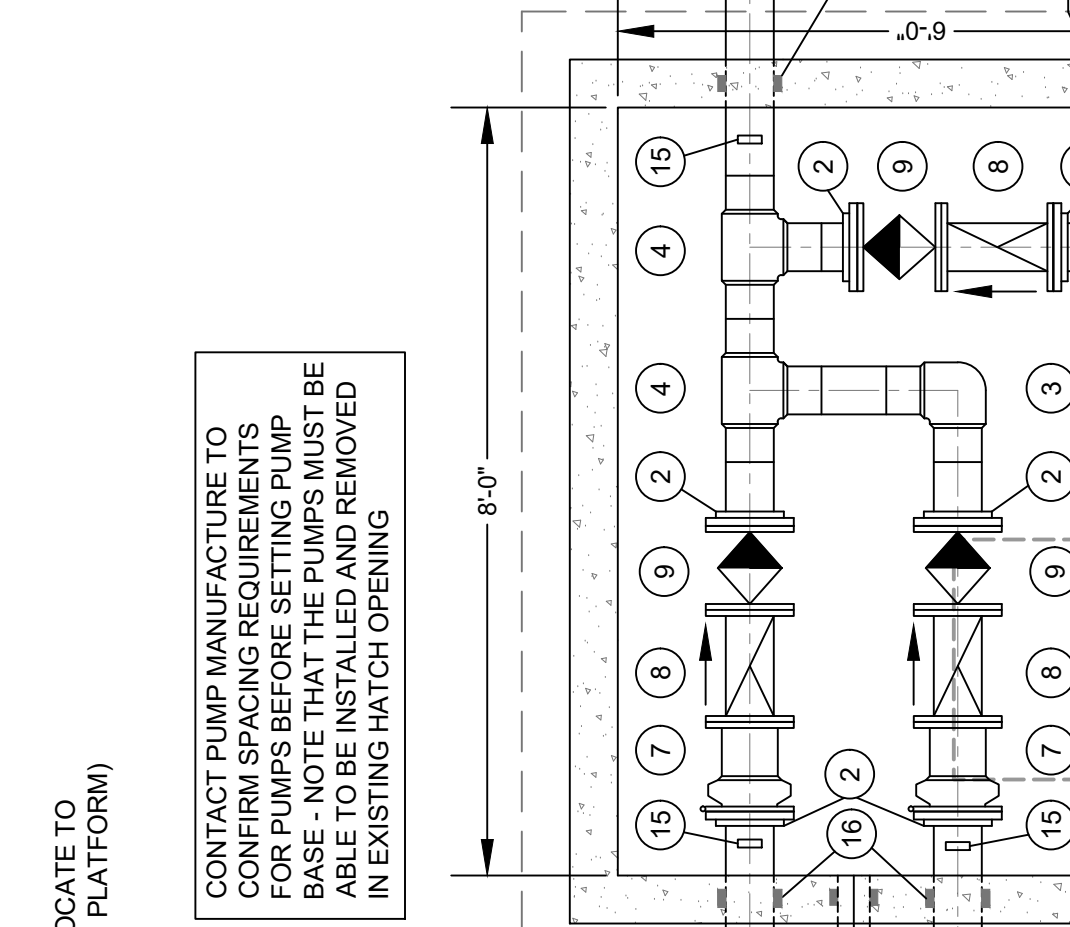
PUMP STATION SECTION A-A
NOT TO SCALE



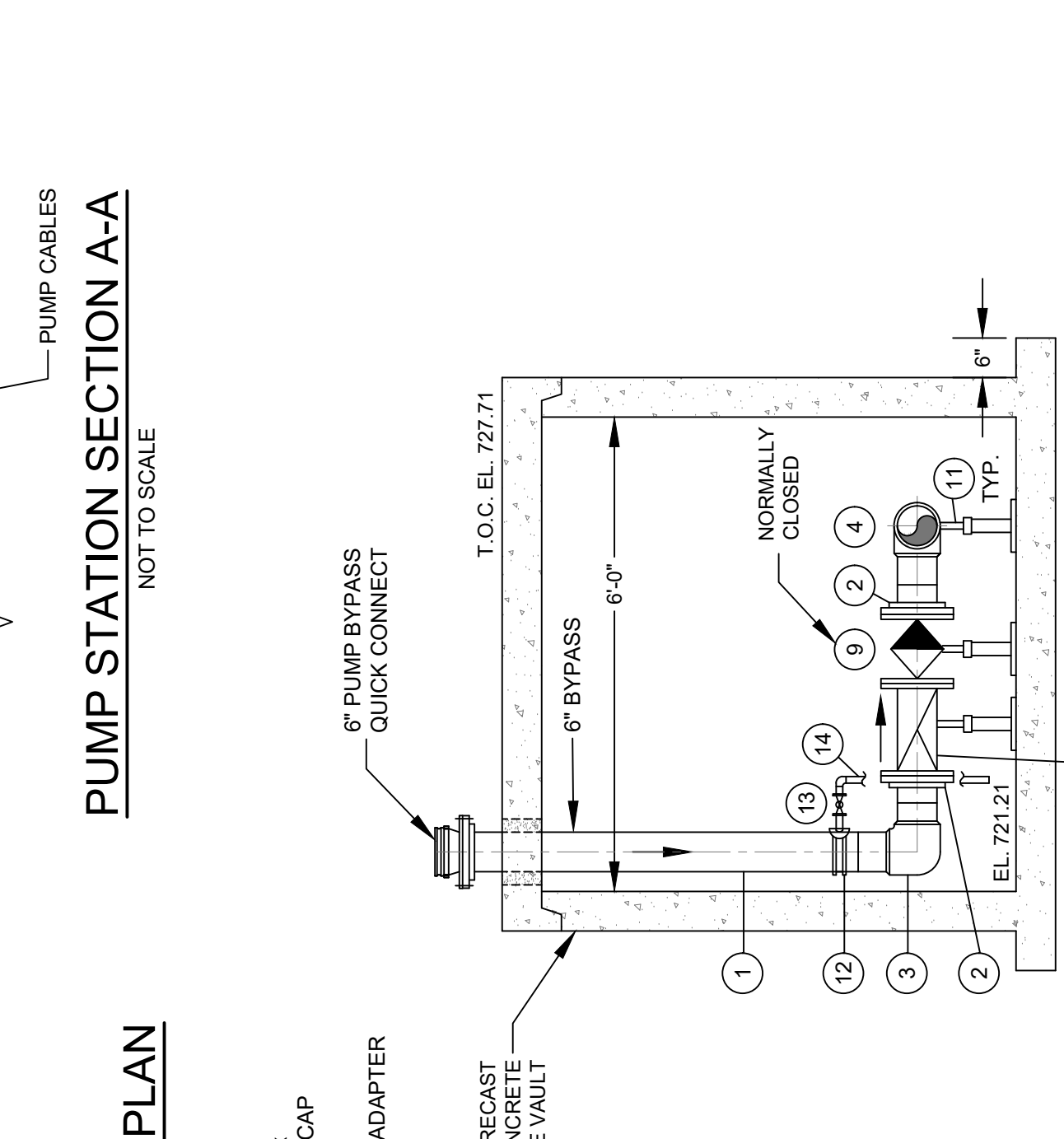
PUMP STATION ELECTRICAL PLAN
NOT TO SCALE



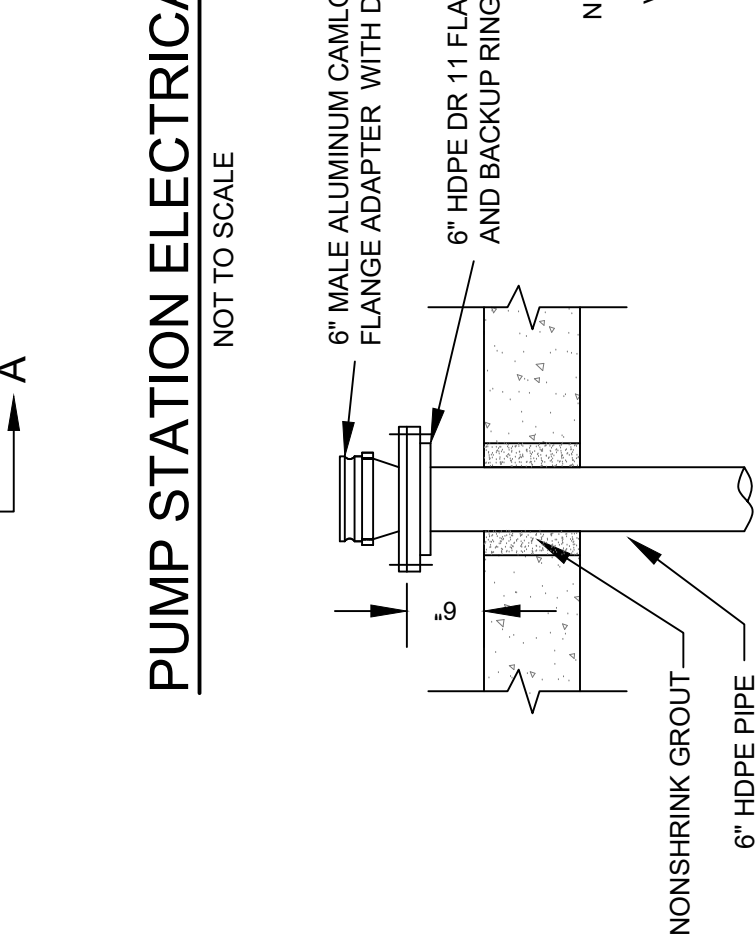
WET WELL QUICK CONNECT DETAIL
NOT TO SCALE



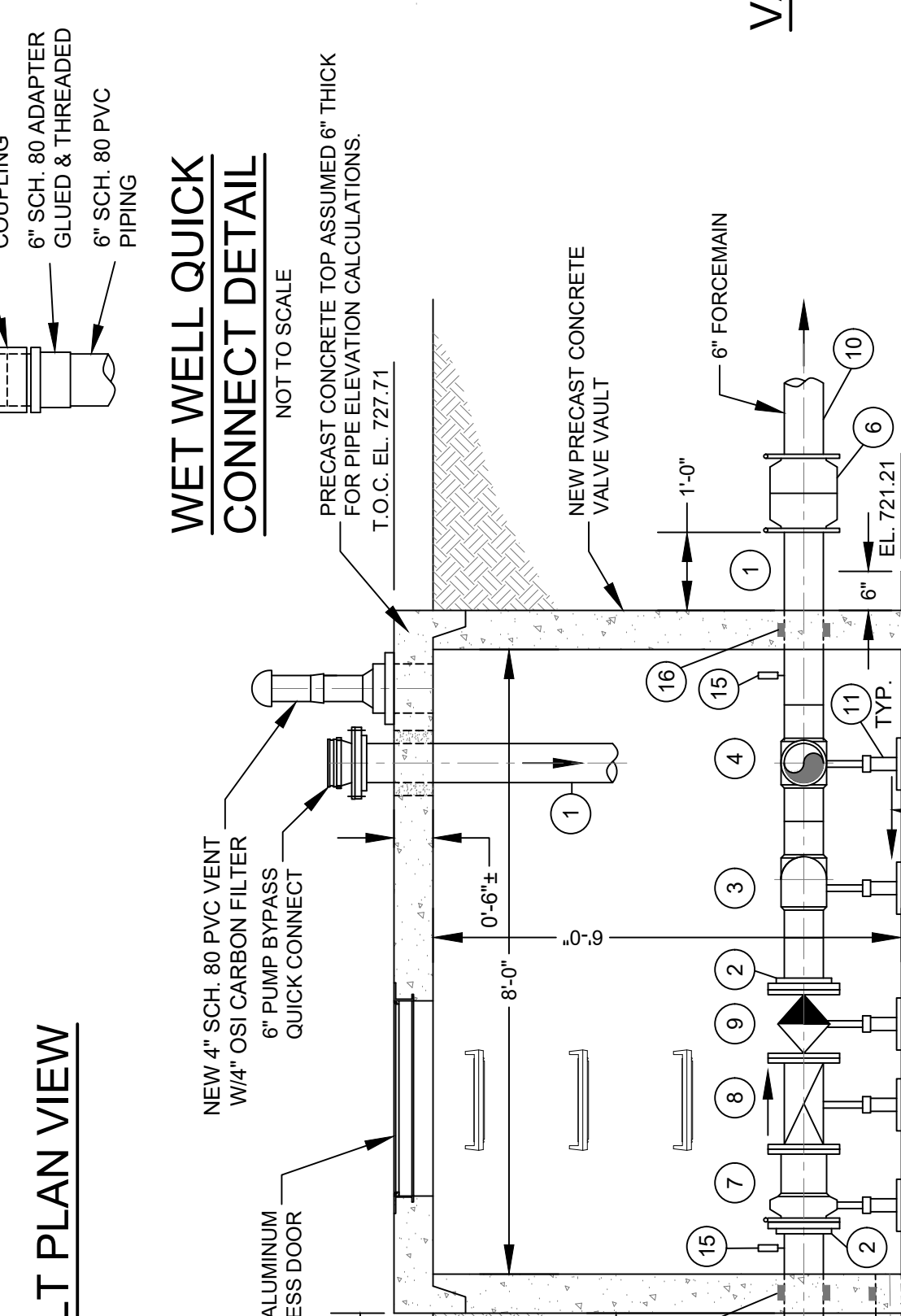
NEW CONCRETE PAD DETAIL
NOT SCALE



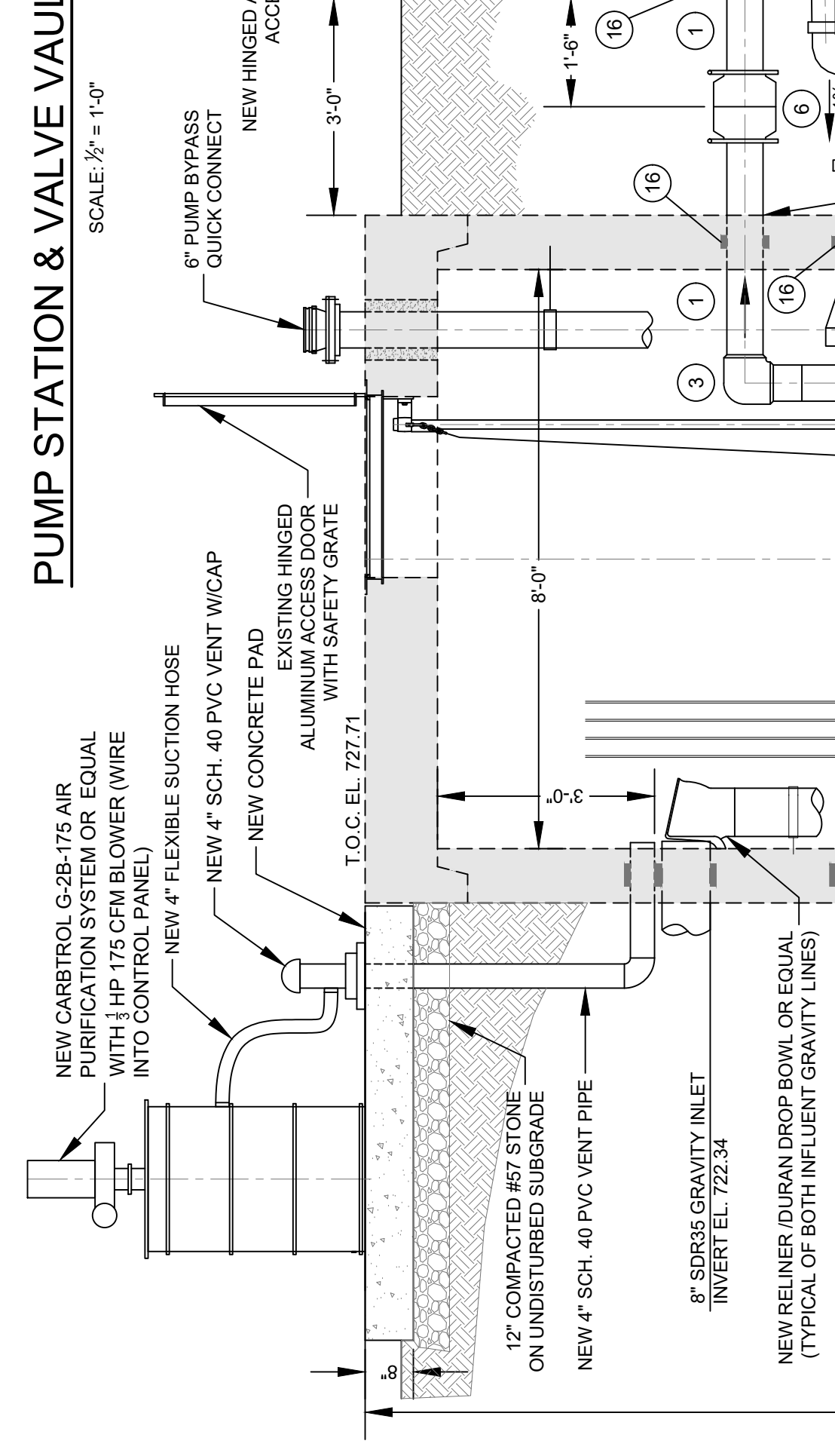
SECTION THRU VALVE VAULT
PUMP BYPASS
SCALE: 3/8" = 1'-0"



VALVE VAULT QUICK CONNECT DETAIL
NOT TO SCALE



PUMP STATION & VALVE VAULT PLAN VIEW
SCALE: 3/8" = 1'-0"



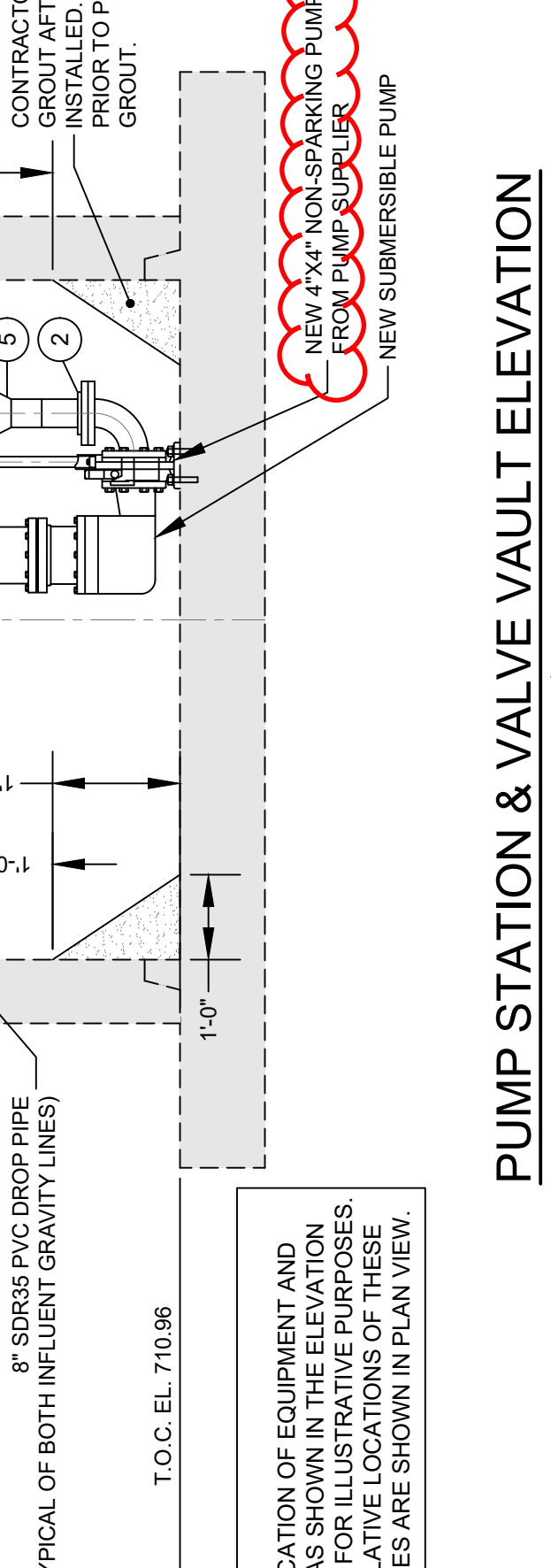
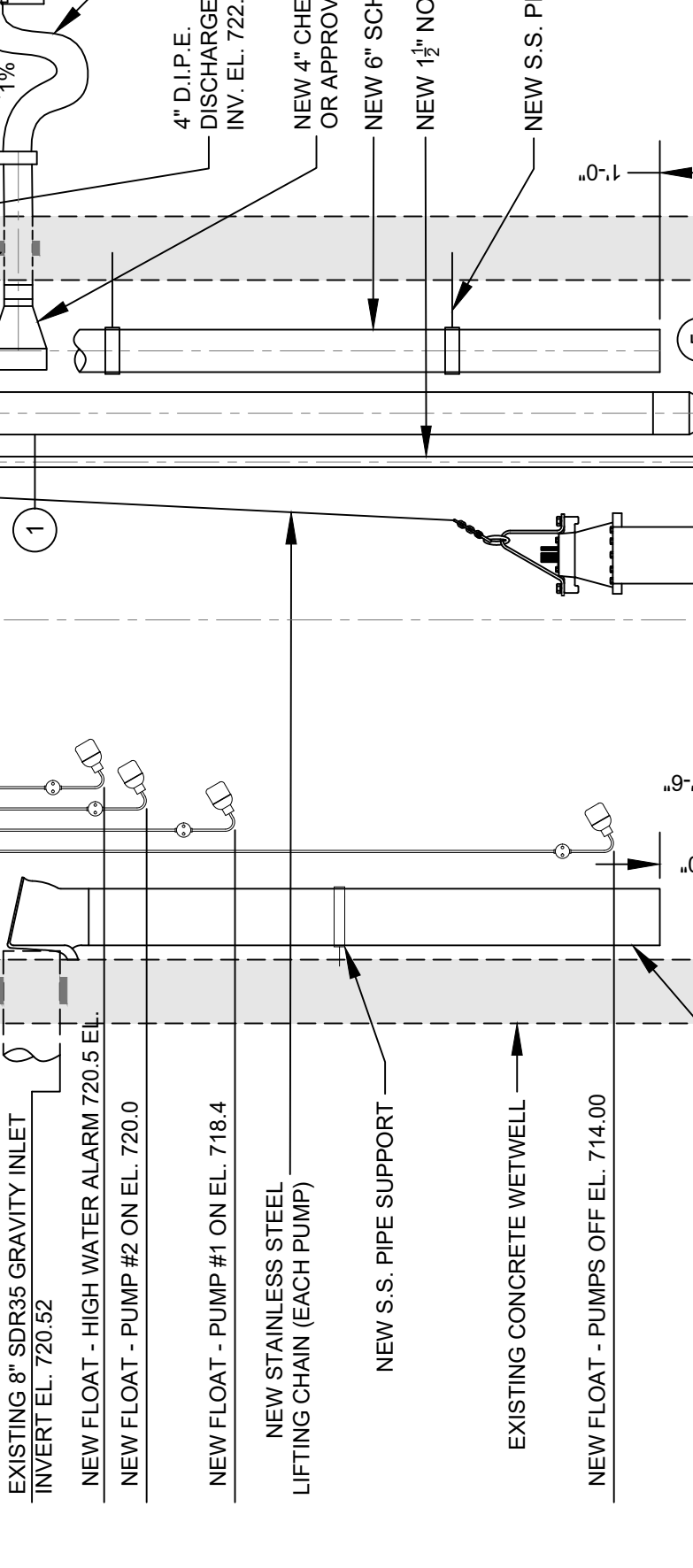
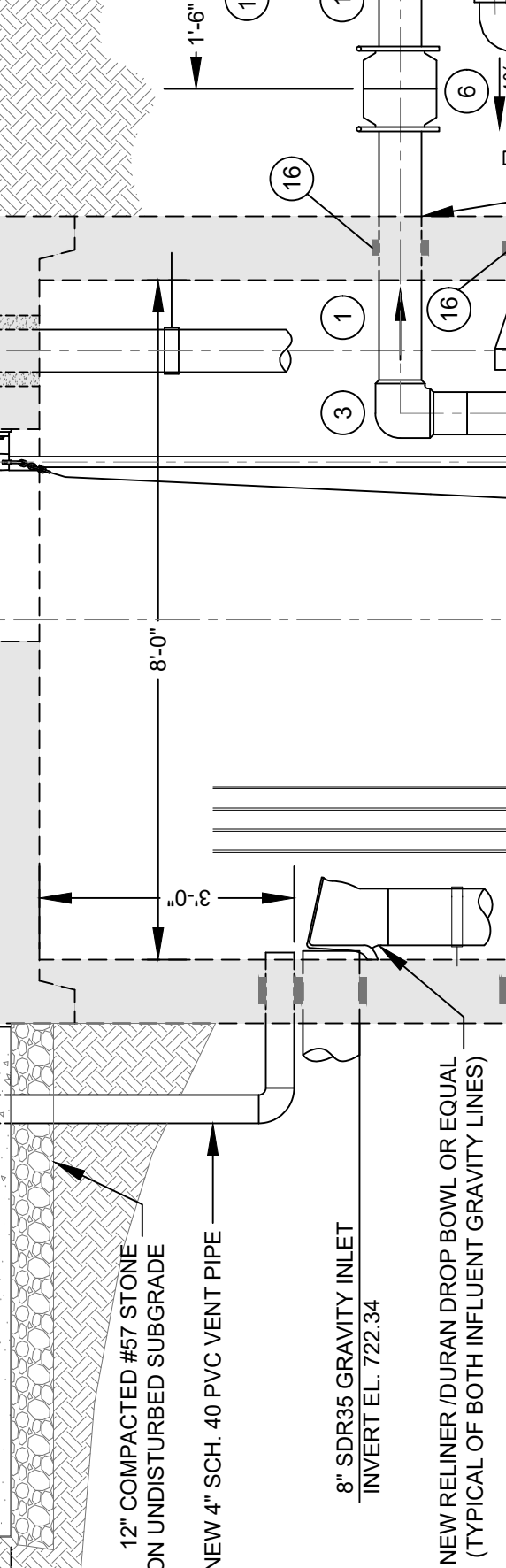
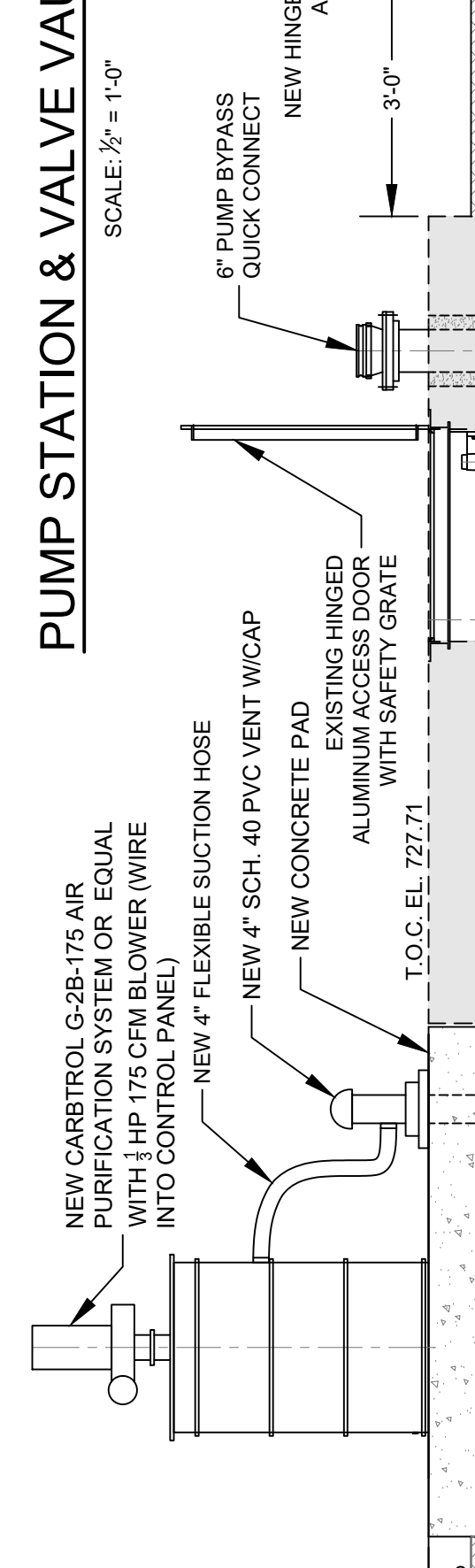
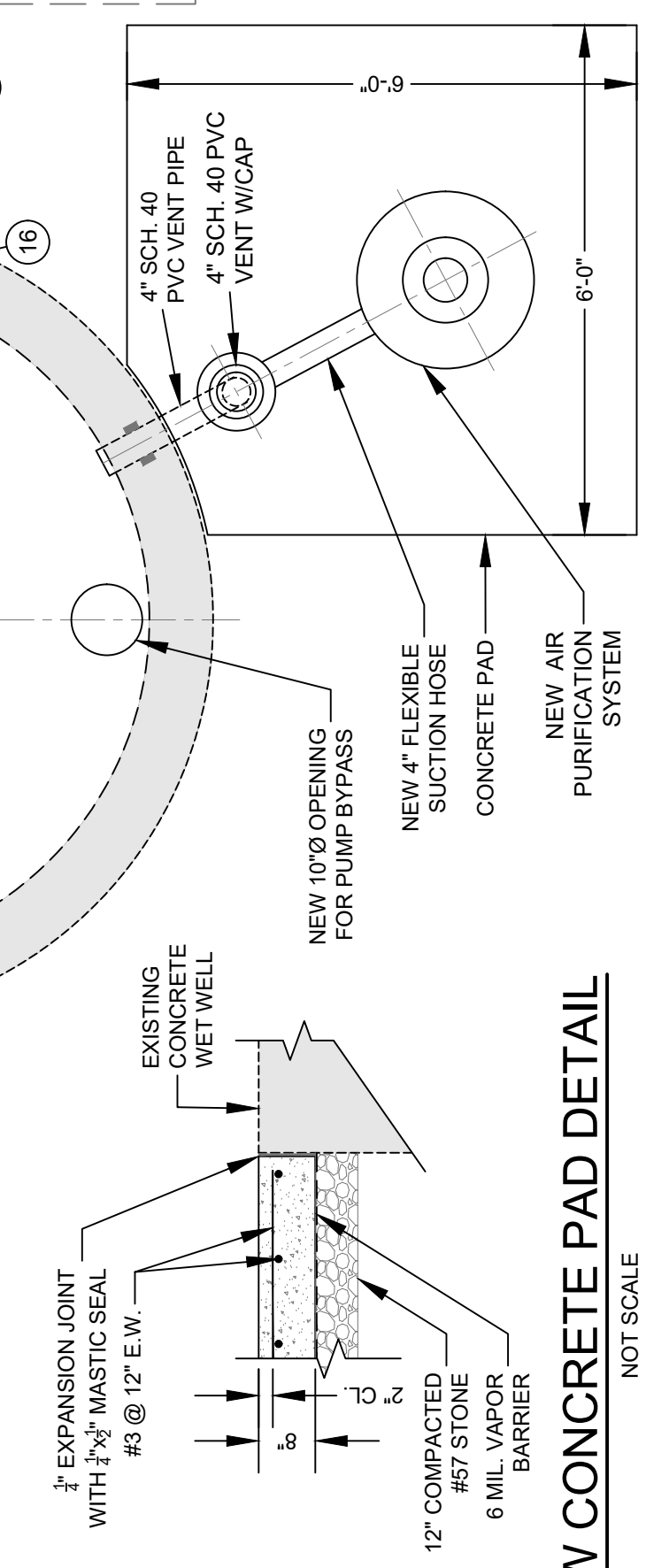
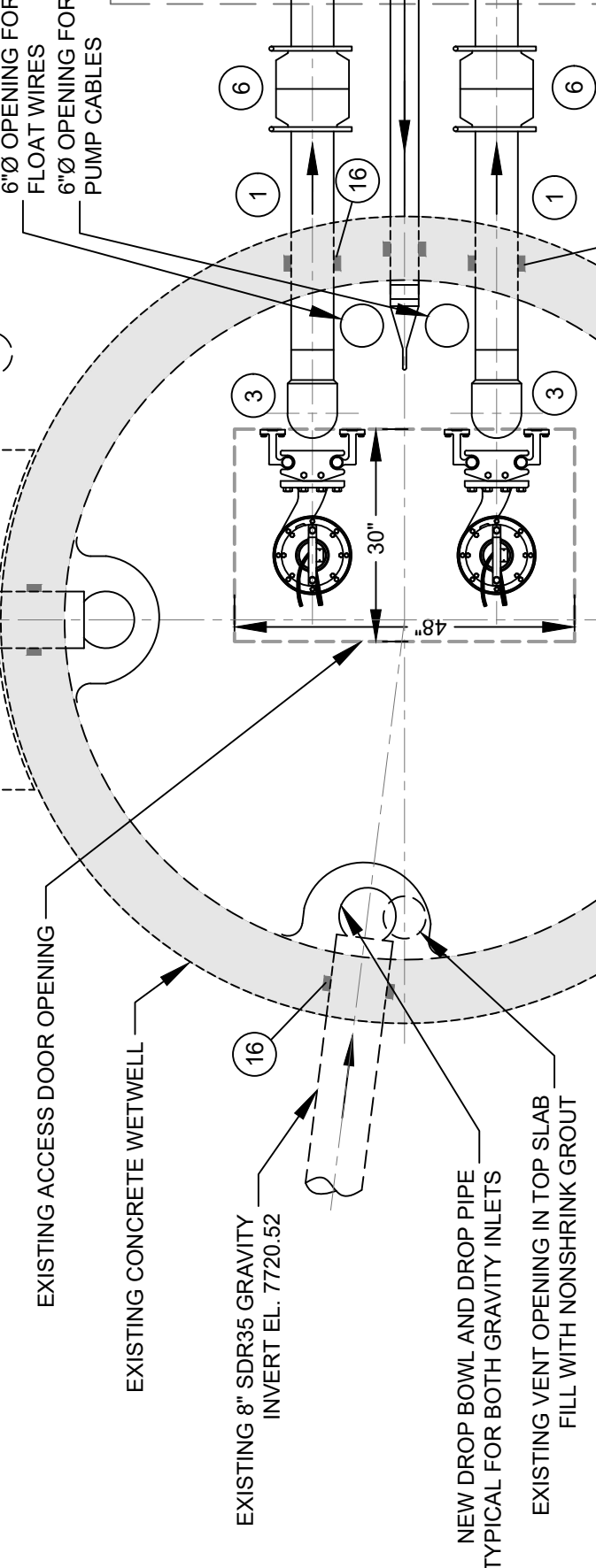
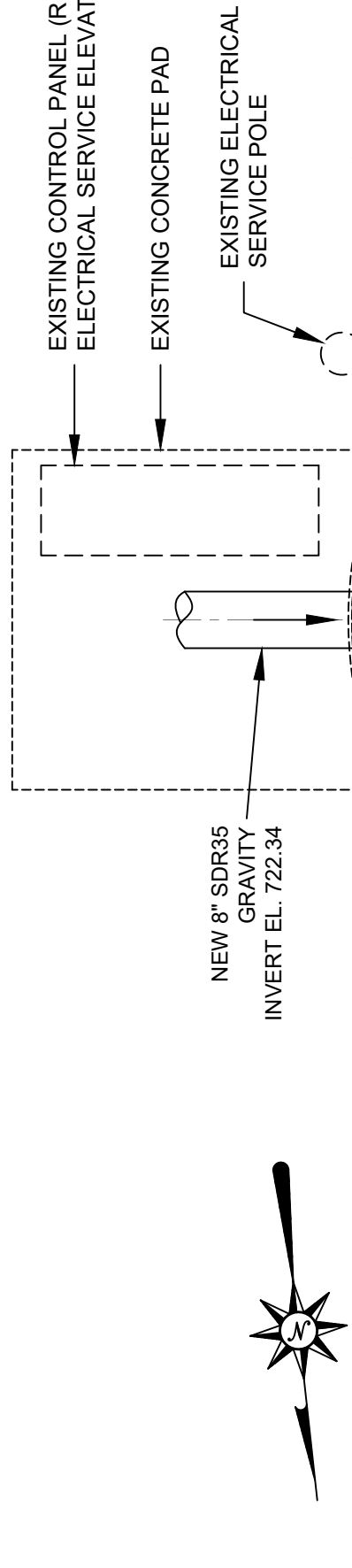
PUMP STATION & VALVE VAULT ELEVATION
SCALE: 3/8" = 1'-0"

NOTES:

- ALL HARDWARE SHALL BE STAINLESS STEEL.
- PIPE SUPPORTS SHALL BE S.S. OFFSET PIPE CLAMPS, NATIONAL PIPE HANGER CORP. OR EQUAL, INSTALLED WITH 1/2" STUDDED ANCHOR BOLTS, H/11 OR EQUAL, EMBEDDED 2'-0" AND SPACED AT 4'-0" O.C.
- BASE PLATES FOR PIPE SUPPORTS IN VALVE BOX SHALL BE SECURED WITH S.S. ANCHOR BOLTS TO THE CONCRETE.
- GROUT OPENINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE PROTECTED FROM CONTACT WITH CONCRETE AND GROUT WITH A COAL TAR COATING OR OTHER MATERIAL APPROVED BY THE ACCESS DOOR MANUFACTURER.
- INTERIOR OF WET WELL SHALL BE COATED PER SPECIFICATION SECTION 05.40.00, PART 02.02.10, INSIDE STATION EXCEPT GUIDE RAILS SHALL BE COATED WITH EPOXY.
- PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
- ACCESS HATCH MUST BE SET SUCH AS TO ALLOW GUIDE RAILS FOR CORRECT OPERATION.
- DISCHARGE FLANGED CONNECTION TO BE VERTICAL FOR CORRECT OPERATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL DIMENSIONS OF LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES.
- DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE 3 PIECE CONSTRUCTION WITH 1/4" FLUSHING CONNECTION, 316 STAINLESS STEEL LOWER HOUSING AND DIAPHRAGM MATERIALS, 1/4" GAUGE CONNECTION AND 1/2" LOWER CONNECTION. VITON DIAPHRAGMS ARE REQUIRED FOR LOW RANGE PRESSURE MEASUREMENTS. PHOSPHOR BRONZE OR PHOSPHOR BRONZE DIAPHRAGMS ARE REQUIRED FOR WASTEWATER. ACCEPTABLE MODELS ARE MARSH 14201, HELICORD 100-H OR EQUAL.
- DIAPHRAGM SEALS SHALL BE PERMANENTLY ATTACHED TO GAUGES BY INSTALLATION OF A LEAD SEALED WIRE CONNECTING THE TWO. THIS IS TO PREVENT ACCIDENTAL LOSS OF THE FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON.
- PHOSPHOR BRONZE BOURNON TUBES, WHITE LAMINATED PHENOL DIALS. GAUGES SHALL BE 4.12" AND HAVE MICROMETER ADJUSTMENT OF POINTERS AND BLACK PHENOL BLACK CAST IRON BRASS OR ALUMINUM CASE AND RING. ROTARY GEAR DRIVE, CORROSION RESISTANT, STAINLESS STEEL. MOVEMENT, BLOWOUT PROTECTION AND BRONZE SOCKETS WITH WRENCH FLATS. ACCURACY SHALL BE WITHIN 1/2 OF 1% OF THE SCALE RANGE. THEY SHALL BE PRECALIBRATED (0.60 PSI/40 FT.). JAMES HERSCH CORP. WASTEWATER DIAPHRAGM GAUGE OR EQUAL. ALL GAUGES SHALL BE 8X6X6".
- WET WELL ACCESS DOOR OPENING 30"X48". MODEL APD3000 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USE FABRICATION INC. OR EQUAL. VALVE VAULT ACCESS DOOR OPENING 30"X30". MODEL APS3000 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USE FABRICATION INC. OR EQUAL.

FLOOD INFORMATION
JULY 2022 FLOOD = EL. 724.1
JULY 2022 FLOOD = EL. 724.1
2022 FLOOD = EL. 724.0

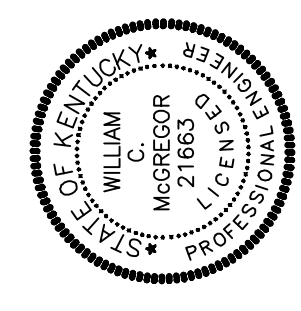
NO.	DESCRIPTION
1	6" HDPE DR 11 PIPE
2	6" HDPE DR 11 FLANGE ADAPTER AND BACKUP RING
3	6" HDPE DR 11 90° BEND
4	6" HDPE DR 11 TEE
5	6"x4" HDPE DR 11 REDUCER
6	6" RESTRAINED COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL
7	6" RESTRAINED FLANGED COUPLING ADAPTER ROMAC INDUSTRIES MODEL "ALPHA FC" OR EQUAL
8	6" FLOID GATE VALVE WITH HAND WHEEL OPERATOR
9	6" FLOID SWING CHECK VALVE WITH EXTERNAL LEVER & WEIGHT
10	6" SDR21 PVC FORCE MAIN
11	ADJUSTABLE PIPE SUPPORT FOR 8" PIPE, STANDON MODEL #492 SADDLE OR EQUAL
12	1" S.S. SERVICE SADDLE
13	1" SCH. 40 PVC TRUE UNION BALL VALVE
14	1" SCH. 40 PVC PIPE TO VALVE VAULT FLOOR (BYPASS DRAIN)
15	DIAPHRAGM SEAL AND PRESSURE GAGE
16	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS



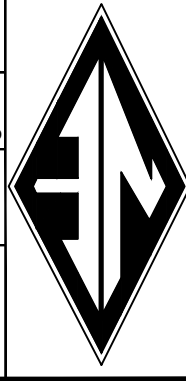
NOTE: THE LOCATION OF EQUIPMENT AND PIPING AS SHOWN IN THE ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES. THE RELATIVE LOCATIONS OF THESE FEATURES ARE SHOWN IN PLAN VIEW.

2023-11-17 R1 RELOCATED VALVE VAULT DRAIN TO DISCHARGE INTO WET WELL (JCW)
 2024-02-20 ADD 1 CHANGE TO GATE VALVE IN LIFT STATION

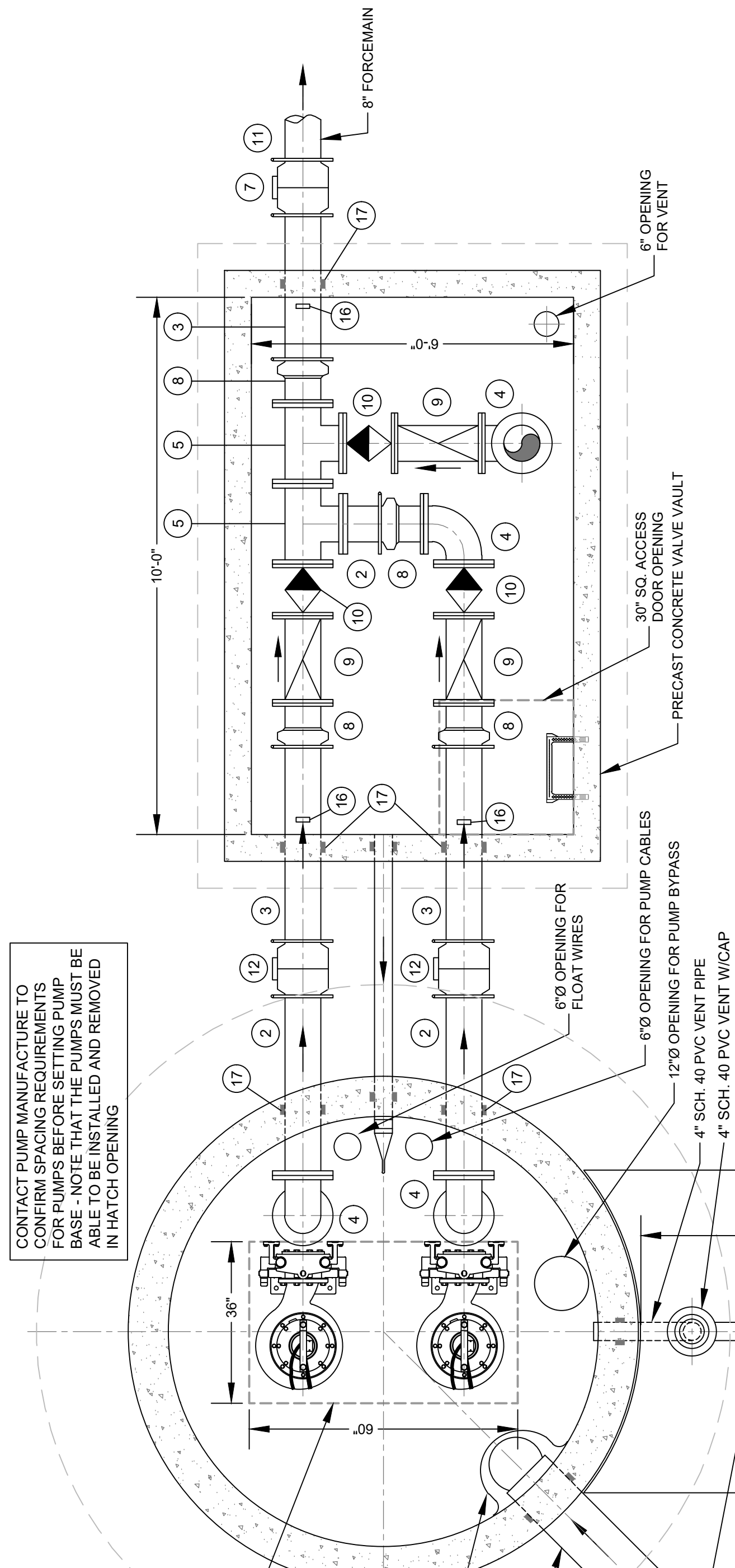
CITY OF JACKSON
 UTILITY RELOCATION
 BREATHITT COUNTY, KY - KY15
 ITEM No. 10-376.00
 COURT STREET LIFT STATION DETAILS



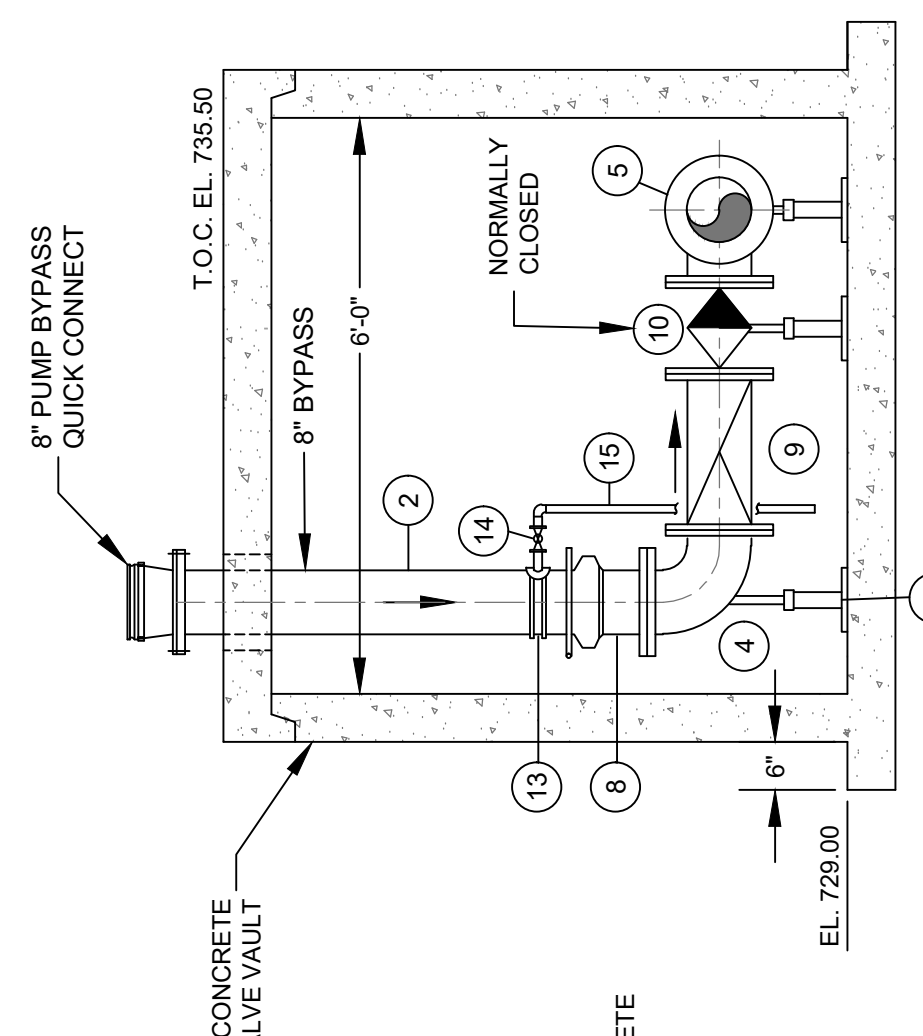
City of Jackson - Utility Relocation
 Breathitt County, KY - KY15, Item No. 376.00
 Drawing By: JCW
 Date: 2023-08-17
 Job No.: 933.40
 AS SHOWN



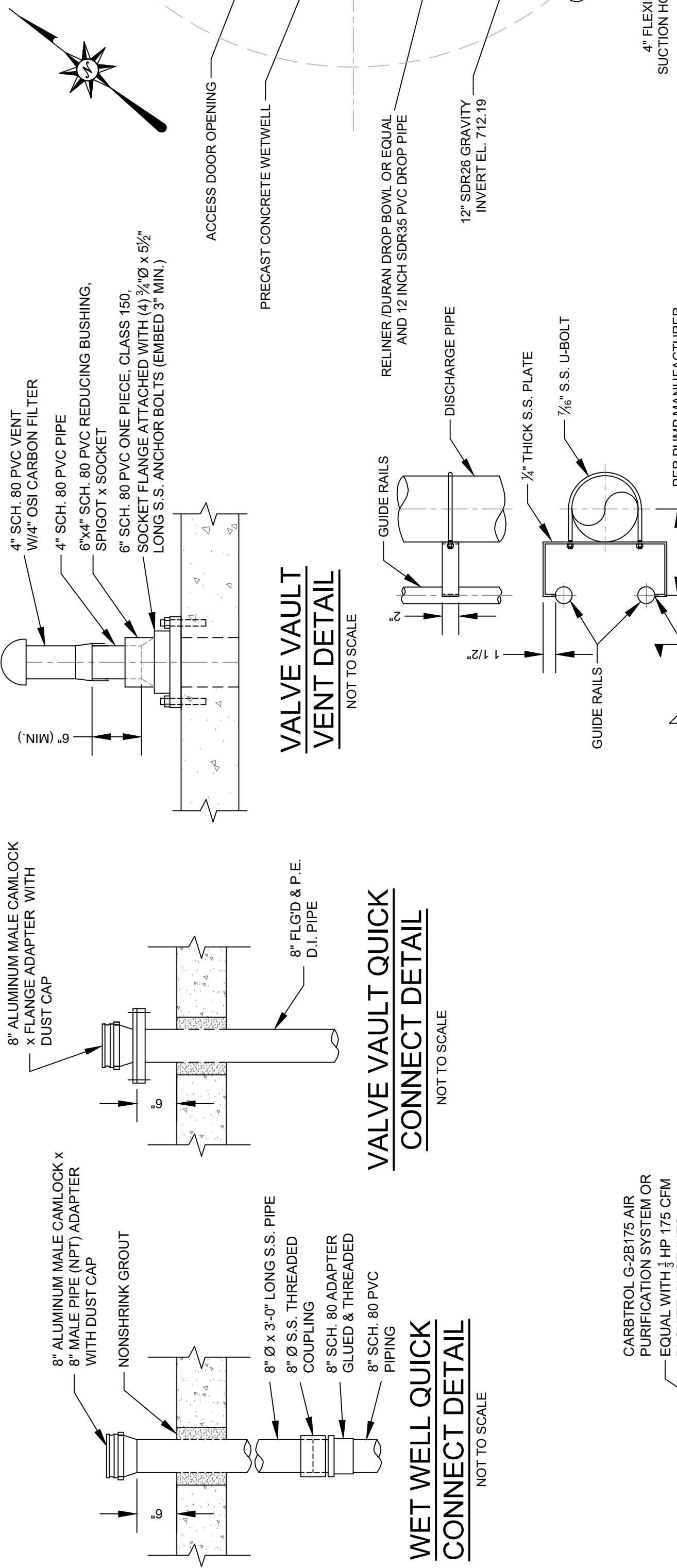
Sheet No. U-041



PUMP STATION & VALVE VAULT PLAN VIEW
 SCALE: 1/2" = 1'-0"



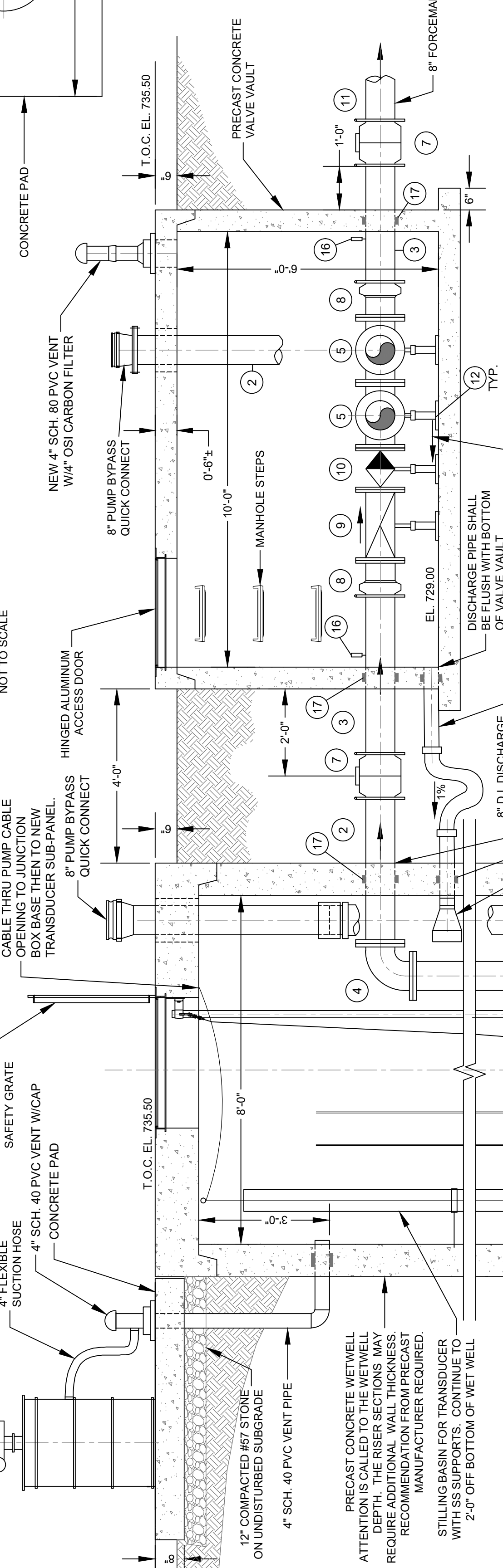
SECTION THRU VALVE VAULT PUMP BYPASS
 SCALE: 1/2" = 1'-0"



WET WELL QUICK CONNECT DETAIL
 NOT TO SCALE

VALVE VAULT QUICK CONNECT DETAIL
 NOT TO SCALE

INTERMEDIATE GUIDE RAIL SUPPORT DETAIL
 NOT TO SCALE



PUMP STATION & VALVE VAULT ELEVATION
 SCALE: 1/2" = 1'-0"

NOTE: THIS CONTROL PANEL WILL BE EQUIPPED WITH VARIABLE FREQUENCY DRIVES (VFDs) TO REGULATE THE PUMPS FLOW RATE. DIAL THE VFD'S BACK TO 85% OR 1500 RPM'S FOR NORMAL OPERATION.

NOTE: THE LOCATION OF EQUIPMENT AND PIPING AS SHOWN IN THE ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES. THE RELATIVE LOCATIONS OF THESE FEATURES ARE SHOWN IN PLAN VIEW.

FLOOD INFORMATION
 2022 FLOOD - EL. 740.0

NOTE: CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASES HAVE BEEN INSTALLED. PRIOR TO PLACEMENT OF NON-SHRINK GROUT

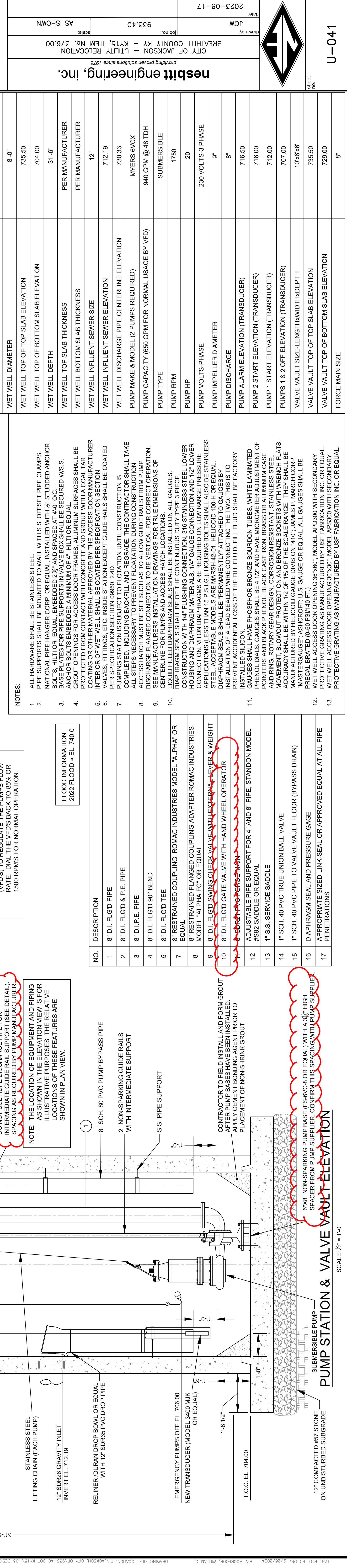
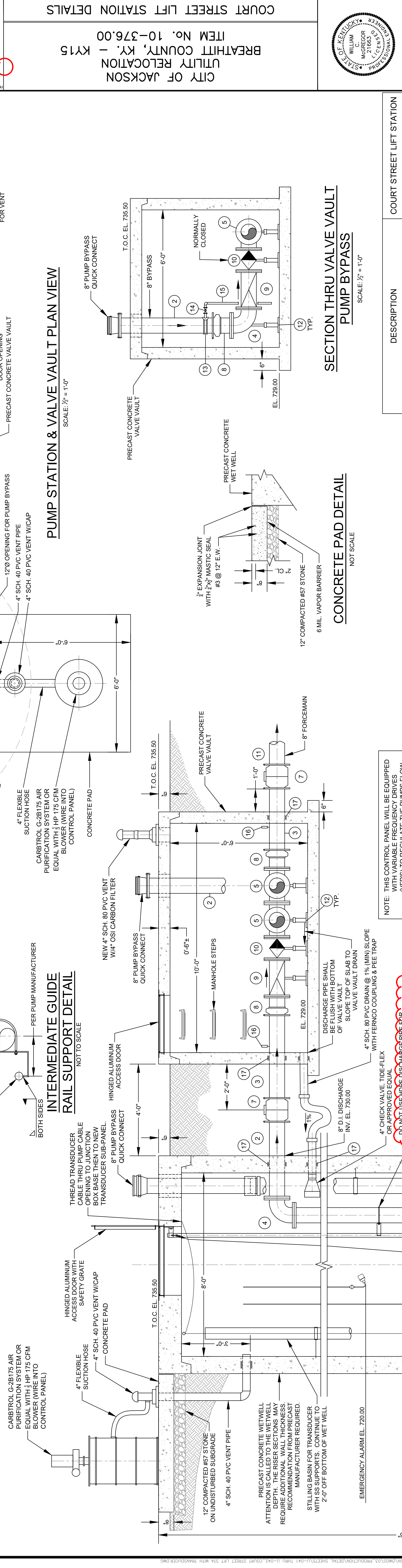
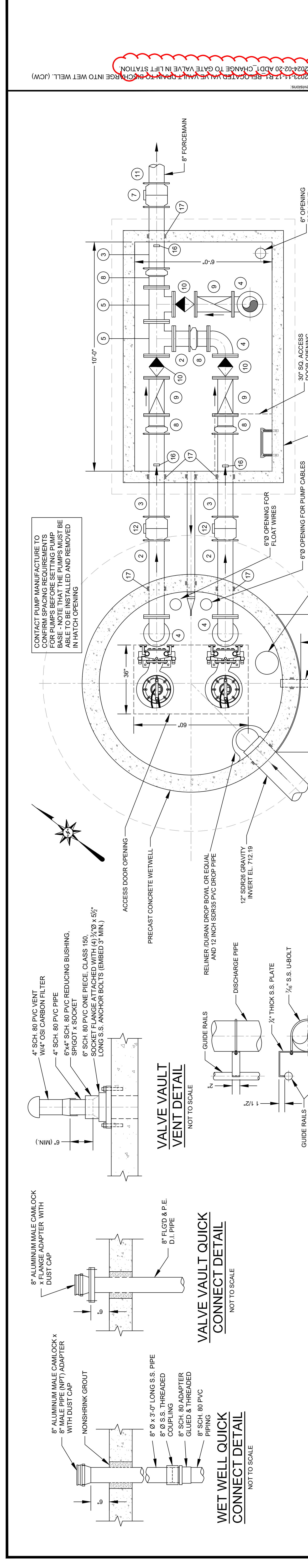
ATTENTION IS CALLED TO THE WET WELL INTERIOR WALL THICKNESS REQUIRE ADDITIONAL WALL THICKNESS RECOMMENDATION FROM PRECAST MANUFACTURER REQUIRED. STILLING BASIN FOR TRANSDUCER WITH S.S. SUPPORTS. CONTINUE TO 2'-0" OFF BOTTOM OF WET WELL

CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASES HAVE BEEN INSTALLED. PRIOR TO PLACEMENT OF NON-SHRINK GROUT

CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASES HAVE BEEN INSTALLED. PRIOR TO PLACEMENT OF NON-SHRINK GROUT

- NOTES:
1. ALL HARDWARE SHALL BE STAINLESS STEEL.
 2. PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS, NATIONAL PIPE HANGER CORP. OR EQUAL, INSTALLED WITH 1/2" STUDDED ANCHOR BOLTS EMBEDDED IN CONCRETE AT 4" MIN. ON CENTER. ANCHOR BOLTS SHALL BE SECURED W/ S. ANCHOR BOLTS EMBEDDED A MINIMUM OF 4" HILT OR EQUAL.
 3. GROUT OPENINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE COATED OR OTHER MATERIAL APPROVED BY THE ACCESS DOOR MANUFACTURER.
 4. ACCESS DOOR MUST BE SET SUCH AS THE WEED DOOR FRAME TO ALLOW PROPER VALVE FITTINGS, ETC. INSIDE STATION. ACCEPT GUIDE RAILS SHALL BE COATED PER SPECIFICATION SECTION 08860.2.4D.
 5. PUMP STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
 6. ACCESS DOOR MUST BE SET SUCH AS THE WEED DOOR FRAME TO ALLOW PROPER VALVE FITTINGS, ETC. INSIDE STATION. ACCEPT GUIDE RAILS SHALL BE COATED PER SPECIFICATION SECTION 08860.2.4D.
 7. PUMP STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
 8. ACCESS DOOR MUST BE SET SUCH AS THE WEED DOOR FRAME TO ALLOW PROPER VALVE FITTINGS, ETC. INSIDE STATION. ACCEPT GUIDE RAILS SHALL BE COATED PER SPECIFICATION SECTION 08860.2.4D.
 9. LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES.
 10. DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE 3 PIECE CONSTRUCTION WITH 1/4" FLUSHING CONNECTION. 316 STAINLESS STEEL LOWER CONNECTION VITON DIAPHRAGM ARE REQUIRED ON LOW RANGE PRESSURE APPLICATIONS (LESS THAN 15 P.S.I.G.). HOUSING BOLTS SHALL ALSO BE STAINLESS STEEL. ACCEPTABLE MODELS ARE MARSH 42-01, HELICOID 100-H OR EQUAL. DIAPHRAGM SEALS SHALL BE "PERMANENTLY" ATTACHED TO GAUGES BY INSTALLATION OF A LEAD SEALED WIRE CONNECTING THE TWO. THIS IS TO PREVENT SILICON OIL LOSS OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON OIL.
 11. GAUGES SHALL HAVE PHOSPHOR BRONZE BOURNOM tubes. WHITE LAMINATED PHENOL DIALS. GAUGES SHALL BE 4 1/2" AND HAVE MICROMETER ADJUSTMENT OF POINTERS AND BLACK PHENOL BLACK CAST IRON, BRASS OR ALUMINUM CASE AND RING, ROTARY GEAR DESIGN, CORROSION RESISTANT. STAINLESS STEEL MOVING, BLOWBY TIGHT LOCK AND BLOWBY SEALS WITH BENCH MARKS MANUFACTURED BY HELICOID GAUGE DIVISION "410", JAMES P. MARCH CORP. "MASTER GAUGE" - ASHROCOT, U.S. GAUGE OR EQUAL. ALL GAUGES SHALL BE PRECALIBRATED (0-80 PSIH/40 PSI).
 12. WET WELL ACCESS DOOR OPENING 36" X 60". MODEL AP0300 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.
 13. PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.

DESCRIPTION	COURT STREET LIFT STATION
WET WELL DIAMETER	8'-0"
WET WELL TOP OF TOP SLAB ELEVATION	735.50
WET WELL TOP OF BOTTOM SLAB ELEVATION	704.00
WET WELL DEPTH	31'-6"
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER
WET WELL INFLUENT SEWER SIZE	12"
WET WELL INFLUENT SEWER ELEVATION	712.19
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	730.33
PUMP MAKE & MODEL (2 PUMPS REQUIRED)	MYERS BVX
PUMP CAPACITY (650 GPM FOR NORMAL USAGE BY VFD)	940 GPM @ 48 TDH
PUMP TYPE	SUBMERSIBLE
PUMP RPM	1750
PUMP HP	20
PUMP VOLTS/3 PHASE	230 VOLTS/3 PHASE
PUMP IMPELLER DIAMETER	9"
PUMP DISCHARGE	8"
PUMP ALARM ELEVATION (TRANSDUCER)	716.60
PUMP 1 START ELEVATION (TRANSDUCER)	716.00
PUMP 2 START ELEVATION (TRANSDUCER)	712.00
PUMPS 1 & 2 OFF ELEVATION (TRANSDUCER)	707.00
VALVE VAULT SIZE-LENGTH/WIDTH/DEPTH	10'X6'X6'
VALVE VAULT TOP OF TOP SLAB ELEVATION	735.50
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	729.00
FORCE MAIN SIZE	8"



CONTACT PUMP MANUFACTURE TO CONFIRM SPACING REQUIREMENTS FOR PUMPS BEFORE SETTING PUMP BASE - NOTE THAT THE PUMPS MUST BE BASE TO BE INSTALLED AND REMOVED IN HATCH OPENING

CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASES HAVE BEEN INSTALLED. PLACE GROUT PRIOR TO PLACEMENT OF NONSHRINK GROUT

NOTE: THIS CONTROL PANEL WILL BE EQUIPPED WITH VARIABLE FREQUENCY DRIVES (VFDs) TO REGULATE THE PUMPS FLOW RATE. DIAL THE VFD'S BACK TO 85% OR 1500 RPMs FOR NORMAL OPERATION.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS, NATIONAL PIPE HANGER CORP. OR EQUAL, INSTALLED WITH 1/2" STUDDED ANCHOR BOLTS WITH 1/4" WASHERS AND WELDED END CAPS. THE ANCHOR BOLTS SHALL BE EMBEDDED A MINIMUM OF 4" HILT OR EQUAL.
3. ANCHOR BOLTS EMBEDDED A MINIMUM OF 4" HILT OR EQUAL.
4. GROUT PROTECTINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE COATING OR OTHER MATERIAL APPROVED BY THE ACCESS DOOR MANUFACTURER.
5. VALVE FITTINGS, ETC. INSIDE STATION, EXCEPT GATE VALVE SHALL BE COATED PER SPECIFICATION SECTION 08860, 2/4D
6. PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
7. ACCESS DOOR MUST BE SET SUCH AS THE WEIGHT OF THE ROUGH CONCRETE SHALL NOT BE SUPPORTED BY THE ACCESS DOOR FRAME.
8. SEE MANUFACTURER'S INSTALLATION DRAWINGS FOR TRUE DIMENSIONS OF CENTERLINE FOR PUMPS AND ACCESS HATCH LOCATIONS.
9. LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES.
10. DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE 3 PIECE CONSTRUCTION WITH 1/4" FLUSHING CONNECTION, 316 STAINLESS STEEL LOWER CONNECTION VITON DIAPHRAGM ARE REQUIRED ON LOW RANGE PRESSURE APPLICATIONS (LESS THAN 15 P.S.I.G.), HOUSING BOLTS SHALL ALSO BE STAINLESS STEEL. ACCEPTABLE MODELS ARE MARSH 42-01, HELICOID 100-H OR EQUAL.
11. DIAPHRAGM SEALS SHALL BE "PERMANENTLY" ATTACHED TO GAUGES BY INSTALLATION OF A LEAD SEALED WIRE CONNECTING THE TWO. THIS IS TO PREVENT AIR LOSS OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON OIL.
12. PHENOL DIALS SHALL HAVE PHOSPHOR BRONZE BOURDON TUBES, WHITE LAMINATED POINTERS AND BLACK PHENOL DESIGN, CORROSION RESISTANT, STAINLESS STEEL AND RING, ROTARY GEAR DRIVE, CORROSION RESISTANT. STAINLESS STEEL MOVENT, BLOWDOWN FUNCTION AND BRASS SCREWS WITH WASHERS, BRASS SCREWS MANUFACTURED BY HELICOID GAUGE DIVISION '4101', JAMES P. MARSH CORP. "MASTER GAUGE" - ASHROFT, U.S. GAUGE OR EQUAL. ALL GAUGES SHALL BE PRECALIBRATED (0-60 RPM/140 FT).
13. PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL. PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.

VALVE VAULT VENT DETAIL

INTERMEDIATE GUIDE RAIL SUPPORT DETAIL

VALVE VAULT QUICK CONNECT DETAIL

WET WELL QUICK CONNECT DETAIL

PUMP STATION & VALVE VAULT PLAN VIEW

SECTION THRU VALVE VAULT PUMP BYPASS

CONCRETE PAD DETAIL

PUMP STATION & VALVE VAULT ELEVATION

NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	8" D.I. FLGD PIPE	1	LINEAR FT	VALVE VAULT DRAIN
2	8" D.I. FLGD & P.E. PIPE	1	LINEAR FT	VALVE VAULT DRAIN
3	8" D.I. PIPE	1	LINEAR FT	VALVE VAULT DRAIN
4	8" D.I. FLGD 90° BEND	1	PIECE	VALVE VAULT DRAIN
5	8" D.I. FLGD TEE	1	PIECE	VALVE VAULT DRAIN
6	8" RESTRAINED COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL	1	PIECE	VALVE VAULT DRAIN
7	8" RESTRAINED ELANGED COUPLING ADAPTER ROMAC INDUSTRIES MODEL "ALPHA FC" OR EQUAL	1	PIECE	VALVE VAULT DRAIN
8	8" D.I. FLGD SWING CHECK VALVE WITH EXTERNAL LEVER & WEIGHT	1	PIECE	VALVE VAULT DRAIN
9	8" D.I. FLGD GATE VALVE WITH HAND WHEEL OPERATOR	1	PIECE	VALVE VAULT DRAIN
10	ADJUSTABLE PIPE SUPPORT FOR 4" AND 8" PIPE, STANDON MODEL #S92 SADDLE OR EQUAL	1	PIECE	VALVE VAULT DRAIN
11	1" S.S. SERVICE SADDLE	1	PIECE	VALVE VAULT DRAIN
12	1" SCH. 40 PVC TRUE UNION BALL VALVE	1	PIECE	VALVE VAULT FLOOR (BYPASS DRAIN)
13	1" SCH. 40 PVC PIPE TO VALVE VAULT FLOOR (BYPASS DRAIN)	1	LINEAR FT	VALVE VAULT FLOOR (BYPASS DRAIN)
14	DIAPHRAGM SEAL AND PRESSURE GAGE	1	PIECE	VALVE VAULT FLOOR (BYPASS DRAIN)
15	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS	1	PIECE	VALVE VAULT FLOOR (BYPASS DRAIN)
16	12" COMPACTED #57 STONE ON UNDISTURBED SUBGRADE	1	SQ. FT	VALVE VAULT FLOOR (BYPASS DRAIN)
17	8" NON-SPARKING PUMP BASE (65-60-C OR EQUAL) WITH A 3/8" HIGH SPACER FROM PUMP SUPPLIER. CONTROL THIS SPACING WITH PUMP SUPPLIER.	1	PIECE	PUMP STATION & VALVE VAULT FLOOR (BYPASS DRAIN)

DESCRIPTION	QTY	UNIT	REMARKS
WET WELL DIAMETER	8'-0"	DIAMETER	COURT STREET LIFT STATION
WET WELL TOP OF BOTTOM SLAB ELEVATION	735.50	ELEVATION	
WET WELL TOP OF TOP SLAB ELEVATION	704.00	ELEVATION	
WET WELL DEPTH	31'-6"	DEPTH	
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER	THICKNESS	
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER	THICKNESS	
WET WELL INFLUENT SEWER SIZE	12"	SIZE	
WET WELL INFLUENT SEWER ELEVATION	712.19	ELEVATION	
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	730.33	ELEVATION	
PUMP MAKE & MODEL (2 PUMPS REQUIRED)	MYERS BVXC	MODEL	
PUMP CAPACITY (650 GPM FOR NORMAL USAGE BY VFD)	940 GPM @ 48 TDH	CAPACITY	
PUMP TYPE	SUBMERSIBLE	TYPE	
PUMP RPM	1750	RPM	
PUMP HP	20	HP	
PUMP VOLTS-3 PHASE	230 VOLTS-3 PHASE	VOLTS	
PUMP IMPELLER DIAMETER	9"	DIAMETER	
PUMP DISCHARGE	8"	DIAMETER	
PUMP ALARM ELEVATION (TRANSDUCER)	716.60	ELEVATION	
PUMP 1 START ELEVATION (TRANSDUCER)	716.00	ELEVATION	
PUMP 1 START ELEVATION (TRANSDUCER)	712.00	ELEVATION	
PUMPS 1 & 2 OFF ELEVATION (TRANSDUCER)	707.00	ELEVATION	
VALVE VAULT SIZE-LENGTH X WIDTH X DEPTH	10' X 6' X 6'	SIZES	
VALVE VAULT TOP OF TOP SLAB ELEVATION	735.50	ELEVATION	
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	729.00	ELEVATION	
FORCE MAIN SIZE	8"	DIAMETER	

CITY OF JACKSON UTILITY RELOCATION BREATHITT COUNTY, KY - KY15 2023-11-17 R1 RELOCATED VALVE VAULT FROM TO DISCHARGE INTO WET WELL (JCM)

COURT STREET LIFT STATION DETAILS

BREATHITT COUNTY, KY - KY15 ITEM NO. 10-376.00

UTILITY RELOCATION

CITY OF JACKSON

UTILITY RELOCATION BREATHITT COUNTY, KY - KY15

ITEM NO. 10-376.00

2023-08-17

933.40

AS SHOWN

2023-08-17

nesbitt engineering, inc.

CITY OF JACKSON - UTILITY RELOCATION BREATHITT COUNTY, KY - KY15, ITEM NO. 376.00

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

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

scale: 3/8" = 1'-0"

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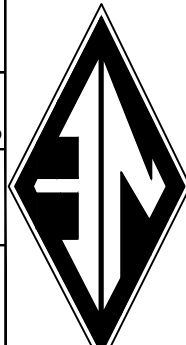
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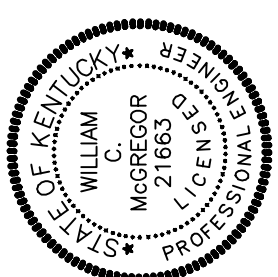
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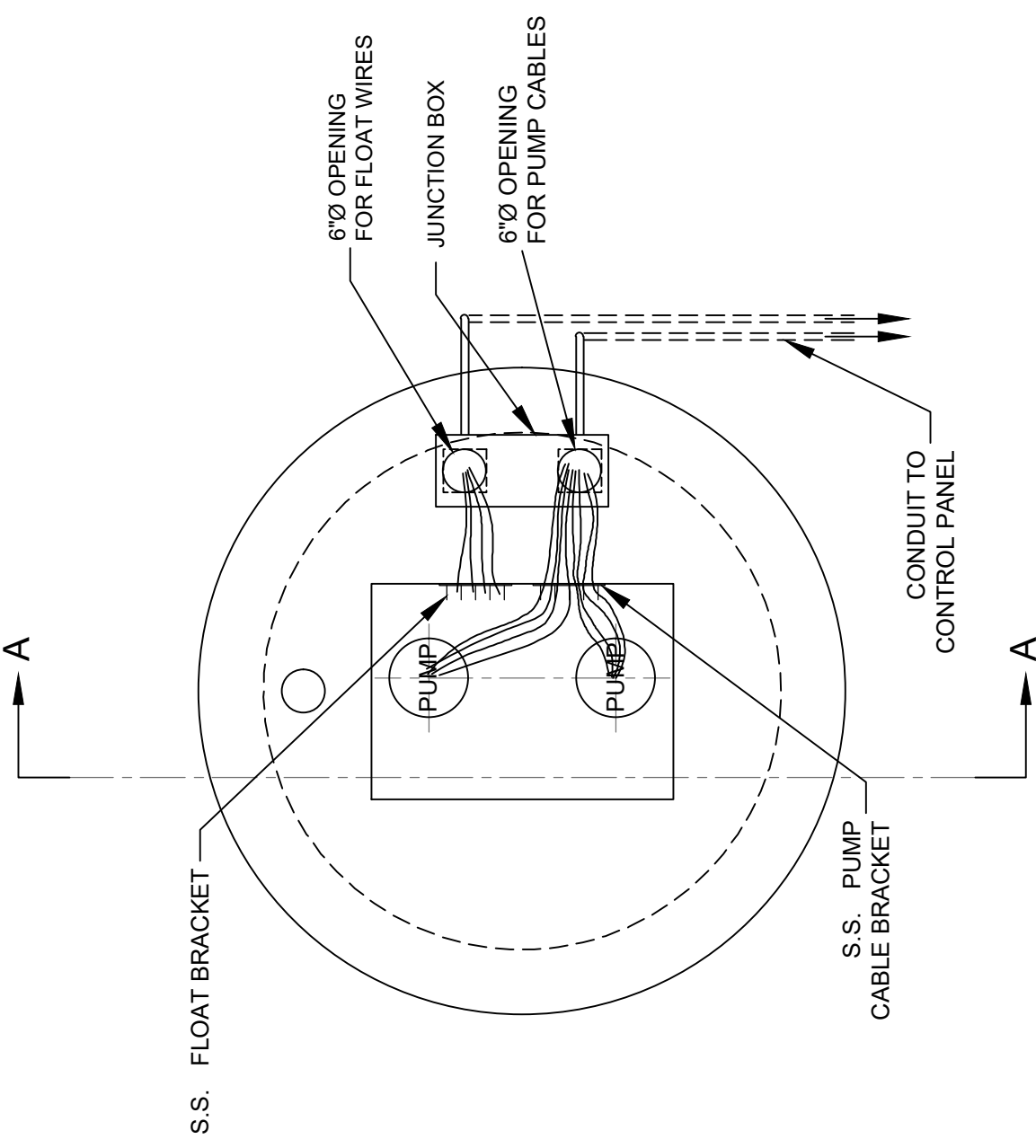
2023-08-17
 Job no. 933.40
 Scale: AS SHOWN
 Drawn by: JCW
 City of Jackson - Utility Relocation
 Breathitt County KY - KY15, Item No. 376.00



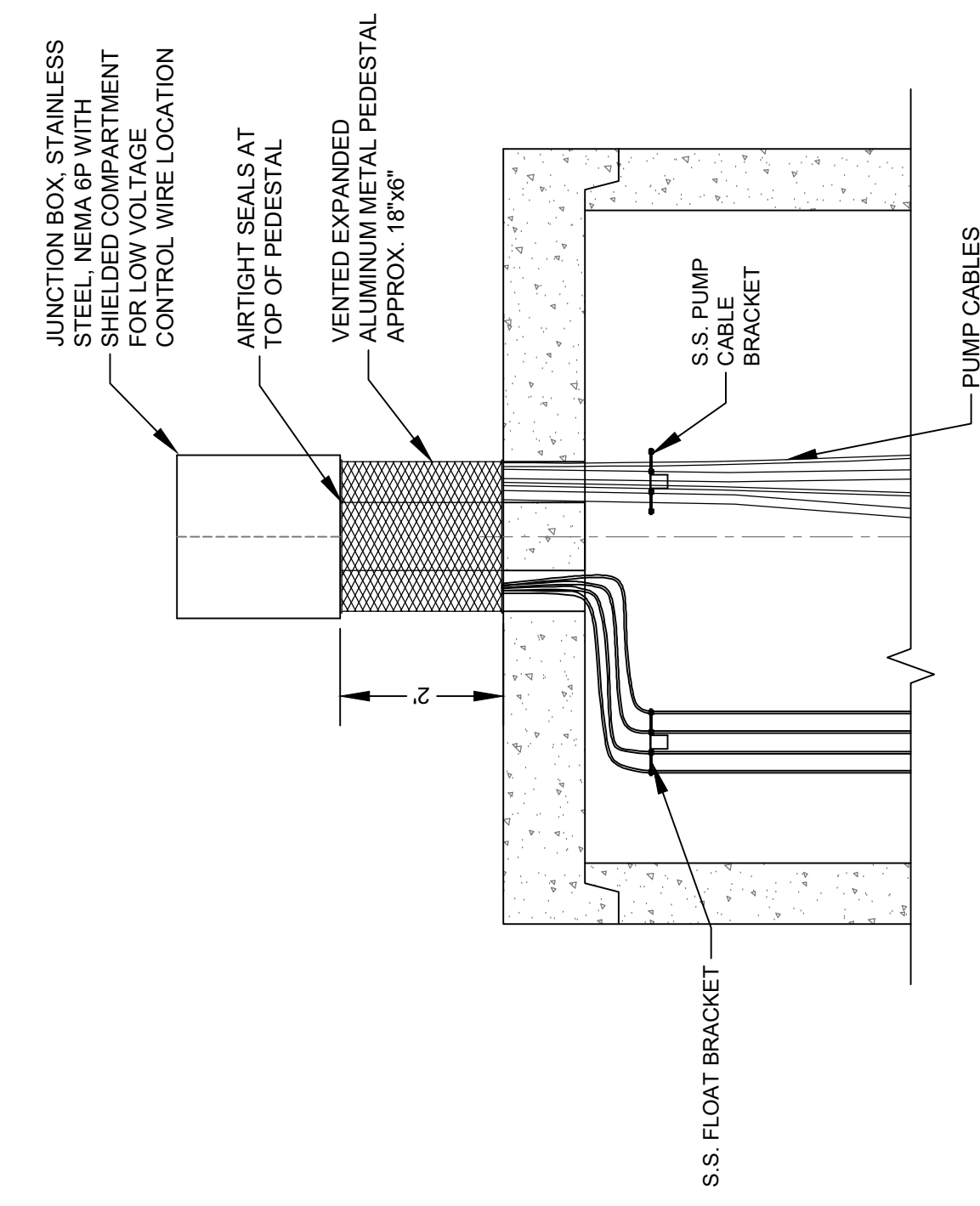
CITY OF JACKSON
 UTILITY RELOCATION
 BREATHITT COUNTY, KY - KY15
 ITEM NO. 10-376.00
 COURT STREET LIFT STATION DETAILS

2024-02-20 ADD1 CHANGE JUNCTION BOX TO 6P
 REVISIONS

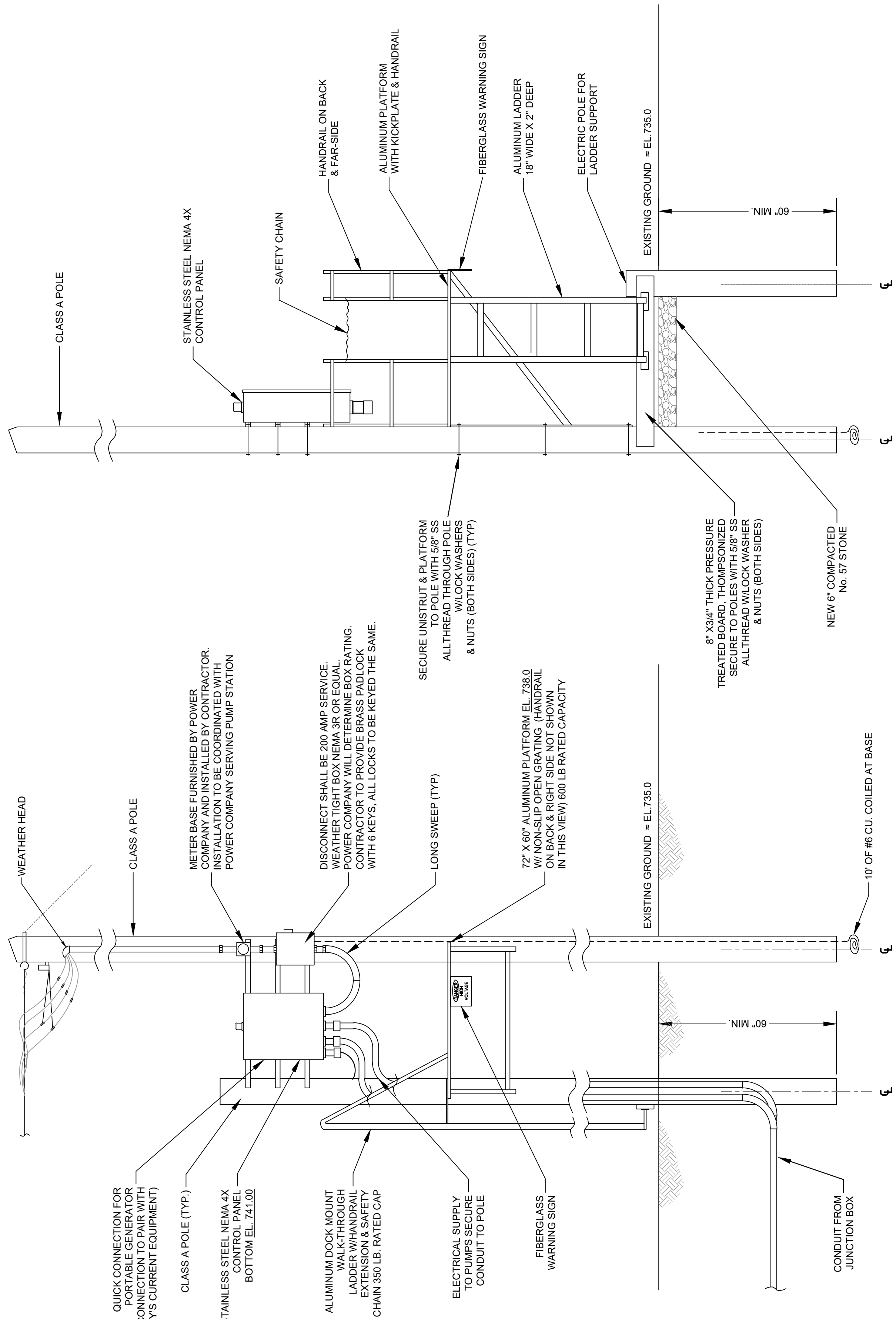
nesbitt engineering, inc.
 Providing proven solutions since 1976



PUMP STATION ELECTRICAL PLAN
 SCALE: 1/2" = 1'-0"



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

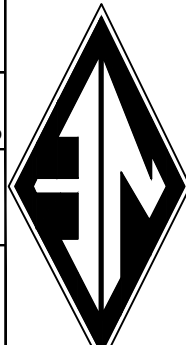


SIDE VIEW

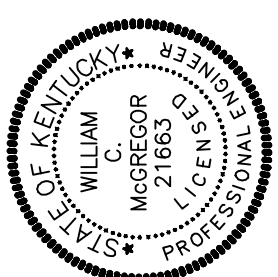
FRONT VIEW

ELECTRICAL SERVICE & DISTRIBUTION ELEVATED PLATFORM ASSEMBLY
 NOT TO SCALE

NOTE: CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY AND MAKE NECESSARY CONNECTIONS TO THE LOCAL DISTRIBUTION SYSTEM. THE COST OF THESE CONNECTIONS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AS PART OF THE BID PRICE.

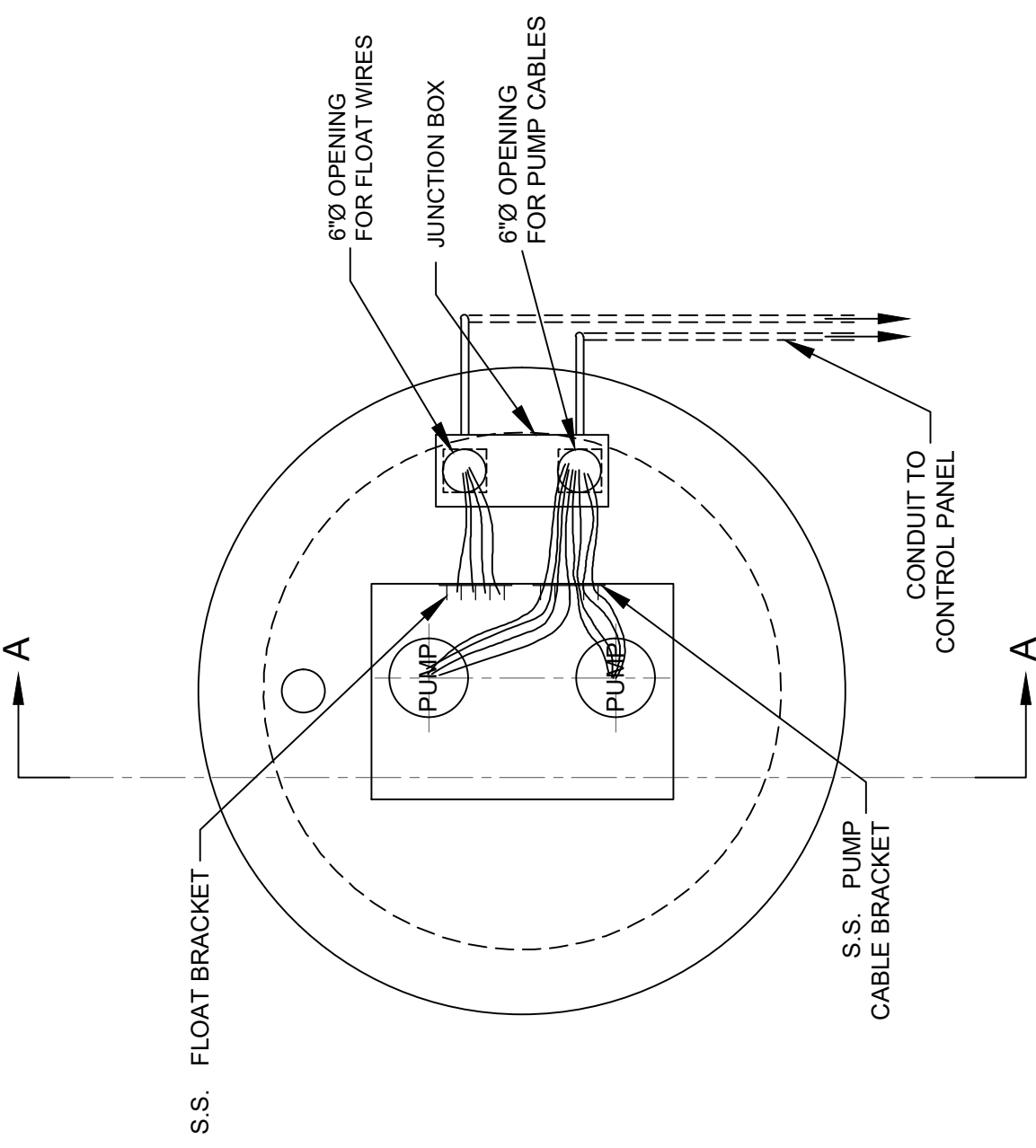


DATE: 2023-08-17	DRAWN BY: JCW	JOB NO.: 933,40	SCALE: AS SHOWN
CITY OF JACKSON - UTILITY RELOCATION BREATHITT COUNTY KY - KY15, ITEM NO. 376.00			
nesity engineering, inc. <i>Providing proven solutions since 1976</i>			

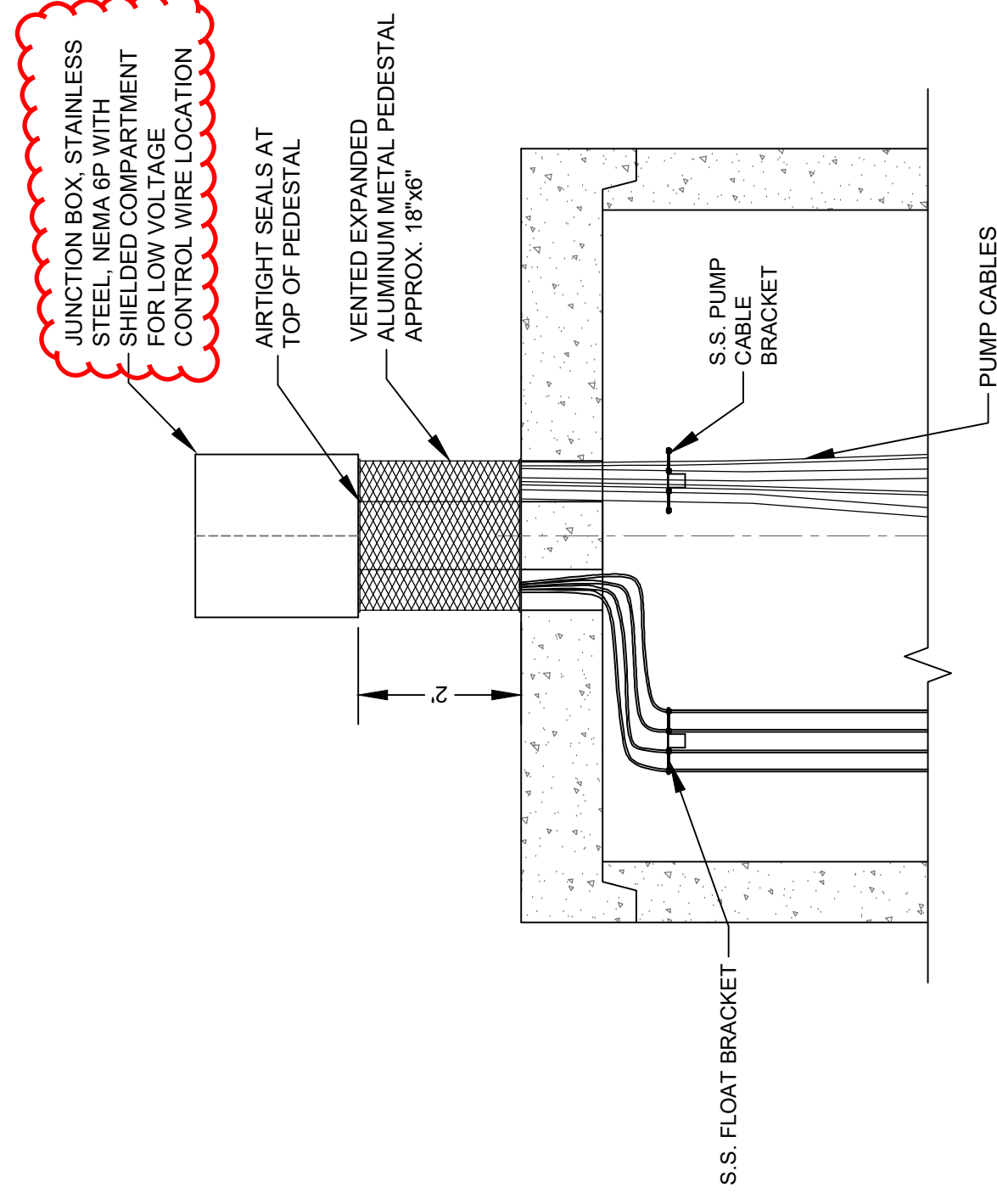


CITY OF JACKSON
UTILITY RELOCATION
BREATHITT COUNTY, KY - KY15
ITEM NO. 10-376.00
COURT STREET LIFT STATION DETAILS

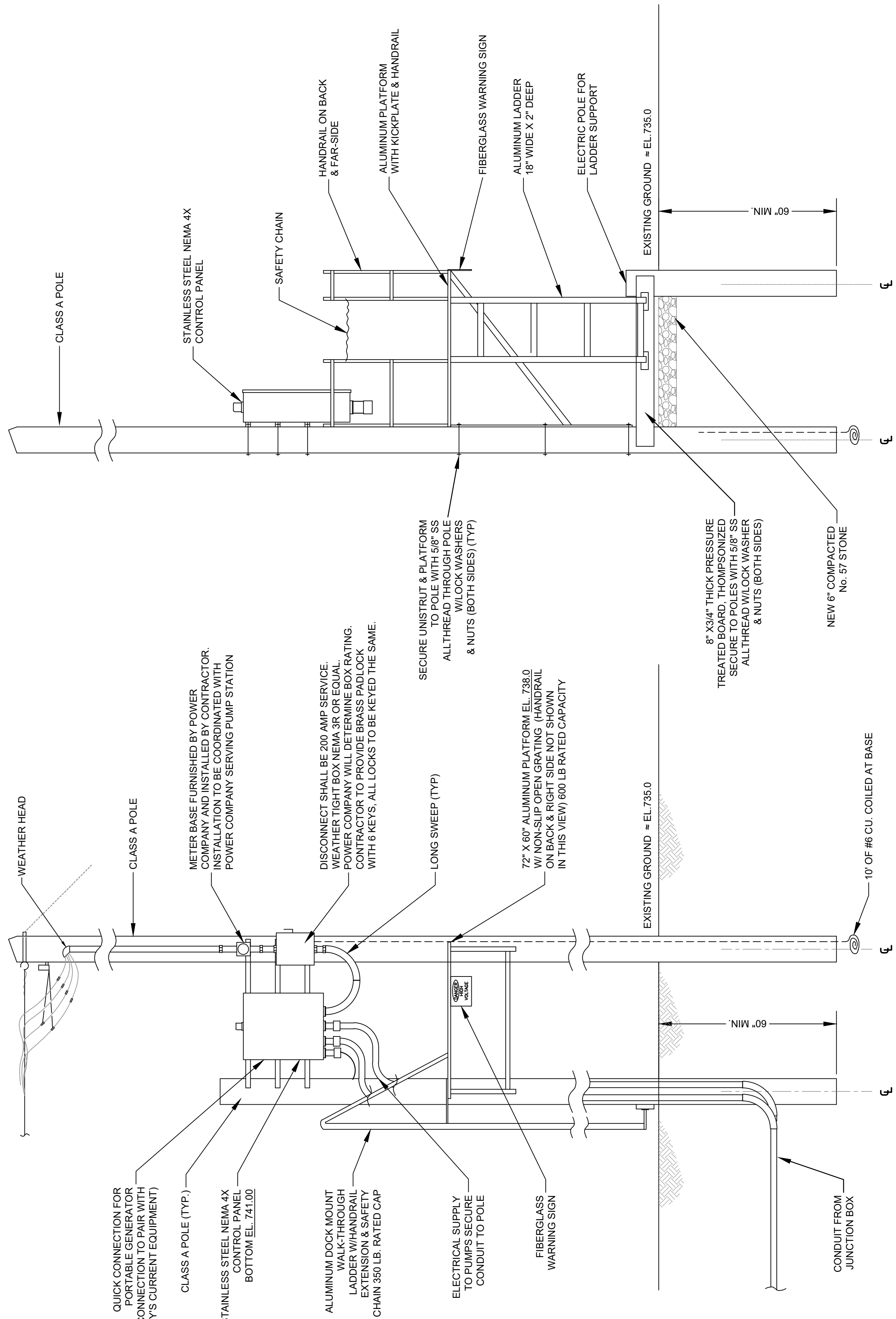
2024-02-20 ADD1 CHANGE JUNCTION BOX TO 6P



PUMP STATION ELECTRICAL PLAN
SCALE: 1/2" = 1'-0"



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

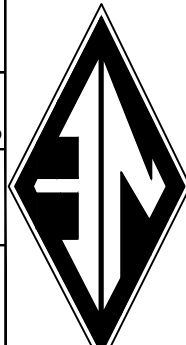


SIDE VIEW

FRONT VIEW

ELECTRICAL SERVICE & DISTRIBUTION ELEVATED PLATFORM ASSEMBLY
NOT TO SCALE

NOTE: CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY AND MAKE NECESSARY CONNECTIONS TO THE METER AND DISCONNECT. THE COST REQUIRED BY THE POWER COMPANY SHALL BE THE CONTRACTOR'S RESPONSIBILITY AS PART OF THE BID PRICE.



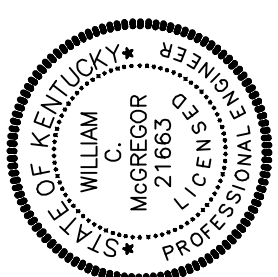
U-044

SHEET NO.

nesbitt engineering, inc.

CITY OF JACKSON - UTILITY RELOCATION
BREATHITT COUNTY, KY - K115, ITEM NO. 376.00

drawn by: JCW
check by: AS SHOWN
date: 2023-08-17



BUS GARAGE LIFT STATION DETAILS

CITY OF JACKSON
UTILITY RELOCATION
BREATHITT COUNTY, KY - K115
ITEM NO. 10-376.00

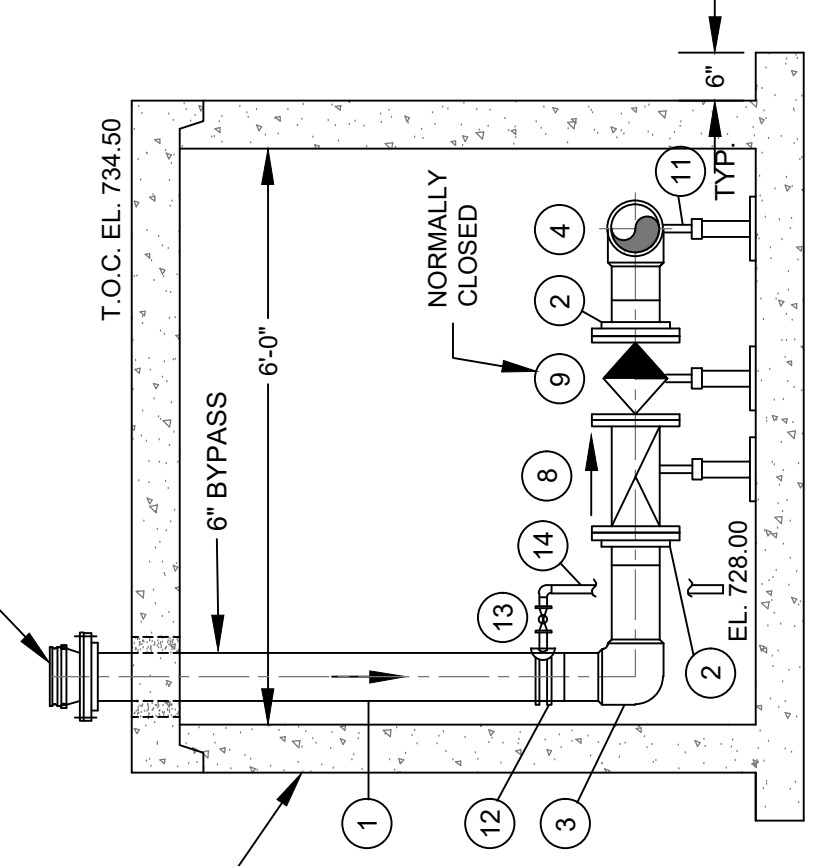
2023-11-17 R1 RELOCATED VALVE VALVE DRAIN TO DISCHARGE INTO WET WELL. (JCW)
2024-02-20 ADD 1 CHANGE TO GATE VALVE IN LIFT STATION.

DESCRIPTION	BUS GARAGE LIFT STATION
WET WELL DIAMETER	6'-0"
WET WELL TOP OF TOP SLAB ELEVATION	734.50
WET WELL TOP OF BOTTOM SLAB ELEVATION	702.00
WET WELL DEPTH	32'-6"
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER
WET WELL INFLUENT SEWER SIZE	12"
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION (2+12")	708.33
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	729.25
PUMP MAKE & MODEL (3 PUMPS REQUIRED)	MYERS 4RX
PUMP CAPACITY	205 GPM @ 42 TDH
PUMP TYPE	SUBMERSIBLE
PUMP RPM	1750
PUMP HP	7.5
PUMP VOLTS-PHASE	230 VOLTS-3 PHASE
PUMP IMPELLER DIAMETER	7.13"
PUMP DISCHARGE	4"
PUMP 2 START ELEVATION	712.00
PUMP 1 START ELEVATION	710.00
PUMPS 1 & 2 OFF ELEVATION	705.00
VALVE VAULT SIZE-LENGTHxWIDTHxDEPTH	8'x6'x6'
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	734.50
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	728.00
FORCE MAIN SIZE	6"

- NOTES:
- ALL HARDWARE SHALL BE STAINLESS STEEL.
 - PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS. CLAMPS SHALL BE 1/2" DIA. HILTI OR APPROVED EQUAL. BOLT HEADS SHALL BE 1/2" DIA. HILTI OR APPROVED EQUAL. BOLT HEADS SHALL BE 1/2" DIA. HILTI OR APPROVED EQUAL. BOLT HEADS SHALL BE 1/2" DIA. HILTI OR APPROVED EQUAL.
 - BASE PLATES FOR PIPE SUPPORTS IN VALVE BOX SHALL BE SECURED W/ S.S. ANCHOR BOLTS EMBEDDED A MINIMUM OF 4" HILTI OR APPROVED EQUAL.
 - ANCHOR BOLTS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE PROTECTED FROM CONTACT WITH CONCRETE AND GROUT WITH A COAL TAR INTERIOR OF WET WELL SHALL BE COATED PER SPECIFICATION SECTION 09660.2.4D.
 - VALVES, FITTINGS, ETC. INSIDE STATION EXCEPT GUIDE RAILS SHALL BE COATED PER SPECIFICATION SECTION 09660.2.4D.
 - PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ACCESS TO THE STATION FOR INSPECTION AND TESTING. ACCESS SHALL BE SET TO PERMIT THE STATION TO BE USED FOR CORRECT OPERATION.
 - SEE MANUFACTURER'S INSTALLATION DRAWINGS FOR TRUE DIMENSIONS OF CENTERLINE FOR PUMPS AND ACCESS HATCH LOCATIONS.
 - LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES. DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE. LOWER HOUSING AND DIAPHRAGM MATERIALS SHALL BE STAINLESS STEEL. APPLICATIONS (LESS THAN 15 P.S.I.G.), HOUSING BOLTS SHALL ALSO BE STAINLESS STEEL. ACCEPTABLE MODELS ARE MARSH 42-01, HELICOID 100-H OR EQUAL.
 - DIAPHRAGM SEALS SHALL BE PERMANENTLY ATTACHED TO GAUGES BY WELDING TO THE DIAPHRAGM HOUSING TO PREVENT ACCIDENTAL LOSS OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON.
 - PHENOL DIALS GAUGES SHALL BE 4 1/2" AND HAVE MICROMETER ADJUSTMENT OF POINTERS AND BLACK PHENOL BLACK CAST IRON BRASS OR ALUMINUM CASE. NO RING FOR TANK REPAIR DESIGN. CONSTRUCTION SHALL BE STAINLESS STEEL. MANUFACTURE SHALL BE WITHIN 1/2 OF 1% OF THE SCALE RANGE. THEY SHALL BE "MASTERGAUGE", ASHCROFT, U.S. GAUGE OR EQUAL. ALL GAUGES SHALL BE PRECALIBRATED (0-90 PSI/140 FT).
 - WET WELL ACCESS DOOR OPENING 30"x30" MODEL APS300 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.

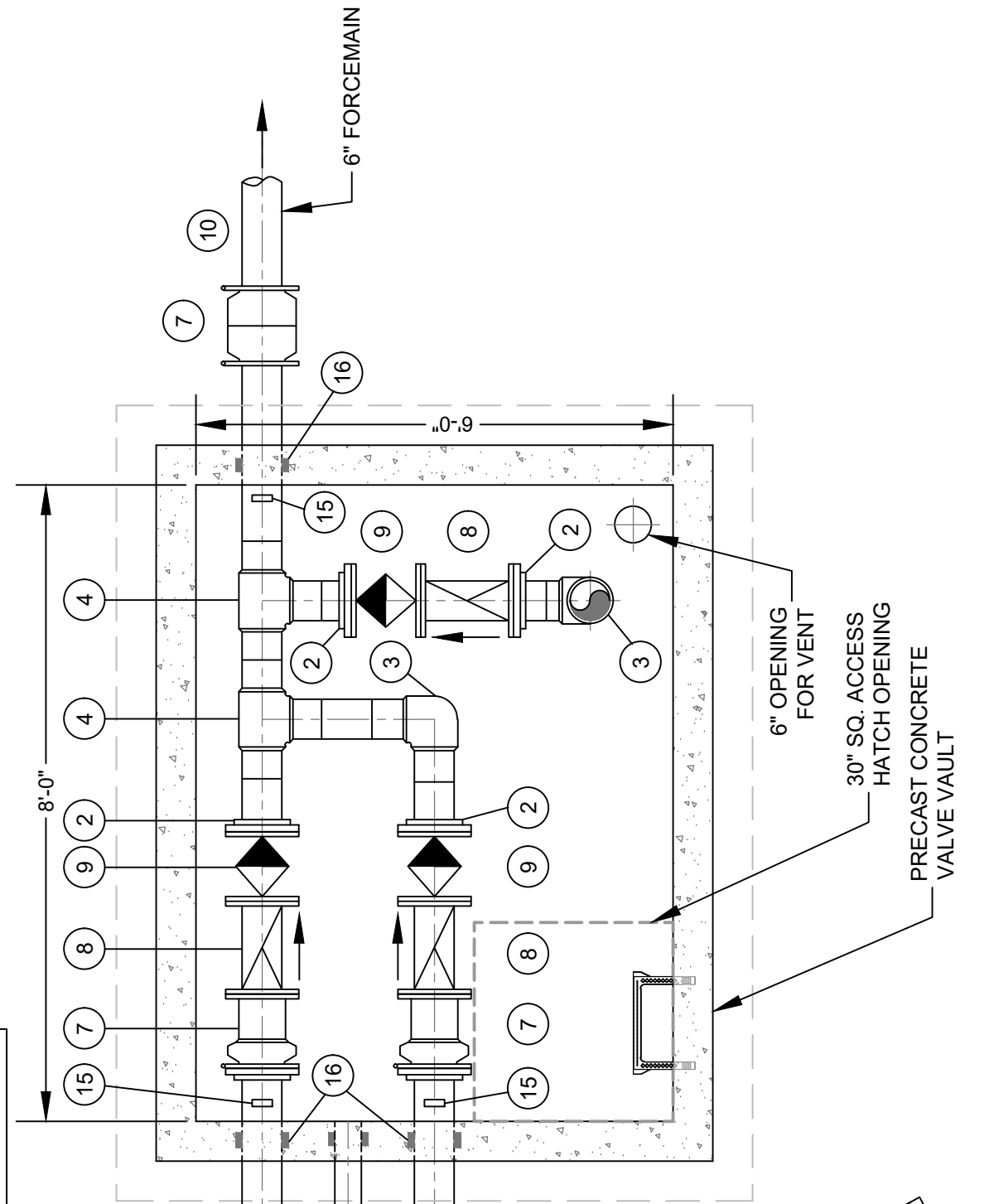
SECTION THRU VALVE VAULT PUMP BYPASS

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



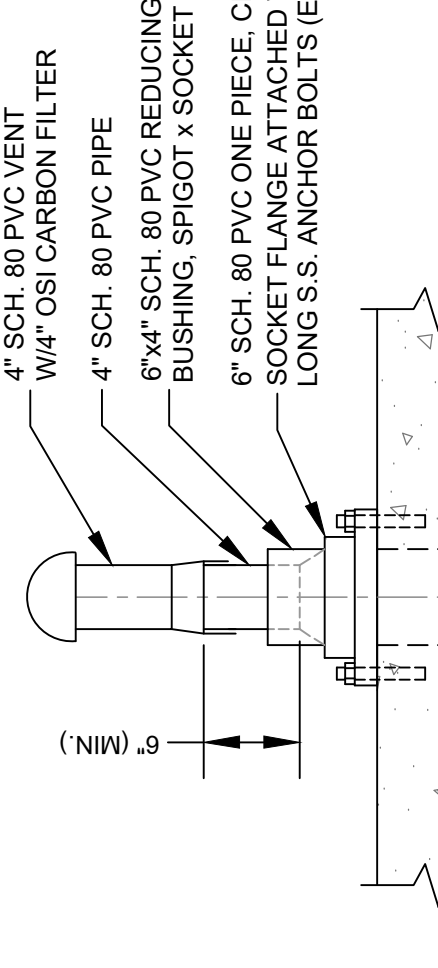
PUMP STATION & VALVE VAULT PLAN VIEW

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



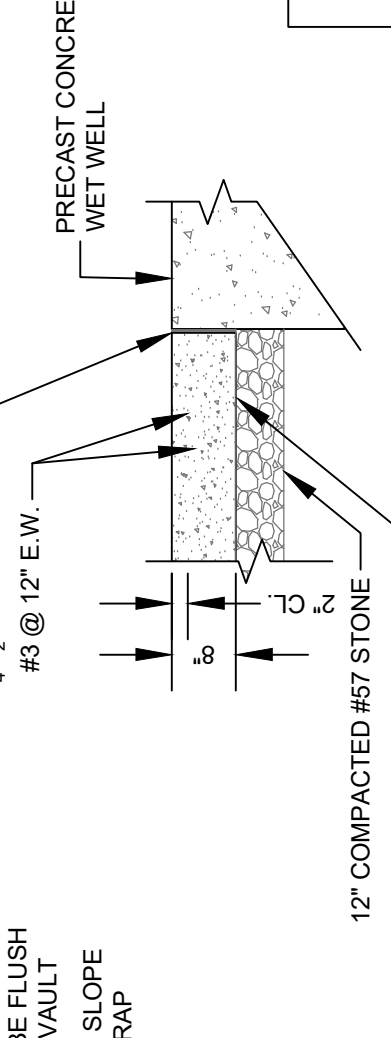
VALVE VAULT VENT DETAIL

NOT TO SCALE

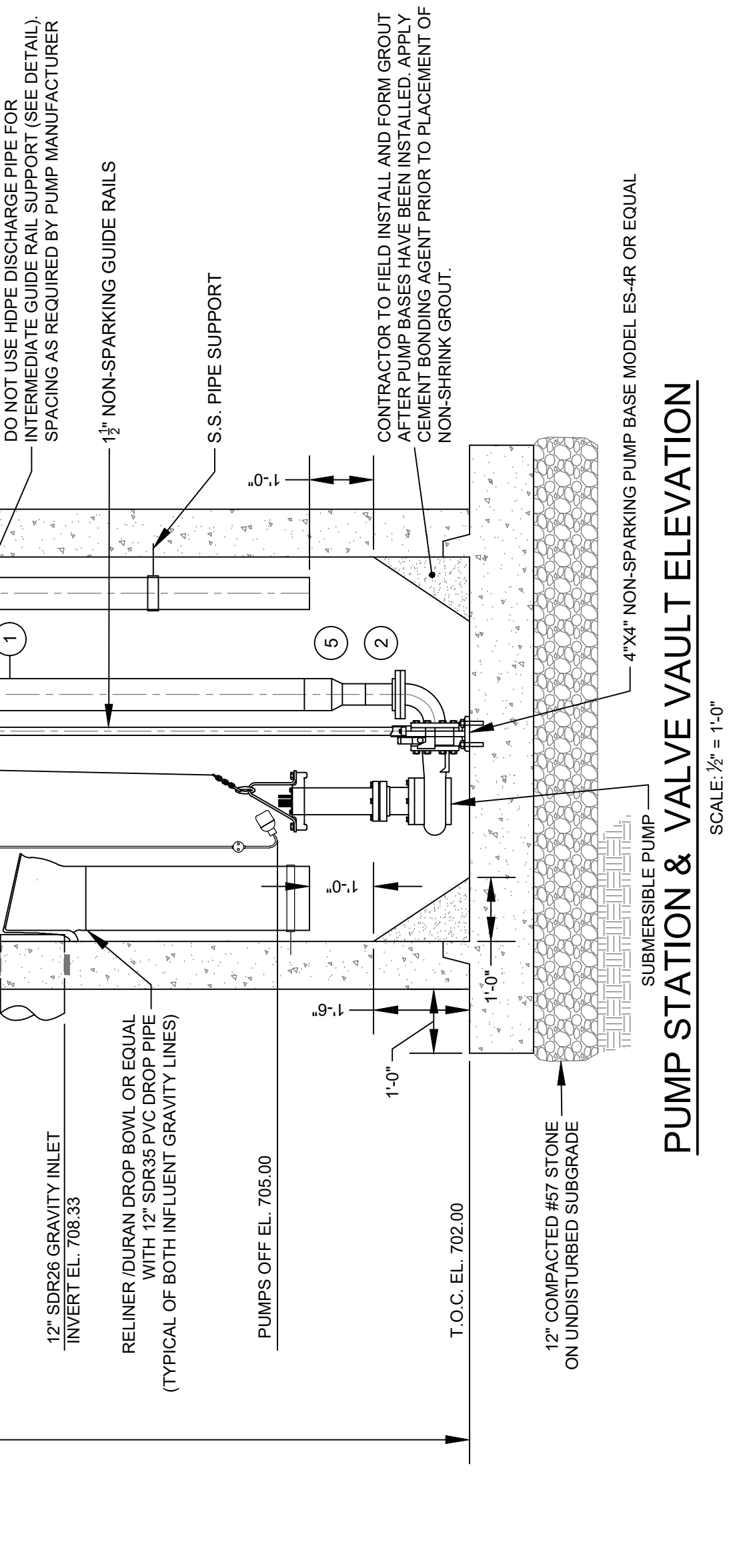


CONCRETE PAD DETAIL

NOT SCALE



NO.	DESCRIPTION
1	6" HDPE DR 11 PIPE
2	6" HDPE DR 11 FLANGE ADAPTER AND BACKUP RING
3	6" HDPE DR 11 90° BEND
4	6" HDPE DR 11 TEE
5	6"x4" HDPE DR 11 REDUCER
6	6" RESTRAINED COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL
7	6" RESTRAINED FLANGED COUPLING ADAPTER ROMAC INDUSTRIES MODEL "ALPHA FC" OR EQUAL
8	6" D.I. FLGD SWING CHECK VALVE WITH EXTERNAL LEVER & WEIGHT
9	6" D.I. FLGD GATE VALVE WITH HAND WHEEL OPERATOR
10	6" SDR21 PVC FORCE MAIN
11	ADJUSTABLE PIPE SUPPORT FOR 8" PIPE, STANDON MODEL #RS2 SADDLE OR EQUAL
12	1" S.S. SERVICE SADDLE
13	1" SCH. 40 PVC TRUE UNION BALL VALVE
14	1" SCH. 40 PVC PIPE TO VALVE VAULT FLOOR (BYPASS DRAIN)
15	DIAPHRAGM SEAL AND PRESSURE GAGE
16	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS

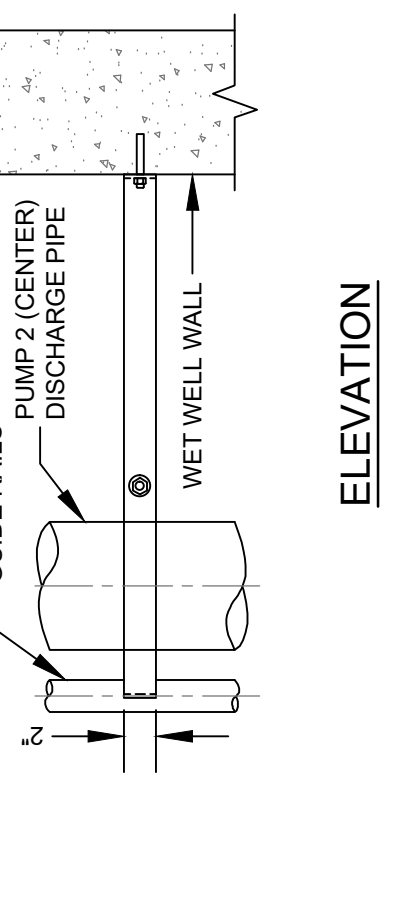


PUMP STATION & VALVE VAULT ELEVATION

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

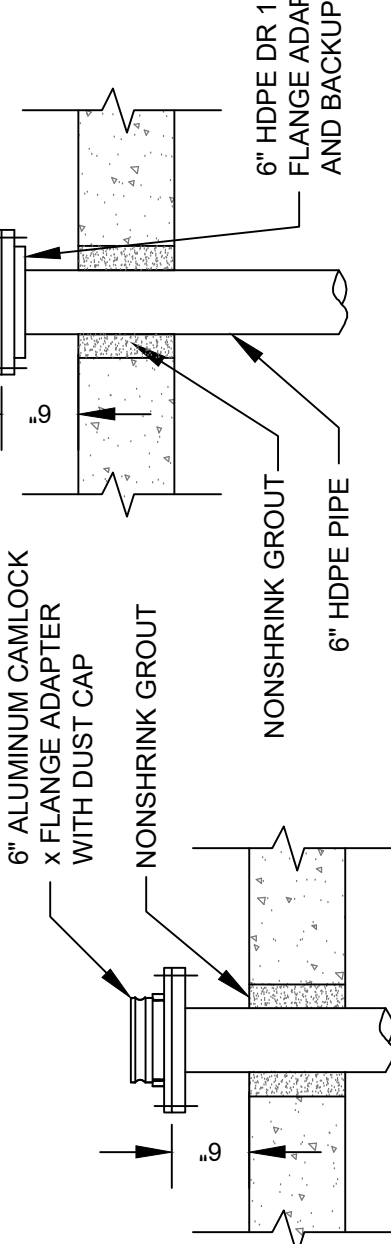
INTERMEDIATE GUIDE RAIL SUPPORT DETAIL

NOT TO SCALE



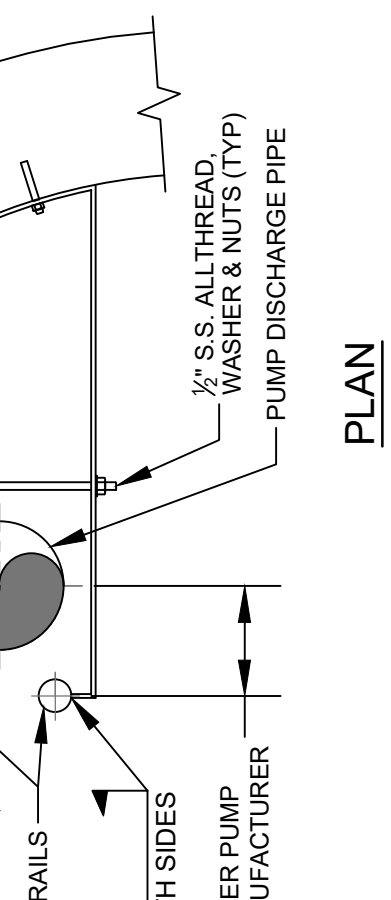
VALVE VAULT QUICK CONNECT DETAIL

NOT TO SCALE



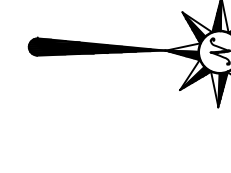
WET WELL QUICK CONNECT DETAIL

NOT TO SCALE



CONTACT PUMP MANUFACTURE TO CONFIRM SPACING REQUIREMENTS FOR PUMPS BEFORE SETTING PUMP BASE - NOTE THAT THE PUMPS MUST BE ABLE TO BE INSTALLED AND REMOVED IN HATCH OPENING

6"Ø OPENING FOR FLOT CABLES



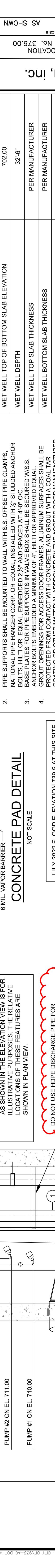
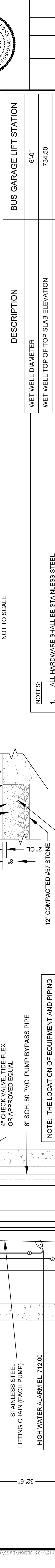
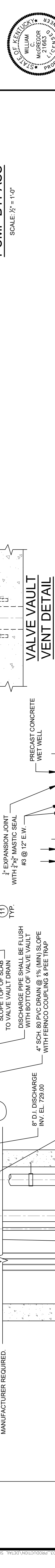
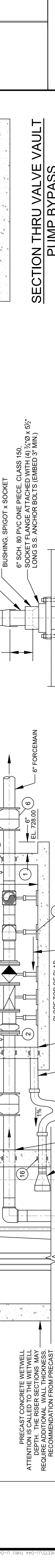
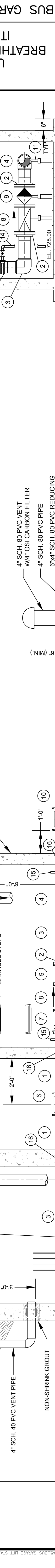
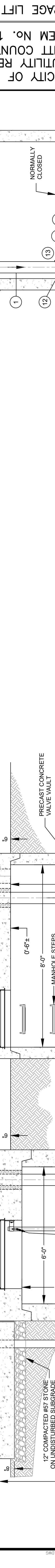
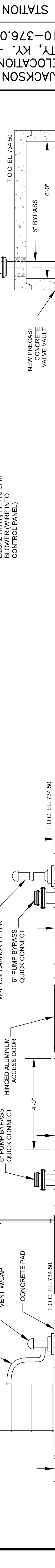
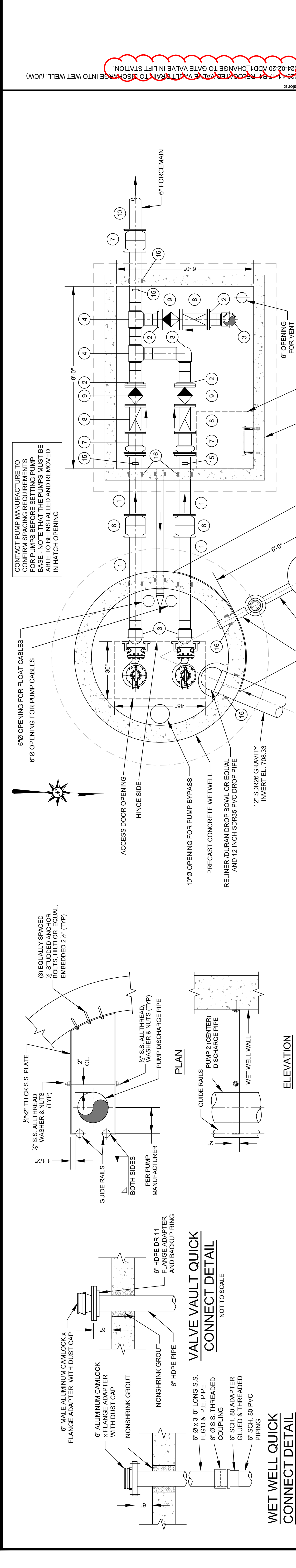
(3) EQUALLY SPACED 1/2" STUDDED ANCHOR BOLTS, HILTI OR EQUAL, EMBEDDED 2 1/2" (TYP)

1/2"Ø THICK S.S. PLATE
1/2" S.S. ALL THREAD, WASHER & NUTS (TYP)
PUMP MANUFACTURER
PUMP DISCHARGE PIPE
GUIDE RAILS
BOTH SIDES PER PUMP MANUFACTURER

6" MALE ALUMINUM CAMLOCK X FLANGE ADAPTER WITH DUST CAP
6" ALUMINUM CAMLOCK X FLANGE ADAPTER WITH DUST CAP
NONSHRINK GROUT
NONSHRINK PIPE
6"Ø x 3'-0" LONG S.S. FLGD & P.E. PIPE
6"Ø S.S. THREADED COUPLING
6" SCH. 80 ADAPTER GULDED & THREADED
6" SCH. 80 PVC PIPING

HINGED ALUMINUM ACCESS DOOR WITH SAFETY GRATE
4" FLEXIBLE SUCTION HOSE
4" VENT, 40 PVC WICAP
CONCRETE PAD
T.O.C. EL. 734.50
12" COMPACTED #57 STONE ON UNDISTURBED SUBGRADE
4" SCH. 40 PVC PIPE
NON-SHRINK GROUT
PRECAST CONCRETE WETWELL ATTENTION IS CALLED TO THE WETWELL DEPTH. THE RISER SECTIONS MAY REQUIRE ADDITIONAL WALL THICKNESS RECOMMENDATION FROM PRECAST MANUFACTURER REQUIRED.

12" SDR26 GRAVITY INLET INVERT EL. 708.33
RELINER DURAM DROP BOWL OR EQUAL WITH 12" SDR35 PVC DROP PIPE (TYPICAL OF BOTH INFLUENT GRAVITY LINES)
PUMPS OFF EL. 705.00
T.O.C. EL. 702.00
12" COMPACTED #57 STONE ON UNDISTURBED SUBGRADE
SUBMERSIBLE PUMP
4"x4" NON-SPARKING PUMP BASE MODEL ES-4R OR EQUAL
DO NOT USE HDPE DISCHARGE PIPE FOR INTERMEDIATE GUIDE RAIL SUPPORT (SEE DETAIL) SPACING AS REQUIRED BY PUMP MANUFACTURER
1 1/2" NON-SPARKING GUIDE RAILS
S.S. PIPE SUPPORT
DISCHARGE PIPE SHALL BE FLUSH TO VALVE VAULT DRAIN
4" SCH. 80 PVC DRAIN @ 1% (MIN) SLOPE WITH FERROU COUPLING & PEE TRAP
3" EXPANSION JOINT WITH 2"x2" MASTIC SEAL #3 @ 12" E.W.
12" COMPACTED #57 STONE
6 MIL VAPOR BARRIER
PRECAST CONCRETE VALVE VAULT
NEW 4" SCH. 80 PVC VENT 1/4" OSI CARBON FILTER
6" PUMP BYPASS QUICK CONNECT
HINGED ALUMINUM ACCESS DOOR
6" PUMP BYPASS QUICK CONNECT
MANHOLE STEPS
6" FORCEMAIN
T.O.C. EL. 734.50
6"Ø OPENING FOR VENT
30" SQ. ACCESS HATCH OPENING
PRECAST CONCRETE VALVE VAULT
6" FORCEMAIN
6"Ø OPENING FOR FLOT CABLES
10'Ø OPENING FOR PUMP BYPASS
PRECAST CONCRETE WETWELL
RELINER DURAM DROP BOWL OR EQUAL AND 12 INCH SDR35 PVC DROP PIPE
12" SDR26 GRAVITY INVERT EL. 708.33
4" SCH. 40 PVC VENT PIPE
4" FLEXIBLE SUCTION HOSE
4" SCH. 40 PVC VENT WICAP
CONCRETE PAD
CARBETROL G-2B175 AIR PURIFICATION SYSTEM OR EQUAL WITH 1/2 HP 175 CFM BLOWER (WIRE INTO CONTROL PANEL)



NO.	DESCRIPTION	QUANTITY	UNIT
1	6" HDPE DR 11 PIPE	1	LINEAL FOOT
2	6" HDPE DR 11 FLANGE ADAPTER AND BACKUP RING	1	EA
3	6" HDPE DR 11 90° BEND	1	EA
4	6" HDPE DR 11 TEE	1	EA
5	6"x4" HDPE DR 11 REDUCER	1	EA
6	6" RESTRAINED COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL	1	EA
7	6" RESTRAINED FLANGED COUPLING ADAPTER ROMAC INDUSTRIES MODEL "ALPHA FC" OR EQUAL	1	EA
8	6" D.I. FLOYD GATE VALVE WITH EXTERNAL LEVER & WEIGHT	1	EA
9	6" D.I. FLOYD GATE VALVE WITH HAND WHEEL OPERATOR	1	EA
10	6" SDR21 PVC FORCE MAIN	1	LINEAL FOOT
11	ADJUSTABLE PIPE SUPPORT FOR 8" PIPE, STANDON MODEL #S2 SADDLE OR EQUAL	1	EA
12	1" S.S. SERVICE SADDLE	1	EA
13	1" SCH. 40 PVC TRUE UNION BALL VALVE	1	EA
14	1" SCH. 40 PVC PIPE TO VALVE VAULT FLOOR (BYPASS DRAIN)	1	LINEAL FOOT
15	DIAPHRAGM SEAL AND PRESSURE GAGE	1	EA
16	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS	1	EA

NOTES:

- ALL HARDWARE SHALL BE STAINLESS STEEL.
- PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS. ANCHOR BOLTS SHALL BE 1/2" DIA. AND 12" LONG. 1/2" DIA. ANCHOR BOLTS SHALL BE EMBEDDED 2" AND SPACED AT 4'-0".
- BASE PLATES FOR PIPE SUPPORTS IN VALVE BOX SHALL BE SECURED W/ S.S. ANCHOR BOLTS EMBEDDED A MINIMUM OF 4" HILT OR APPROVED EQUAL.
- GROUT OPENINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE PROTECTED FROM CONTACT WITH CONCRETE AND GROUT WITH A COAL TAR INTERIOR OF WET WELL SHALL BE COATED PER SPECIFICATION SECTION PER SPECIFICATION SECTION 09860.2.4D.
- PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ACCESS TO THE PUMPING STATION THROUGH THE VALVE VAULT. ACCESS SHALL BE SET TO BE VERTICAL FOR CORRECT OPERATION. SEE MANUFACTURER'S INSTALLATION DRAWINGS FOR TRUE DIMENSIONS OF CENTERLINE FOR PUMPS AND ACCESS HATCH LOCATIONS.
- LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES. DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE SPECIE HOUSING AND DIAPHRAGM MATERIALS. 1/4" GAUGE CONNECTION AND 1/2" LOWER CONNECTION VITON DIAPHRAGMS ARE REQUIRED ON LOW RANGE PRESSURE APPLICATIONS (LESS THAN 15 P.S.I.G.). HOUSING BOLTS SHALL ALSO BE STAINLESS STEEL. ACCEPTABLE MODELS ARE MARSH 42-01, HELICOID 100-H OR EQUAL.
- DIAPHRAGM SEALS SHALL BE PERMANENTLY ATTACHED TO GAUGES BY INSTALLED SILICON. PREVENT ACCIDENTAL LOSS OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY PHENOL DIALS GAUGES SHALL BE 4 1/2" AND HAVE MICROMETER ADJUSTMENT OF POINTERS AND BLACK PHENOL BLACK CAST IRON BRASS OR ALUMINUM CASE NO. RING. FOR MARKING DESIGN, CONSULT THE MANUFACTURER'S INSTRUCTIONS. MANUFACTURER SHALL BE WITHIN 1/2 OF 1% OF THE SCALE RANGE. THEY SHALL BE MANUFACTURED BY HELICOID GAUGE DIVISION "410" JAMES P. MARCH CORP. "MASTERGAUGE", ASHCROFT, U.S. GAUGE OR EQUAL. ALL GAUGES SHALL BE PRECALIBRATED (0-90 PSI/40 FT).
- WET WELL ACCESS DOOR OPENING 30"x30" MODEL APS300 WITH SECONDARY WET WELL ACCESS DOOR OPENING 30"x30" MODEL APS300 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.

CONTACT PUMP MANUFACTURE TO CONFIRM SPACING REQUIREMENTS FOR PUMPS BEFORE SETTING PUMP BASE - NOTE THAT THE PUMPS MUST BE ABLE TO BE INSTALLED AND REMOVED IN HATCH OPENING

6" O.D. OPENING FOR FLOAT CABLES

6" O.D. OPENING FOR PUMP CABLES

30" SQ. ACCESS HATCH OPENING

PRECAST CONCRETE VALVE VAULT

6" O.D. OPENING FOR VENT

6" FORCEMAIN

6" O.D. OPENING FOR PUMP BYPASS

PRECAST CONCRETE WETWELL

12" SDR26 GRAVITY INVERT EL. 708.33

4" SCH. 40 PVC VENT PIPE

4" FLEXIBLE SUCTION HOSE

4" SCH. 40 PVC VENT WICAP

CONCRETE PAD

CARBONTRON G-2B175 AIR PURIFICATION SYSTEM OR EQUAL WITH 1/2 HP 175 CFM BLOWER (WIRE INTO CONTROL PANEL)

4" SCH. 80 PVC VENT

1/4" O.S.I. CARBON FILTER

6" SCH. 80 PVC PIPE

6" SCH. 80 PVC REDUCING BUSHING, SPIGOT X SOCKET

6" SCH. 80 PVC ONE PIECE CLASS 150 SOCKET FLANGE ATTACHED WITH (4) 1/2" X 5/8" LONG S.S. ANCHOR BOLTS (EMBED 3" MIN.)

6" O.D. DISCHARGE INV. EL. 728.00

4" CHECK VALVE, TIDE-FLEX OR APPROVED EQUAL

6" SCH. 80 PVC PUMP BYPASS PIPE

HINGED ALUMINUM ACCESS DOOR WITH SAFETY GRATE

4" FLEXIBLE SUCTION HOSE

4" VENT WICAP

CONCRETE PAD

T.O.C. EL. 734.50

12" COMPACTED #57 STONE ON UNDISTURBED SUBGRADE

4" SCH. 40 PVC PIPE

NON-SHRINK GROUT

PRECAST CONCRETE WETWELL

ATTENTION IS CALLED TO THE WETWELL DEPTH. THE RISER SECTIONS MAY REQUIRE ADDITIONAL WALL THICKNESS RECOMMENDATION FROM PRECAST MANUFACTURER REQUIRED.

STAINLESS STEEL LIFTING CHAIN (EACH PUMP)

HIGH WATER ALARM EL. 712.00

PUMP #2 ON EL. 711.00

PUMP #1 ON EL. 710.00

12" SDR26 GRAVITY INVERT EL. 708.33

RELINER DURAM DROP BOWL OR EQUAL WITH 12" SDR35 PVC DROP PIPE (TYPICAL OF BOTH INFLUENT GRAVITY LINES)

PUMPS OFF EL. 705.00

T.O.C. EL. 702.00

12" COMPACTED #57 STONE ON UNDISTURBED SUBGRADE

SUBMERSIBLE PUMP

4"x4" NON-SPARKING PUMP BASE MODEL ES-4R OR EQUAL

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

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

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

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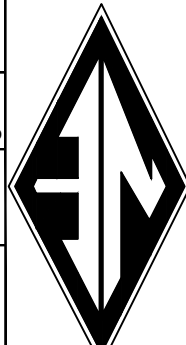
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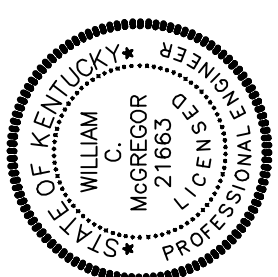
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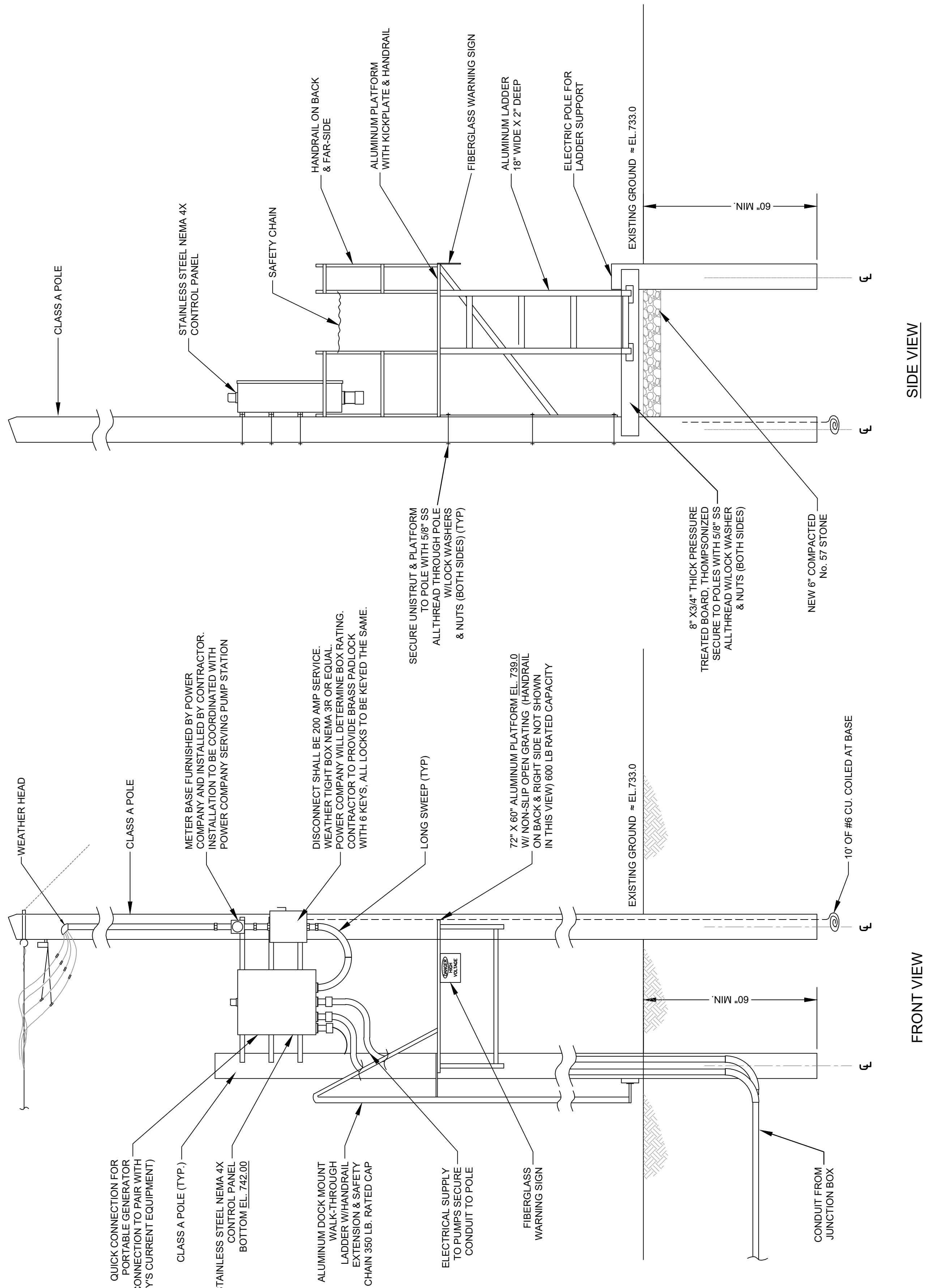
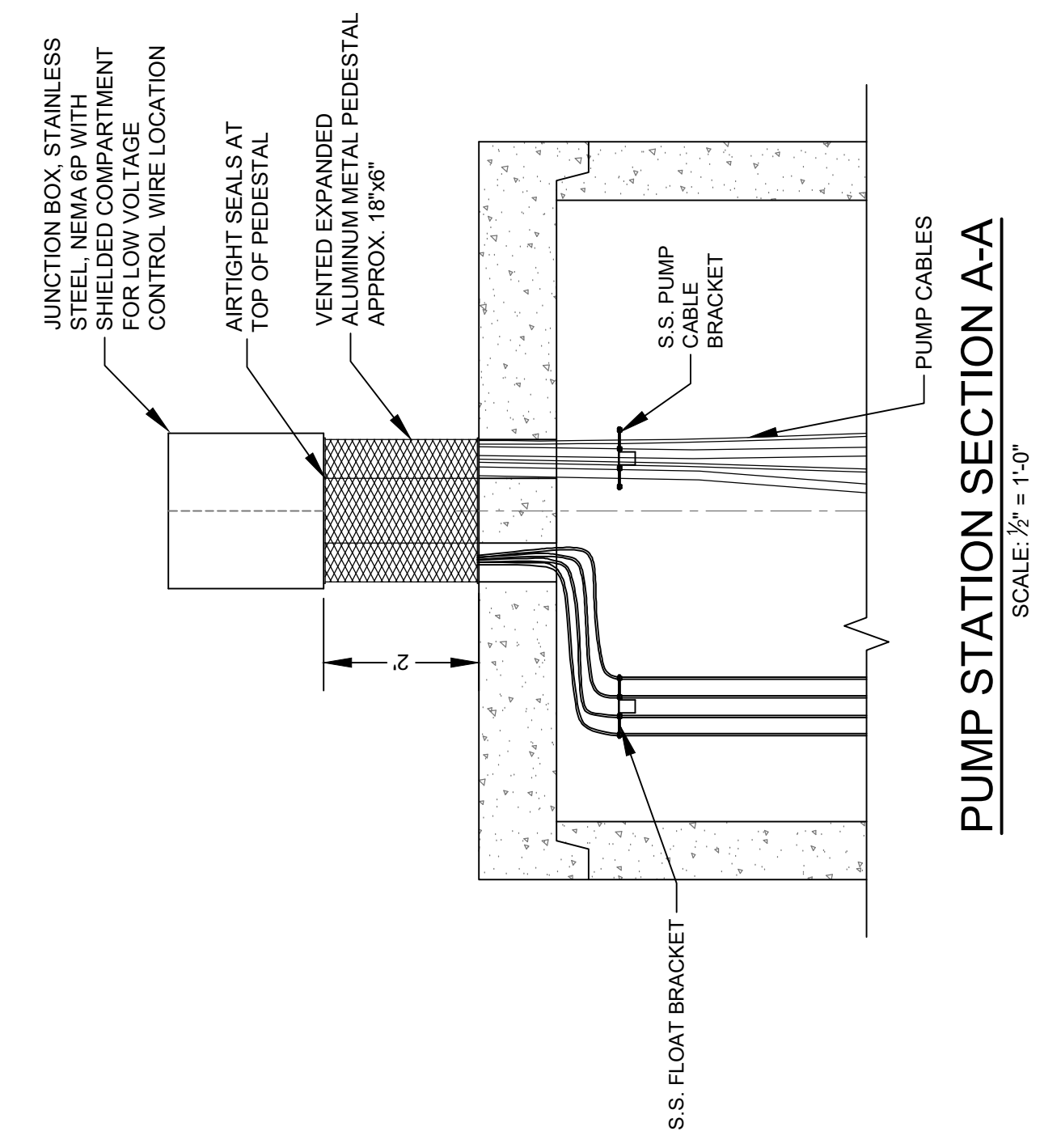
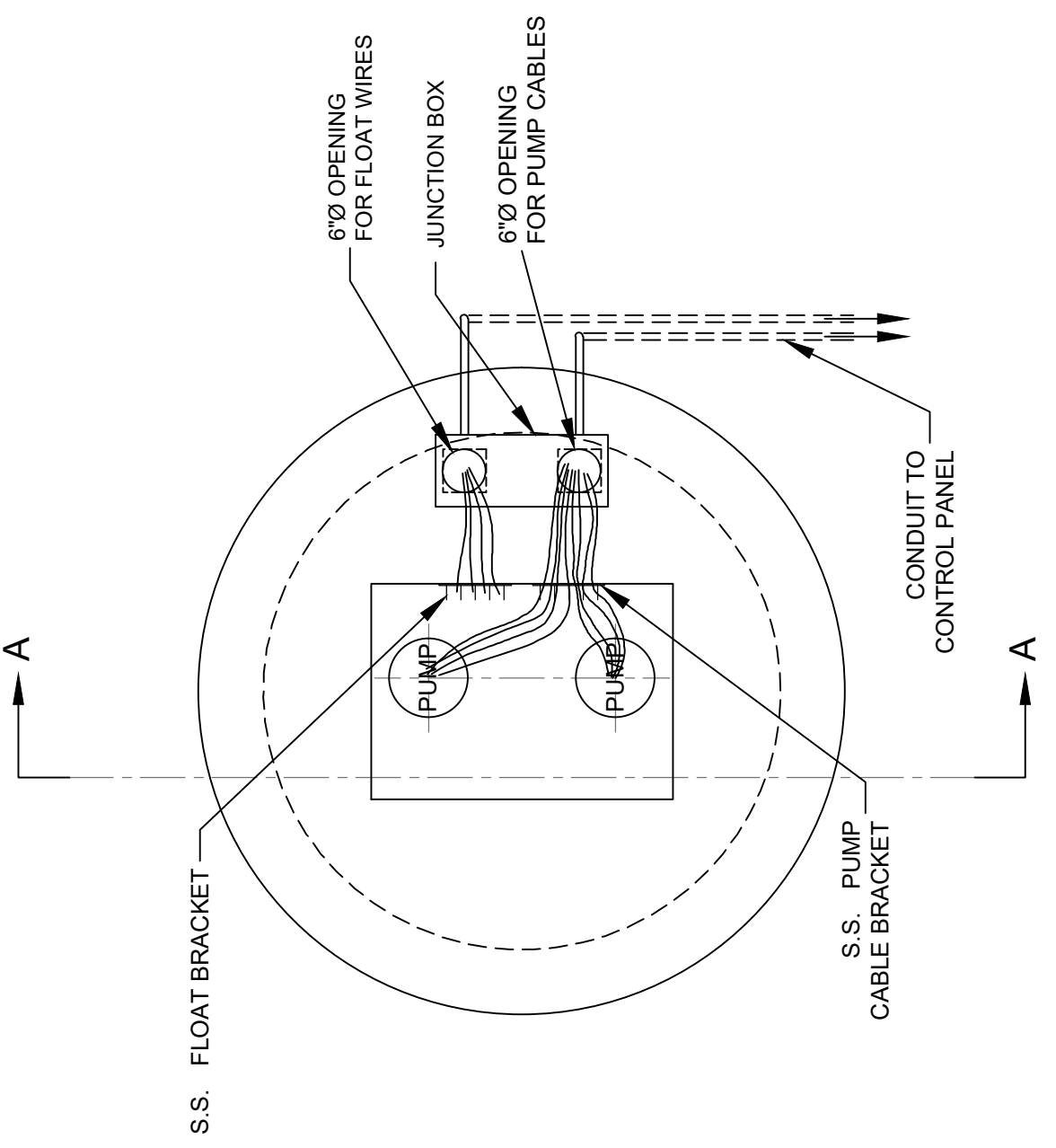


nesity engineering, inc.		2023-08-17
CITY OF JACKSON - UTILITY RELOCATION BREATHITT COUNTY KY - KY15, ITEM NO. 376.00	Job no. 933.40	2023-08-17
Scale: AS SHOWN	Drawn by: JCW	

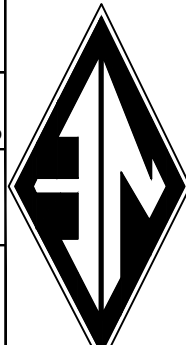


CITY OF JACKSON
UTILITY RELOCATION
BREATHITT COUNTY, KY - KY15
ITEM NO. 10-376.00
BUS GARAGE LIFT STATION DETAILS

2024-02-20 ADD1 CHANGE JUNCTION BOX TO 6P
REVISIONS



NOTE: CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY AND MAKE ARRANGEMENTS FOR METER LOCATION. METER LOCATION COST REQUIRED BY THE POWER COMPANY SHALL BE THE CONTRACTOR'S RESPONSIBILITY AS PART OF THE BID PRICE.

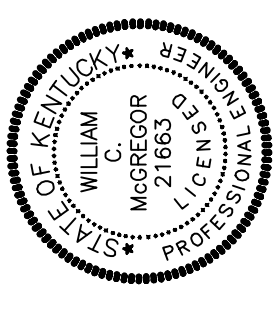


U-045

City of Jackson
 Utility Relocation
 Breathitt County, KY - KY15, Item No. 376.00

Job no.: 933.40
 Scale: AS SHOWN

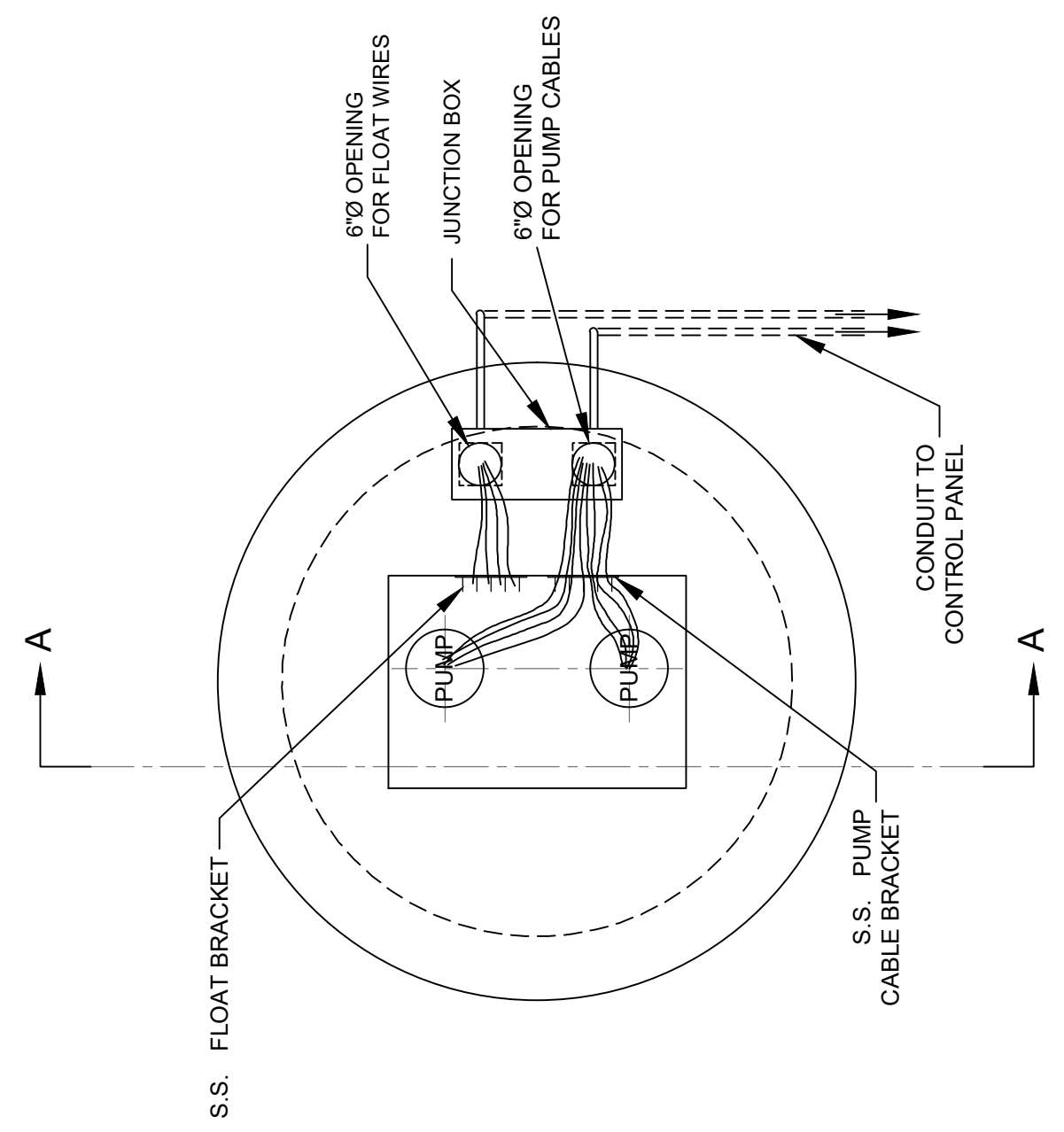
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 Date: 2023-08-17



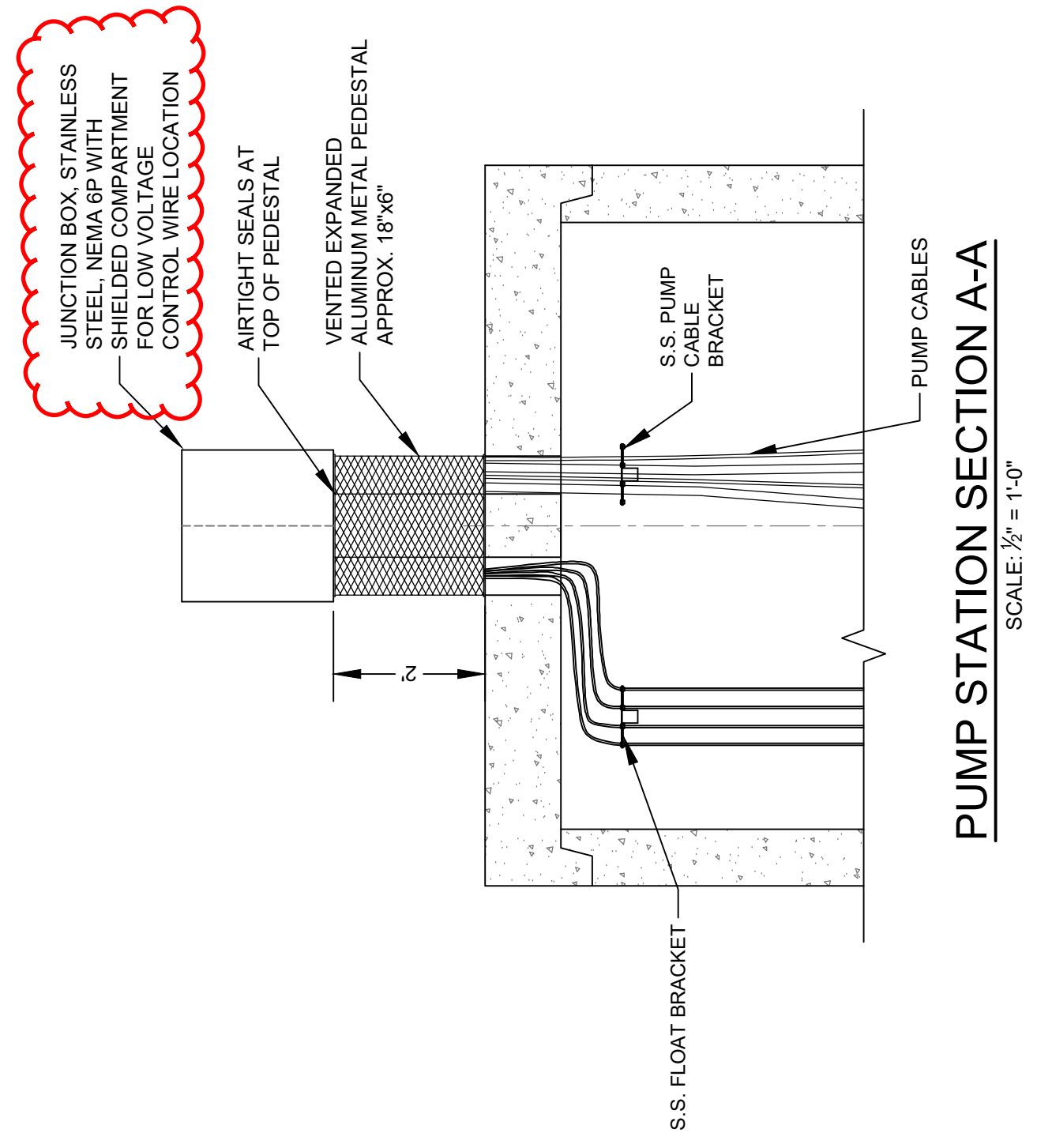
CITY OF JACKSON
 UTILITY RELOCATION
 BREATHITT COUNTY, KY - KY15
 ITEM NO. 10-376.00
 BUS GARAGE LIFT STATION DETAILS

2024-02-20 ADD1 CHANGE JUNCTION BOX TO 6P

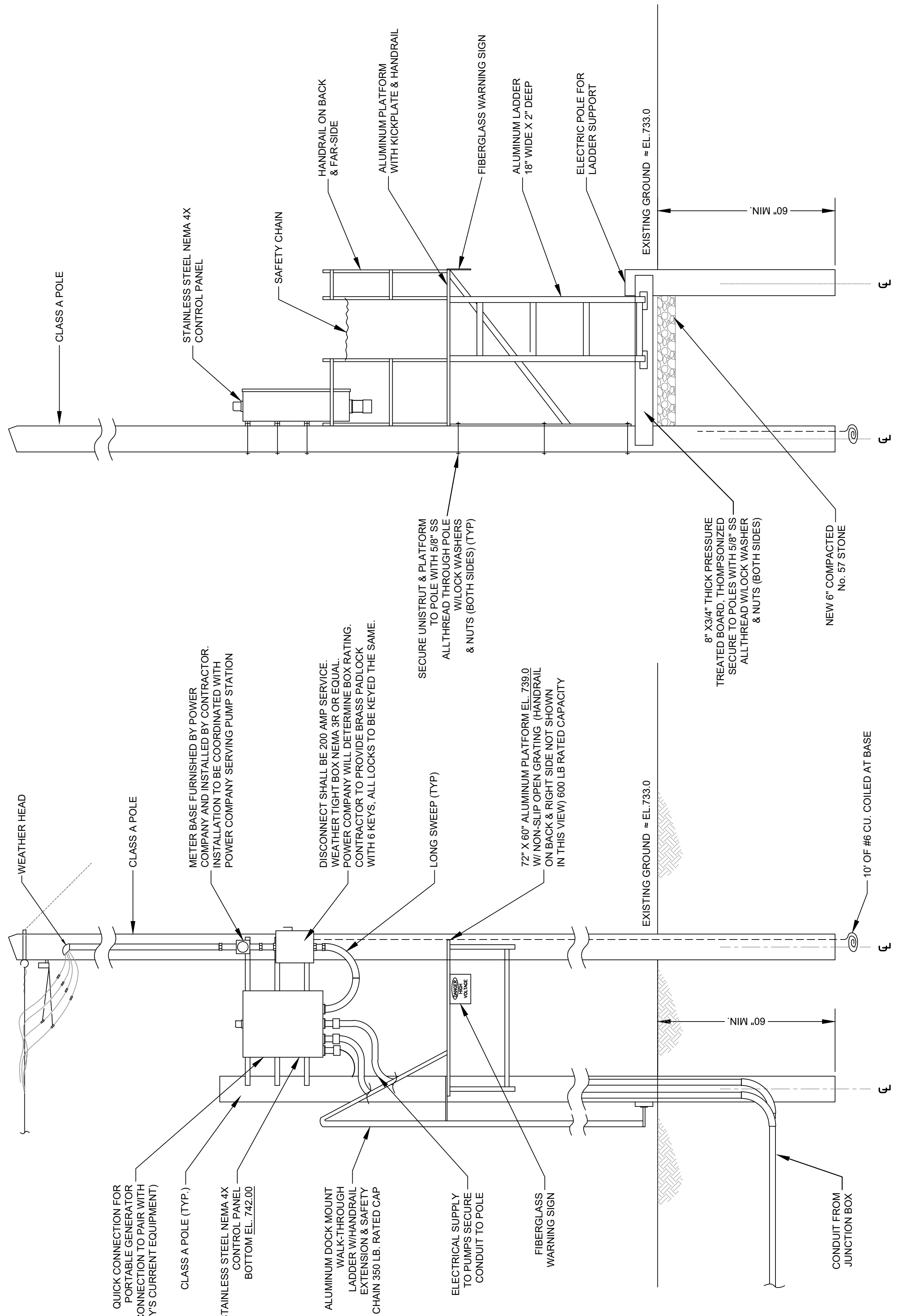
nesbitt engineering, inc.
proving proven solutions since 1976



PUMP STATION ELECTRICAL PLAN
 SCALE: 1/2" = 1'-0"



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

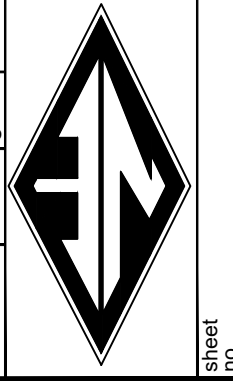


SIDE VIEW

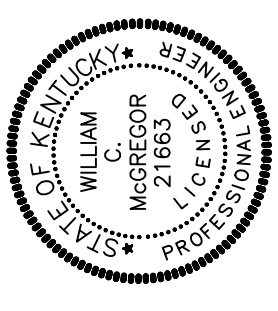
FRONT VIEW

NOTE: CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY AND MAKE ARRANGEMENTS FOR METER LOCATION. METER LOCATION COST REQUIRED BY THE POWER COMPANY SHALL BE THE CONTRACTOR'S RESPONSIBILITY AS PART OF THE BID PRICE.

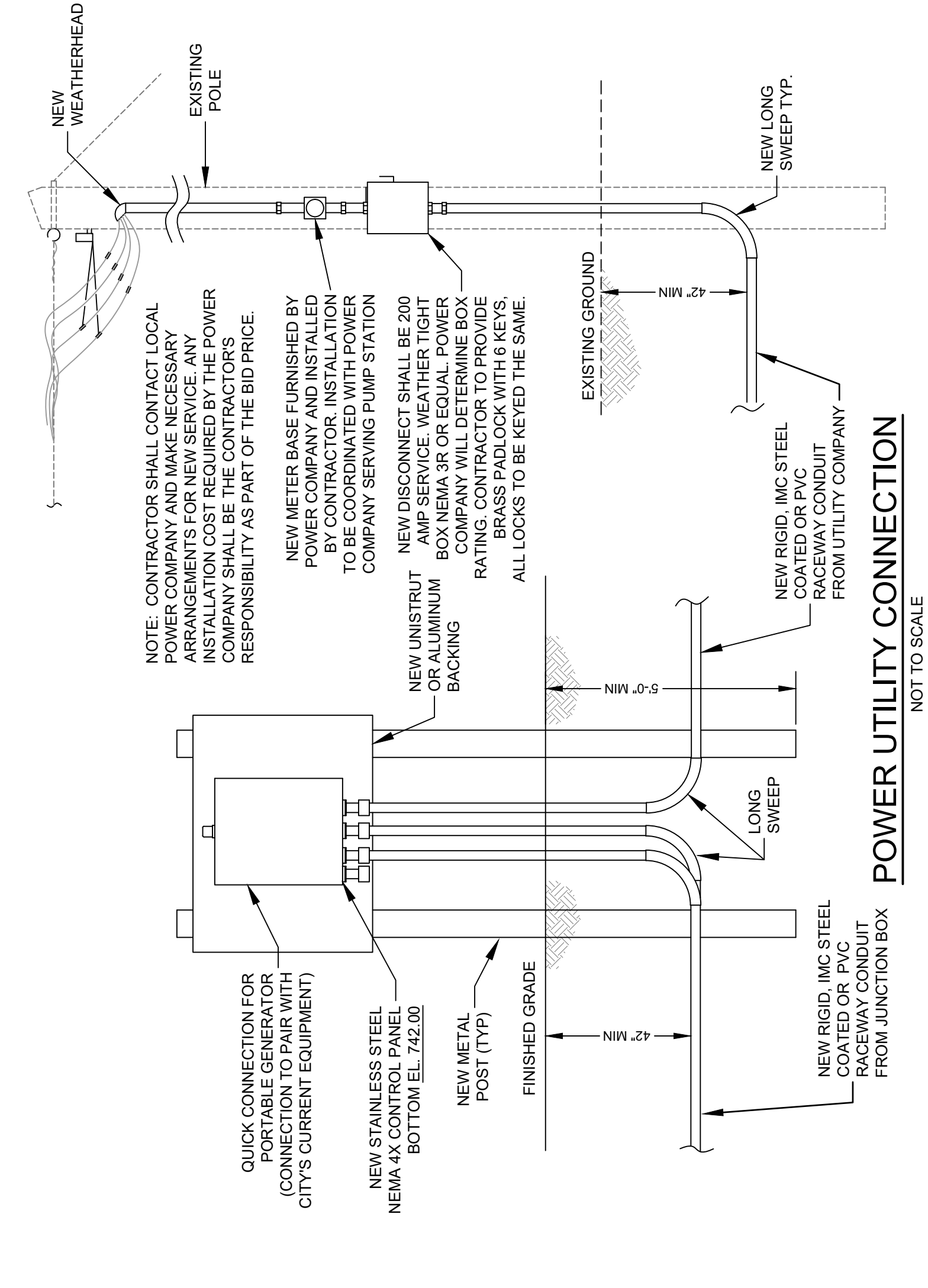
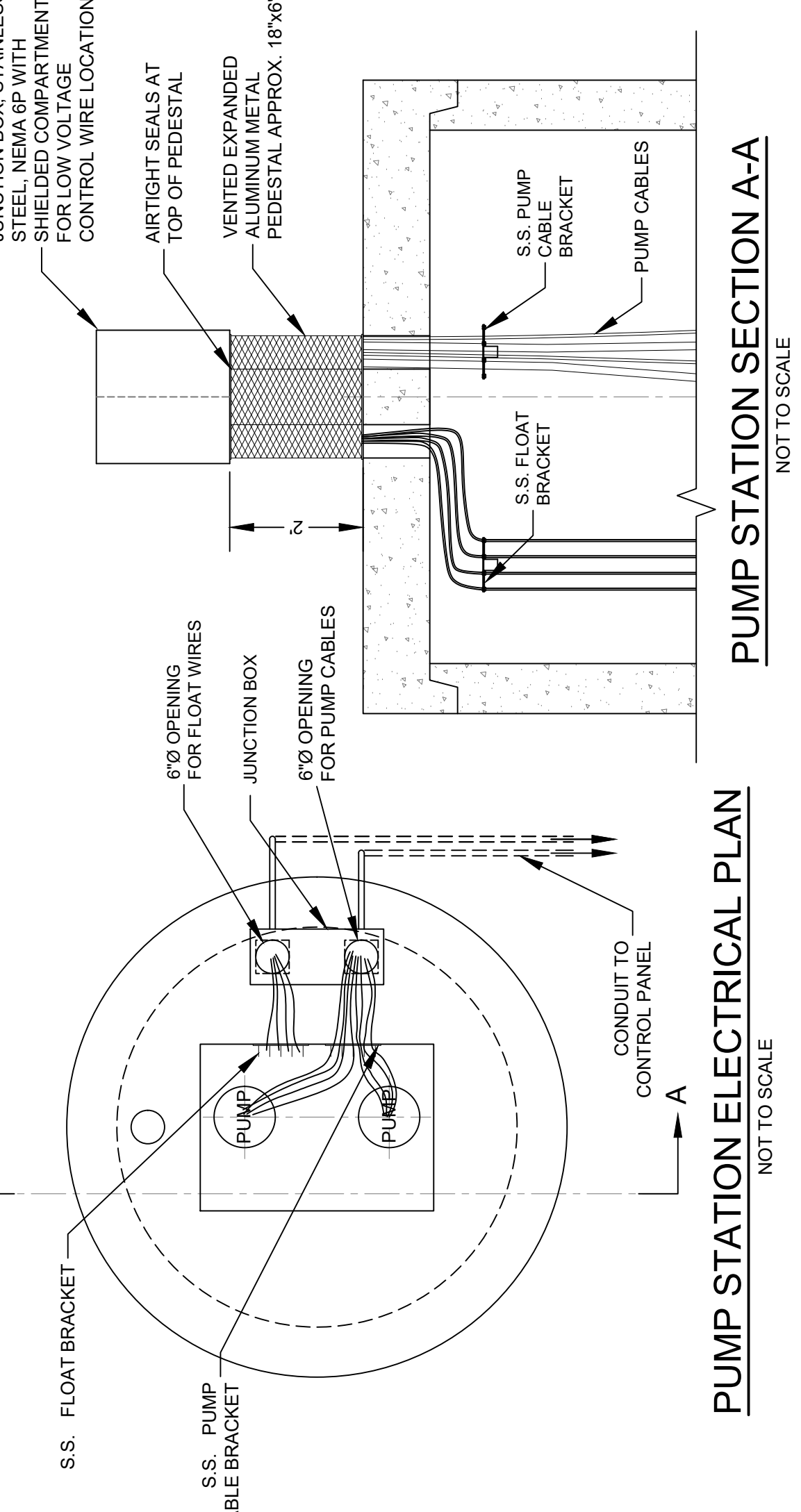
**ELECTRICAL SERVICE & DISTRIBUTION
 ELEVATED PLATFORM ASSEMBLY**
 NOT TO SCALE



DATE	2023-08-17
DRAWN BY	JCM
CHECKED BY	AS SHOWN
PROJECT NO.	933.40
PROJECT NAME	CITY OF JACKSON - UTILITY RELOCATION BREATHITT COUNTY, KY - KY15, ITEM NO. 376.00

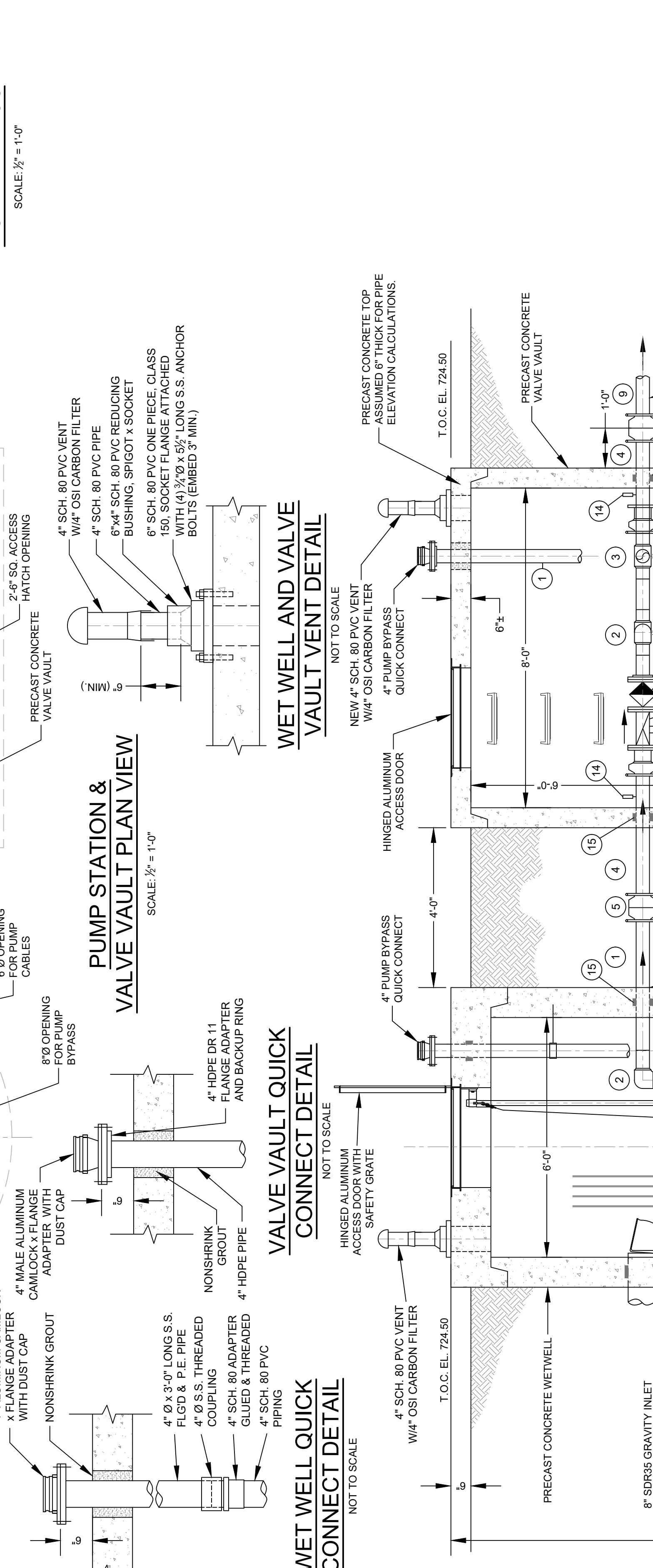
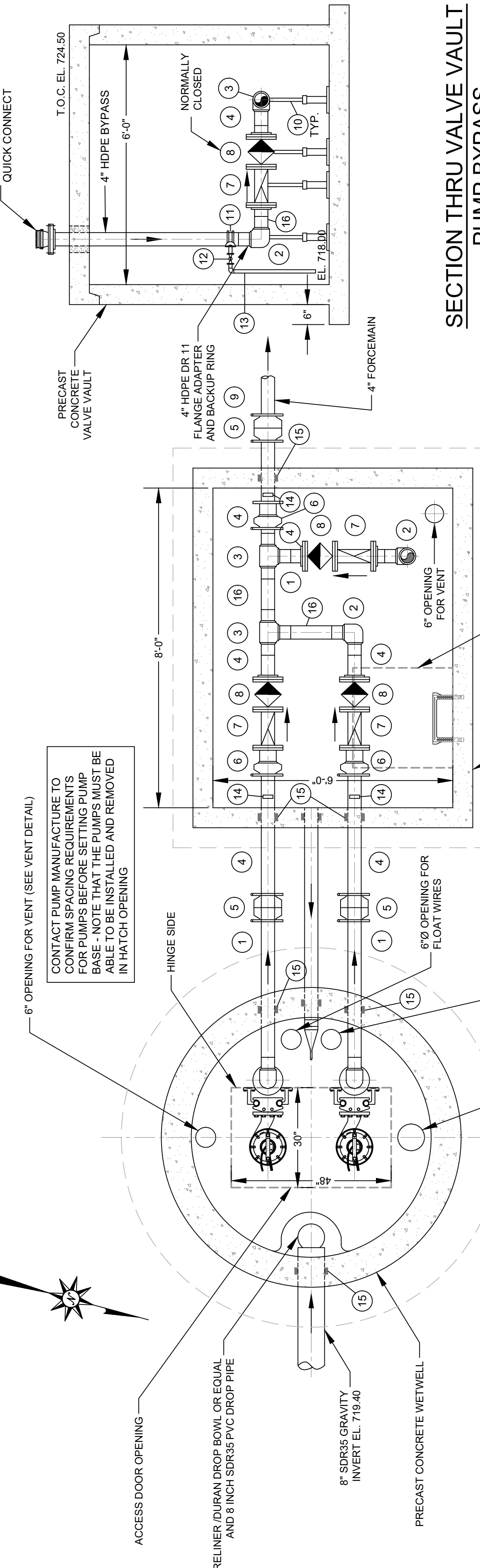


CITY OF JACKSON
UTILITY RELOCATION
BREATHITT COUNTY, KY - KY15
ITEM NO. 10-376.00
WENDY'S LIFT STATION DETAILS

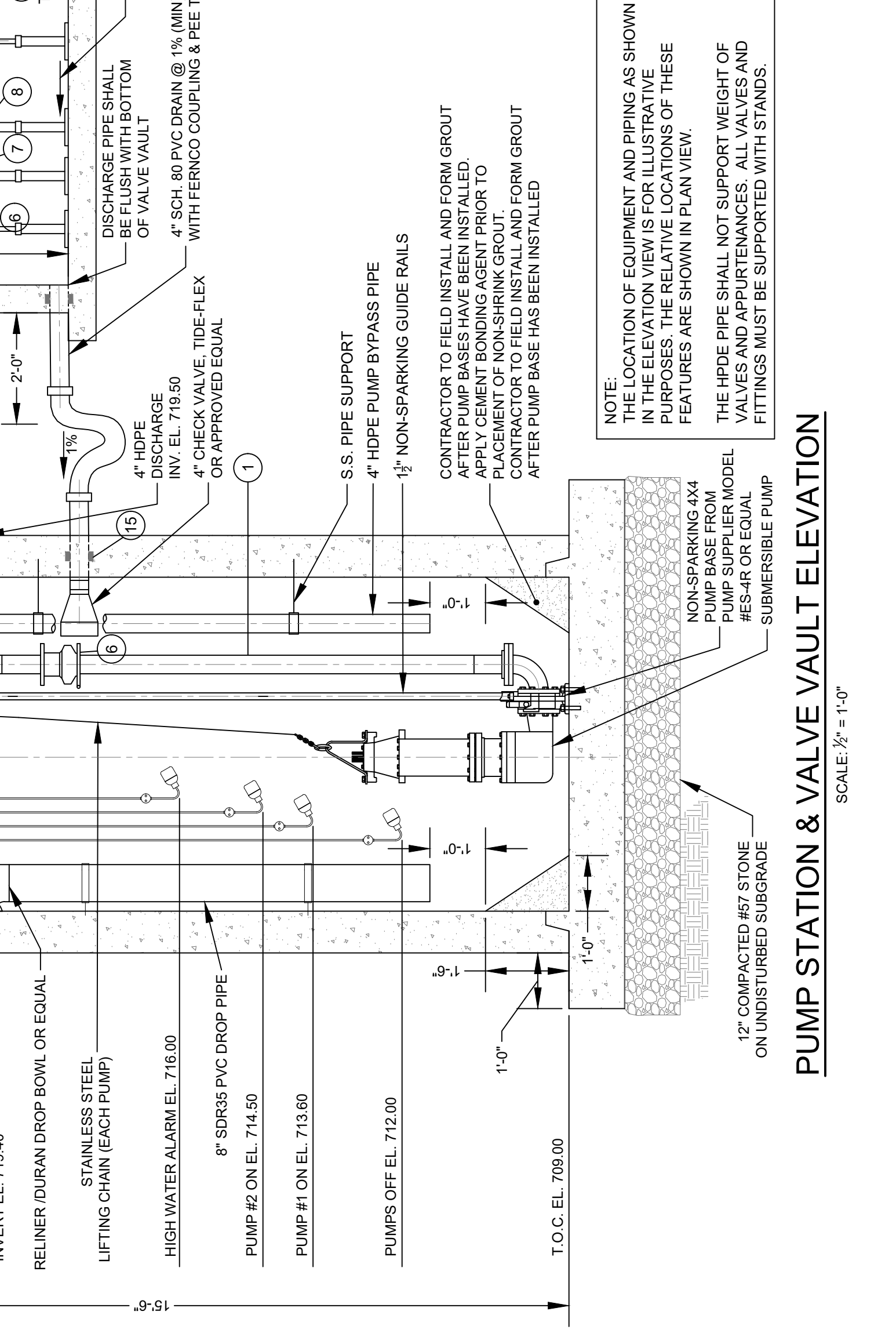


DESCRIPTION	WENDY'S LIFT STATION
WET WELL DIAMETER	6'-0"
WET WELL TOP OF TOP SLAB ELEVATION	724.50
WET WELL TOP OF BOTTOM SLAB ELEVATION	709.00
WET WELL DEPTH	15'-6"
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER
WET WELL INFLUENT SEWER SIZE	8"
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	719.40
PUMP MAKE & MODEL (2 PUMPS REQUIRED)	MYERS 4RX
PUMP CAPACITY	207 GPM @ 53 TDH
PUMP TYPE	SUBMERSIBLE
PUMP RPM	1750
PUMP HP	7.5
PUMP VOLTS-PHASE	230 VOLTS-3 PHASE
PUMP IMPELLER DIAMETER	7.75"
PUMP DISCHARGE	4"
PUMP ALARM ELEVATION	716.00
PUMP 2 START ELEVATION	714.50
PUMP 1 START ELEVATION	713.80
PUMPS 1 & 2 OFF ELEVATION	712.00
VALVE VAULT SIZE-LENGTHxWIDTHxDEPTH	8'x6'x6'
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	724.50
FORCE MAIN SIZE	4"

- NOTES:**
- ALL HARDWARE SHALL BE STAINLESS STEEL.
 - PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS.
 - ANCHOR BOLTS SHALL BE 1/2" DIA. x 12" LONG WITH 1/2" STUDDED ANCHOR BOLT NUTS TO FOOT. EMBEDDED IN VALVE BOX SHALL BE SECURED W/ S. BASE PLATES FOR PIPE SUPPORTS IN VALVE BOX SHALL BE SECURED W/ S. ANCHOR BOLTS EMBEDDED A MINIMUM OF 4". H/LTI OR APPROVED EQUAL.
 - PROTECT OPENINGS FOR ACCESS DOOR FRAMES, ALUMINUM SURFACES SHALL BE PROTECTED FROM CONTACT WITH CONCRETE AND GROUT WITH A COAL TAR VARIETY OF WET FILL SHALL BE COATED PER SECTION 02050.
 - VALVES, FITTINGS, ETC. INSIDE STATION EXCEPT GUIDE RAILS SHALL BE COATED PER SPECIFICATION SECTION 09660. 2.40.
 - PUMPING STATION IS SUBJECT TO FLOTATION UNTIL CONSTRUCTION IS COMPLETED, INCLUDING BACKFILL AND REGRADE. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PREVENT FLOTATION DURING CONSTRUCTION.
 - DISCHARGE FLANGED CONNECTION TO BE VERTICAL FOR CORRECT OPERATION. SEE MANUFACTURER INSTALLATION DRAWINGS FOR TRUE DIMENSIONS OF CONNECTION.
 - LIQUID FILLED DIAPHRAGM SEALS SHALL BE INSTALLED ON ALL GAUGES. DIAPHRAGM SEALS SHALL BE OF THE CONTINUOUS DUTY TYPE 3 PIECE HOUSING AND DIAPHRAGM MATERIALS. 1/4" GAUGE CONNECTION AND 1/2" LOWER CONNECTION. VITON DIAPHRAGMS ARE REQUIRED ON LOW RANGE PRESSURE APPLICATIONS (LESS THAN 15 P.S.I.G.). HOUSING BOLTS SHALL ALSO BE STAINLESS STEEL. ACCEPTABLE MODELS ARE MARSH 42-01, HELICOID 100-H OR EQUAL.
 - DIAPHRAGM SEALS SHALL BE PERMANENTLY ATTACHED TO GAUGES BY PRETIGHTENING LEAD SEALS TO THE CONNECTING TUBING. THIS IS TO PREVENT AS DEVALUATION OF THE FILL FLUID. FILL FLUID SHALL BE FACTORY INSTALLED SILICON.
 - GAUGES SHALL HAVE PHOSPHOR BRONZE BOURNOM TUBES, WHITE LAMINATED POINTERS AND BLACK PHENOL BLACK CAST IRON BRASS OR ALUMINUM CASE AND RING. ROTARY GEAR DESIGN, CORROSION RESISTANT, STAINLESS STEEL ACCURACY SHALL BE WITHIN 1/2% OF THE SCALE RANGE. THEY SHALL BE MANUFACTURED BY HELICOID GAUGE DIVISION, 74107, JAMES P. MARCH CORP. "MASTERSGAUGE", ASHCROFT, U.S. GAUGE OR EQUAL. ALL GAUGES SHALL BE PRECALIBRATED (0-60 PSI/140 FT.).
 - WET WELL ACCESS DOOR OPENING 30"x48" MODEL AP0300 WITH SECONDARY WET WELL ACCESS DOOR OPENING 30"x30" MODEL AP3030 WITH SECONDARY PROTECTIVE GRATING AS MANUFACTURED BY USF FABRICATION INC. OR EQUAL.



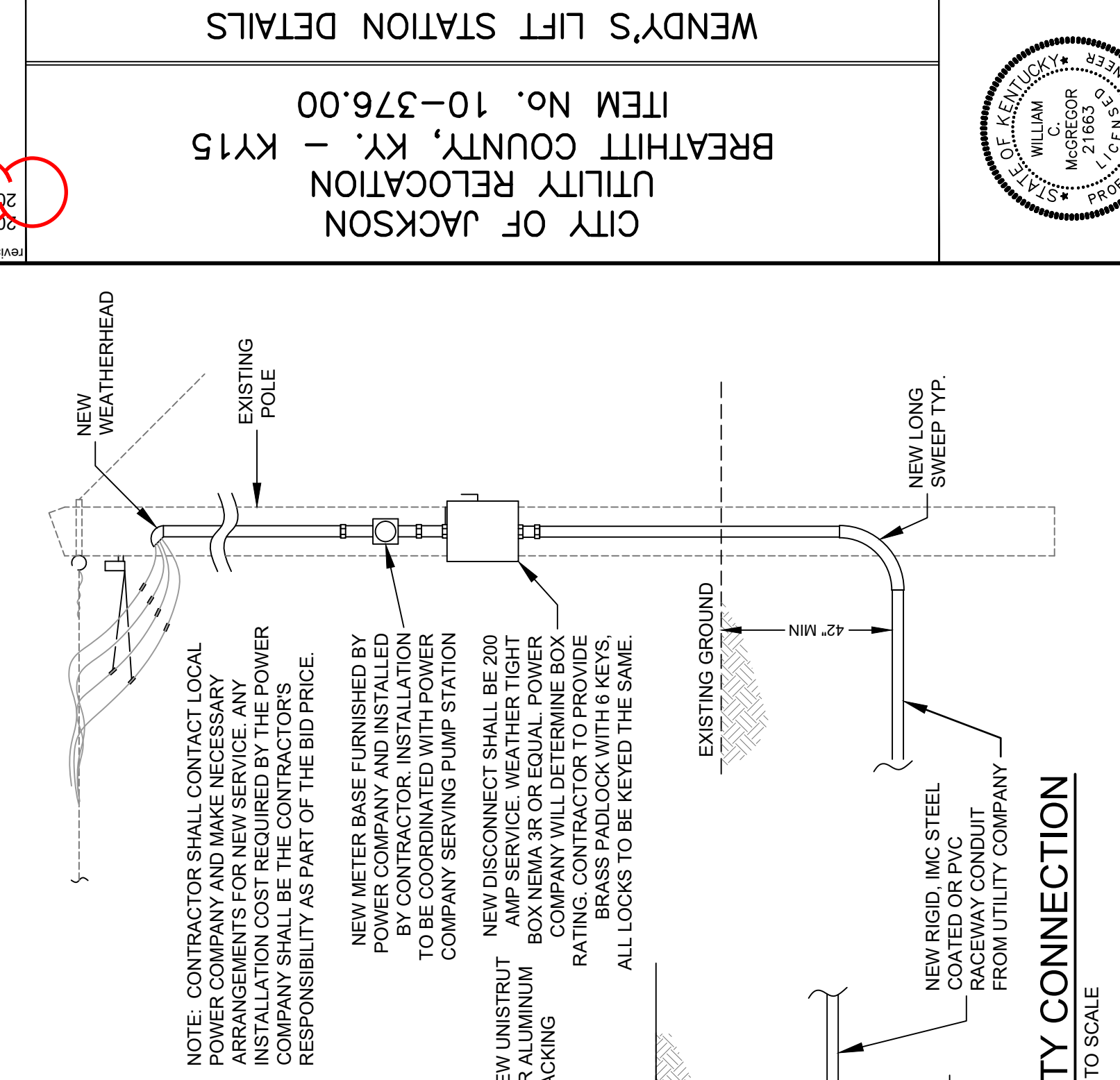
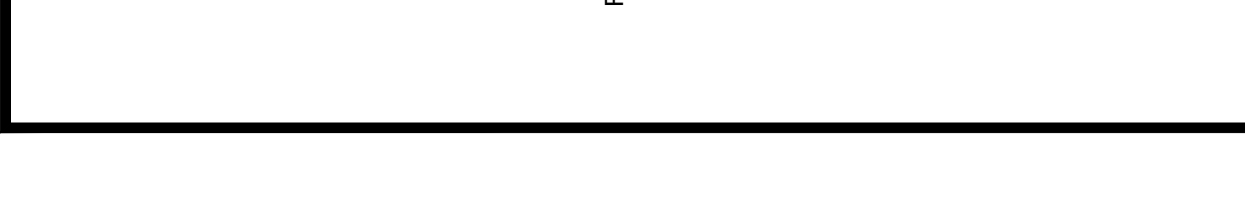
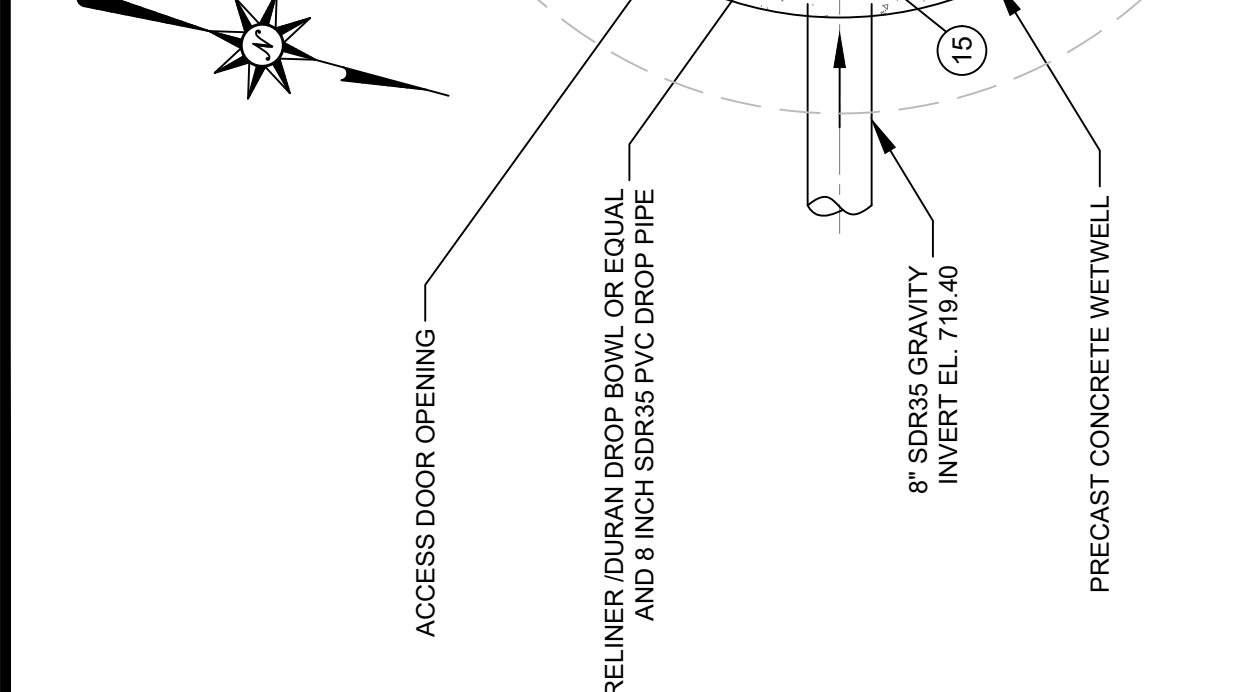
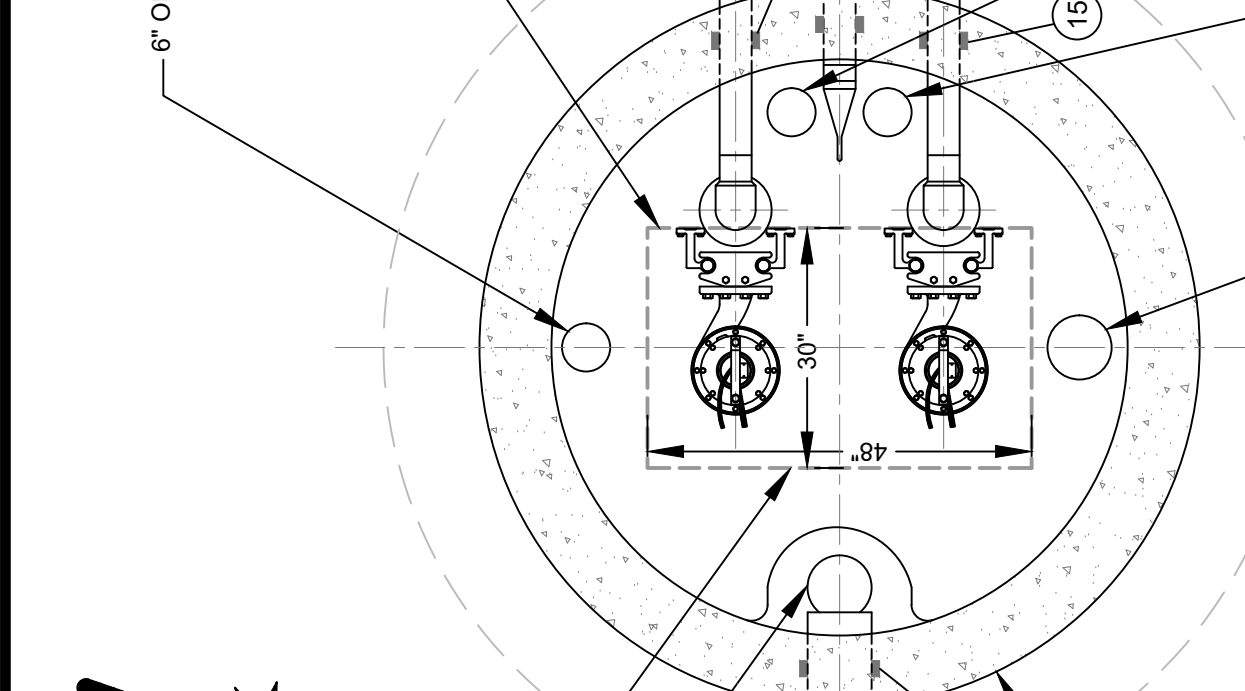
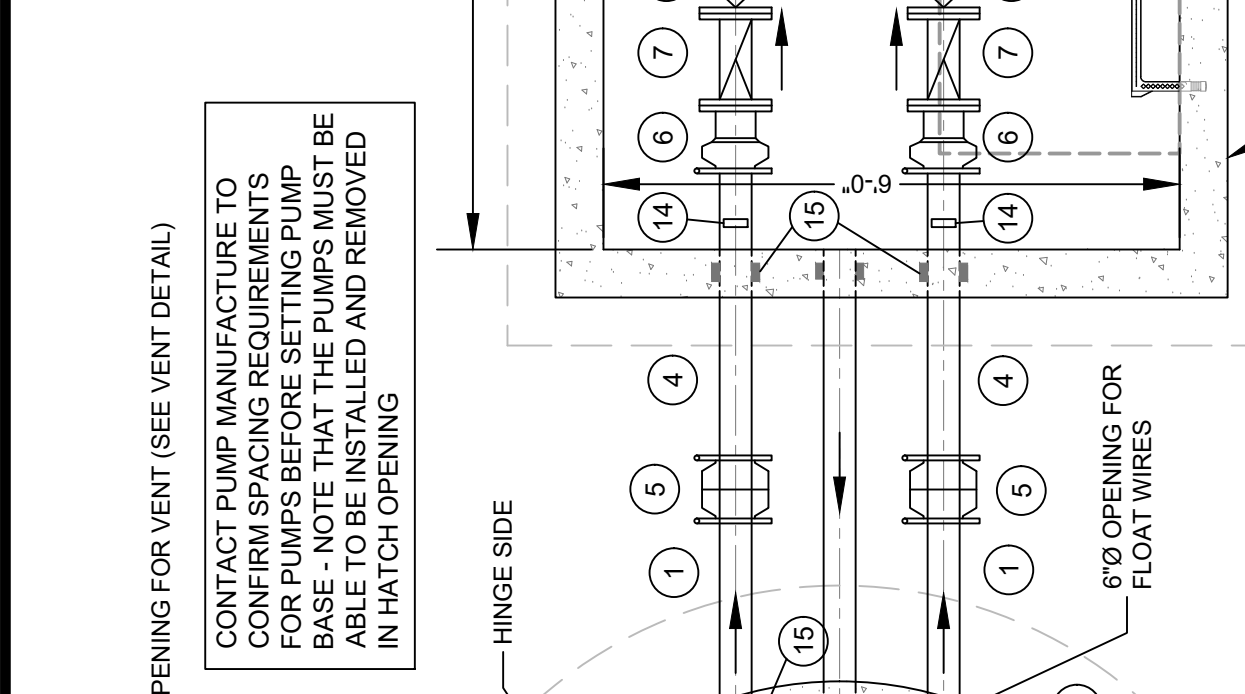
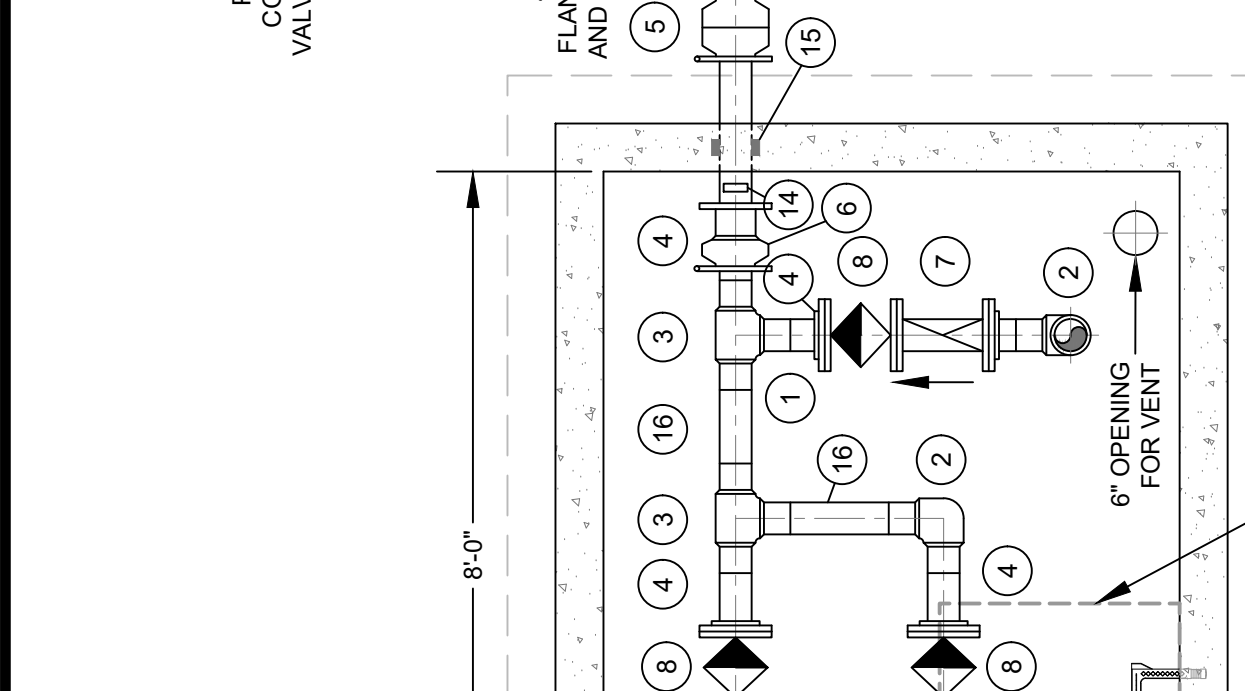
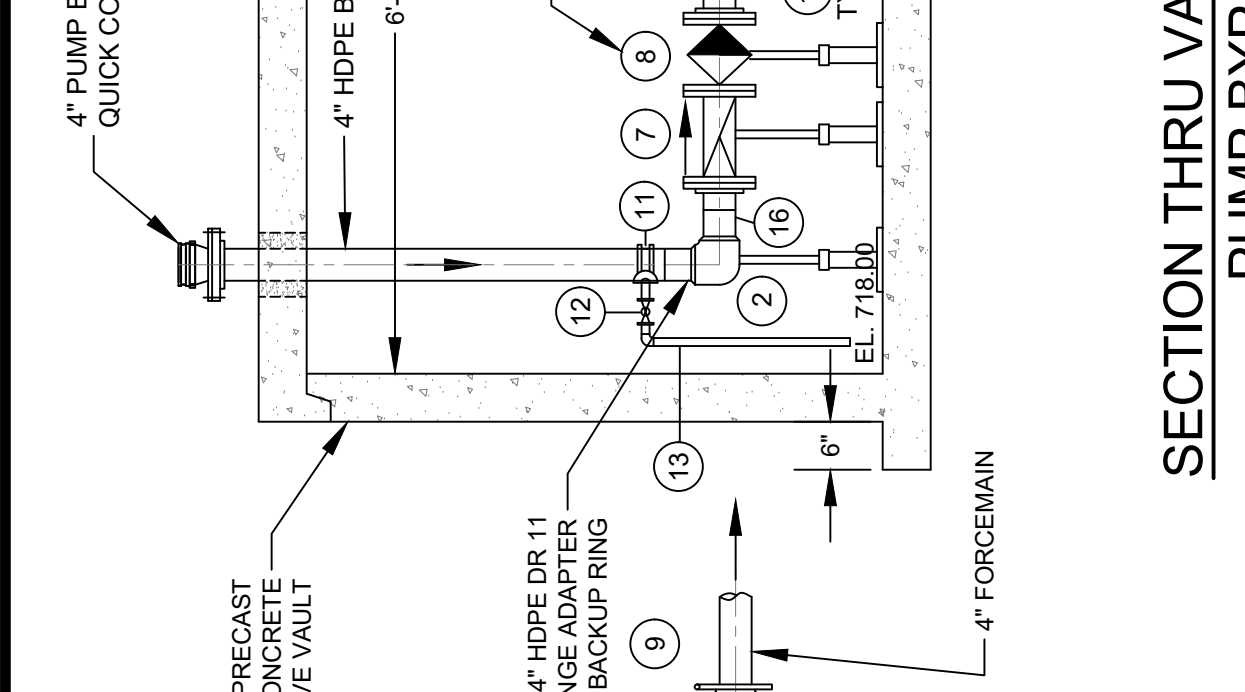
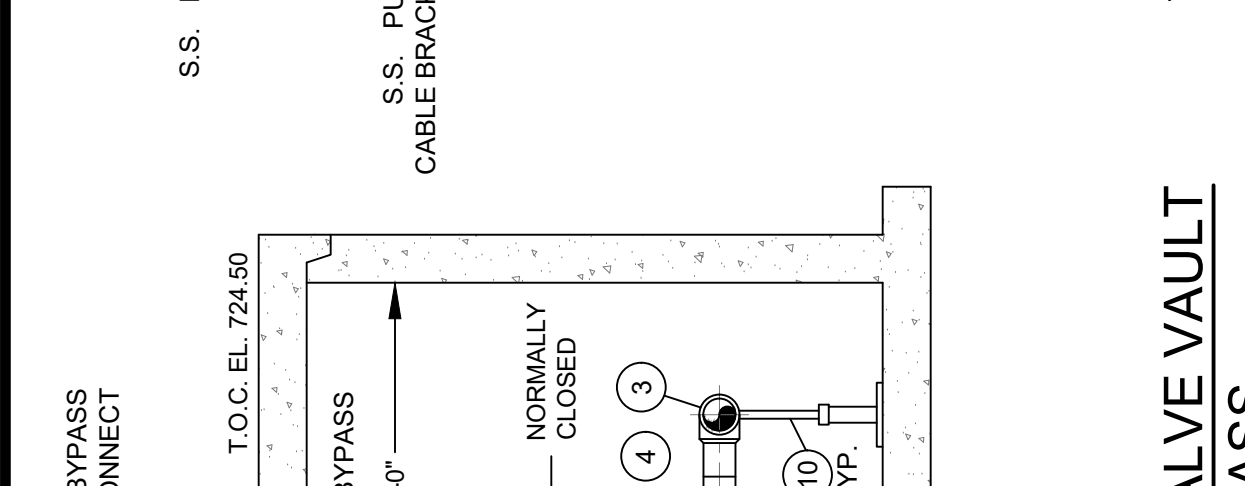
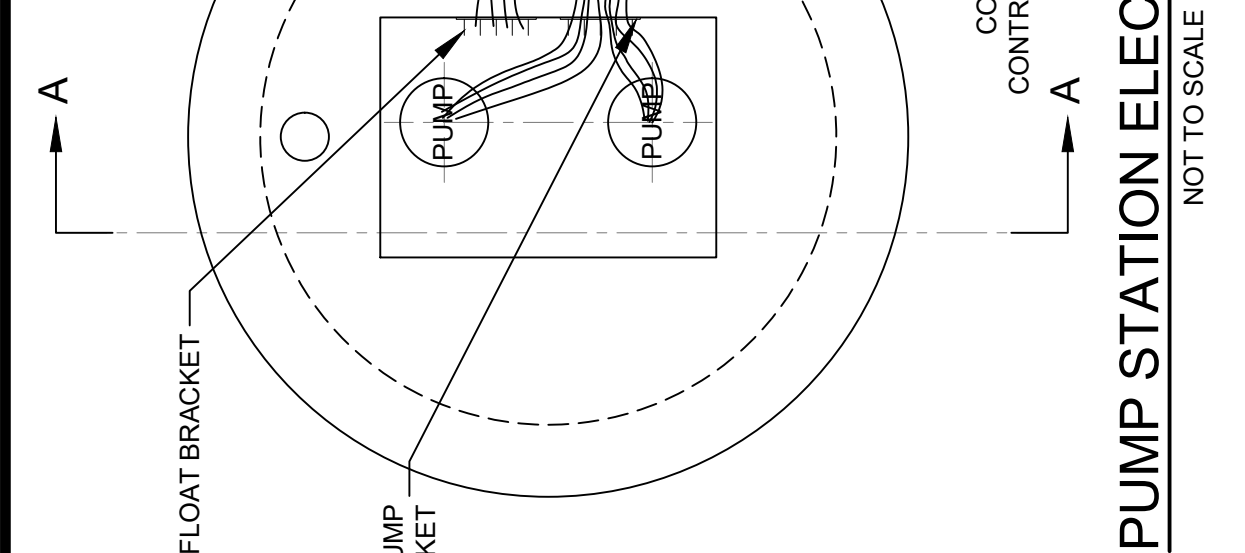
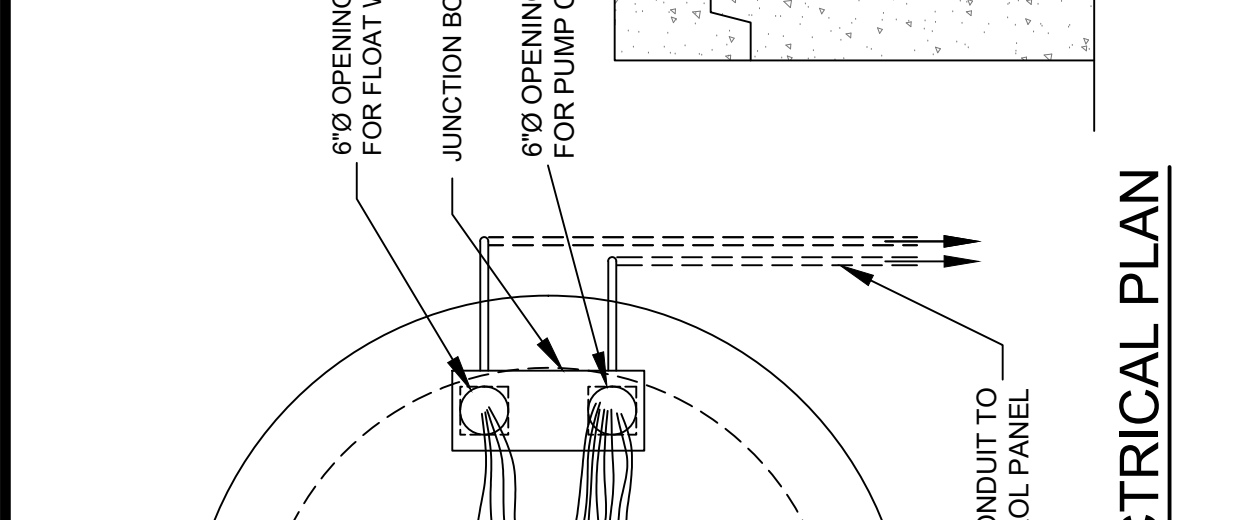
NO.	DESCRIPTION
1	4" D.I. FLGD & P.E. PIPE
2	4" D.I. FLGD 90° BEND
3	4" D.I. FLANGED TEE
4	4" D.I.P.E. PIPE
5	4" RESTRAINT COUPLING, ROMAC INDUSTRIES MODEL "ALPHA" OR EQUAL
6	4" RESTRAINED FLANGED COUPLING ADAPTER, ROMAC INDUSTRIES MODEL ALPHA, "FC" OR EQUAL
7	4" D.I. FLGD SWING CHECK VALVE WITH EXTERNAL LEVER & WEIGHT
8	4" D.I. FLGD GATE VALVE WITH HAND WHEEL OPERATOR
9	4" SDR21 PVC FORCE MAIN
10	ADJUSTABLE PIPE SUPPORT FOR 4" PIPE, STANDON MODEL #692 SADDLE OR EQUAL
11	1" S.S. SERVICE SADDLE
12	1" SCH. 40 PVC TRUE UNION BALL VALVE
13	1" SCH. 40 PVC PIPE TO VALVE VAULT FLOOR (BYPASS DRAIN)
14	DIAPHRAGM SEAL AND PRESSURE GAGE
15	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS
16	4" D.I. FLGD SPOOL



NOTE:
THE LOCATION OF EQUIPMENT AND PIPING AS SHOWN IN THE ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES. THE RELATIVE LOCATIONS OF THESE FEATURES ARE SHOWN IN PLAN VIEW.

THE HPDE PIPE SHALL NOT SUPPORT WEIGHT OF VALVES AND APPURTENANCES. ALL VALVES AND FITTINGS MUST BE SUPPORTED WITH STANDS.

2023-11-17 RELOCATED WET WELL DRAIN TO WET WELL (JCM)
 2024-02-20 ADD 1 CHANGE TO DUCTILE IRON PIPING IN LIFT STATION.



DESCRIPTION	WENDY'S LIFT STATION
WET WELL DIAMETER	6'-0"
WET WELL TOP OF TOP SLAB ELEVATION	724.50
WET WELL TOP OF BOTTOM SLAB ELEVATION	709.00
WET WELL DEPTH	15'-6"
WET WELL TOP SLAB THICKNESS	PER MANUFACTURER
WET WELL BOTTOM SLAB THICKNESS	PER MANUFACTURER
WET WELL INFLUENT SEWER SIZE	8"
WET WELL INFLUENT SEWER ELEVATION	719.40
WET WELL DISCHARGE PIPE CENTERLINE ELEVATION	719.70
PUMP MAKE & MODEL (2 PUMPS REQUIRED)	MYERS 4RX
PUMP CAPACITY	207 GPM @ 53 TDH
PUMP TYPE	SUBMERSIBLE
PUMP RPM	1750
PUMP HP	7.5
PUMP VOLTS-PHASE	230 VOLTS-3 PHASE
PUMP IMPELLER DIAMETER	7.75"
PUMP DISCHARGE	4"
PUMP 2 START ELEVATION	716.00
PUMP 1 START ELEVATION	714.50
PUMPS 1 & 2 OFF ELEVATION	713.80
VALVE VAULT SIZE-LENGTHxWIDTHxDEPTH	8'x6'x6'
VALVE VAULT TOP OF BOTTOM SLAB ELEVATION	724.50
FORCE MAIN SIZE	4"

NOTES:
 1. ALL HARDWARE SHALL BE STAINLESS STEEL.
 2. PIPE SUPPORTS SHALL BE MOUNTED TO WALL WITH S.S. OFFSET PIPE CLAMPS.
 3. GAUGES SHALL BE MOUNTED TO WALL WITH S.S. STUDDED ANCHOR BOLTS WITH 1/2\"/>

NO.	DESCRIPTION
1	4\"/>
2	4\"/>
3	4\"/>
4	4\"/>
5	4\"/>
6	4\"/>
7	4\"/>
8	4\"/>
9	4\"/>
10	4\"/>
11	4\"/>
12	1\"/>
13	1\"/>
14	DIAPHRAGM SEAL AND PRESSURE GAGE
15	APPROPRIATE SIZED LINK-SEAL OR APPROVED EQUAL AT ALL PIPE PENETRATIONS
16	4\"/>

NOTE: THE LOCATION OF EQUIPMENT AND PIPING AS SHOWN IN THE ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES. THE RELATIVE LOCATIONS OF THESE FEATURES ARE SHOWN IN PLAN VIEW.
 THE HPDE PIPE SHALL NOT SUPPORT WEIGHT OF VALVES AND APPURTENANCES. ALL VALVES AND FITTINGS MUST BE SUPPORTED WITH STANDS.

CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASES HAVE BEEN INSTALLED. APPLY CEMENT BONDING AGENT PRIOR TO FORMING. CONTRACTOR TO FIELD INSTALL AND FORM GROUT AFTER PUMP BASE HAS BEEN INSTALLED.

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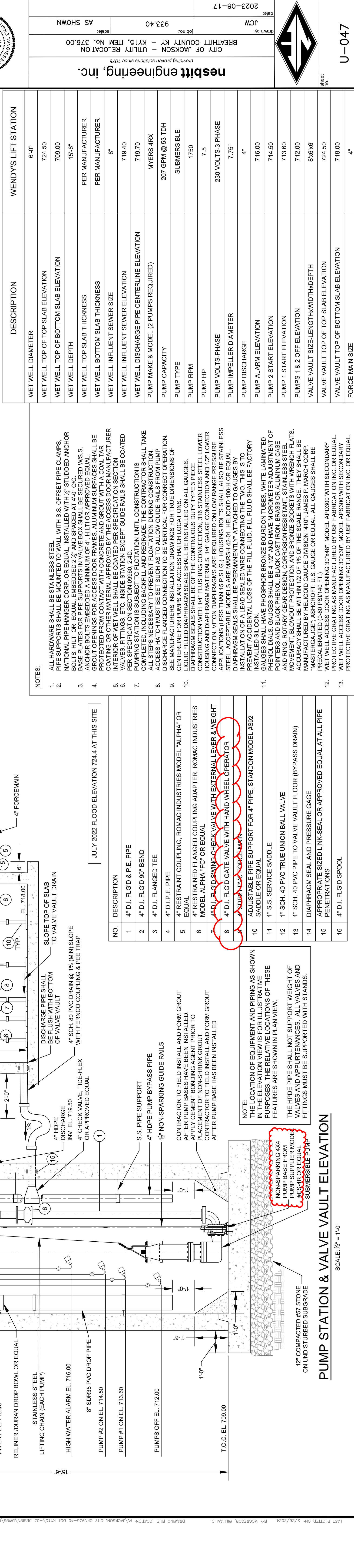
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2023-11-17 RELOCATED WET WELL DRAIN TO WET WELL (JCM)
 2024-02-20 ADD 1 CHANGE TO DUCTILE IRON PIPING IN LIFT STATION.

