

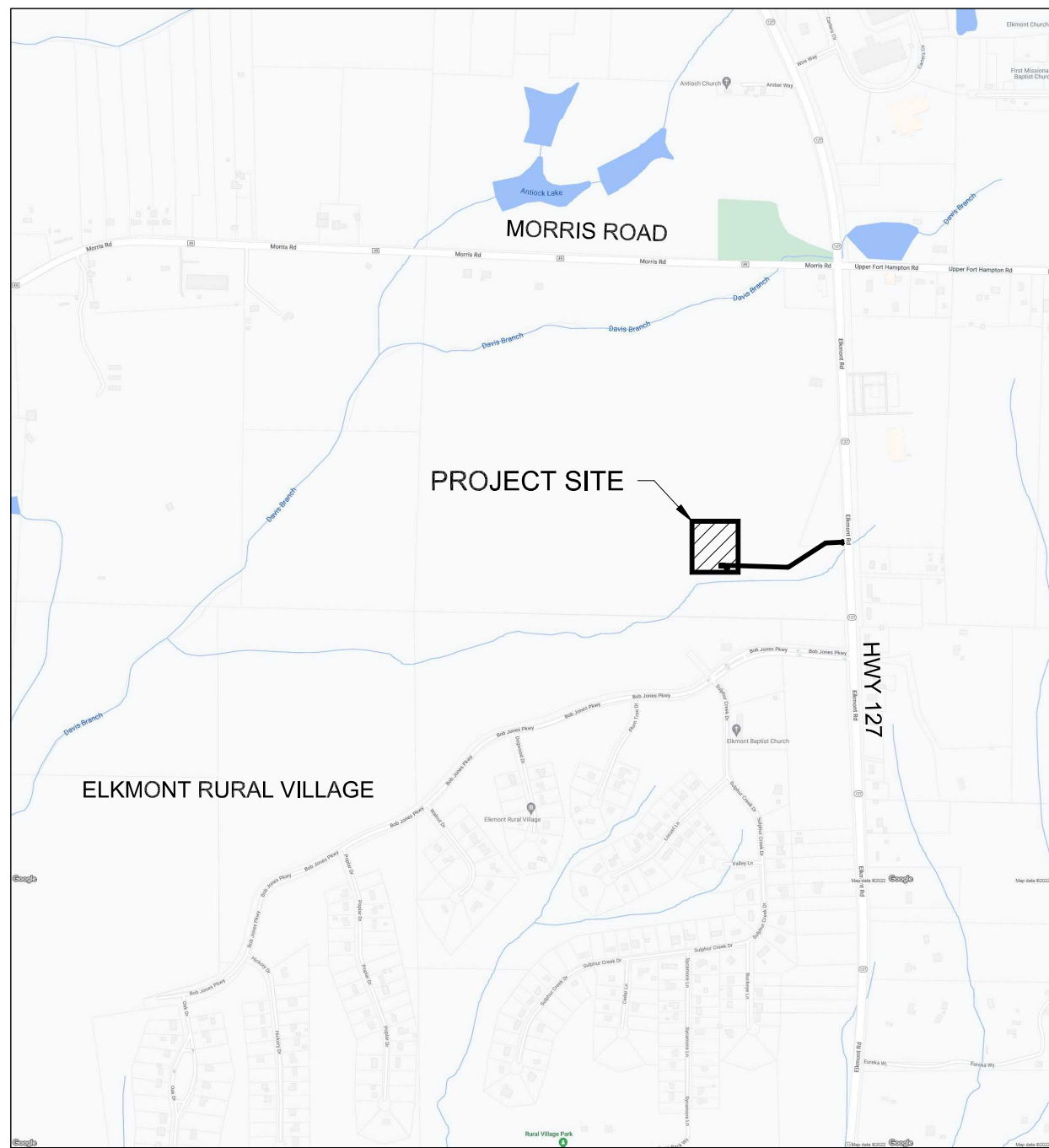
CONSTRUCTION PLANS

for

ELKMONT REGIONAL PUMP STATION

UPGRADES & GRAVITY SEWER

LIMESTONE COUNTY WATER AND SEWER AUTHORITY
17218 US-72
Athens, AL 35611



SITE VICINITY MAP
(NOT TO SCALE)



INDEX TO SHEETS	
SHEET C1.0	OVERALL LAYOUT
SHEET C2.0	PUMP STATION SITE PLAN
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SHEETS C4.0-7.0	PLAN AND PROFILE
SHEET C8.0	SITE DEMOLITION PLAN
SHEETS C9.0-11.0	PROJECT DETAILS
SHEET E0.1	ELECTRICAL LEGEND, NOTES
SHEET E0.2	SINGLE LINE DIAGRAM
SHEET E0.3	WIRING DIAGRAM
SHEETS E1.1-E1.3	ELECTRICAL DETAILS
SHEET E2.1	LIFT STATION ELECTRICAL PLAN

LIMESTONE COUNTY WATER & SEWER AUTHORITY (LCWSA)

REVIEWED FOR COMPLIANCE WITH LCWSA STANDARD SPECIFICATIONS, POLICIES, & PROCEDURES:
WHEN IMPROVEMENTS ARE COMPLETED, RECORD/FINAL DRAWINGS WILL BE SUBMITTED TO LCWSA.

NAME/TITLE _____ DATE _____

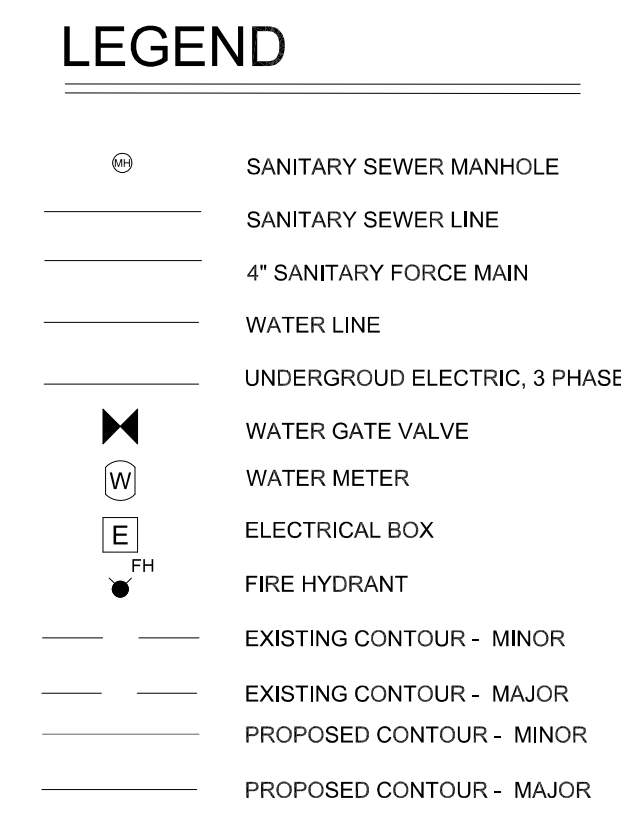
LIMESTONE COUNTY WATER AND SEWER AUTHORITY BOARD ENGINEER

APPROVED FOR CONSTRUCTION:

NAME/TITLE _____ DATE _____



**MORELL
ENGINEERING**
711 E. HOBBS STREET
ATHENS, ALABAMA 35611
PHONE (256) 867-4957 FAX (256) 867-1324





SEWER NOTES:

1. SEWER LINES SHALL HAVE 5' MINIMUM SEPARATION FROM WATER LINES.
1. ALL MANHOLES SHALL HAVE XYTEX C 1000 RED ADMIXTURE AND 12" BUTYL JOINT WRAP AROUND ALL JOINTS AND VERTICALLY FROM PIPE INLETS UP TO THE FIRST JOINT WITH CONSEAL CS-75 PRIMER.
3. DETAILED SUBMITTALS OF EACH MANHOLE ARE REQUIRED.
4. ALL DUCTILE IRON PIPE SHALL BE PROTECTO 401 LINED PRESSURE CLASS 350.

HDPE NOTES:

1. ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE DUCTILE IRON PIPE SIZE (DIPS) 4" DR 17 WITH GREEN STRIPE.
2. UTILITY IDENTIFICATION TRACE WIRES REQUIRED FOR HDRE PIPE INSTALLATIONS PER SPECIFICATION.
3. WARNING TAPE REQUIRED 12" ABOVE PIPE.
4. ALL FITTINGS SHALL BE DUCTILE IRON AND SHALL BE CONNECTED WITH AN HDPE MECHANICAL JOINT ADAPTER FUSED TO THE PIPE.

CLIENT: LOWSA ADDRESS 17210 US-72, Athens, AL 35611		MORELL PROJECT NUMBER: 23-047		SITE PLAN of ELKMONT REGIONAL PUMP STATION UPGRADES						REVISIONS <table border="1"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>												711 E. JOHNS STREET ATHENS, AL 35611 PHONE: (256) 867-4857 WWW.MORELLENGINEERING.COM	
SHEET NUMBER C2.0		CHECKED BY: WTM		SCALE: 1"=5'		DRAWN BY: DCM																	

FITTINGS LIST

- LINK SEAL BOOT
- STANDON MODEL # S92 SADDLE PIPE SUPPORT, 316 SS
- 4" FLG TIDEFLEX SERIES TF-2 CHECK VALVE W/ SS STRAPS
- 4" DI PIPE
- 8" MJ BURIED PLUG VALVE WITH MANUAL NUT
- 4" ALUMINUM FLG x THREADED SPOOL PIECE (LENGTH AS REQ'D)
- 4" ALUMINUM CAM & GROOVE COUPLING
- 6" FLG DeZURIK PEF ECCENTRIC PLUG VALVE WITH HANDWHEEL
- 6" SS MEGAFLANGE ADAPTER
- 2" SS THREADED AUTOMATIC AIR & VACUUM RELEASE ARI MODEL D-020
- 6" DI MJ TEE W/ RESTRAINING FOLLOWER GLANDS
- 6" DI MJ 90° BEND W/ RESTRAINING FOLLOWER GLANDS
- 6" SS FLG 90° BEND
- 6" DI FLG x PE SPOOL PIECE (LENGTH AS REQ'D)
- 6" DI PE x PE SPOOL PIECE (LENGTH AS REQ'D)
- 6" SS FLG x FLG SPOOL PIECE (LENGTH AS REQ'D)
- 6" SS FLG x PE SPOOL PIECE WITH WELDED 2" THREADED OUTLET FOR ARV
- CHECK VALVE, PER LCWSA SPECIFICATIONS
- FLYGT NP 3069 SH 3~ 272
- FOXBORO 9104A MAGNETIC FLOW METER W/ IMT 25 SERIES TRANSMITTER, SEE NOTE 6
- 6" MJ BURIED PLUG VALVE WITH MANUAL NUT
- 8" DI MJ TEE W/ RESTRAINING FOLLOWER GLANDS
- 4" DI FLG 90° BEND
- 6" DI TO PVC TRANSITION ADAPTER & 8X6 REDUCER
- 8" DI FLG 90° BEND
- SS VALVE & 4" DIAMETER, OIL FILLED PRESSURE GAUGE W/ ISOLATOR BETWEEN GAUGE AND PROCESS DEBRIS

ABBREVIATIONS

SS - STAINLESS STEEL

DI - DUCTILE IRON

MJ - MECHANICAL JOINT

PE - PLAIN END

FLG - FLANGE

PUMP DESIGN SCHEDULE

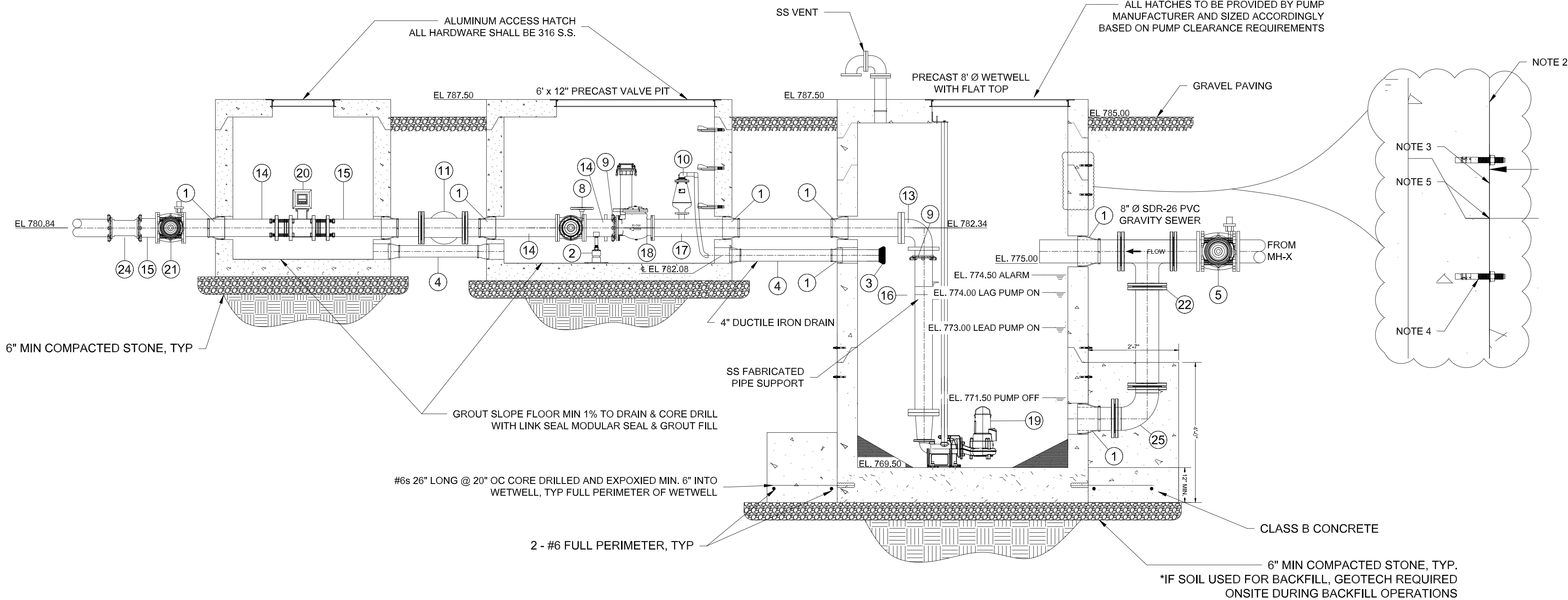
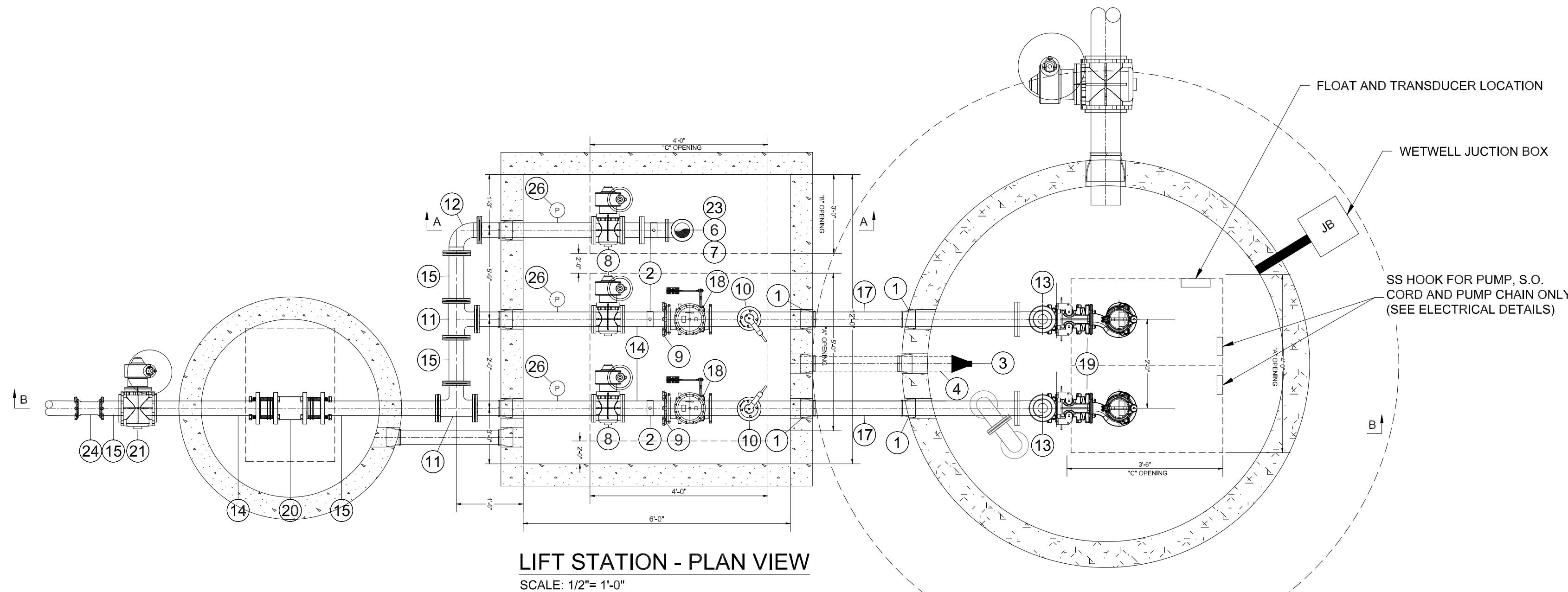
PUMP CAP (GPM)	180
RPM	3230
PHASE	3
VOLTAGE	460
MIN. HP	3.8
DESIGN TOTAL DYNAMIC HEAD	41'

NOTE

PUMPS SHALL BE FLYGT NP 3069 SH 3~ 272
(126 MM IMPELLAR, THREE-PHASE, 460 VOLT)
NO OTHER PUMPS ALLOWED

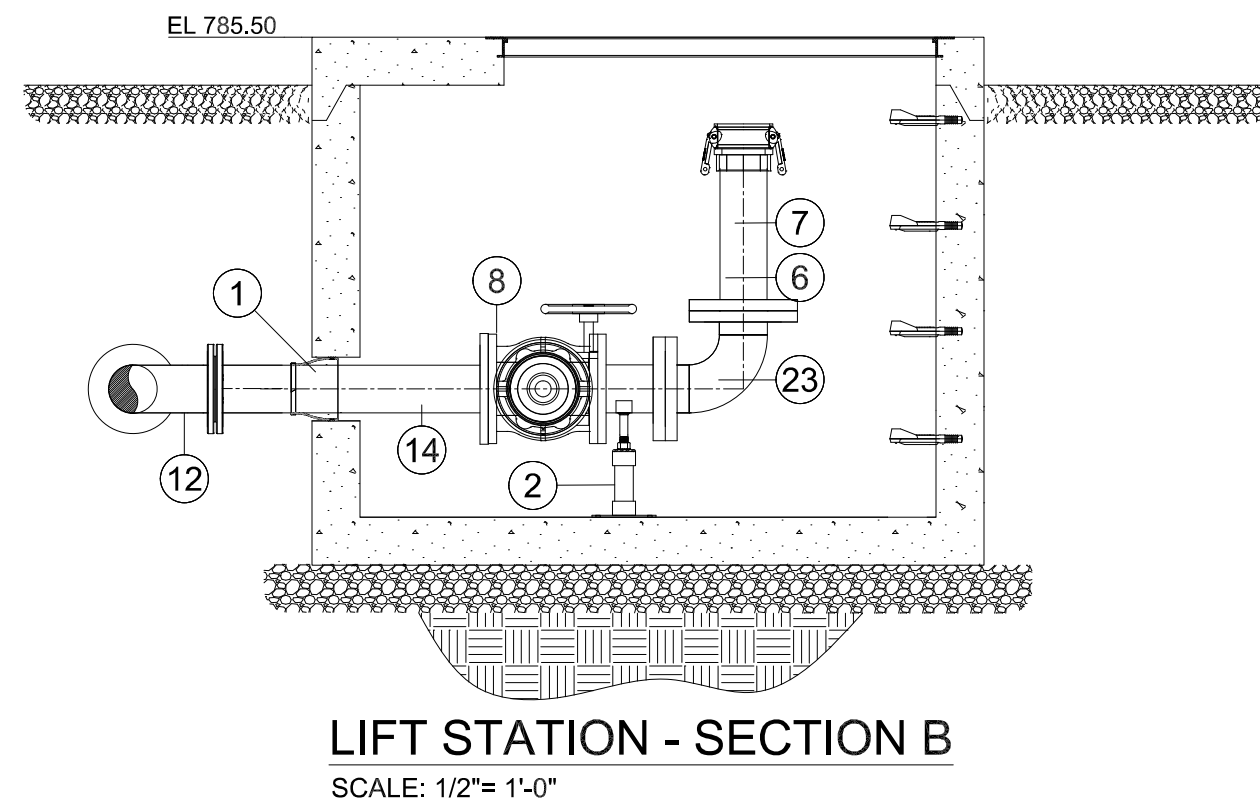
NOTES

- CONFINED SPACE SIGN REQUIRED PER OSHA 1910.146(c)(2) AND SHALL BE 14" x 10" ALUMINUM READING "DANGER - PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER".
- 6 STRAPS PER JOINT REQUIRED FOR WETWELL. EVENLY SPACE AROUND WETWELL AFTER APPLYING JOINT WRAP, TYP. ALL STRAPS NOT SHOWN FOR CLARITY.
- 1/2" x 3" x 20" GALVANIZED STEEL PLATE COATED WITH BITUMASTIC COAL TAR EPOXY ON ALL SURFACES.
- 3/4" x 3" WEDGE ANCHOR BOLTS, COAT HEADS OF BOLTS WITH BITUMASTIC COAL TAR EPOXY BEFORE BACKFILL.
- 12" WIDE BUTYL JOINT WRAP, FULL PERIMETER, TYP ALL PRECAST JOINTS.
- THE FLOW TRANSMITTER SHALL BE PROVIDED WITH AN EDCO SLAC SERIES 4-WIRE, NEMA 4X SURGE PROTECTION DEVICE (FOR 120V AND ANALOG SURGE PROTECTION) AND FIELD MOUNTED NEXT TO THE TRANSMITTER.
- PAINT ALL EXPOSED PIPING AND FERROUS METALS INSIDE VALVE PIT AND WETWELL (BOTH OPTIONS).
- SEE LCWSA STANDARD FOR VALVE, MH'S, WETWELL, ETC.
- ALL HARDWARE, INCLUDING FLANGE BOLTS, SHALL BE 316 SS INSIDE VALVE PIT AND WETWELL
- ALL DUCTILE IRON TO BE P401 COATED



LIFT STATION - SECTION A

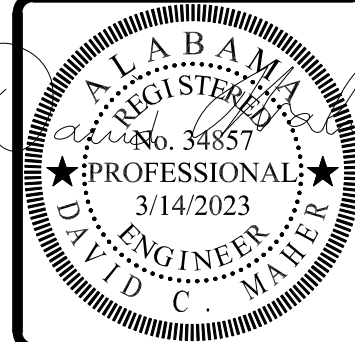
SCALE: NTS



LIFT STATION - SECTION B

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

REVISIONS



PUMP STATION SECTION
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 21-0261

SCALE: NTS

DRAWN BY: DOM

DATE: 3/14/2023

CHECKED BY: WTM

CLIENT:
LCWSA
ADDRESS
1721 US-72, Athens, AL 38611

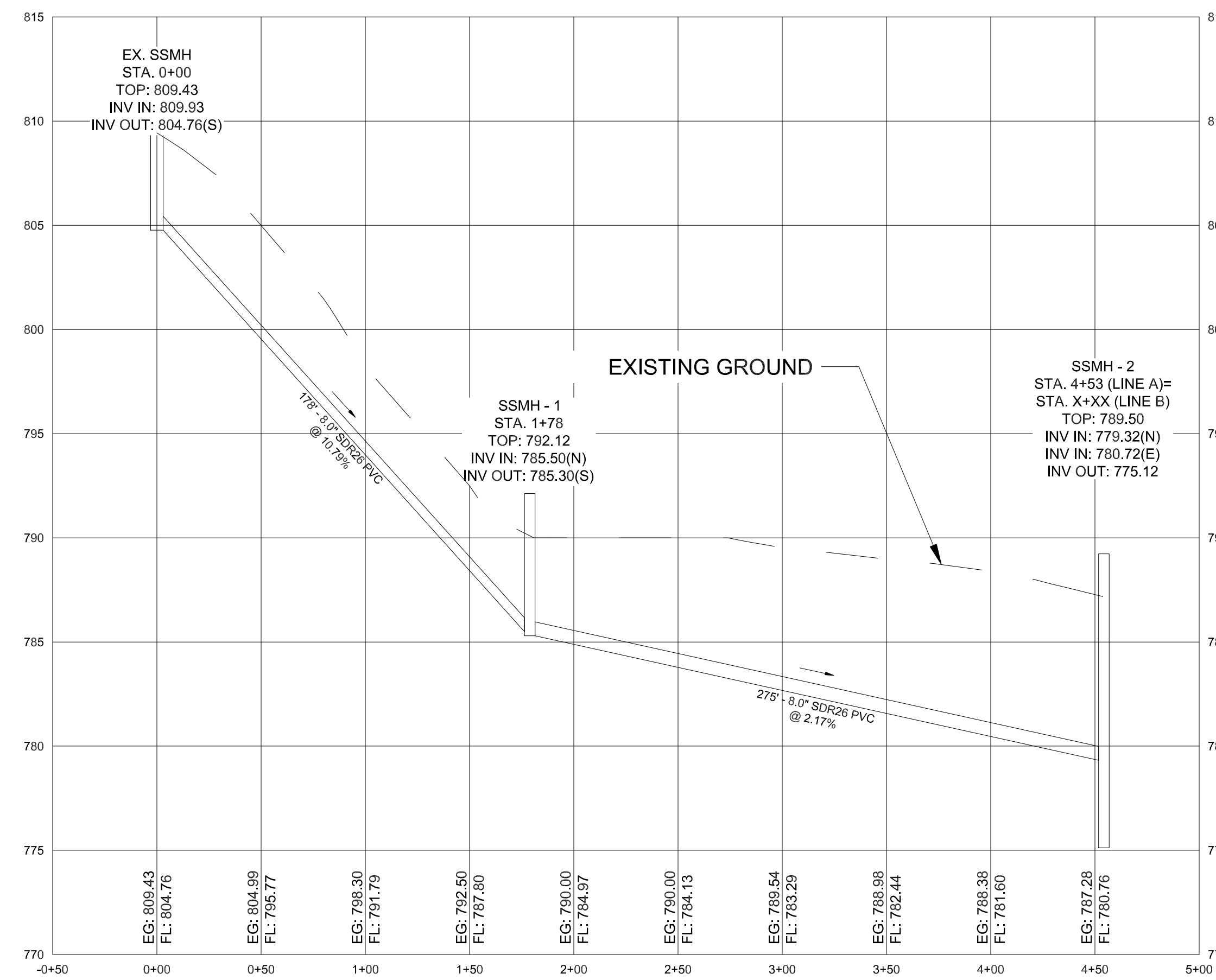
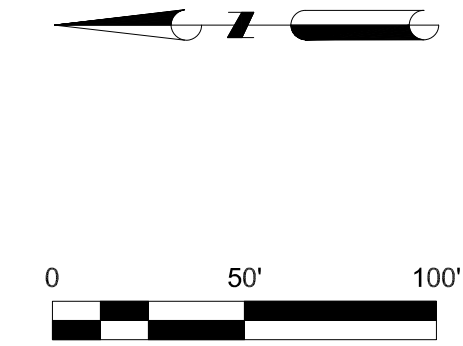
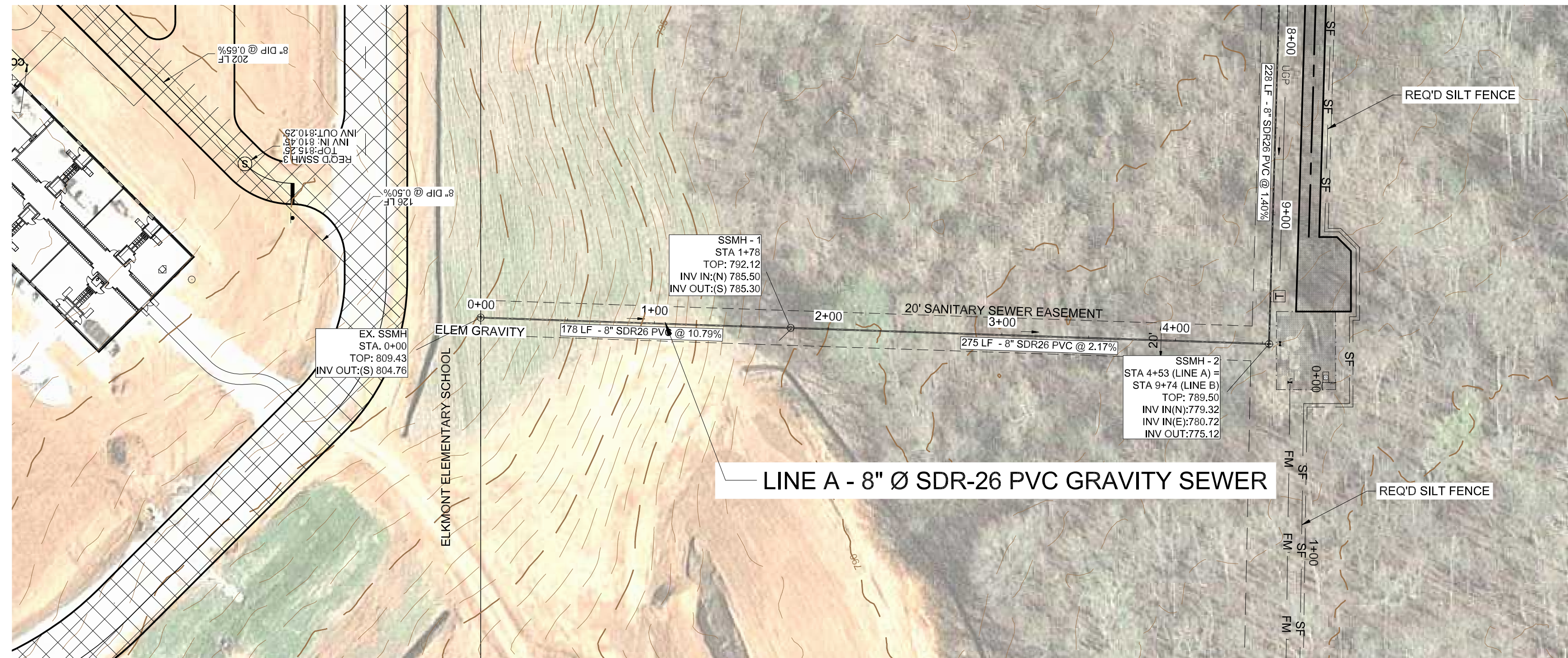
SHEET NUMBER

C3.0

711 E. HOBBS STREET ATHENS, AL 38611

PHONE: (256) 867-4857

WWW.MORELLENGINEERING.COM



REVISIONS

711 E. HOBBS STREET / ATHENS, AL. 35611
PHONE: (256) 867-4957
WWW.MORELLENGINEERING.COM



PLAN AND PROFILE of LCWSA - ELKMONT REGIONAL PUMP STATION UPGRADES

MORELL PROJECT NUMBER: 23-0047

SCALE: 1"=50 H' 1"=5' V

DRAWN BY: DCM

DATE: 03/14/2023

CHECKED BY: WTM

CLIENT:
LCWSA
ADDRESS
17218 US-72, Athens, AL 35611

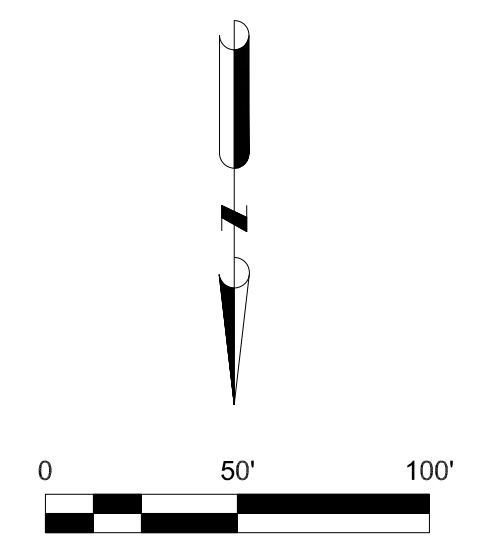
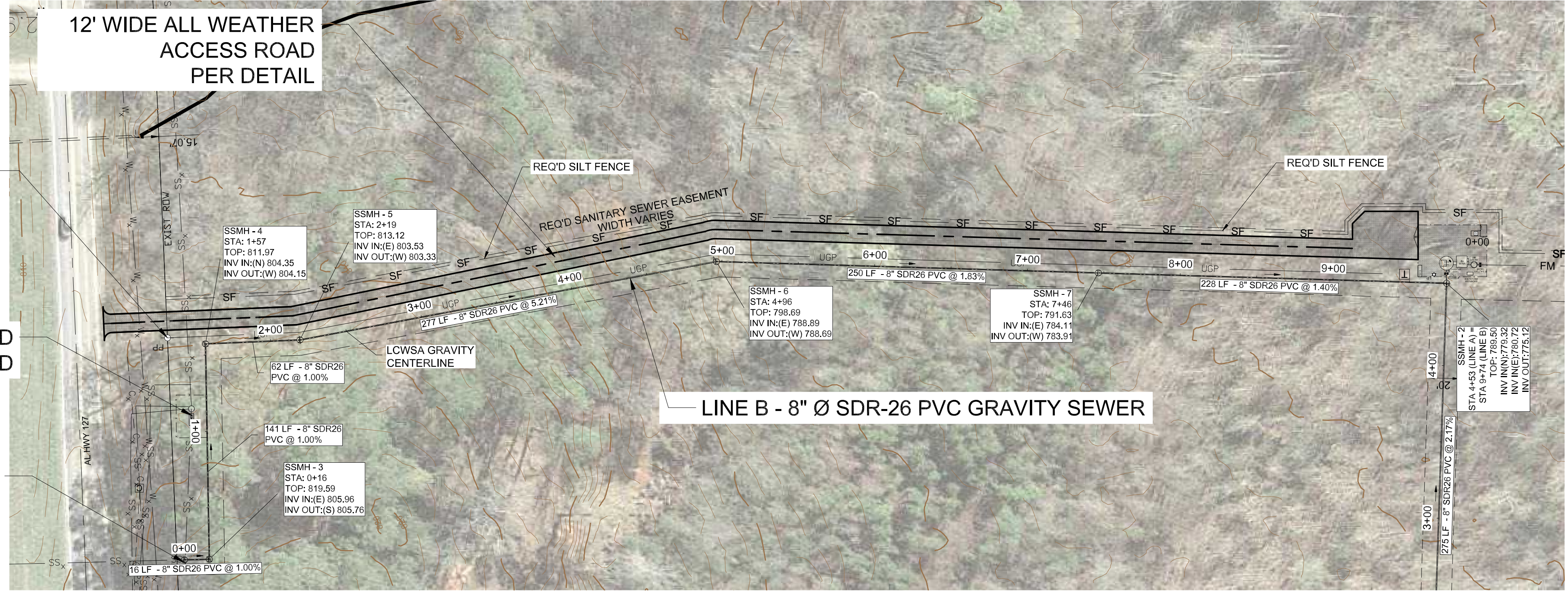
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C4.0

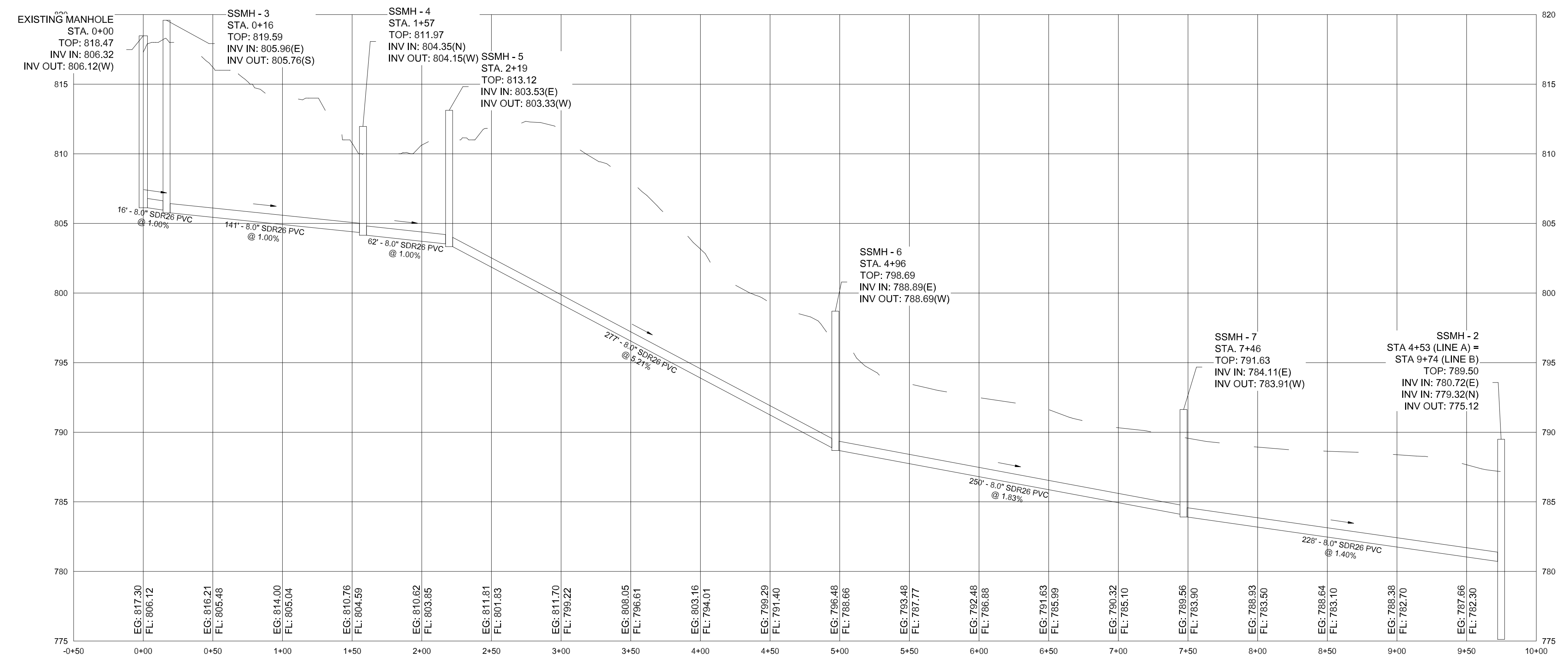
REQUIRED: POWER POLE AND
CONDUIT TO PUMP STATION
ALL COORDINATION WITH ATHENS
ELECTRIC DEPARTMENT
Phone: 256-232-1440

EXISTING PUMP STATION AND
WETWELL TO BE DEMOLISHED

TIE TO EXISTING MANHOLE
REFORM CHANNEL AT BOTTOM TO
DRAIN TO NEW TAP LOCATION



ALTERNATE No. 1
LINE B - PLAN VIEW (STA 0+00 to 9+74)
SCALE: 1"= 50'



ALTERNATE No. 1
LINE B - PROFILE VIEW (STA 0+00 to 9+99)
SCALE: H: 1"= 50' / V: 1" = 5'

REVISIONS

711 E. HOBBS STREET ATHENS, AL 35611
PHONE: (256) 867-4857
WWW.MORELLENGINEERING.COM

ALABAMA
REGISTERED
PROFESSIONAL
ENGINEER
3/14/2023
J. C. MORELL

MORELL
ENGINEERING

ALTERNATE 1 - PLAN AND PROFILE
of
LCWSA - ELKMONT REGIONAL PUMP
STATION UPGRADES

MORELL PROJECT NUMBER: 23-007

DATE: 03/14/2023

CHECKED BY: WTM

C5.0

CLIENT:
LCWSA
ADDRESS
1721 US-72, Athens, AL 35611

SHEET NUMBER

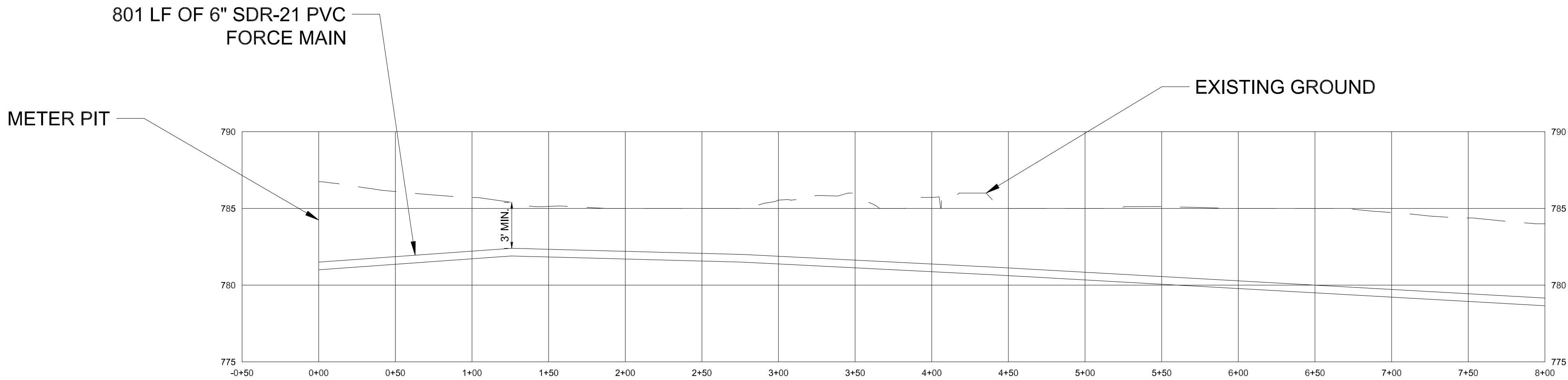
MORELL SCALE: 1"=50' H 1"=5' V
DRAWN BY: DCM

- SEWER NOTES:
- SEWER LINES SHALL HAVE 5' MINIMUM SEPARATION FROM WATER LINES.
 - ALL MANHOLES SHALL HAVE XYPEX C 1000 RED ADMIXTURE AND 12" BUTYL JOINT WRAP AROUND ALL JOINTS AND VERTICALLY FROM PIPE INLETS UP TO THE FIRST JOINT WITH CONSEAL CS-75 PRIMER.
 - DETAILED SUBMITTALS OF EACH MANHOLE ARE REQUIRED.
 - ALL DUCTILE IRON PIPE SHALL BE PROTECTO 401 LINED PRESSURE CLASS 350.

- HDPE NOTES:
- ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE DUCTILE IRON PIPE SIZE (DIPS) 4" DR 17 WITH GREEN STRIPE.
 - UTILITY IDENTIFICATION TRACE WIRES REQUIRED FOR HDRE PIPE INSTALLATIONS PER SPECIFICATION.
 - WARNING TAPE REQUIRED 12" ABOVE PIPE.
 - ALL FITTINGS SHALL BE DUCTILE IRON AND SHALL BE CONNECTED WITH AN HDPE MECHANICAL JOINT ADAPTER FUSED TO THE PIPE.



6" SDR-21 FORCE MAIN - PLAN VIEW (STA 0+00 to 8+00)
SCALE: 1"= 50'



6" SDR 21 FORCE MAIN - PROFILE VIEW (STA 0+00 to 8+00)
SCALE: H: 1"= 50' / V: 1"= 5'

REVISIONS
711 E. HOBBS STREET ATHENS, AL 35611
PHONE: (256) 867-4857
WWW.MORELLENGINEERING.COM



FORCE MAIN PLAN AND PROFILE
of
LCWSA - ELKMONT REGIONAL PUMP
STATION UPGRADES

MORELL PROJECT NUMBER: 23-007	SCALE: 1"=50' H 1"=5' V	DRAWN BY: DCM
DATE: 03/14/2023	CHECKED BY: WTM	

CLIENT: LCWSA ADDRESS 1721 US-72, Athens, AL 35611	SHEET NUMBER C6.0
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GENERAL NOTES:

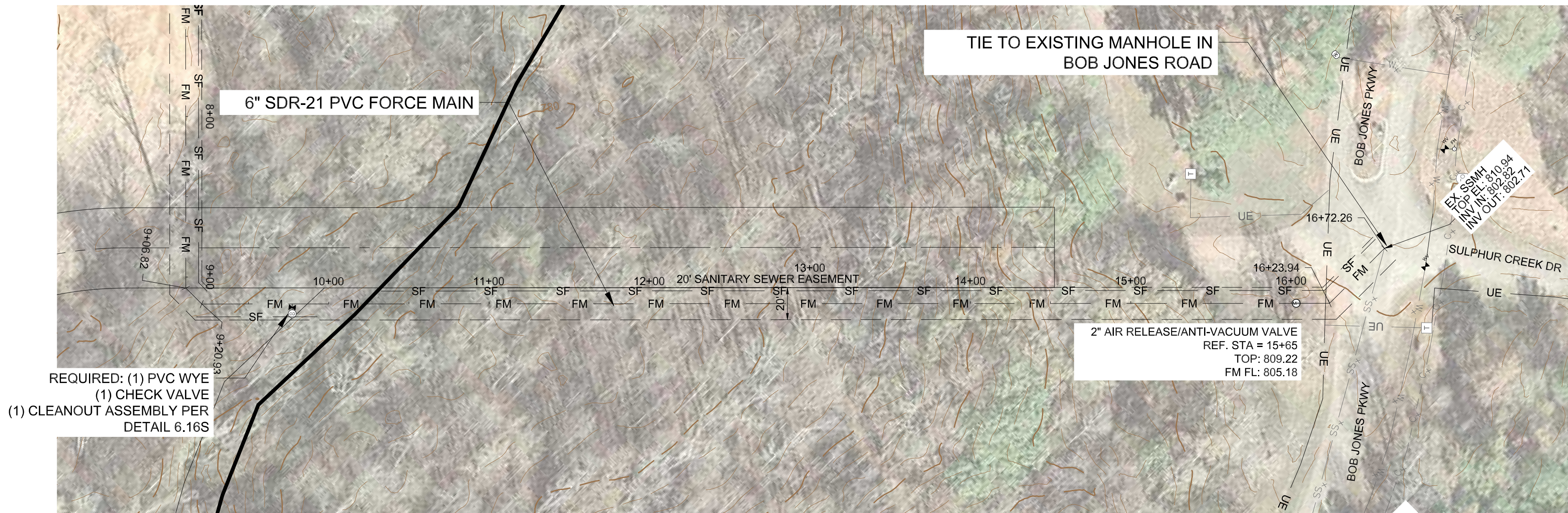
1. SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR SAFETY, MEANS, OR METHODS OF THE CONTRACTOR.
2. THE LOCATIONS OF ALL UNDERGROUND UTILITIES ARE ASSUMED BASED ON AVAILABLE MAPS, GIS DATA, ETC. SOME UTILITIES WERE NOT LOCATED BY ALABAMA ONE CALL (811) PRIOR TO, OR FOLLOWING THE SURVEY. ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN ON THE PLANS. FOR THIS REASON, THE CONTRACTOR SHOULD ANTICIPATE ADDITIONAL TIME WILL BE REQUIRED ON THE PROJECT TO:
 - A. HAVE UTILITIES LOCATED BY ALABAMA ON-CALL IN THE AREAS AHEAD OF THE WORK.
 - B. REVIEW ANY POTENTIAL CONFLICTS AND/OR REQUIRED CHANGES IN THE PIPELINE ROUTE WITH THE OWNER AND/OR ENGINEER.
 - C. SPOT DIG AND/OR RESEARCH WITH THE APPROPRIATE UTILITY COMPANY TO DETERMINE DEPTHS OF CUT, PIPE MATERIALS, ETC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AGENCIES BEFORE WORK COMMENCES TO VERIFY THE TYPE, LOCATION, PROTECTION REQUIREMENTS, DEPTH OF ALL EXISTING UTILITIES, DRAINAGE FACILITIES, AND OTHER OBSTRUCTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REPAIRING AND/OR REPLACING ANY SUCH ITEMS DAMAGED DURING CONSTRUCTION.
4. UTILITIES SHOWN ON PLANS AND PROFILES ARE SHOWN IN APPROXIMATE LOCATIONS AND MAY BE AT ASSUMED ELEVATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF EXISTING UTILITIES, OBSTRUCTIONS, AND DRAINAGE STRUCTURES. ALL EXISTING LINES SHALL REMAIN ACTIVE THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION AND SATISFACTORY REPAIR OR REPLACEMENT OF DAMAGED FACILITIES.
5. CONTRACTOR SHALL LOCATE AND UNCOVER ALL POTENTIALLY CONFLICTING UTILITIES BEFORE CONSTRUCTION GRADES OR DEPTHS OF CUT ARE FINALIZED AND PIPE IS LAID.
6. APPROXIMATE LOCATIONS OF OVERHEAD POWER LINES MAY OR MAY NOT BE SHOWN ON PLANS. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING ALL LOCATIONS IN THE FIELD AND PLAN WORK IN THOSE AREAS ACCORDINGLY.
7. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF ALL BENCHMARK ELEVATIONS & COORDINATES WITH SURVEYOR PRIOR TO BEGINNING THE WORK. CONTRACTOR IS RESPONSIBLE FOR ALL EASEMENT OR ROW SURVEYS REQUIRED TO COMPLETE THE WORK. ROW, PROPERTY, AND/OR EASEMENT BOUNDARIES SHOWN ON PLANS ARE APPROXIMATE AND FOR GENERAL REFERENCE ONLY.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE DRAINAGE, STORMWATER PERMITS, AND COMPLIANCE WITH ALL GOVERNMENTAL STORMWATER REGULATIONS.
9. CONTRACTOR SHALL MAINTAIN TRAFFIC FLOW TO RESIDENCES AND BUSINESSES WITH MINIMUM DISRUPTION OF ACCESS.
10. ALL EXCAVATION BACKFILL IN NON-TRAFFIC OR NON-PAVED AREAS SHALL BE COMPACTED TO MIN 95% STANDARD PROCTOR DENSITY TO PREVENT SETTLEMENT.
11. ROCK SHALL BE UNDERCUT A MINIMUM OF 4" AND PIPE BEDDED IN STONE.
12. ALL TRENCHES TO BE COMPACTED PER DETAIL TO PREVENT SETTLEMENT.
13. ALL CONNECTIONS TO EXISTING LINES TO BE COORDINATED WITH THE UTILITY TO MINIMIZE INTERRUPTION OF WATER AND/OR SEWER SERVICE.
14. ALL LANDSCAPED AREAS, FENCES, ETC. AFFECTED BY CONSTRUCTION SHALL BE REPLACED AND RESTORED IN-KIND (UNLESS SPECIFICALLY NOTED ON THE PLANS). ALL DISTURBED GRASSED AREAS SHALL BE RESODDED OR SEEDED.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ANY EXCESS MATERIALS RESULTING FROM THE WORK.
16. NO EXCAVATIONS SHALL BE LEFT UNATTENDED BY THE CONTRACTORS PERSONNEL UNLESS BARRICADED TO PREVENT INJURY.
17. ANY PILING, SHORING, ETC. (SIZE, DEPTHS, LOCATIONS, TYPES, ETC.) SHALL BE DESIGNED, FURNISHED, AND MAINTAINED BY THE CONTRACTOR.
18. UNLESS THE CONTRACTOR HAS MADE OTHER ARRANGEMENTS ON HIS OWN FOR TEMPORARY FACILITIES, ALL PIPE, FITTINGS, BORE PITS, MARKERS, ETC. SHALL BE INSTALLED ON STATE OR COUNTY ROW, PERMANENT OR CONSTRUCTION EASEMENTS.
19. SURVEY PROVIDED BY MORELL ENGINEERING, INC. ALL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
20. "STANDARD WATER & SEWER SPECIFICATIONS AND DESIGN CRITERIA" LATEST EDITION AS ADOPTED BY LIMESTONE COUNTY WATER AND SEWER AUTHORITY, IS HEREBY MADE A PART OF THESE PLANS.

SEWER NOTES:

1. SEWER LINES SHALL HAVE 5' MINIMUM SEPARATION FROM WATER LINES.
2. ALL MANHOLES SHALL HAVE XYPEX C 1000 RED ADMIXTURE AND 12" BUTYL JOINT WRAP AROUND ALL JOINTS AND VERTICALLY FROM PIPE INLETS UP TO THE FIRST JOINT WITH CONSEAL GS-75 PRIMER.
3. DETAILED SUBMITTALS OF EACH MANHOLE ARE REQUIRED.
4. ALL DUCTILE IRON PIPE SHALL BE PROTECTO 401 LINED PRESSURE CLASS 350.

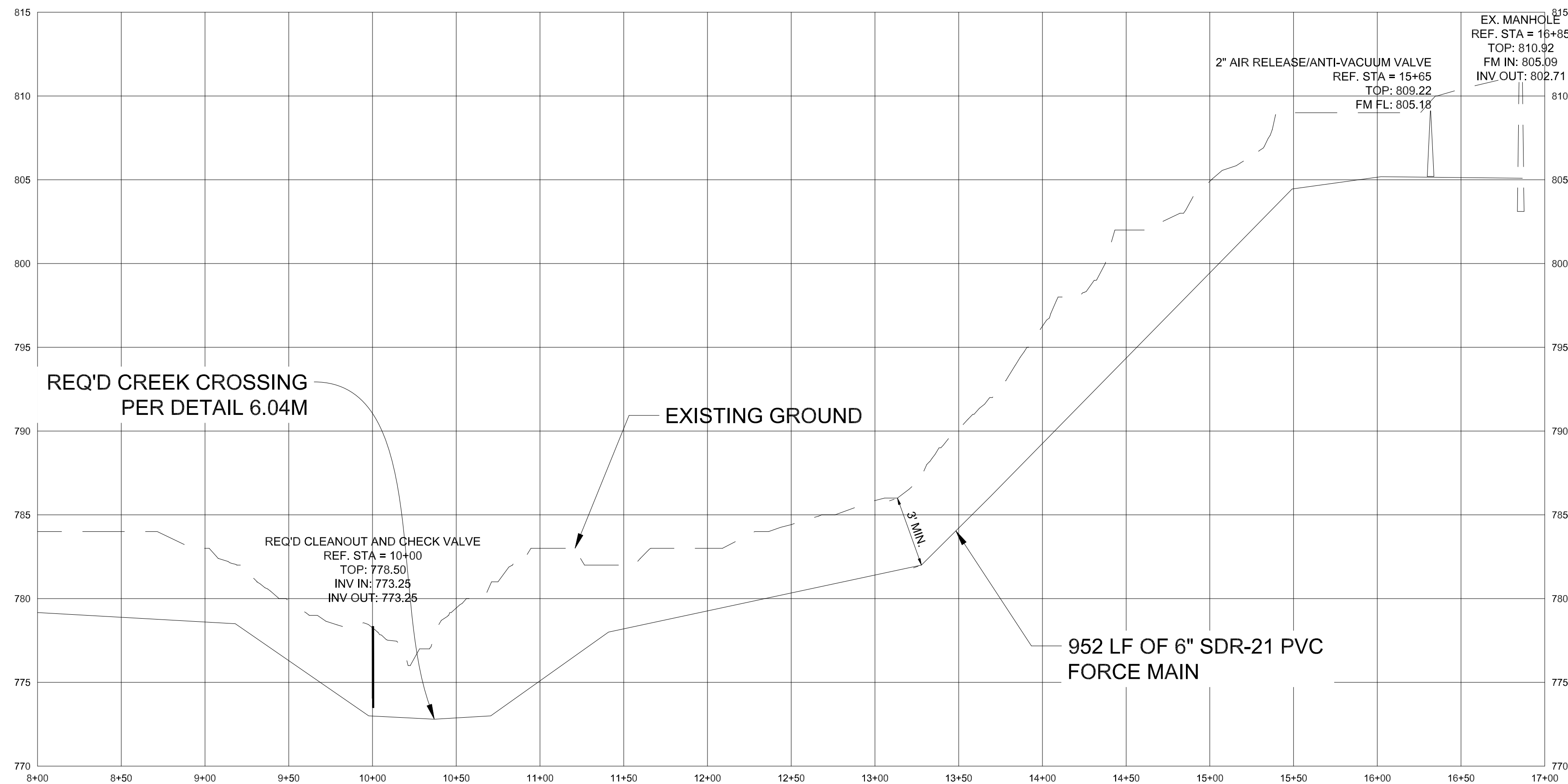
HDPE NOTES:

1. ALL HIGH DENSITY POLYETHYLENE (HDPE) PIPE SHALL BE DUCTILE IRON PIPE SIZE (DIPS) 4" DR 17 WITH GREEN STRIPE.
2. UTILITY IDENTIFICATION TRACE WIRES REQUIRED FOR HDPE PIPE INSTALLATIONS PER SPECIFICATION.
3. WARNING TAPE REQUIRED 12" ABOVE PIPE.
4. ALL FITTINGS SHALL BE DUCTILE IRON AND SHALL BE CONNECTED WITH AN HDPE MECHANICAL JOINT ADAPTER FUSED TO THE PIPE.



6" SDR-21 FORCE MAIN - PLAN VIEW (STA 8+00 to 16+85)

SCALE: 1"= 50'

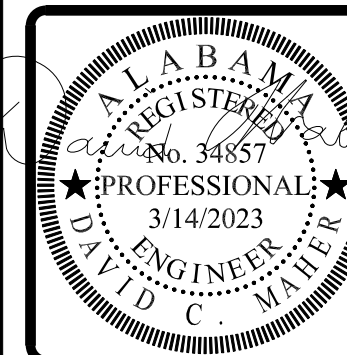


6" SDR 21 FORCE MAIN - PROFILE VIEW (STA 8+00 to 16+85)

SCALE: H: 1"= 50' / V: 1" = 5'

REVISIONS	

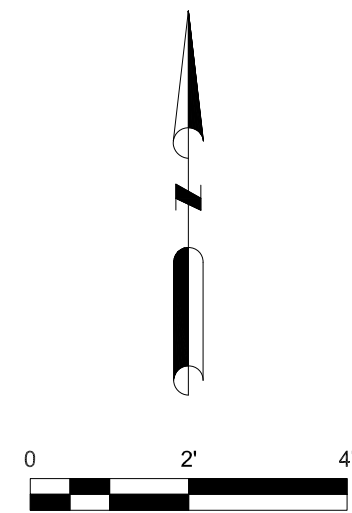
711 E. HOBBS STREET ATHENS, AL 35611
PHONE: (256) 867-4857
WWW.MORELLENGINEERING.COM



FORCE MAIN PLAN AND PROFILE
of
LCWSA - ELKMONT REGIONAL PUMP
STATION UPGRADES

MORELL PROJECT NUMBER: 23-007	SCALE: 1"=50' H 1"=5' V	DRAWN BY: DOM
DATE: 03/14/2023	CHECKED BY: WTM	

CLIENT: LCWSA ADDRESS 17210 US-72, Athens, AL 35611	SHEET NUMBER C7.0
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NEW 8" SDR-26 PVC
GRAVIYT SEWER

8" PVC SS

EXISTING 8" PVC SEWER MAIN TO BE
PLUGGED AT MANHOLE, ABANDONED

REMOVE EXISTING 6' SECURITY FENCING

REMOVE POWER METER AND SWITCH

REMOVE SCADA, RETURN TO LCWSA

REMOVE PUMP CONTROL PANEL

REMOVE PUMPS, PIPING, VALVES
ABANDON 4' Ø FRP WETWELL

MH

NEW 4" SDR-21 PVC
FORCE MAIN (TYP.)

(2) CONNECTION TO NEW MANHOLE
W/ LINK SEAL BOOT (TYP.)

CAP EXISTING 4" FORCEMAIN
& PLUG CONNECTION AT MH# A009A01-025
(BEHIND ELKMONT BAPTIST CHURCH)
TO BE ABANDONED

CONNECTION TO EXISTING 4" FORCEMAIN, 45° BEND (TYP.)
CAP AND ABANDON PAST CONNECTION

EXISTING 4" FORCEMAIN
AVIAGEN EGG DEPOT, MORRIS ROAD

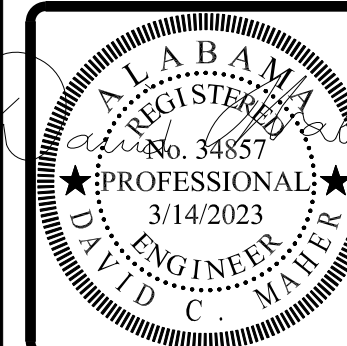
EXISTING 4" FORCEMAIN
ELKMONT INDUSTRIAL PARK NORTH

NOTES

1. Coordinate each shutdown for each abandonment with LCWSA at least one week prior to performing

ALTERNATE No. 1
EXISTING LIFT STATION - LAYOUT PLAN
SCALE: 1" = 2'

REVISIONS



DEMOLITION PLAN
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 23-007

DATE: 03/14/2023

CHECKED BY: WTM

CLIENT:
LCWSA
ADDRESS
17216 US-72, Athens, AL 35611

SHEET NUMBER

C8.0

SCALE: 1" = 2'

DRAWN BY: DCM

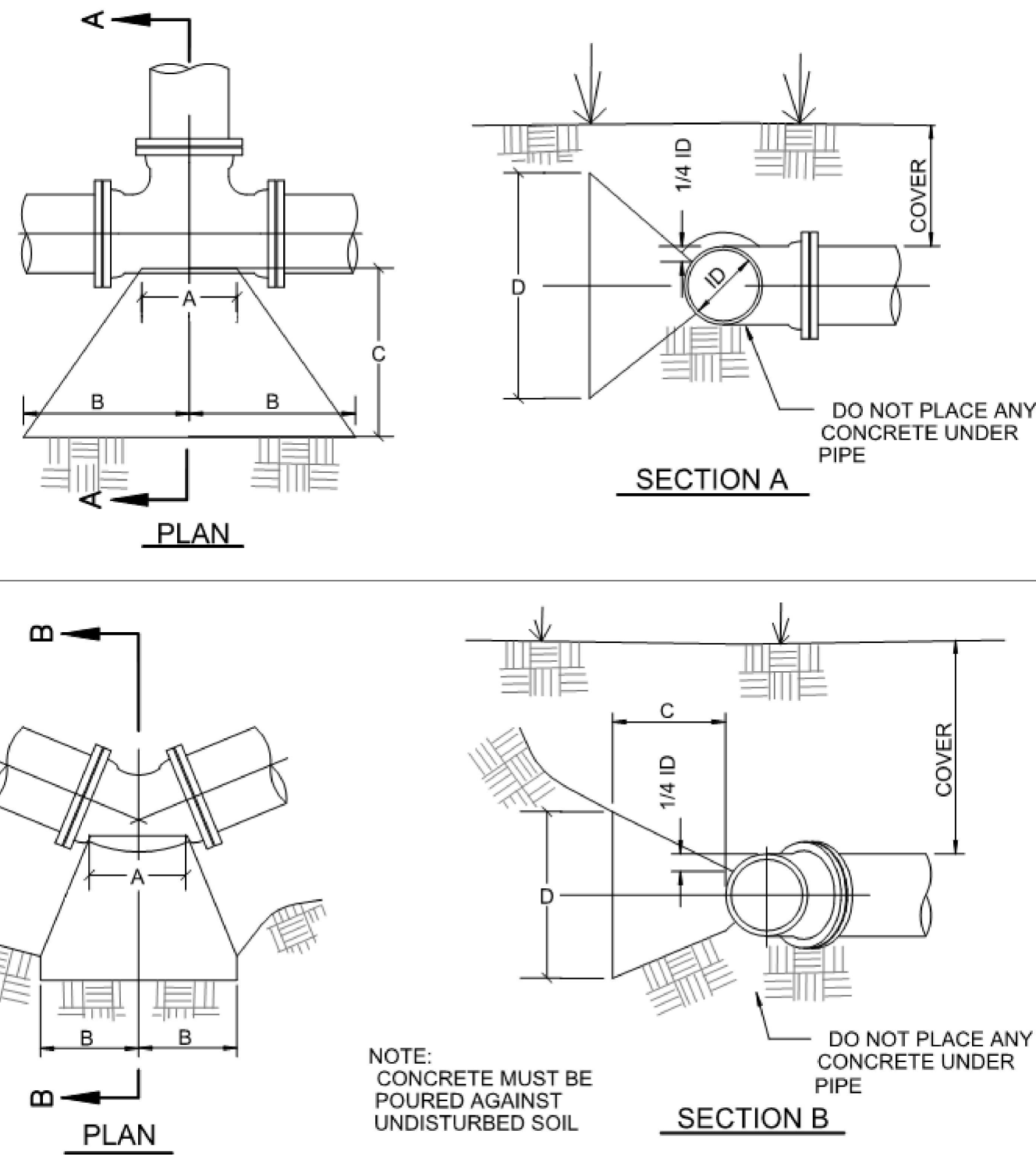
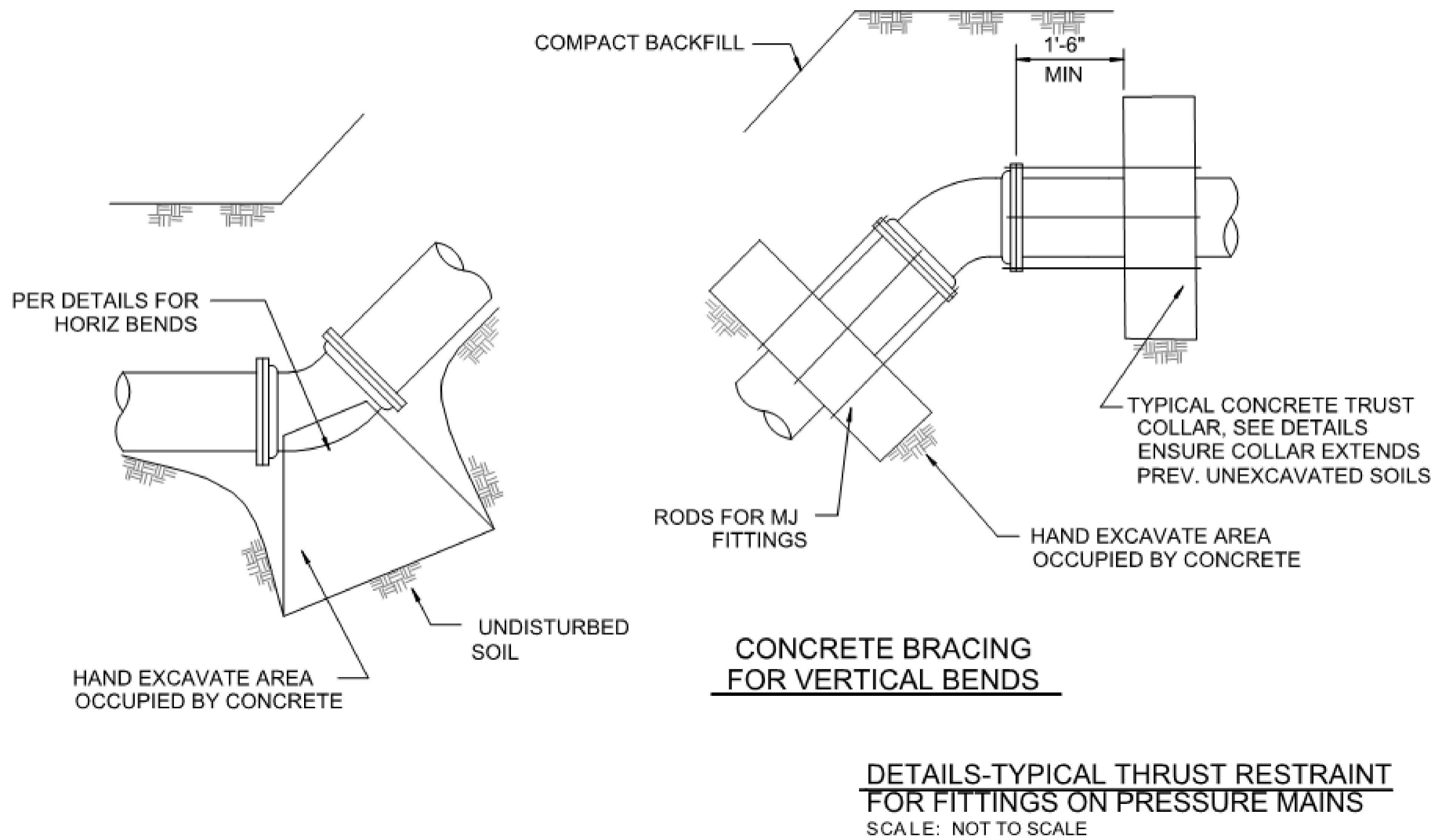
711 E. HOBBS STREET ATHENS, AL 35611

PHONE: (256) 867-4857

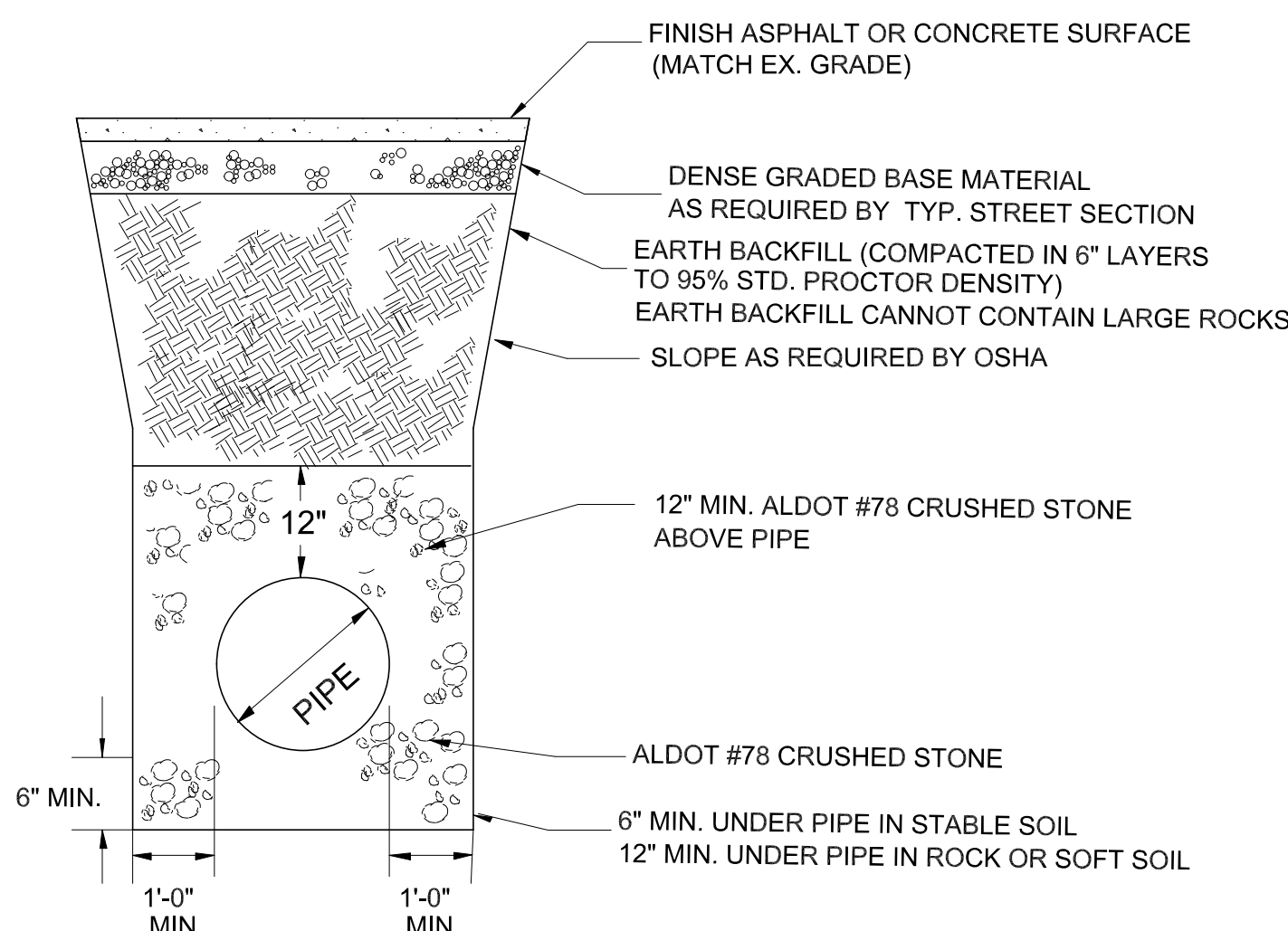
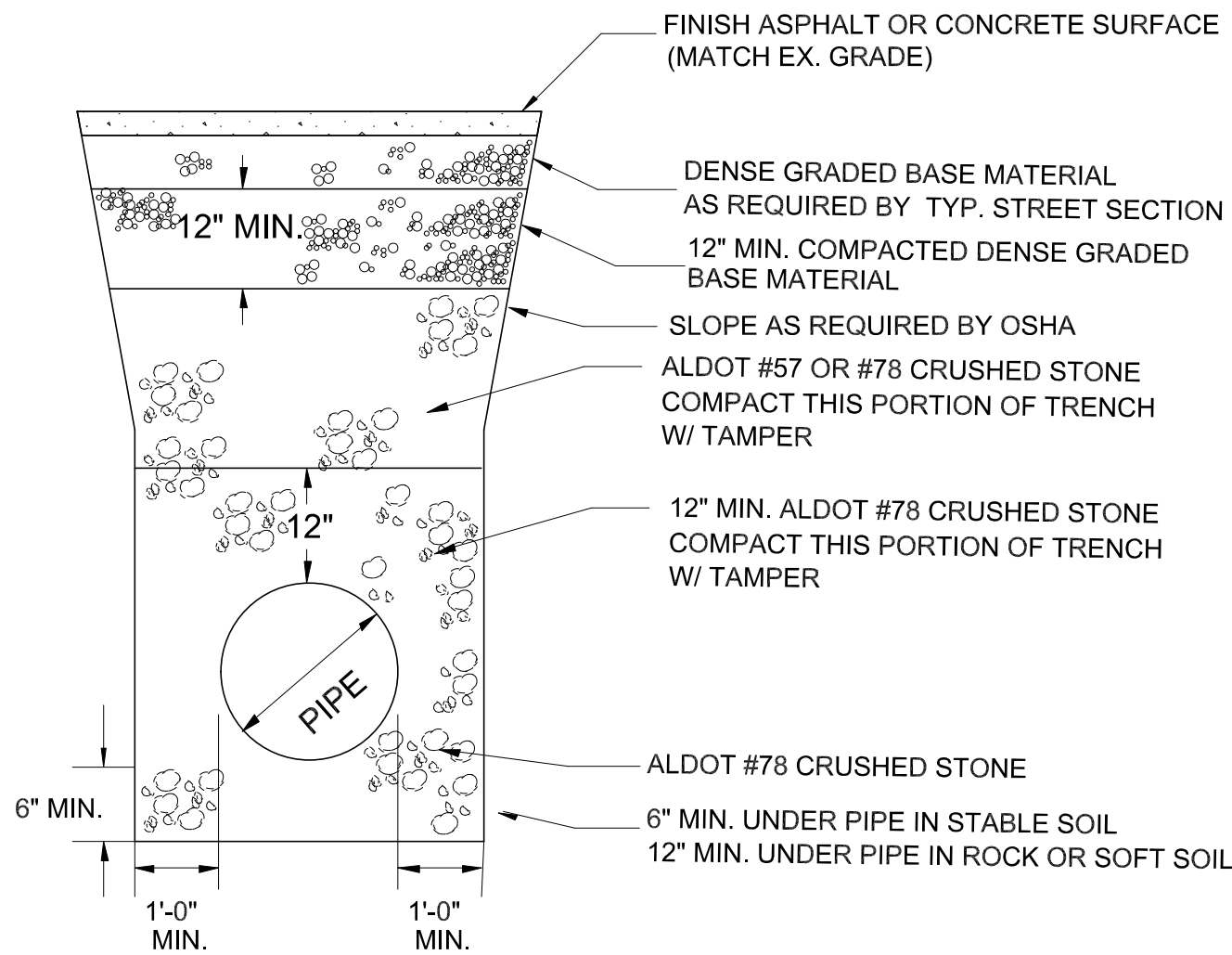
WWW.MORELLENGINEERING.COM

TYPICAL CONCRETE BRACING DIMENSIONS

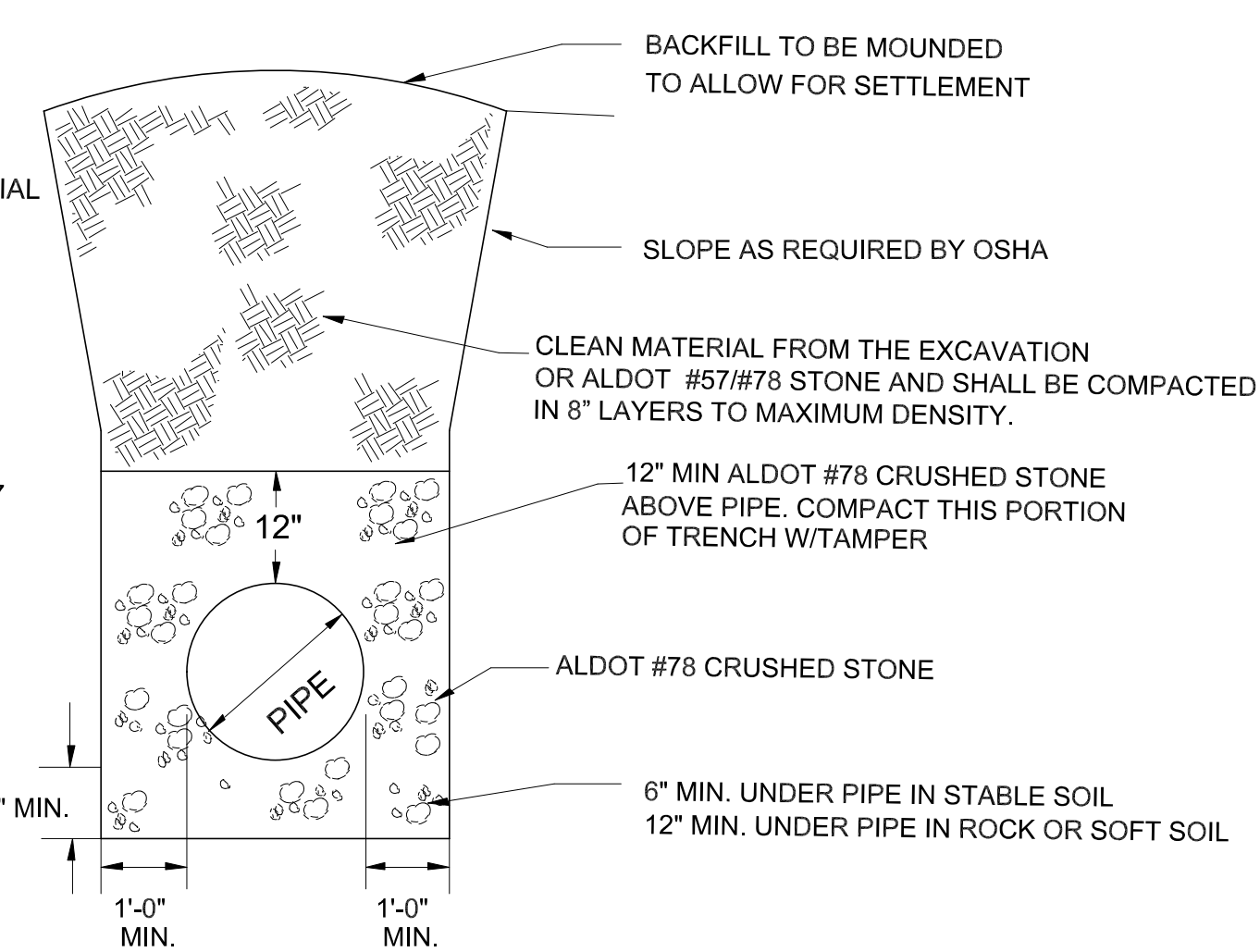
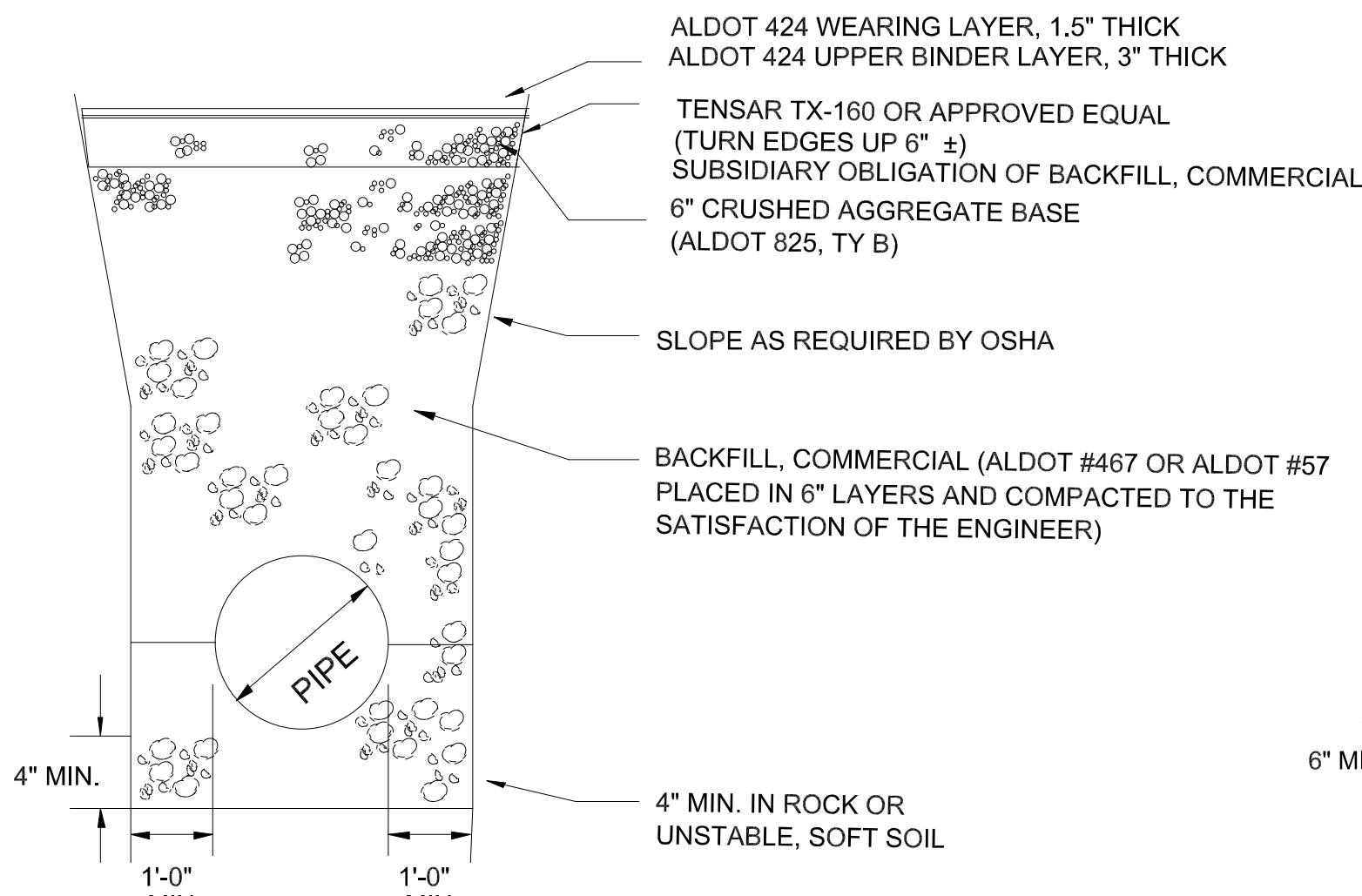
PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS	PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS
4"	5"	5"	6"	1'-0"	2'-6"	TEE RUN	4"	4"	2"	1'-0"	6"	2'-6"	11-1/4" BEND
6"	6"	8"	6"	1'-6"	2'-6"		6"	6"	2"	1'-0"	8"	2'-6"	
8"	7"	1'-1"	6"	2'-0"	2'-6"		8"	8"	4"	1'-0"	10"	2'-6"	
10"	9"	1'-6"	6"	2'-6"	3'-0"		10"	10"	5"	1'-0"	1'-0"	3'-0"	
12"	10"	1'-10"	6"	3'-0"	3'-0"		12"	1'-2"	6"	1'-0"	1'-2"	3'-0"	
14"	11 1/2"	1'-9"	7"	3'-6"	3'-0"		14"	1'-2"	8"	1'-0"	1'-4"	3'-0"	
16"	1'-0 1/2"	2'-0"	8"	4'-0"	3'-0"		16"	1'-2"	10"	1'-0"	1'-6"	3'-0"	
18"	1'-2"	2'-4"	9"	4'-6"	3'-0"	90° BEND	18"	1'-4"	1'-0"	1'-0"	1'-8"	3'-0"	22-1/2" BEND
20"	1'-3 1/2"	2'-6"	10"	5'-0"	3'-6"		20"	1'-4"	1'-1"	1'-0"	2'-6"	3'-6"	
PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS	PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS
4"	4"	6"	1'-10"	1'-0"	2'-6"	45° BEND	4"	4"	3 1/2"	1'-1"	1'-0"	2'-6"	22-1/2" BEND
6"	6"	1'-0"	1'-9"	1'-6"	2'-6"		6"	6"	6 1/2"	1'-2"	1'-6"	2'-6"	
8"	8"	1'-4"	1'-9"	2'-0"	2'-6"		8"	8"	10"	1'-2"	2'-0"	2'-6"	
10"	10"	2'-1"	1'-11"	2'-6"	3'-0"		10"	10"	1'-1 1/2"	1'-4"	2'-6"	3'-0"	
12"	1'-2"	2'-6"	1'-11"	3'-0"	3'-0"		12"	1'-2"	1'-4 1/2"	1'-8"	3'-0"	3'-0"	
14"	1'-2"	2'-6"	2'-0"	3'-6"	3'-0"		14"	1'-2"	1'-4 1/2"	1'-8"	3'-6"	3'-0"	
16"	1'-4"	2'-11"	2'-1"	4'-0"	3'-0"		16"	1'-2"	1'-7"	1'-10"	4'-0"	3'-0"	
18"	1'-6"	3'-4"	2'-2"	4'-6"	3'-0"	22-1/2" BEND	18"	1'-4"	1'-9 1/2"	2'-4"	4'-6"	3'-0"	22-1/2" BEND
20"	1'-8"	3'-6"	2'-3"	5'-0"	3'-6"		20"	1'-4"	1'-11"	2'-4"	5'-0"	3'-6"	
PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS	PIPE DIA.	A	B	C	D	MIN. COVER	FITTINGS
4"	4"	4"	1'-1"	8"	2'-6"	22-1/2" BEND	4"	4"	4"	1'-2"	1'-0"	2'-6"	22-1/2" BEND
6"	4"	4"	1'-2"	1'-0"	2'-6"		6"	4"	6"	1'-2"	1'-4"	2'-6"	
8"	6"	6"	1'-2"	1'-4"	2'-6"		8"	6"	8"	1'-4"	1'-8"	3'-0"	
10"	8"	8"	1'-4"	1'-8"	3'-0"		10"	8"	8"	1'-4"	1'-8"	3'-0"	
12"	1'-0"	11"	1'-8"	2'-0"	3'-0"		12"	1'-0"	11"	1'-8"	2'-0"	3'-0"	
14"	1'-0"	12"	1'-8"	2'-4"	3'-0"		14"	1'-0"	12"	1'-8"	2'-4"	3'-0"	
16"	1'-2"	1'-1"	1'-10"	3'-4"	3'-0"		16"	1'-2"	1'-1"	1'-10"	3'-4"	3'-0"	
18"	1'-2"	1'-0"	2'-4"	3'-8"	3'-0"	22-1/2" BEND	18"	1'-2"	1'-0"	2'-4"	3'-8"	3'-0"	22-1/2" BEND
20"	1'-4"	1'-2"	2'-4"	4'-2"	3'-6"		20"	1'-4"	1'-2"	2'-4"	4'-2"	3'-6"	



- GENERAL NOTES:
- GENERAL DIMENSIONS SHALL BE CONSIDERED AS MINIMUMS, CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL AS REQUIRED FOR ACTUAL FIELD CONDITIONS ENCOUNTERED.
 - CONTRACTOR TO ENSURE ALL THRUST RESTRAINT IS ADEQUATE.
 - ALL CONCRETE FOR THRUST RESTRAINT SHALL BEAR AGAINST FIRM UNDISTURBED SOILS.
 - CONTRACTOR SHALL WRAP ALL ACCESSORIES, BOLTS, NUTS, CONNECTIONS, ETC. IN PLASTIC SUCH THAT THEY CAN BE REMOVED WITHOUT THE NEED FOR CONCRETE REMOVAL.
 - UNLESS OTHERWISE STATED IN PLANS, ALL FITTINGS SHALL BE RJ OR MJ WITH RESTRAINING FOLLOWER GLANDS, RESTRAINING FOLLOWER GLANDS SHALL BE MEGA-LUG, ROMAC, OR EQUAL. RETAINER GLANDS NOT ALLOWED.



- NOTES
- SLOPE, BENCHING, SHORING, ETC. AS DETERMINED AND DESIGNED BY THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE OSHA REGULATIONS FOR "OPEN TRENCH EXCAVATIONS".
 - BEDDING REQ'D FOR ALL GRAVITY LINES, ALL PVC LINES AND ALL CONCRETE LINES. BEDDING REQUIRED IN ALL AREAS OF ROCK EXCAVATION OR UNSUITABLE SOILS. BELL HOLES REQ'D FOR PIPES > 4" DIA. FOR DUCTILE IRON PRESSURE MAINS, SELECT EARTH MAY BE USED FOR BEDDING IN AREAS OF ROCK EXCAVATION.
 - ALL MATERIALS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY AT 2%± OPTIMUM MOISTURE CONTENT. MATERIALS UNDER PAVING, CONCRETE, STRUCTURES, ETC. SHALL BE COMPACTED TO TO MIN 98%-100% STANDARD PROCTOR. MECHANICAL COMPACTION SHALL BE BY VIBRATORY SHEEPSFOOT OR OTHER EQUIP. SPECIFICALLY DESIGNED FOR THE COMPACTION OF EARTH. COMPACTION EQUIP. SHALL BE ON-SITE PRIOR TO BEGINNING OF WORK. MECHANICAL COMPACTION SHALL BE COMPLETED IN LOOSE LIFTS AS SHOWN ON THE DETAIL.
 - TEMPORARY COMPACTED PUG-MIX BACKFILL REQ'D UNTIL PAVEMENT PLACEMENT IS COMPLETE. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN THIS PUGMIX TO KEEP IT FLUSH WITH THE ADJACENT PAVING, ETC. UNTIL THE FINAL PAVING IS PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ASPHALT OR CONCRETE PATCHES WHEN NEEDED FOR PUBLIC SAFETY AND/OR CONVENIENCE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND UTILIZE APPROPRIATE MEANS AND METHODS OF CONSTRUCTION TO ENSURE THAT THE ENTIRE AREAS UNDER THE HAUNCHES OF THE PIPE ARE FILLED WITH THE REQUIRED MATERIALS AND COMPACTED APPROPRIATELY.
 - ADDITIONAL AND/OR SPECIAL REQUIREMENTS MAY BE REQ'D BY THE PLANS, SPECIFICATIONS AND/OR CONTRACT DOCUMENTS.
 - TO THE EXTENT POSSIBLE, AS DETERMINED BY THE CONTRACTOR, TRENCH WALL SHORING METHODS SHALL BE USED IN PAVED AREAS TO MINIMIZE PAVING REPAIR REQUIREMENTS.



STORM AND UTILITY PIPE BEDDING

NOT TO SCALE

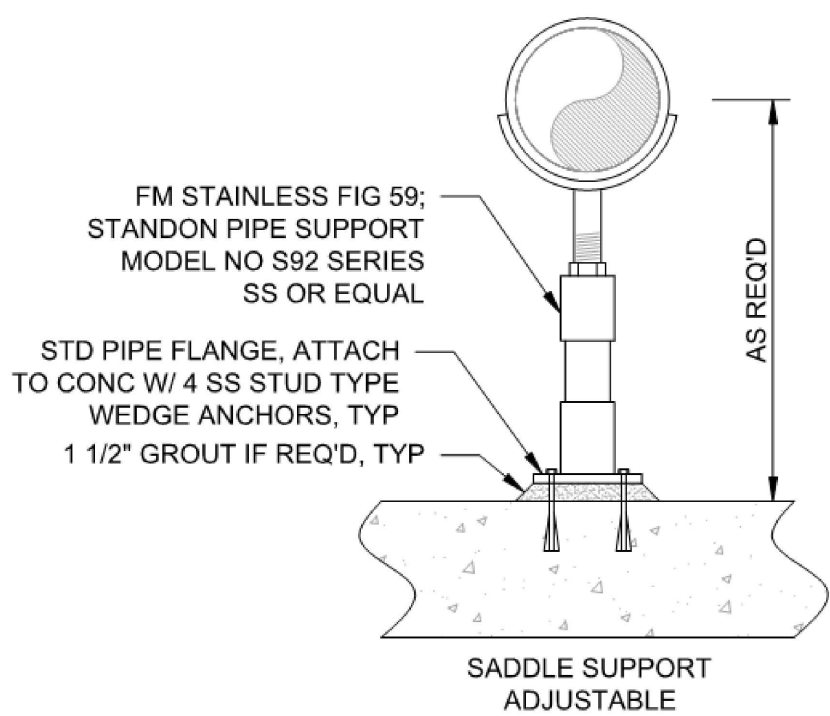
REVISIONS	711 E. HOBBS STREET ATHENS, AL 38611	PHONE: (256) 867-4857	WWW.MORELLENGINEERING.COM
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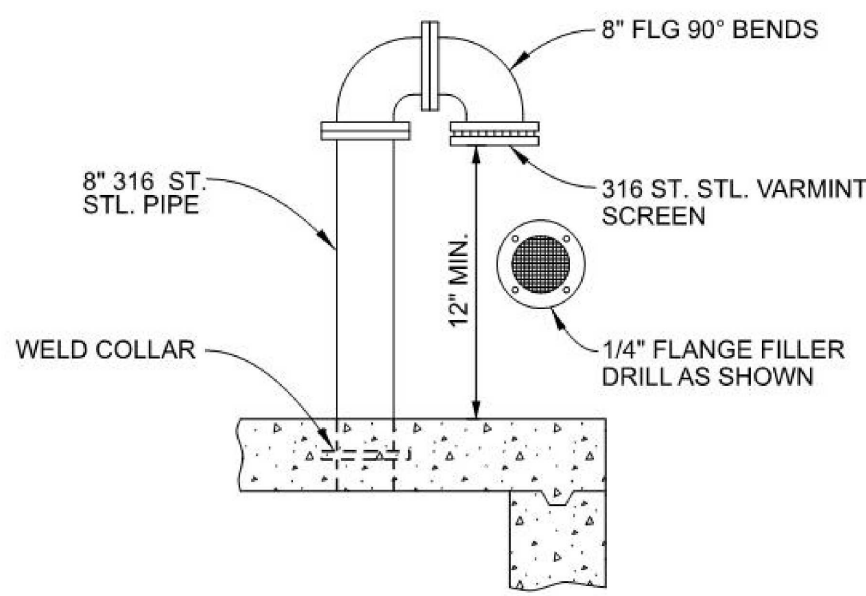
DETAILS of ELKMONT REGIONAL PUMP STATION UPGRADES

MORELL PROJECT NUMBER: 23-0037	SCALE: 1"=XXX'	DRAWN BY: DCM
DATE: 3/14/2023	CHECKED BY: WTM	

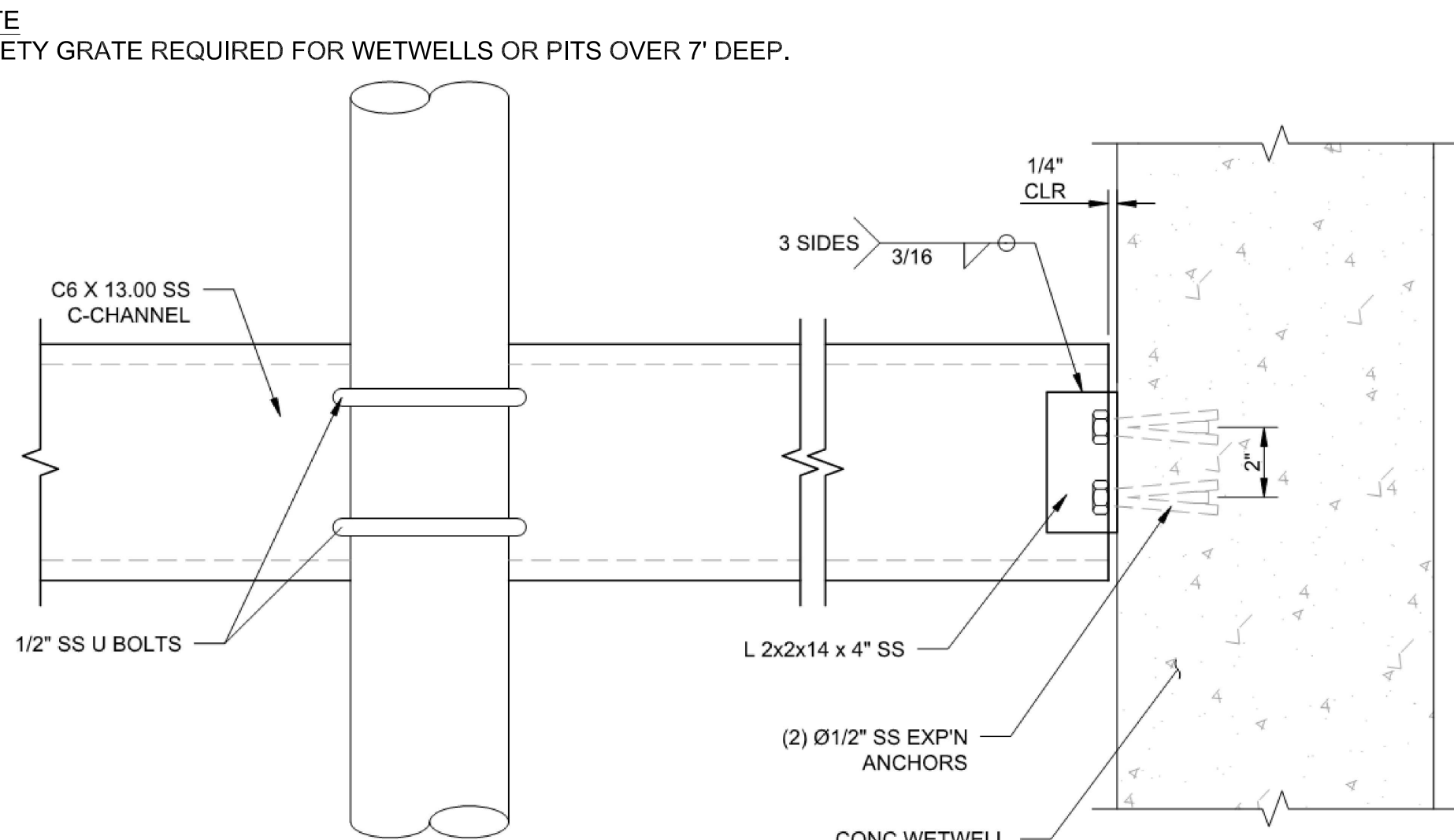
CLIENT: LOWSA	SHEET NUMBER: C9.0
ADDRESS: 17216 US-72, Athens, AL 38611	



FLOOR MOUNTED PIPE SUPPORT
SCALE: NTS

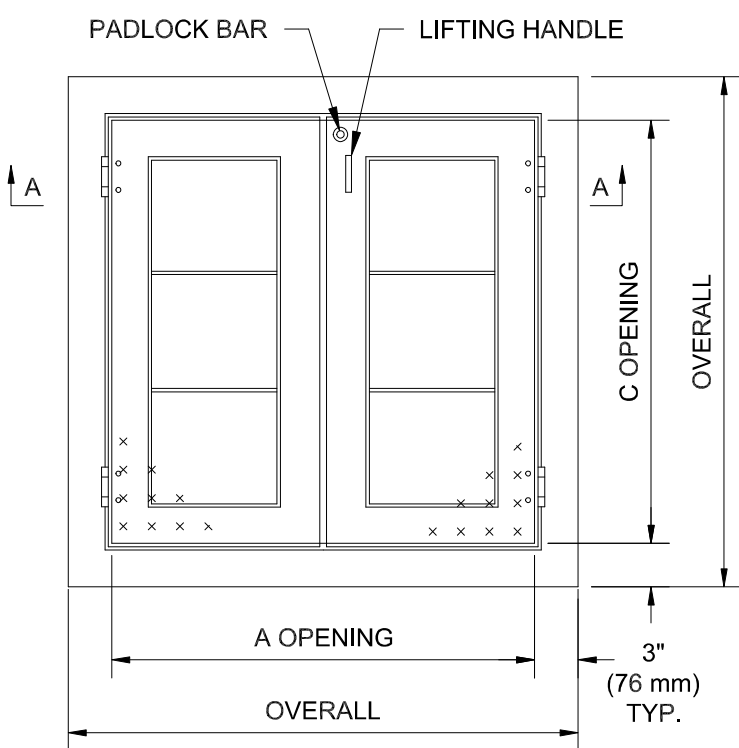


STAINLESS STEEL VENT
SCALE: NTS

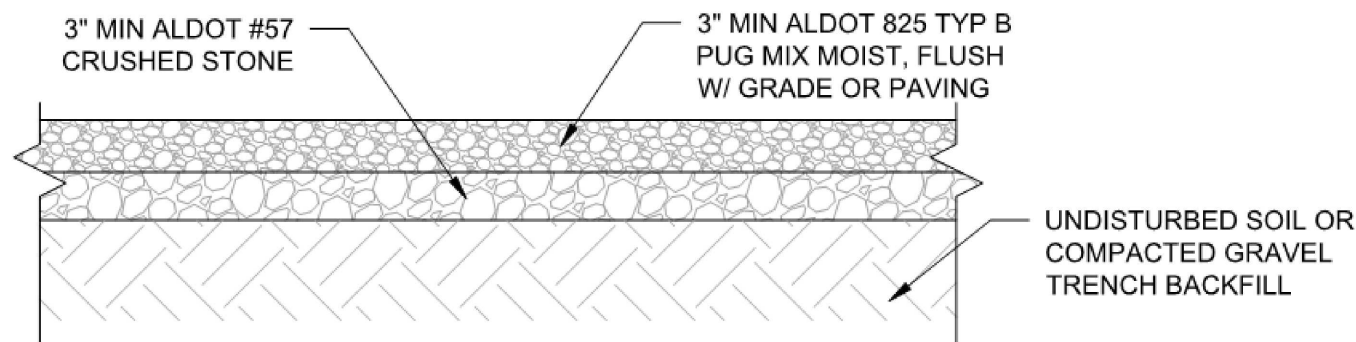
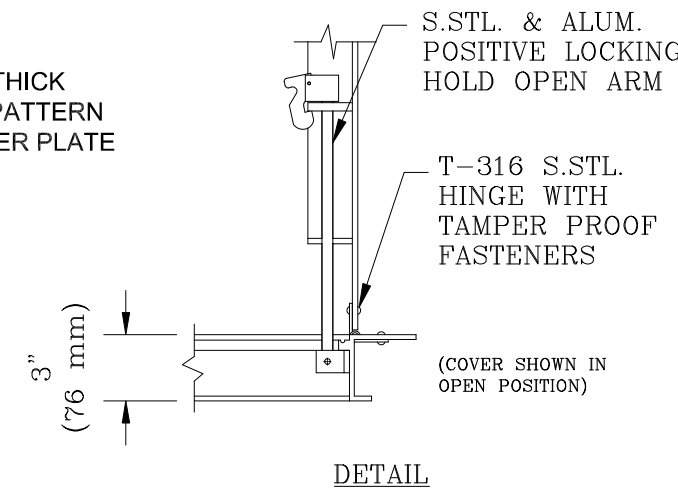
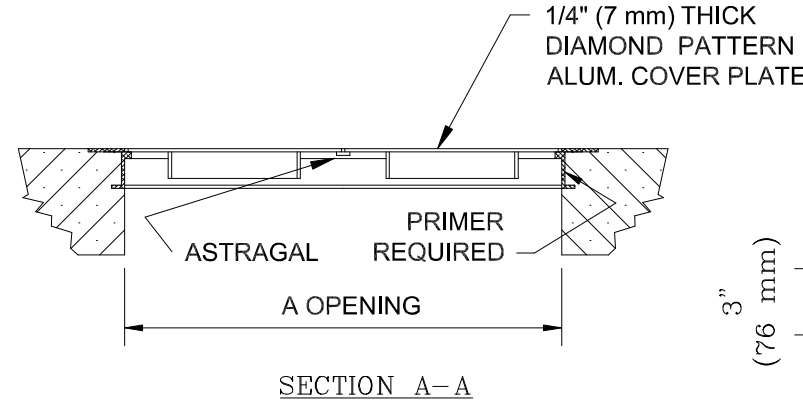


STAINLESS STEEL PIPE SUPPORT
SCALE: NTS

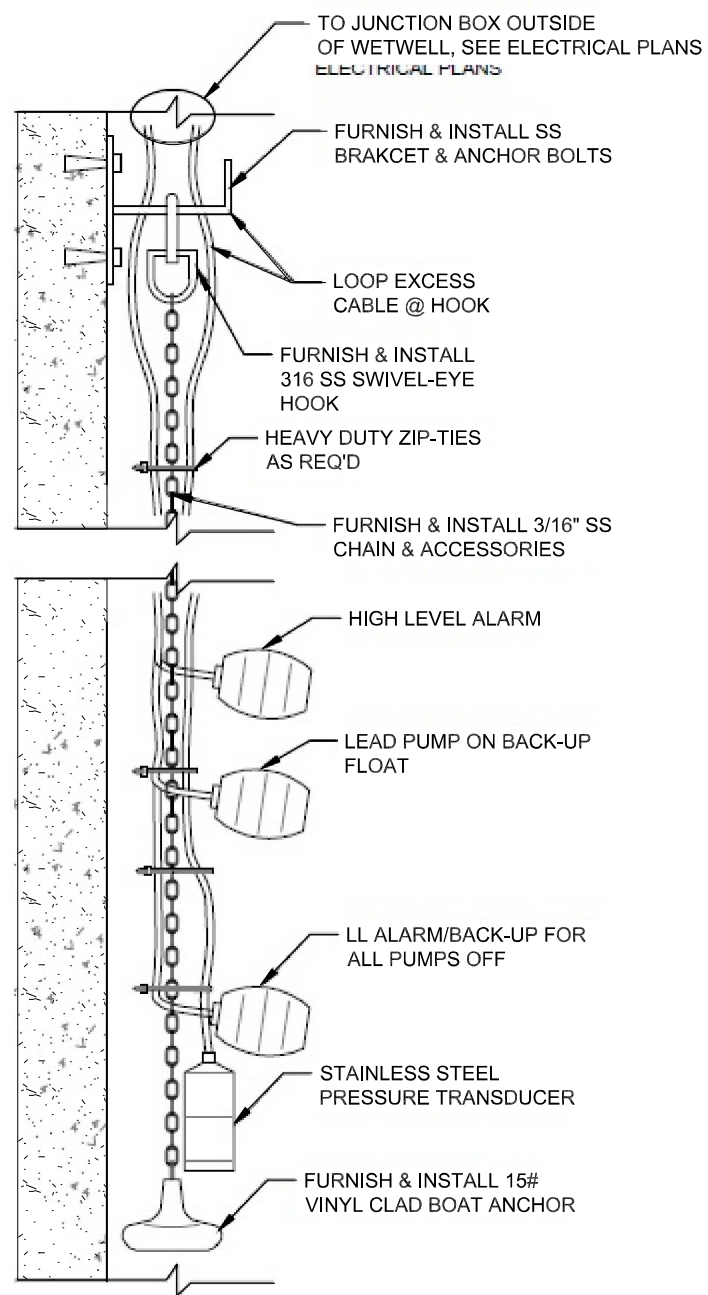
NOTE
1. SAFETY GRATE REQUIRED FOR WETWELLS OR PITS OVER 7' DEEP.



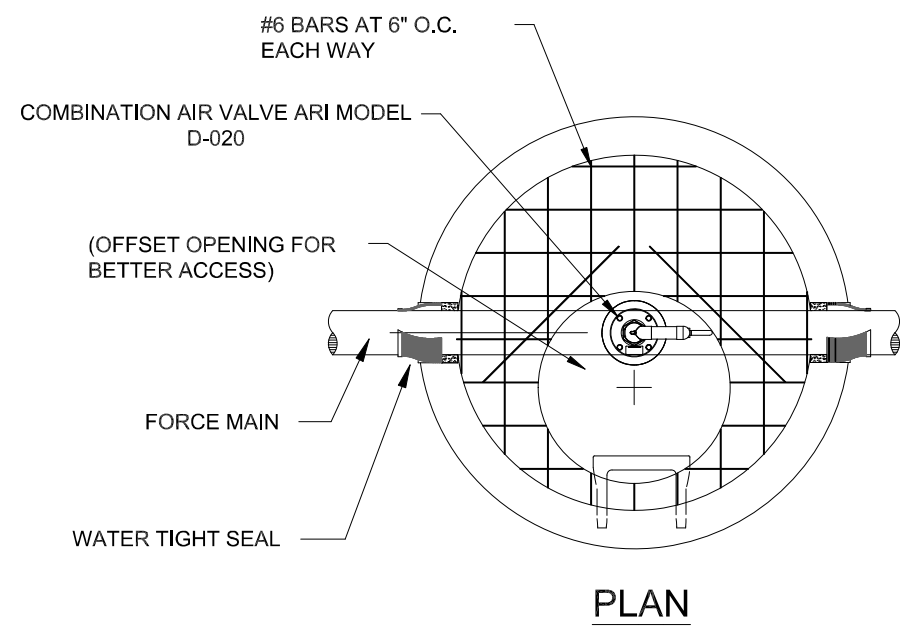
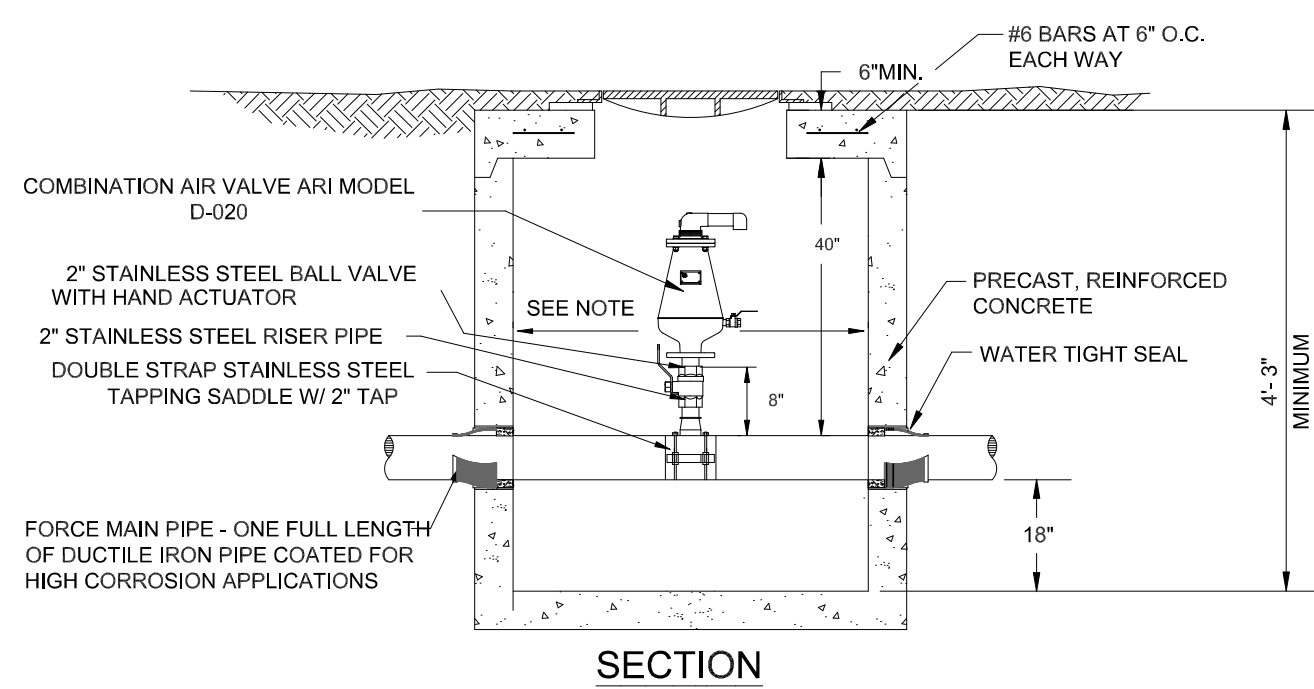
HATCH DETAILS
SCALE: NTS



GRAVEL DRIVEWAYS
SCALE: NTS



SUBMERSIBLE LEVEL TRANSMITTER W/ BACKUP
FLOAT DETAIL
SCALE: NTS



2" AIR RELEASE VALVE & MANHOLE
SCALE: NTS

- NOTES:
- <8" FORCEMAIN PIPE, USE 4.0' DIAMETER MANHOLE, WITH 5" WALL THICKNESS.
 - 10" & 12" FORCEMAIN PIPE, USE 6.0' DIAMETER MANHOLE WITH 7" WALL THICKNESS.

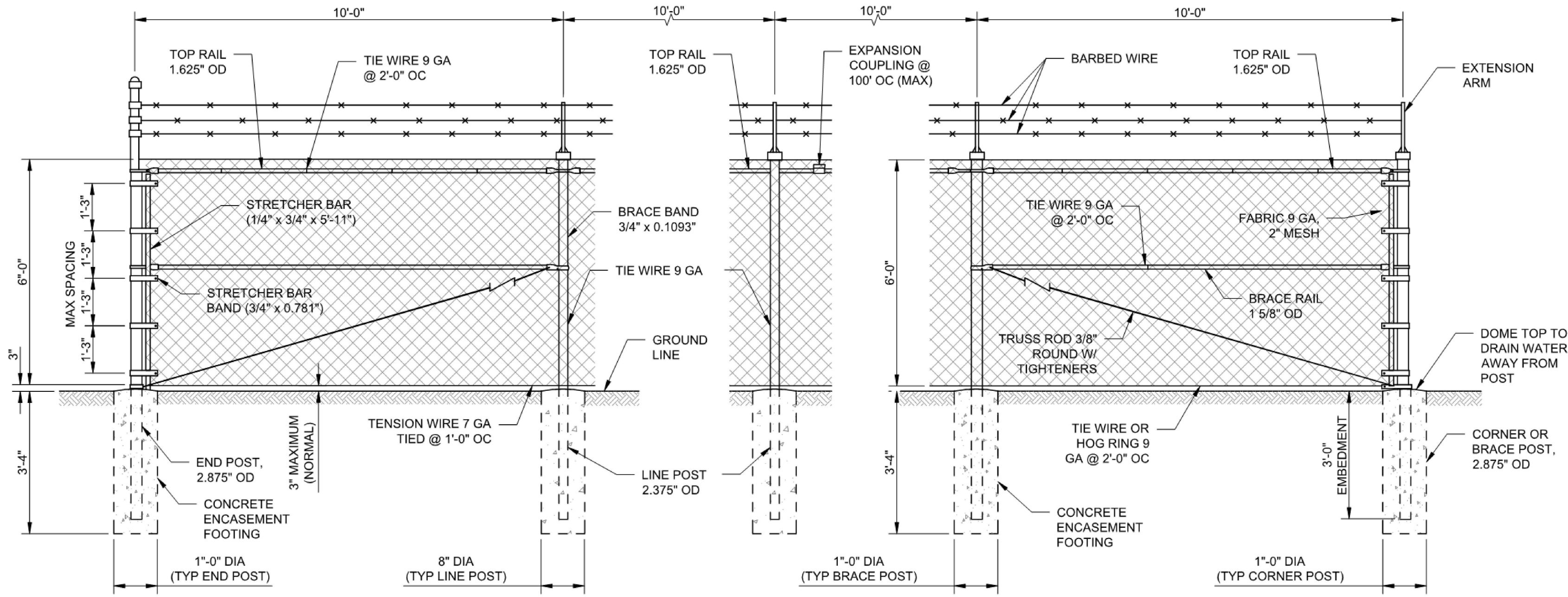
REVISIONS	



DETAILS
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 23-007	SCALE: 1"=XXX'	DRAWN BY: DCM
DATE: 3/14/2023	CHECKED BY: WTM	

CLIENT: LOWSA ADDRESS 1721 US-72, Athens, AL 38611	SHEET NUMBER C10.0
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END PANEL

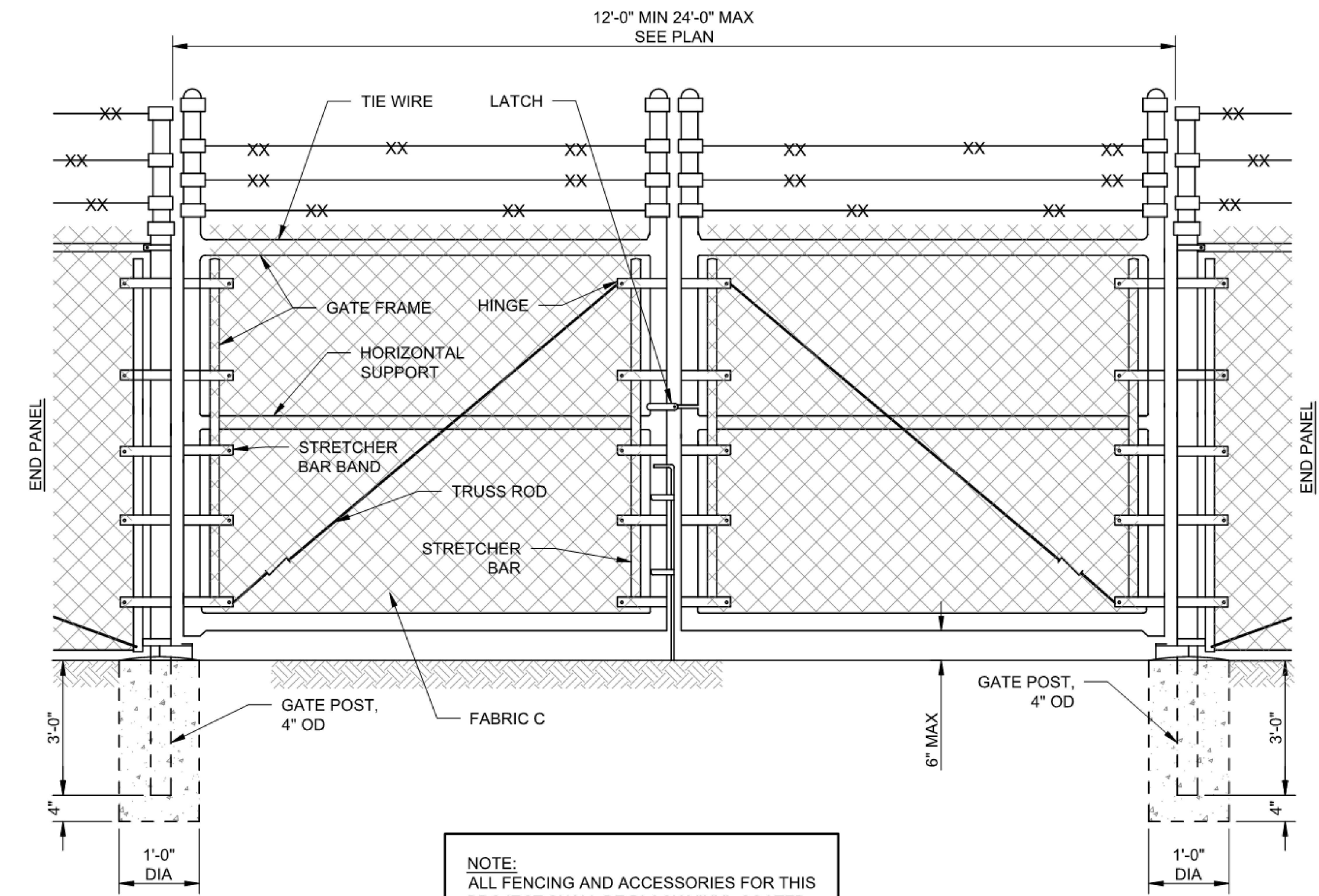
NOTES:

- BRACE PANEL SHALL BE PLACED A MAXIMUM OF 500 FEET CENTER TO CENTER FROM END, CORNER OR BRACE POSTS. ANY BREAKS IN HORIZONTAL ALIGNMENT OF MORE THAN 30 DEGREES SHALL BE CONSIDERED A CORNER.
- ALL FENCING AND ACCESSORIES FOR THIS PROJECT SHALL BE BLACK VINYL COATED.

BRACE OR CORNER PANEL

TYPICAL FENCE DETAIL

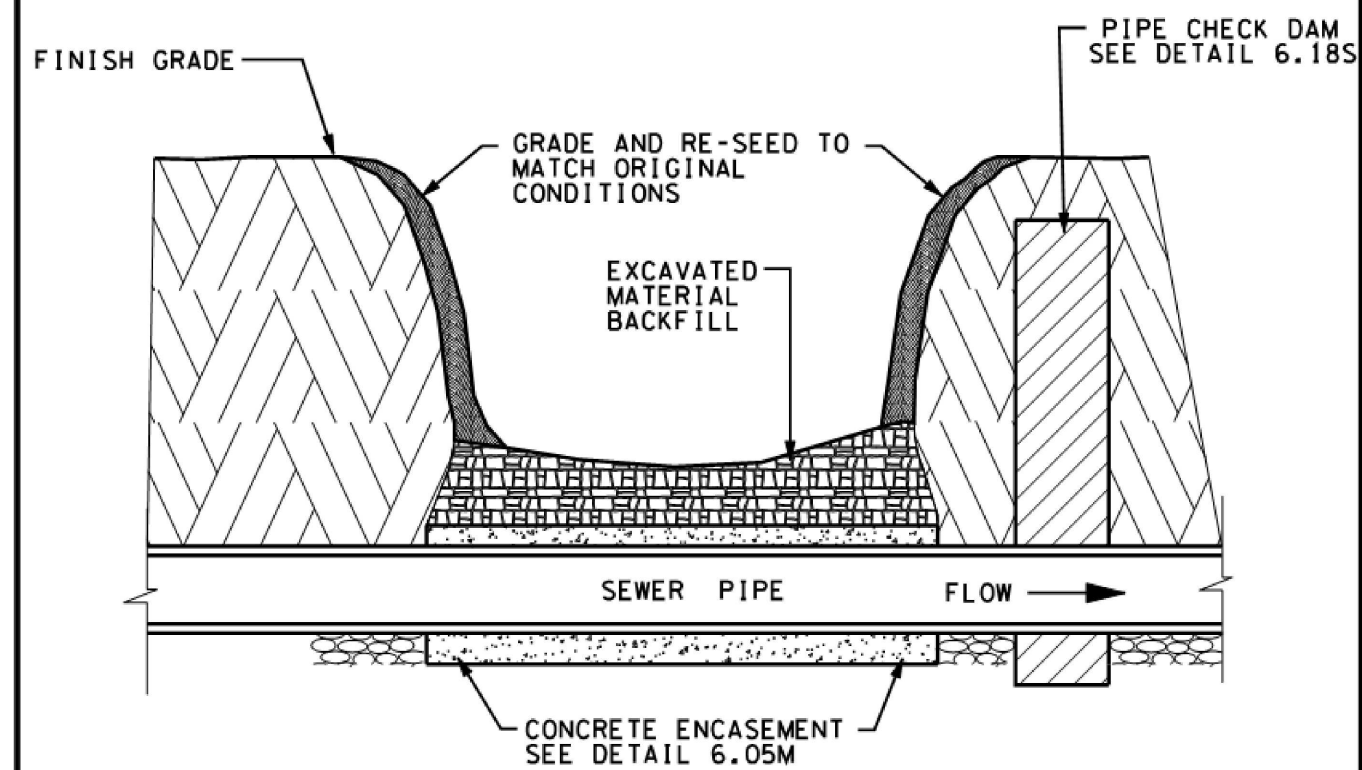
SCALE: NTS



NOTE:
ALL FENCING AND ACCESSORIES FOR THIS PROJECT SHALL BE BLACK VINYL COATED.

DOUBLE SWING GATE

SCALE: NTS



NOTE: FOR A NO-BLAST CREEK CROSSING, CROSSING IS TO BE PERFORMED AS FOLLOWS.

- LINE DRILL ON 8" CENTER-TO-CENTER ACROSS THE CREEK ALONG EACH EDGE OF PROPOSED DITCH (36" DITCH WIDTH).
- PERFORM ADDITIONAL LINE DRILLING BETWEEN PROPOSED DITCH EDGES AS NEEDED.
- BREAK ROCK BETWEEN LINE DRILL HOLES WITH HOE-RAM AND REMOVE FRACTURED ROCK AS NEEDED TO ALLOW FOR PIPE INSTALLATION.
- INSTALL PIPE AT GRADE AND ENCASE IN CONCRETE PER DETAIL 6.04M. TOP OF CONCRETE TO EXTEND 8" ABOVE TOP OF PIPE. (CONCRETE TO BE CLASS "B" AS SPECIFIED IN CONTRACT DOCUMENTS. ENCASEMENT WIDTH TO BE POURED THE WIDTH OF THE TRENCH WITH A MINIMUM OF 4" ON EACH SIDE.)
- BACKFILL OVER CONCRETE WITH ORIGINAL EXCAVATED MATERIAL ON EACH SIDE.
- GRADE CREEK BANK AND CREEK BOTTOM TO MATCH ORIGINAL GRADE.
- RE-SEED BANKS TO MATCH ORIGINAL CONDITIONS.

DATE: 08/2010

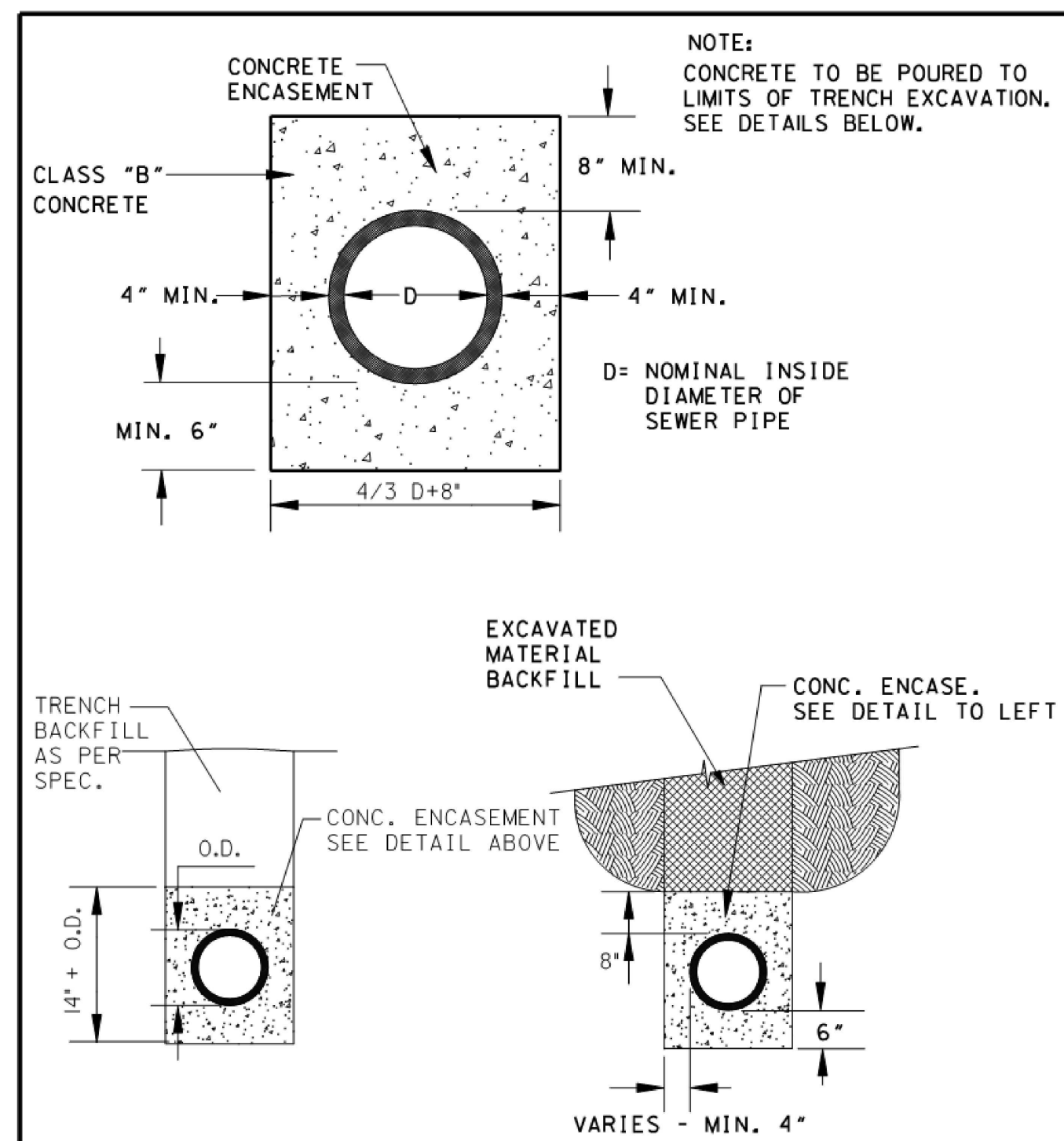
NOT TO SCALE

CREEK CROSSING

STANDARD DETAILS

LIMESTONE COUNTY WATER AND SEWER AUTHORITY
LIMESTONE COUNTY, ALABAMA

6.04 M



STANDARD CONCRETE ENCASEMENT

CREEK BOTTOM CONCRETE ENCASEMENT

DATE: 08/2010

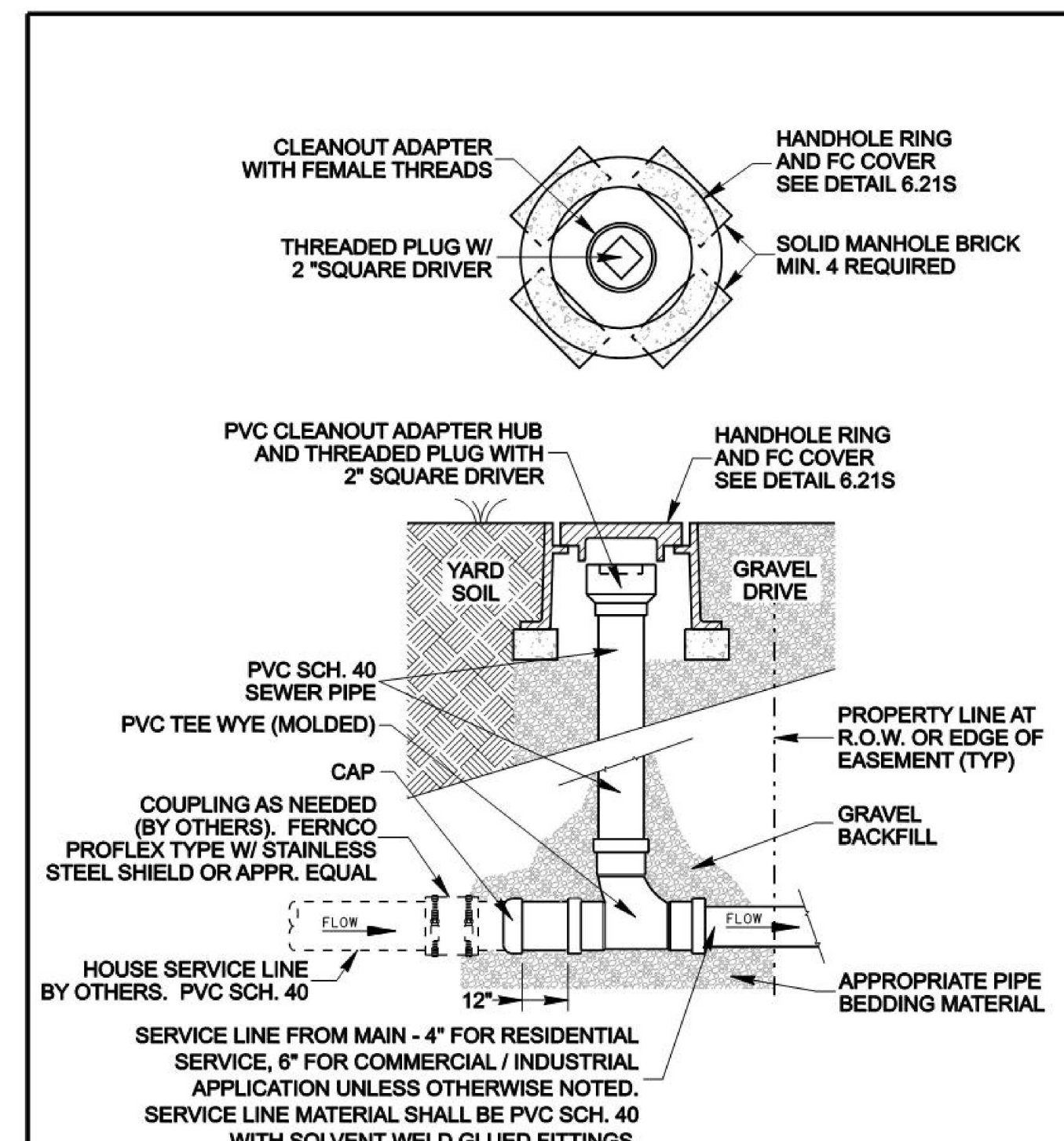
NOT TO SCALE

CONCRETE PROTECTION FOR UTILITY LINES

STANDARD DETAILS

LIMESTONE COUNTY WATER AND SEWER AUTHORITY
LIMESTONE COUNTY, ALABAMA

6.05 M



REVISED: 11/2010

DATE: 08/2010

NOT TO SCALE

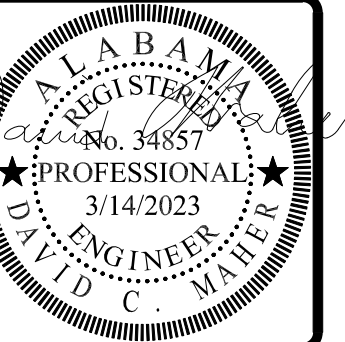
SANITARY SEWER SERVICE
CLEANOUT ASSEMBLY

STANDARD DETAILS

LIMESTONE COUNTY WATER AND SEWER AUTHORITY
LIMESTONE COUNTY, ALABAMA

6.16 S

REVISIONS



DETAILS
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 23-007

DATE: 3/14/2023

CLIENT:
LOWSA
ADDRESS
1721 US-72, Athens, AL 38611

SHEET NUMBER

SCALE: 1"=XXX'

CHECKED BY: WTM

DRAWN BY: DOM

C11.0

711 E. HOBBS STREET ATHENS, AL 38611
PHONE: (256) 867-4857
WWW.MORELLENGINEERING.COM

GENERAL ELECTRICAL LEGEND

FIXTURE OUTLET - POLE LIGHT FIXTURE - QUANTITY AND ORIENTATION(S) OF LUMINAIRES AS INDICATED ON PLANS.

FIXTURE OUTLET DESIGNATIONS:

A FIXTURE TYPE "A" - MAY BE USED WITH OTHER TYPES.
b SWITCH LEG TO WHICH FIXTURE IS CONNECTED - MAY BE USED WITH OTHER LOWER-CASE LETTERS.
2 CIRCUIT NUMBER - MAY BE USED WITH OTHER NUMBERS.

SWITCH OUTLET - S.P.S.T. - 20A - 120-277VAC.

SWITCH OUTLET - CONTROLS OUTLET "a", ETC.

SWITCH OUTLET - S.P.S.T. - 20A - 120VAC - WEATHERPROOF S.P.S.T. 20A 120-277VAC TOGGLE-TYPE LIGHT SWITCH WITH "AUTO-OFF" LEGEND PLATE - LABEL FUNCTION WITH ENGRAVED NAMEPLATE (SUCH AS "POLE LIGHT").

SWITCH OUTLET - WEATHERPROOF WITH PILOT LIGHT (CLEAR LIGHT ON WITH LOAD ON) - S.P.S.T. - 20A - 120-277VAC - HUBBELL #HBL1221PLC TOGGLE SWITCH WITH #HBL1795 CLEAR BUBBLE WEATHERPROOF PLATE.

PHOTOELECTRIC CONTROL - S.P.S.T. - 120VAC OR 277VAC - 2000W - TORK 2101 FOR 120V CIRCUITS & TORK 2104 FOR 277V CIRCUITS - AT TOP OF EQUIPMENT STAND FACING NORTH AWAY FROM LIGHT(S).

DOUBLE DUPLEX

WALL OUTLET - RECEPTACLE - 20A - 125V - 2P - 3W - GROUNDING - "GF" TYPE - WEATHER RESISTANT - NEMA 5-20R - SINGLE PLATE.

OUTLET INSTALLATION DESIGNATIONS (APPLY TO ALL OUTLETS, DEVICES & EQUIPMENT):

ES EQUIPMENT MOUNTED TO ALUMINUM SUPPORT FRAME - SEE DETAIL "E-ES".
VL VERIFY EXACT OUTLET LOCATION WITH OWNER PRIOR TO ROUGH-IN.
W WEATHER PROOF - OUTLET SHALL BE INSTALLED WITH WEATHERPROOF, IN-USE, CAST COVER.

BRANCH/FEEDER CIRCUIT - CONCEALED IN WALLS OR CEILING.

BRANCH/FEEDER CIRCUIT - CONCEALED IN FLOOR SLAB OR DIRT FILL.

BRANCH/FEEDER CIRCUIT - OVERHEAD BETWEEN POLES.

BRANCH/FEEDER CIRCUIT MODIFIERS:

2#12 & 1#12G UNLESS NOTED OTHERWISE.
3#12 & 1#12G, ETC. UNLESS NOTED OTHERWISE (TICK MARKS INDICATE CONDUCTOR QUANTITY NOT INCLUDING GROUND WIRE).
2#10 & 1#10G UNLESS NOTED OTHERWISE (NUMBER INDICATES WIRE AWG).

SIZE CONDUIT PER N.E.C. UNLESS INDICATED OTHERWISE.

UNDERGROUND PRIMARY POWER SERVICE - PROVIDE CONDUITS (QUANTITIES, SIZES, TYPES & INSTALLATION) AS DIRECTED BY UTILITY COMPANY) TO POINT AS DIRECTED BY UTILITY CO. - WHERE SO REQUIRED BY UTILITY CO., PROVIDE PULLBOXES (QUANTITIES, LOCATION, TYPES & INSTALLATION) AS PER UTILITY CO. REQUIREMENTS - COORDINATE LOCATION(S) & EXACT REQUIREMENTS WITH UTILITY CO. PRIOR TO BID AND INCLUDE ALL COSTS IN BID.

UNDERGROUND SECONDARY POWER SERVICE - SEE ASSOCIATED SINGLE LINE DIAGRAM - VERIFY EXACT SERVICE TRANSFORMER LOCATION(S) WITH UTILITY CO. PRIOR TO BID AND INCLUDE ALL COSTS IN BID.

POWER AND INSTRUMENTATION DUCT-BANK - CONCRETE-ENCASED - SEE DETAIL "E-DR".

FLEXIBLE CONNECTION TO EQUIPMENT.

BRANCH CIRCUIT - RISER DOWN OR GENERAL CONDUIT STUB-OUT.

POWER DISTRIBUTION EQUIPMENT.

LIGHTING PANEL - SURFACE MOUNTED.

TRANSFORMER - POWER.

DISCONNECT SWITCH - NONFUSED.

DISCONNECT SWITCH - FUSED.

AUTOMATIC TRANSFER SWITCH.

GROUND CONNECTION.

MOTOR OUTLET - SIZE AS SHOWN.

GENERATOR BATTERY CHARGER.

GENERATOR BLOCK HEATER.

GENERAL ELECTRICAL LEGEND

ES x3 FLOAT SWITCH(ES) - "x3" INDICATES QUANTITY OF FLOAT SWITCHES.

PT SUBMERSIBLE PRESSURE TRANSDUCER.

FE FLOW ELEMENT.

FIT FLOW INDICATING TRANSMITTER.

TYPICAL CONTROL & INSTRUMENTATION WIRING MARK (WHERE "*" REPRESENTS A UNIQUE IDENTIFIER CONSISTING OF LETTERS AND NUMBERS) - SEE DETAIL "E-SUBW".

WWJB WETWELL JUNCTION BOX(ES) - SEE DETAIL "E-WWJB".

DETAIL DESIGNATOR - "A" INDICATED DETAIL MARK - "E-1" INDICATED SHEET NUMBER WHERE DETAIL IS LOCATED (TYPICAL).

GENERAL ABBREVIATIONS:

(EX) EXISTING TO REMAIN.
(EX-R) EXISTING TO BE REMOVED - REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, DEVICES, CONDUIT AND WIRING CONNECTIONS TO OTHER ELECTRICAL ITEMS UNLESS SHOWN OTHERWISE.
(EX-RL) EXISTING TO BE RELOCATED - REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, DEVICES, CONDUIT AND WIRING AT EXISTING LOCATION. RELOCATE ITEM TO NEW LOCATION SHOWN ON ELECTRICAL PLANS. EXTEND AND RECONNECT EXISTING CONDUIT, WIRING, ETC. TO NEW LOCATION AS REQUIRED UNLESS SHOWN OTHERWISE.
(EX-RP) EXISTING TO BE REPLACED - EXTEND AND RECONNECT EXISTING CONDUIT AND WIRING TO REPLACED ITEM.

ELECTRICAL ABBREVIATIONS:

A AMPERES.
AIC AMPERES INTERRUPTING CAPACITY.
AFF ABOVE FINISHED FLOOR.
AL ALUMINUM.
ATS AUTOMATIC TRANSFER SWITCH.
AWG AMERICAN WIRE GAUGE.
C CONDUIT.
CU COPPER.
EC EMPTY CONDUIT. OR ELECTRICAL CONTRACTOR FUSE PER NAMEPLATE.
FPN FUSE PER NAMEPLATE.
G GROUND CONDUCTOR.
KVA KILOVOLT-AMPERES.
KW KILOWATT.
LV LOW VOLTAGE.
MCM THOUSAND CIRCULAR MILS.
MV MEDIUM VOLTAGE.
N NEUTRAL.
NEC NATIONAL ELECTRICAL CODE.
NEMA NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION.
NIC NOT IN CONTRACT.

NSV NEW, SPARE OR VACATED.
OC ON CENTER.
P POLES.
PF POWER FACTOR.
PVC POLYVINYL CHLORIDE.
SLD SINGLE LINE DIAGRAM.
SS STAINLESS STEEL.
UL UNDERWRITERS LABORATORY.
UNO UNLESS NOTED OTHERWISE.
V VOLTS.
W WIRES.

CFCI CONTRACTOR FURNISHED, CONTRACTOR INSTALLED.
CFOI CONTRACTOR FURNISHED, OWNER INSTALLED.
OFCI OWNER FURNISHED, OWNER INSTALLED.
OFCI OWNER FURNISHED, CONTRACTOR INSTALLED.

TYPICAL CIRCUITRY DESIGNATIONS:

2 SETS OF 4#3/0 & 1#3G - 2 1/2" C CONDUIT SIZE.
GROUND CONDUCTOR WIRE GAUGE.
QUANTITY OF GROUND CONDUCTORS (PER SET)
PHASE/NEUTRAL CONDUCTOR WIRE GAUGE.
QUANTITY OF PHASE/NEUTRAL CONDUCTORS (PER SET).
QUANTITY OF PARALLEL SETS OF THE PHASE/NEUTRAL CONDUCTORS, GROUND CONDUCTOR AND CONDUIT SPECIFIED.

MULTI-CONDUCTOR CONTROL 600V TRAY CABLE DESIGNATIONS:

(2) 4C#14 W/G - 1 1/4" C CONDUIT SIZE.
"W/G" = WITH ADDITIONAL INTEGRAL GROUND CONDUCTOR WITH GREEN INSULATION IN EACH CABLE SHEATH.
WIRE GAUGE.
QUANTITY OF CONDUCTORS IN EACH CABLE SHEATH (NOT INCLUDING GROUND).
QUANTITY OF MULTI-CONDUCTOR CABLES OF THE TYPE SPECIFIED WITHIN THE SPECIFIED CONDUIT.

TWISTED, SHIELDED INSTRUMENTATION CABLE DESIGNATIONS:

(2) #16TSP - 1" C CONDUIT SIZE.
"TSP" = TWISTED SHIELDED PAIR.
WIRE GAUGE.
QUANTITY OF INSTRUMENTATION CABLES IN THE SPECIFIED CONDUIT.

GENERAL ELECTRICAL NOTES

1. ALL EQUIPMENT SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH NEC.

2. CONTRACTOR SHALL VISIT THE SITE OF THE WORK PRIOR TO SUBMITTING BID TO EXAMINE CAREFULLY LOCAL CONDITIONS AND DIFFICULTIES TO BE ENCOUNTERED. ANY DISCREPANCY BETWEEN PLANS AND EXISTING CONDITIONS SHALL IMMEDIATELY BE CALLED TO THE ATTENTION OF THE ENGINEER.

3. CONTRACTOR SHALL VERIFY ALL REQUIREMENTS FOR POWER SERVICE WITH UTILITY COMPANIES PRIOR TO SUBMITTING BID. IF THEIR REQUIREMENTS ARE AT A VARIANCE WITH THOSE SHOWN ON PLANS THE CONTRACTOR SHALL INFORM ENGINEER IMMEDIATELY. ALL COSTS INCURRED WITH THE UTILITY COMPANY FOR SERVICE SHALL BE INCLUDED IN BID PRICE. IF SUCH COSTS ARE NOT AVAILABLE AT BID TIME CONTRACTOR SHALL INCLUDE WITH BID A LETTER FROM A RESPONSIBLE PARTY WITH THE UTILITY COMPANY STATING SUCH, AND COSTS WILL THEN BE EXCLUDED FROM THE BID PRICE.

4. ELECTRICAL PLANS & DETAILS INDICATE TYPICAL WIRING REQUIREMENTS FOR PROCESS EQUIPMENT BASED ON BASIS-OF-DESIGN SYSTEMS/EQUIPMENT. VERIFY EXACT WIRING REQUIREMENTS & ALL DEVICE LOCATIONS WITH APPROVED MANUFACTURERS SHOP DRAWINGS PRIOR TO ROUGH-IN. NO ADDITIONAL COMPENSATION WILL BE PAID FOR ADJUSTMENTS REQUIRED TO COMPLY WITH REQUIREMENTS OF NON BASIS-OF-DESIGN SYSTEMS/EQUIPMENT SUPPLIERS.

5. ENTIRE ELECTRICAL INSTALLATION WITHIN HAZARDOUS AREAS AS DEFINED ON PLANS OR BY NFPA 820 SHALL COMPLY WITH ALL APPLICABLE NEC REQUIREMENTS FOR CONDUIT SEALS, RACEWAY TYPES, MATERIAL/DEVICE TYPES, ETC.

6. ALL WIRING/CABLING SHALL BE STRANDED COPPER PER SPECIFICATION REQUIREMENTS.

LIGHTING FIXTURE SCHEDULE									
MARK	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMPS		TYPE	MOUNTING HEIGHT	MOUNTING TYPE	REMARKS
				NUMBER	WATTS				
Y1	LITHONIA COLUMBIA DAY-BRITE	DSXD-LED-P5-40K-T4M-MVOLT-RPA- HS-DDBXD	120	1	89 (11,434 LUMENS)	LED		MOUNT TO 18" LITHONIA ROUND STRAIGHT STEEL POLE #RSS184B-DM191AS-DDBXD - SEE DETAIL "E-LP1"	

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE ALL FIXTURE MOUNTING PROVISIONS PRIOR TO ORDERING FIXTURES.

2. ALL FIXTURES AND BALLASTS/DRIVERS SHALL BE RATED FOR OPERATION IN AMBIENT TEMPERATURES UP TO 55 DEGREES CELSIUS.

AUTOMATIC TRANSFER SWITCH SCHEDULE - ATS-A									
KAIC / WCR RATING: 22KAIC (MINIMUM)				NORMAL FED FROM: MAIN FUSED DISCONNECT SWITCH					
VOLTAGE: 277/480V-3P-4W				NORMAL FEEDER: SEE SINGLE LINE DIAGRAM					
AMP RATING: 60 AMP				EMERGENCY FED FROM: GEN-A					
LOCATION: SEE PLANS				EMERGENCY FEEDER: SEE SINGLE LINE DIAGRAM					
LOAD SIDE FEEDER DESCRIPTION			VOLTS	P	HP	KW OR KVA	AMPS	WIRE AND COND. SIZE	
PUMP CP			277/480	3		13.6		SEE SINGLE LINE DIAGRAM	
	EMERGENCY		TOTAL CONNECTED LOAD				NORMAL		NOTES: 1. ENCLOSURE SHALL BE NEMA 4X S.S.
	13.5 KVA		13.5 KVA				13.5 KVA		
	16.9 AMPS		16.9 AMPS				16.9 AMPS		
	13.5 KVA		TOTAL DEMAND LOAD:				13.5 KVA		
	16.9 AMPS		16.9 AMPS				16.9 AMPS		
	13.6 KVA		TOTAL COMPUTED LOAD:				13.6 KVA		
	17.0 AMPS		17.0 AMPS				17.0 AMPS		

GENERATOR SCHEDULE - GEN-A									
KW RATING: 25KW (MINIMUM)					SKVA RATING (AT 35%V. DIP):				
VOLTAGE: 277/480V-3P-4W					SOUND ATTENUATION: CRITICAL SILENCER				
FUEL TYPE: DIESEL					LOCATION: SEE PLANS				
CIR. NO.	DESCRIPTION	VOLTS	P	HP	KW OR KVA	AMPS	BKR SIZE	SWITCH SIZE SWITCH AMPS	F-TRON AMPS WIRE AND COND. SIZE
1	ATS-A (E)	277/480	3		13.6		60/3		SEE SINGLE LINE DIAGRAM
TOTAL CONNECTED LOAD:						13.5 KVA	NOTES:		
						16.9 AMPS			
TOTAL DEMAND LOAD:						13.5 KVA			
						16.9 AMPS			
TOTAL COMPUTED LOAD:						13.6 KVA			
						17.0 AMPS			

GENERATOR MINIMUM SIZING REQUIREMENTS	
GENERAL REQUIREMENTS:	
MINIMUM KW:	25KW
MAXIMUM VOLTAGE DIP:	20%
MAXIMUM FREQ. DIP:	10%
ALTITUDE:	940FT.
AMBIENT TEMP:	120°F
STEP LOADS:	
STEP #1:	2.5KVA 1PHASE LINEAR MISC. LOAD
STEP #2:	(1) 4HP-3PHASE PUMP MOTOR - ACROSS-THE-LINE FVNR STARTER - UNLOADED STARTING
STEP #3:	(1) 4HP-3PHASE PUMP MOTOR - ACROSS-THE-LINE FVNR STARTER - UNLOADED STARTING
NOTES:	
1. GENERATOR SHALL BE SIZED TO ACCOMMODATE THE STEP LOADS WHILE MEETING THE GENERAL REQUIREMENTS LISTED.	
2. SUBMITTALS SHALL INCLUDE SIZING REPORT SHOWING COMPLIANCE WITH THESE GENERATOR SIZING REQUIREMENTS.	



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JRA JOB NO. 222084

MORELL PROJECT NUMBER: 21-0261

CLIENT:
LOWISA
ADDRESS
ELKMONT, AL

DATE: 2/23/23

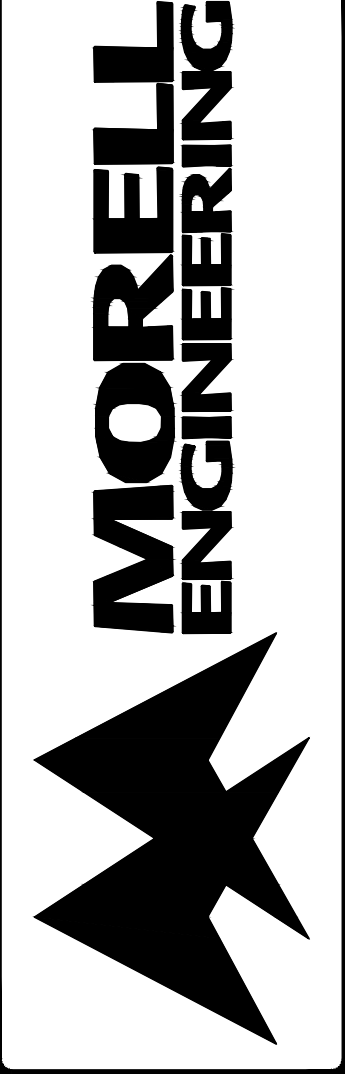
SHEET NUMBER

SCALE: AS NOTED

CHECKED BY: PDB

DRAWN BY: RGN

ELEC. LEGEND, NOTES & SCHEDULES
or
ELKMONT REGIONAL PUMP STATION
UPGRADES



REVISIONS

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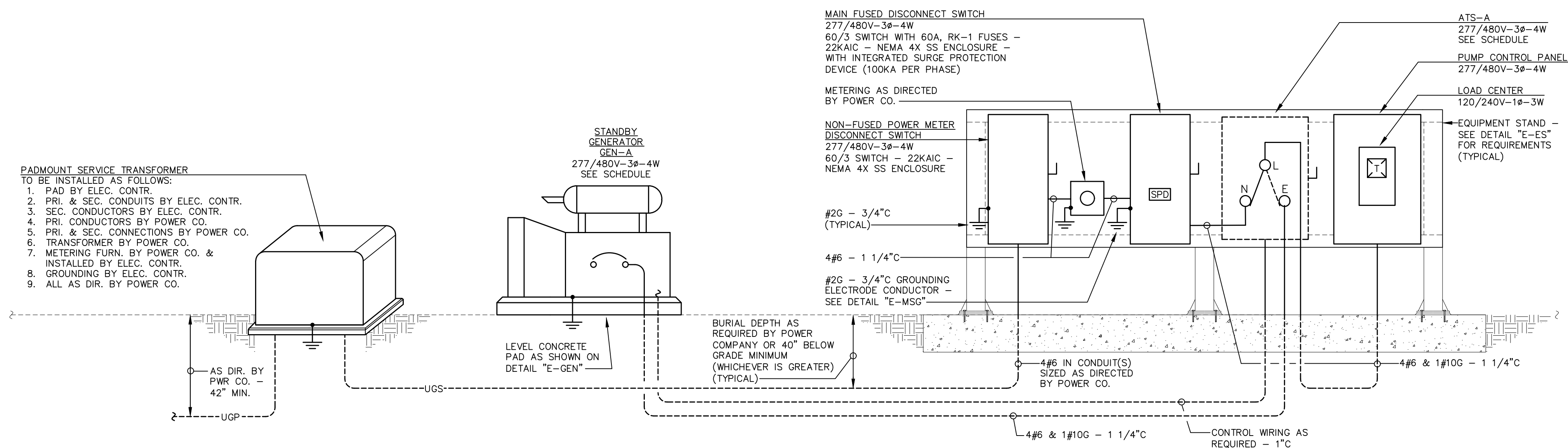


DIAGRAM NOTES

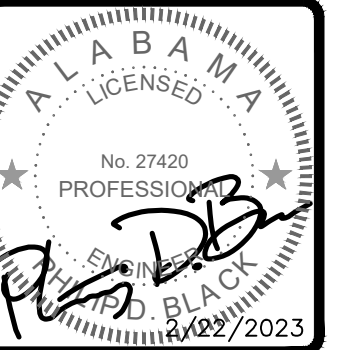
1. NEUTRAL-GROUND BONDS SHALL ONLY BE MADE AT THE FOLLOWING LOCATIONS:
A. MAIN FUSED DISCONNECT SWITCH.
B. SECONDARY SIDE OF ALL TRANSFORMERS.

SINGLE LINE DIAGRAM

SCALE : NONE

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SINGLE LINE DIAGRAM
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

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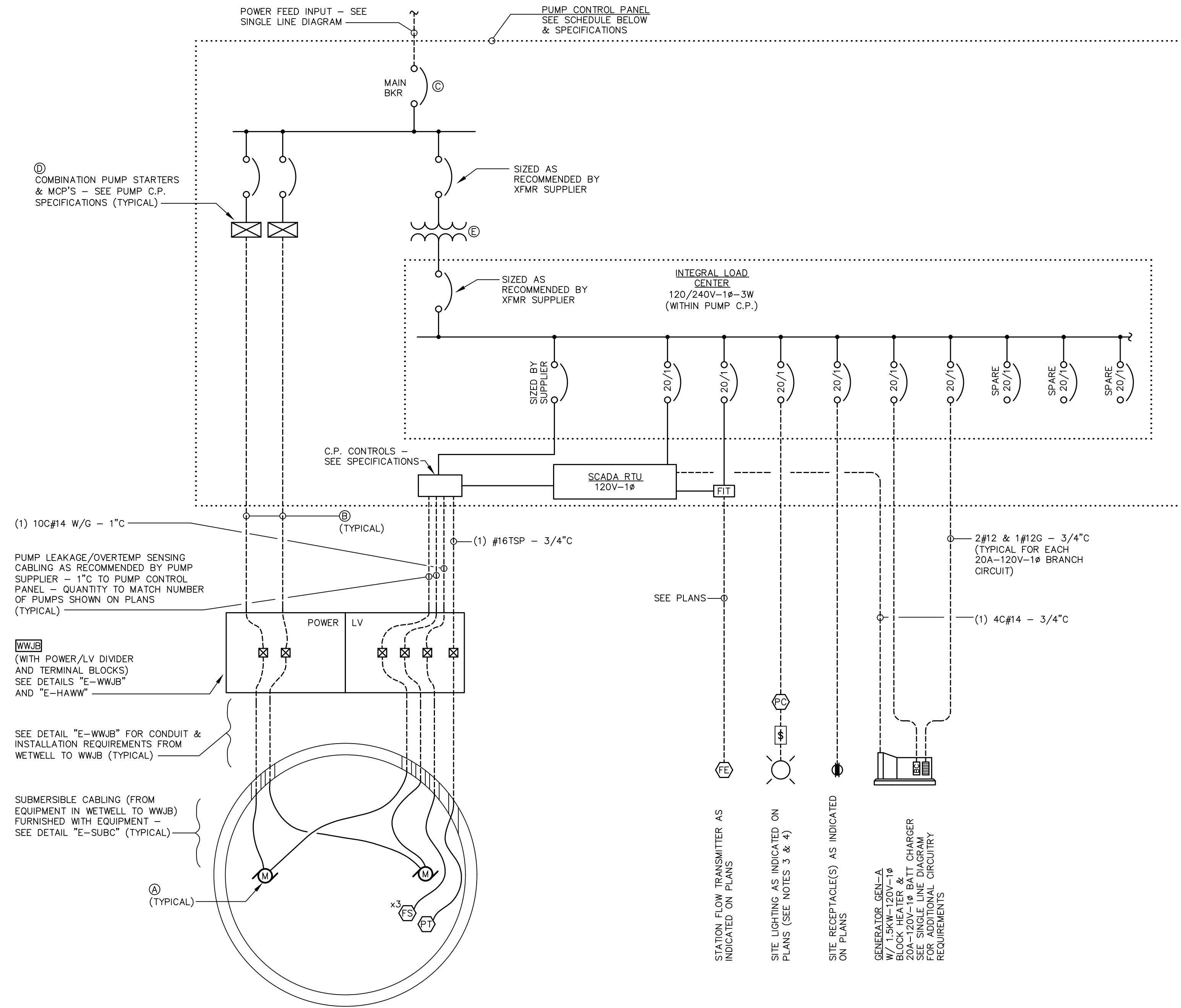
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E0.2



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DETAIL "E-SUBW"
TYPICAL SUBMERSIBLE PUMP STATION
WIRING DIAGRAM

SCALE : NONE

WIRING DIAGRAM WIRING LEGEND	
————	WIRING BY PANEL SUPPLIER
-----	FIELD WIRING BY CONTRACTOR

DIAGRAM NOTES	
1. THIS IS A TYPICAL DIAGRAM THAT INDICATES PUMP STATION WETWELL, 120V & MISCELLANEOUS WIRING REQUIREMENTS. IT IS NOT INTENDED TO SPECIFY ALL REQUIRED CIRCUITRY FOR THE PROJECT. SEE PLANS FOR SITE-SPECIFIC QUANTITIES OF DEVICES & EQUIPMENT. SEE SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS. PROVIDE ALL INTERCONNECTIONS/CIRCUITRY AS REQUIRED FOR A COMPLETE INSTALLATION.	
2. EXACT LOCATIONS OF ALL DEVICES AND EQUIPMENT WITHIN WETWELL SHALL BE AS DIRECTED BY CIVIL ENGINEER.	
3. LIGHT SWITCH(ES) SHALL BE CONNECTED IN SERIES WITH PHOTOCELL SUCH THAT BOTH MUST BE "ON" FOR ASSOCIATED FIXTURES TO OPERATE.	
4. ALL INTERCONNECTING CIRCUITRY BETWEEN SEPARATE EQUIPMENT, DEVICES, ETC. SHALL BE ROUTED UNDERGROUND (RATHER THAN EXPOSED OR ABOVE GRADE) WHERE POSSIBLE.	

"E-SUBW" DIAGRAM SCHEDULE									
PUMP STATION	(A) SUBMERSIBLE PUMPS		(B) PUMP FEEDERS (FROM STARTER TO WWJB)	CONTROL PANEL					
	QTY	RATING		INPUT VOLTAGE	KAIC RATING	ENCLOSURE RATING	(C) MAIN BREAKER	(D) STARTER TYPE	(E) CONTROL TRANSFORMER
ELKMONT ELEM. SCHOOL	2	4HP-480V-3P	3#12 & 1#12G - 3/4" C	277/480V-3P-4W	22KAIC	NEMA 4X S.S.	60/3	FVNR	5KVA



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CLIENT:
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SHEET NUMBER
E0.3

MORELL PROJECT NUMBER: 21-0261

DATE: 2/23/23

SCALE: AS NOTED

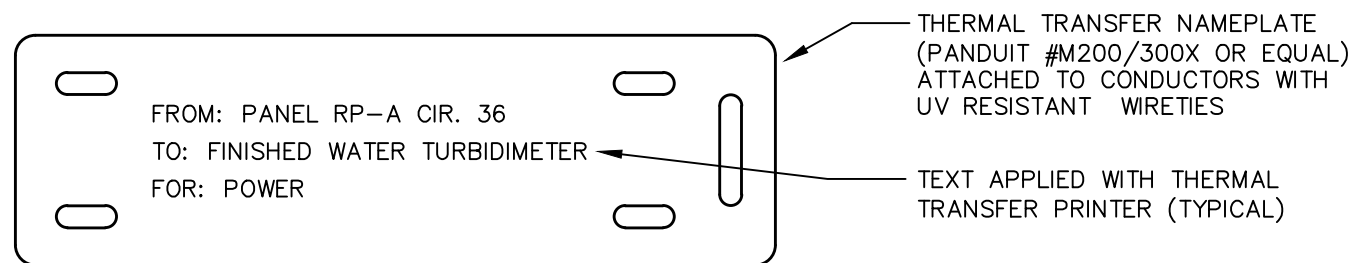
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PUMP STATION WIRING DIAGRAM
of
ELKMONT REGIONAL PUMP STATION
UPGRADES



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DETAIL "E-CL" TYPICAL CIRCUIT LABEL

SCALE : NONE

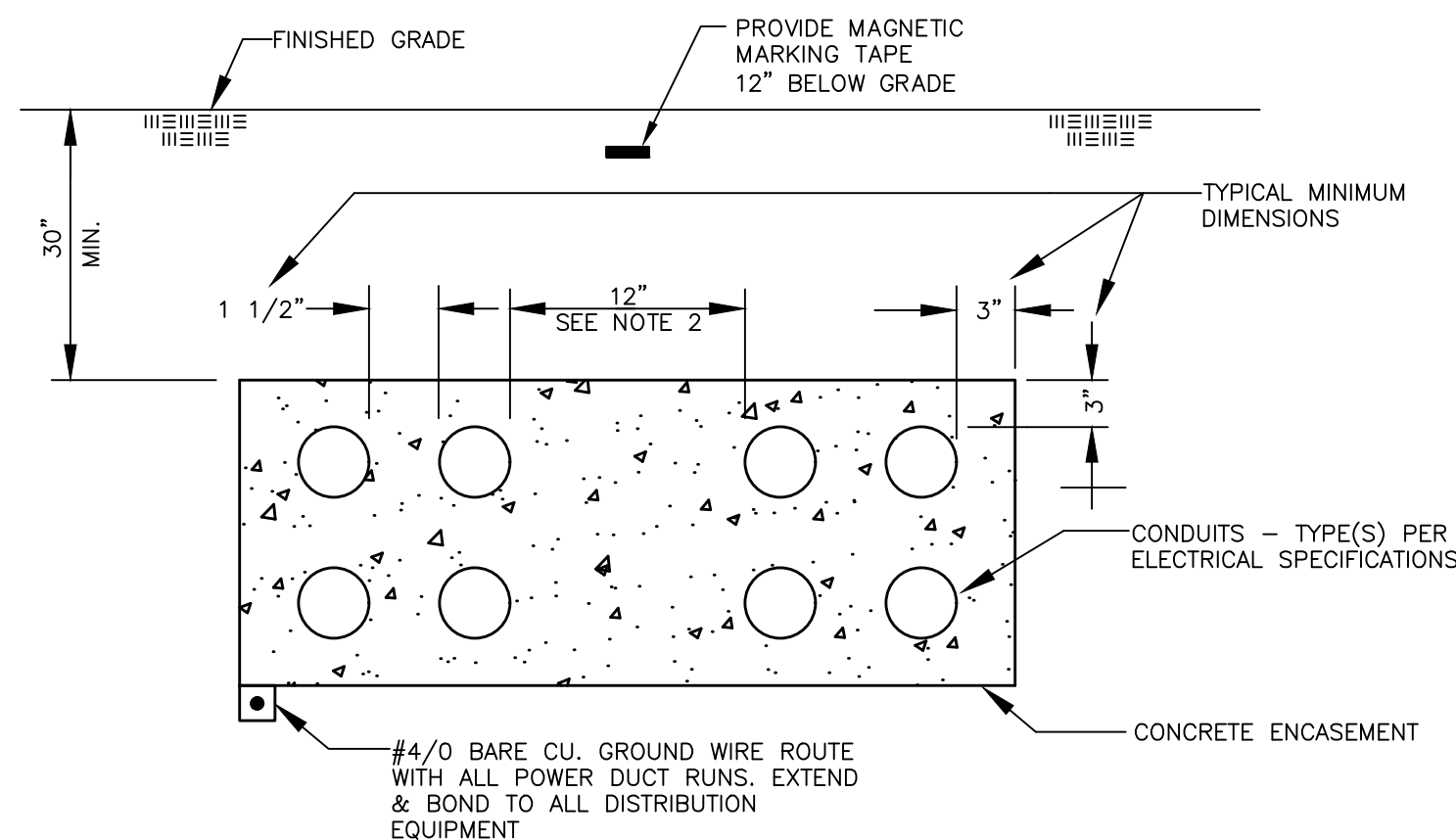
NOTES THIS DETAIL ONLY	
1.	CIRCUIT LABEL TYPES SHOWN ABOVE SHALL BE USED TO IDENTIFY ALL CIRCUITS WITHIN PULLBOXES, HANDHOLES, VAULTS JUNCTION BOXES LARGER THAN 4-11/16", APPROXIMATELY EVERY 50 FEET WITHIN CABLE TRAYS (INCLUDING AT MAJOR CABLE TRAY JUNCTIONS AND BREAKOUT LOCATIONS) AND AT OTHER SIMILAR LOCATIONS. SEE SPECIFICATIONS FOR LABELING REQUIREMENTS IN OTHER AREAS.
2.	CIRCUIT NUMBERS SHALL BE IDENTIFIED FOR ALL CIRCUITS FED FROM LIGHTING OR POWER PANELBOARDS.
3.	"FROM", "TO" & "FOR" TEXT SHOWN ABOVE ARE FOR EXAMPLE PURPOSES ONLY. NAMES/NUMBERS SHALL BE ADJUSTED TO MATCH ASSOCIATED CIRCUITS/CABLES.
4.	SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

NAME:	RP-A
RATING:	120/208V-3ø-4W
FED FROM:	PP-A CIR. 4 (IN MAIN ELEC. ROOM)

DETAIL "E-EDL" ELECTRICAL DISTRIBUTION EQUIPMENT LABEL

SCALE : NONE

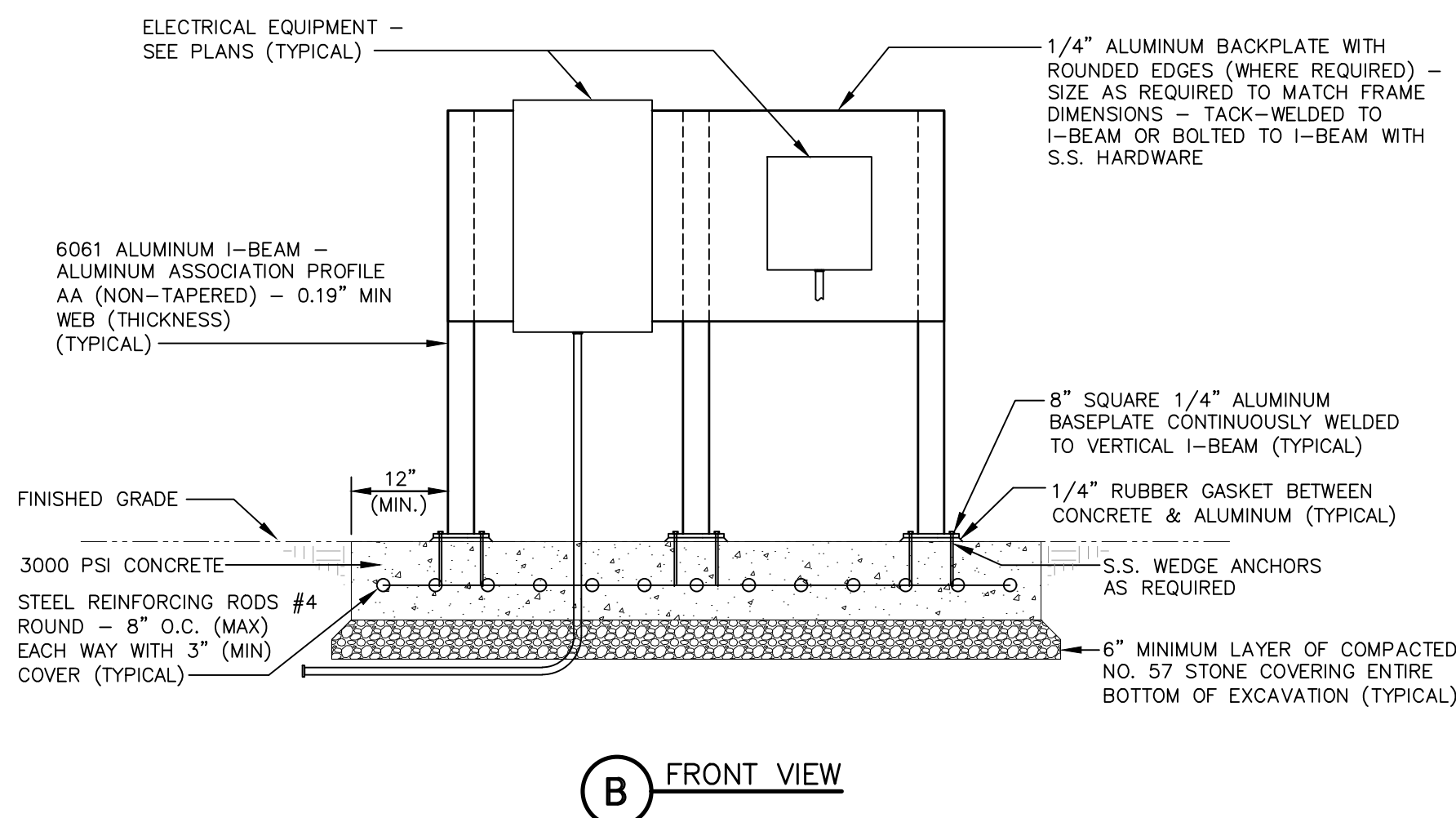
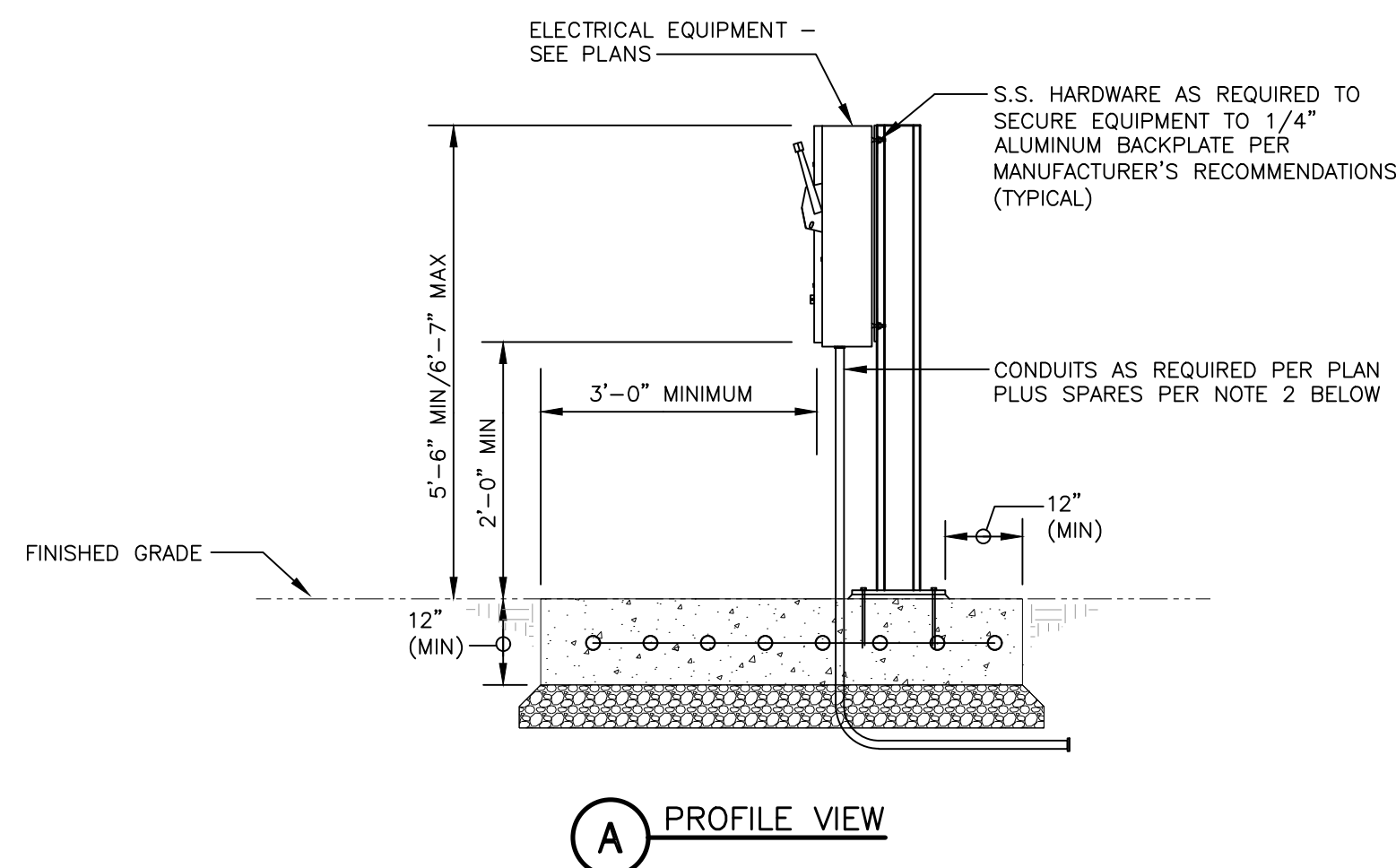
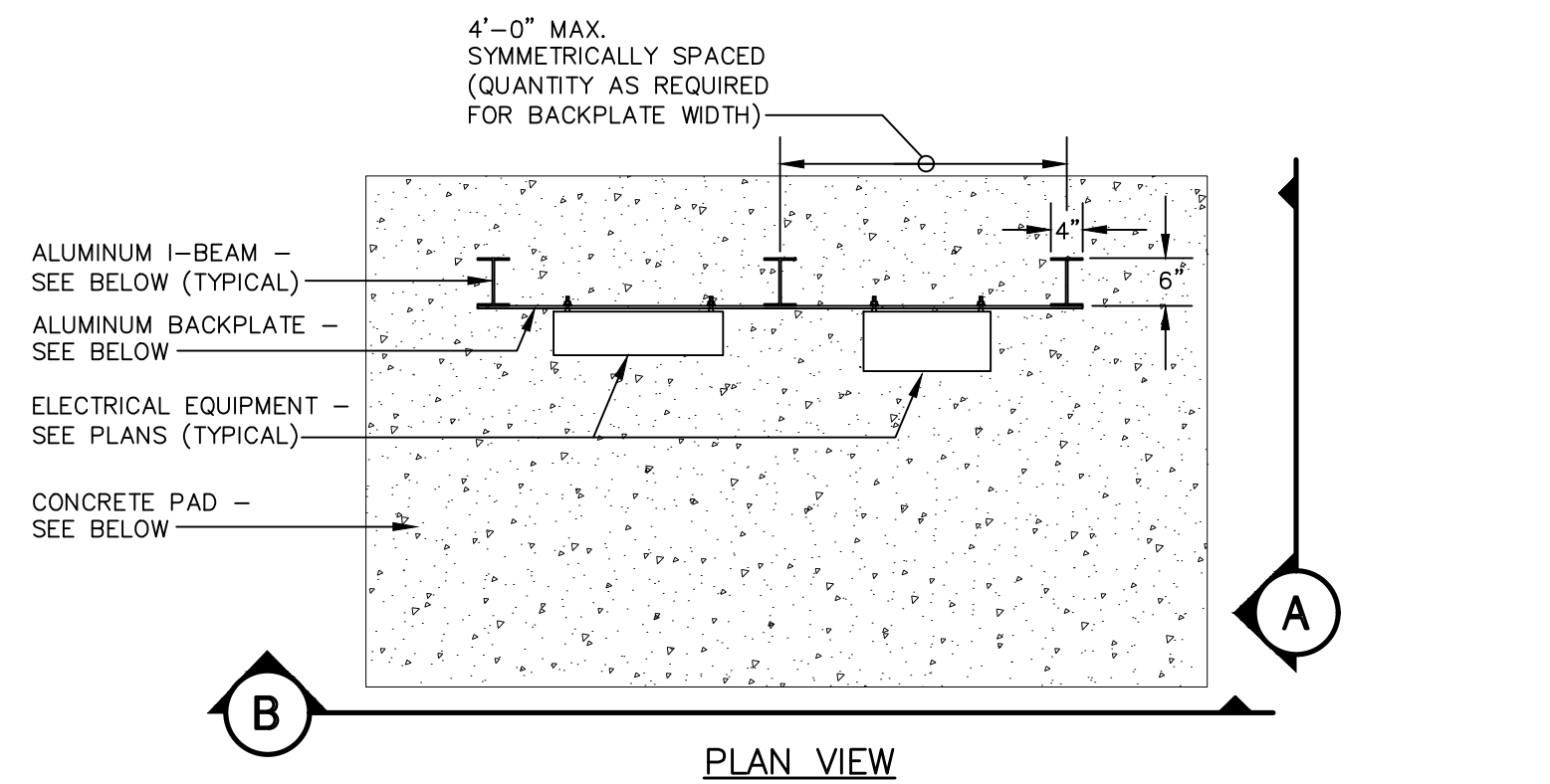
DETAIL NOTES	
1.	PANEL NAMES & RATINGS LISTED ABOVE ARE FOR EXAMPLE PURPOSES ONLY. NAMES & RATINGS SHALL BE ADJUSTED TO MATCH ASSOCIATED EQUIPMENT.
2.	THE INTENT OF THIS DETAIL IS TO DEMONSTRATE GENERAL ELECTRICAL IDENTIFICATION REQUIREMENTS FOR ELECTRICAL DISTRIBUTION AND UTILIZATION EQUIPMENT. REFER TO SPECIFICATIONS FOR SPECIFIC REQUIREMENTS REGARDING LOCATIONS, CONTENT, MATERIALS, ETC..



DETAIL "E-DR" TYPICAL CONCRETE-ENCASED DUCT RUN SECTION

SCALE : NONE

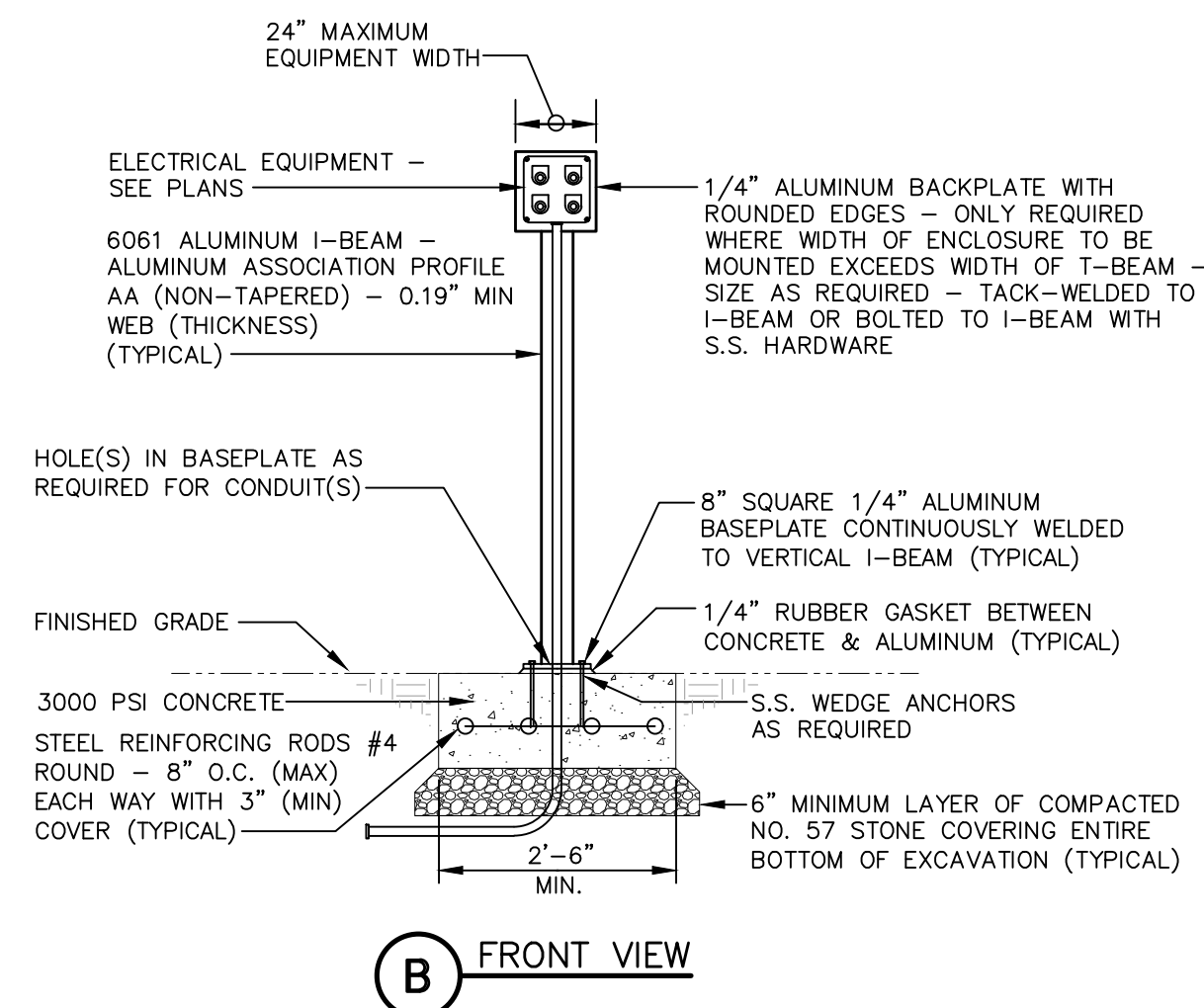
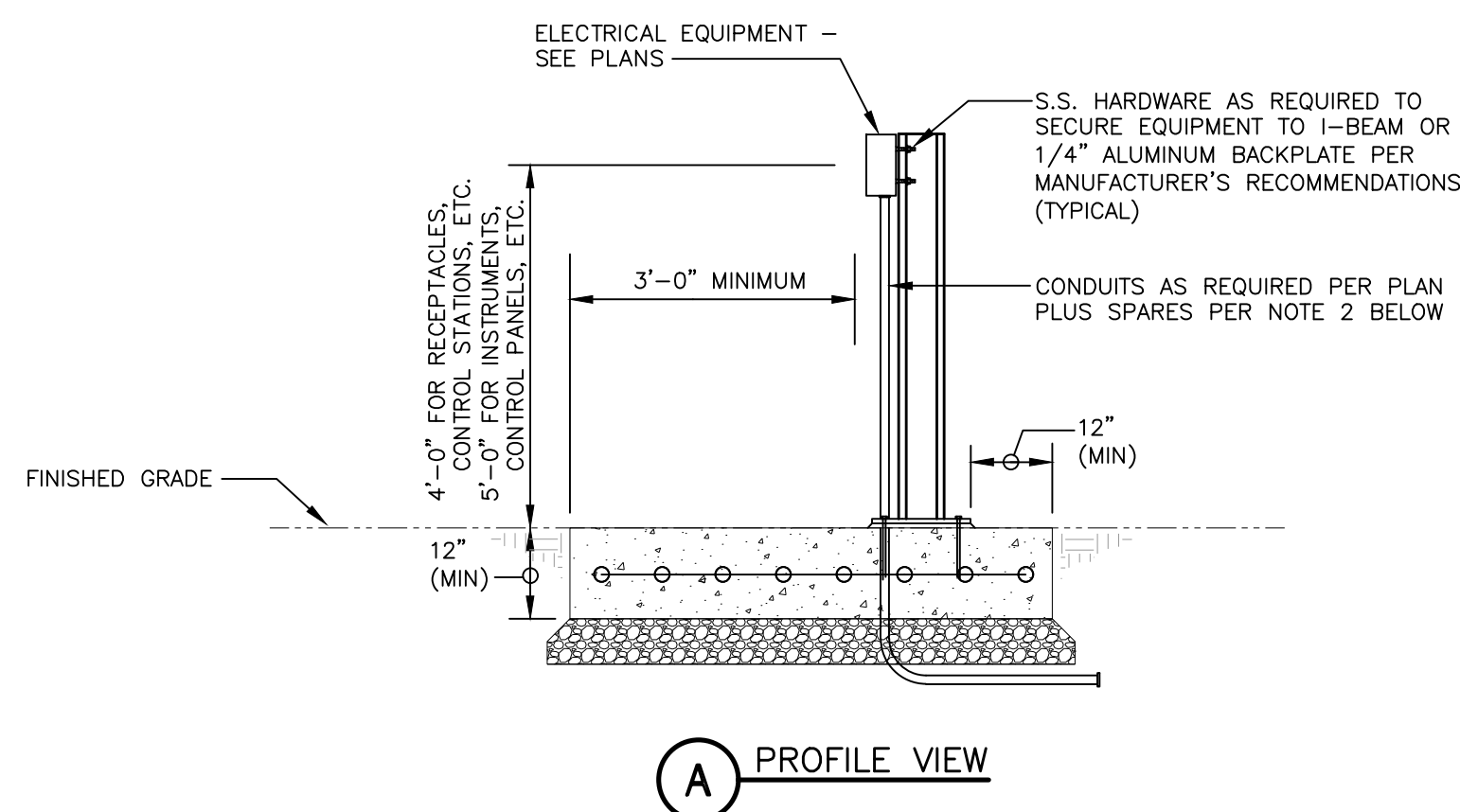
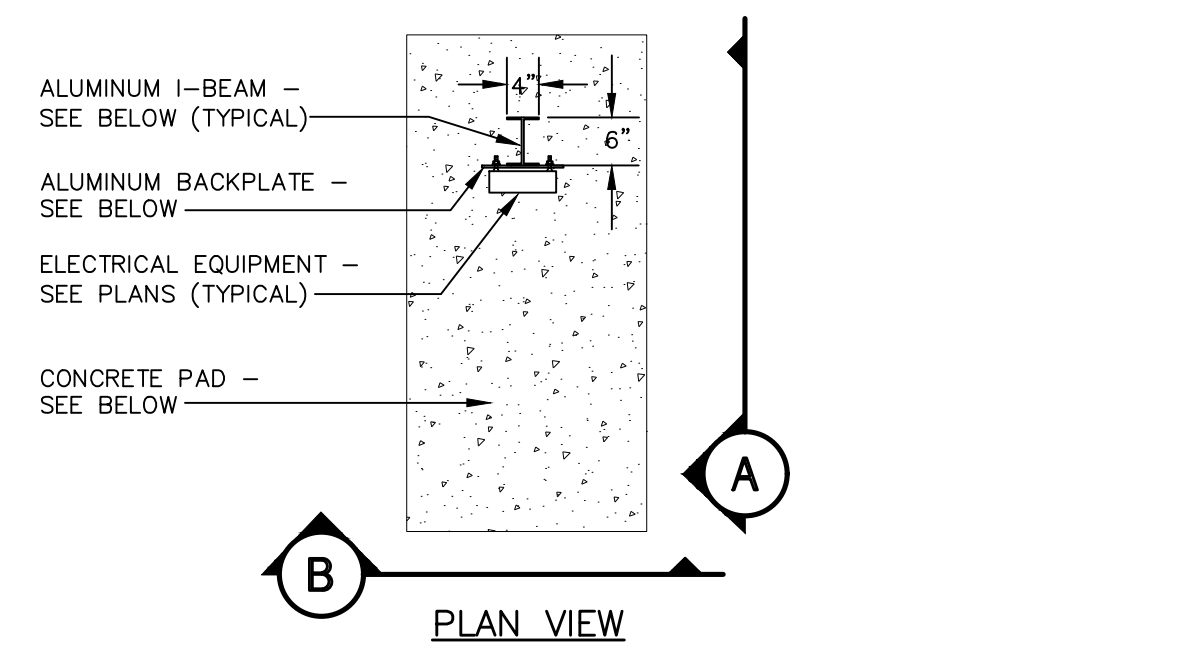
DETAIL NOTES	
1.	PVC SPACERS SHALL BE INSTALLED AT RECOMMENDED INTERVALS TO SUPPORT AND MAINTAIN SPACING FOR CONDUITS.
2.	INSTRUMENTATION CONDUITS SHALL BE SEPARATED FROM POWER/CONTROL CONDUITS BY A MINIMUM OF 12" THROUGHOUT ANY DUCT RUNS.



DETAIL "E-ES" EQUIPMENT SUPPORT

SCALE : NONE

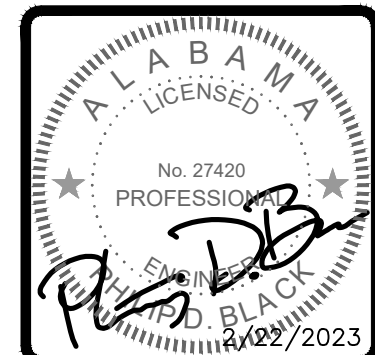
DETAIL NOTES	
1.	ALL DIMENSIONS SHOWN ARE TYPICAL.
2.	PROVIDE TWO (2) 1"E.C. FROM ALL DISTRIBUTION PANELS, LIGHTING PANELS, PLC'S AND CONTROL PANELS ROUTED BELOW CONCRETE PAD TO NEAREST PULLBOX OR ACCESSIBLE STUB OUT LOCATION (NOT UNDERNEATH CONCRETE/ROCK/STRUCTURE/ETC).



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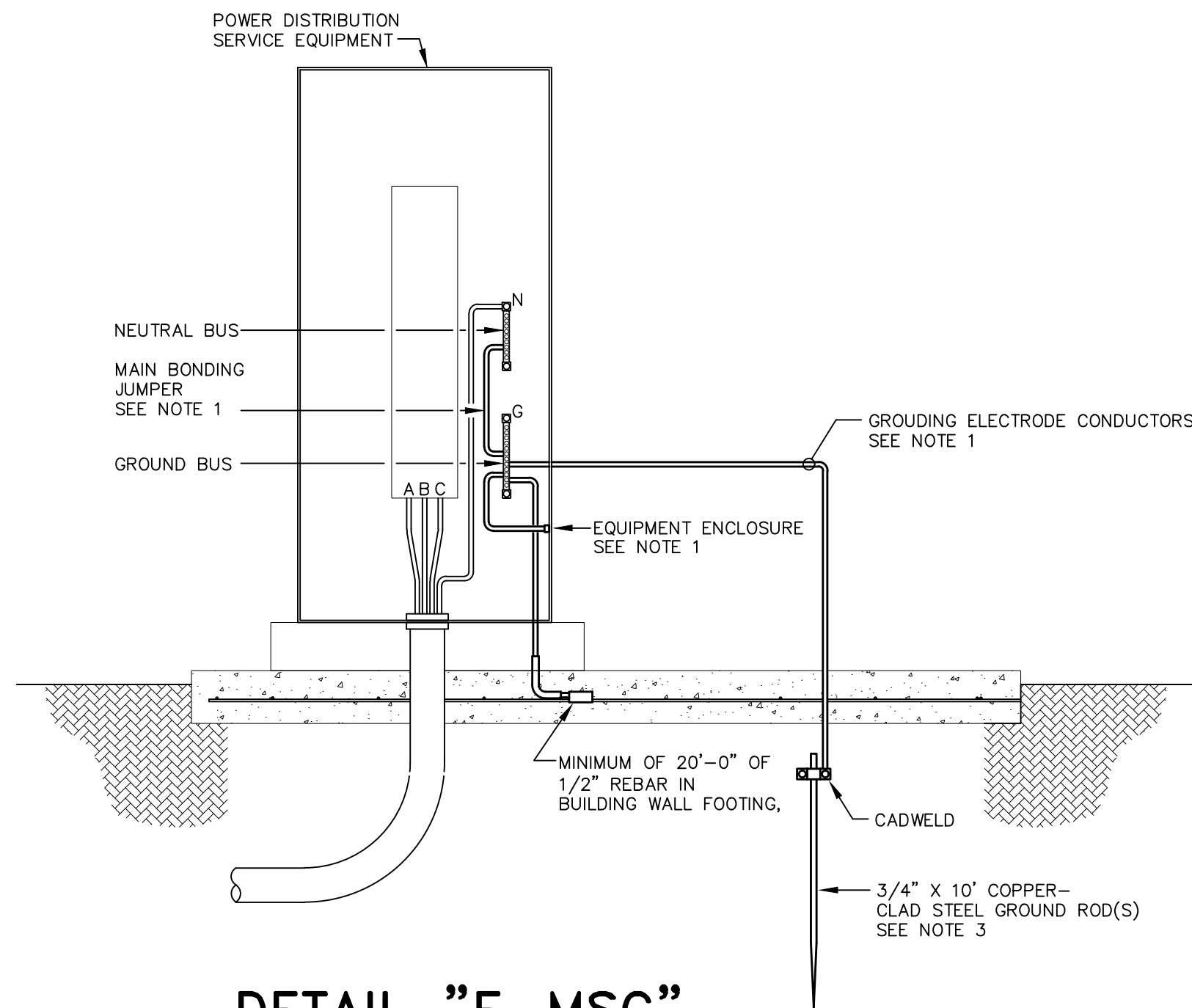
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ELECTRICAL DETAILS
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

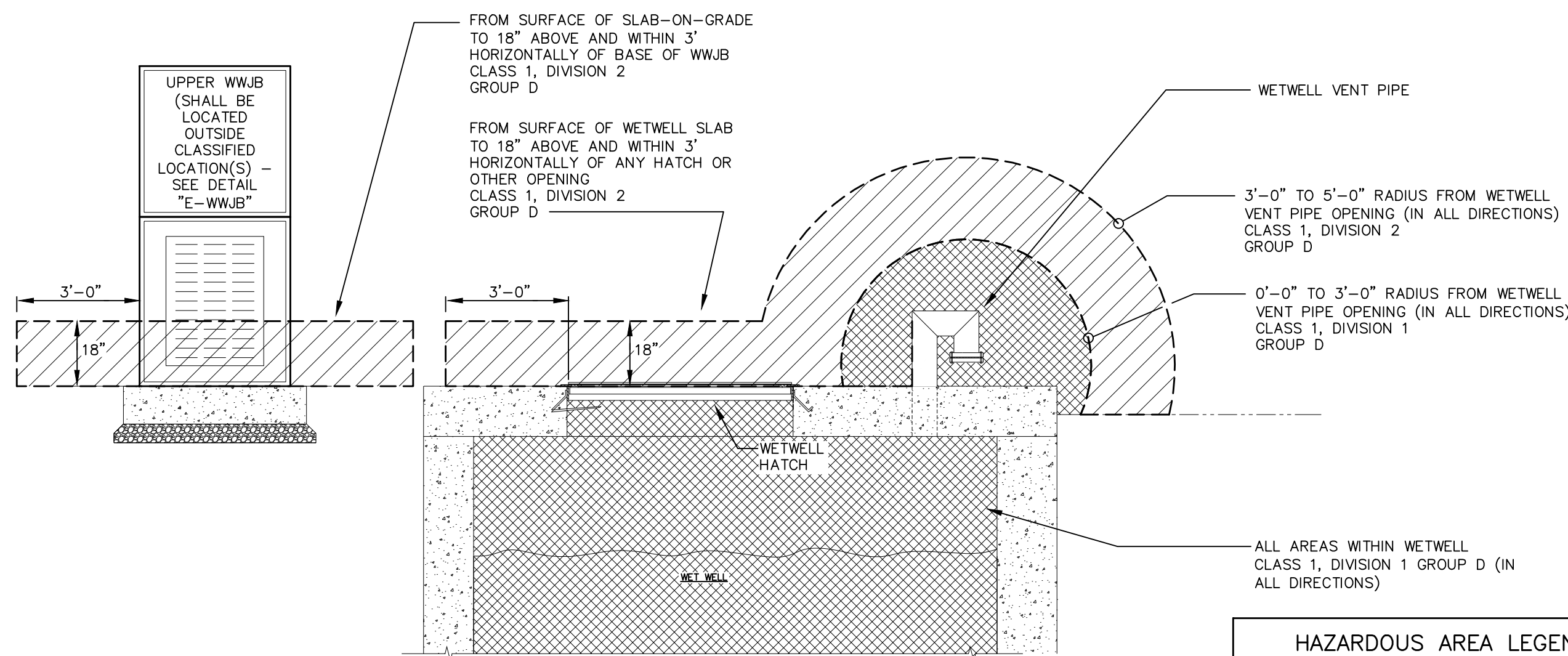
MORELL PROJECT NUMBER: 21-0261	SCALE: AS NOTED	DRAWN BY: RGN
DATE: 2/23/23	CHECKED BY: PDB	

CLIENT: LOWISA ADDRESS ELKMONT, AL	SHEET NUMBER E1.1
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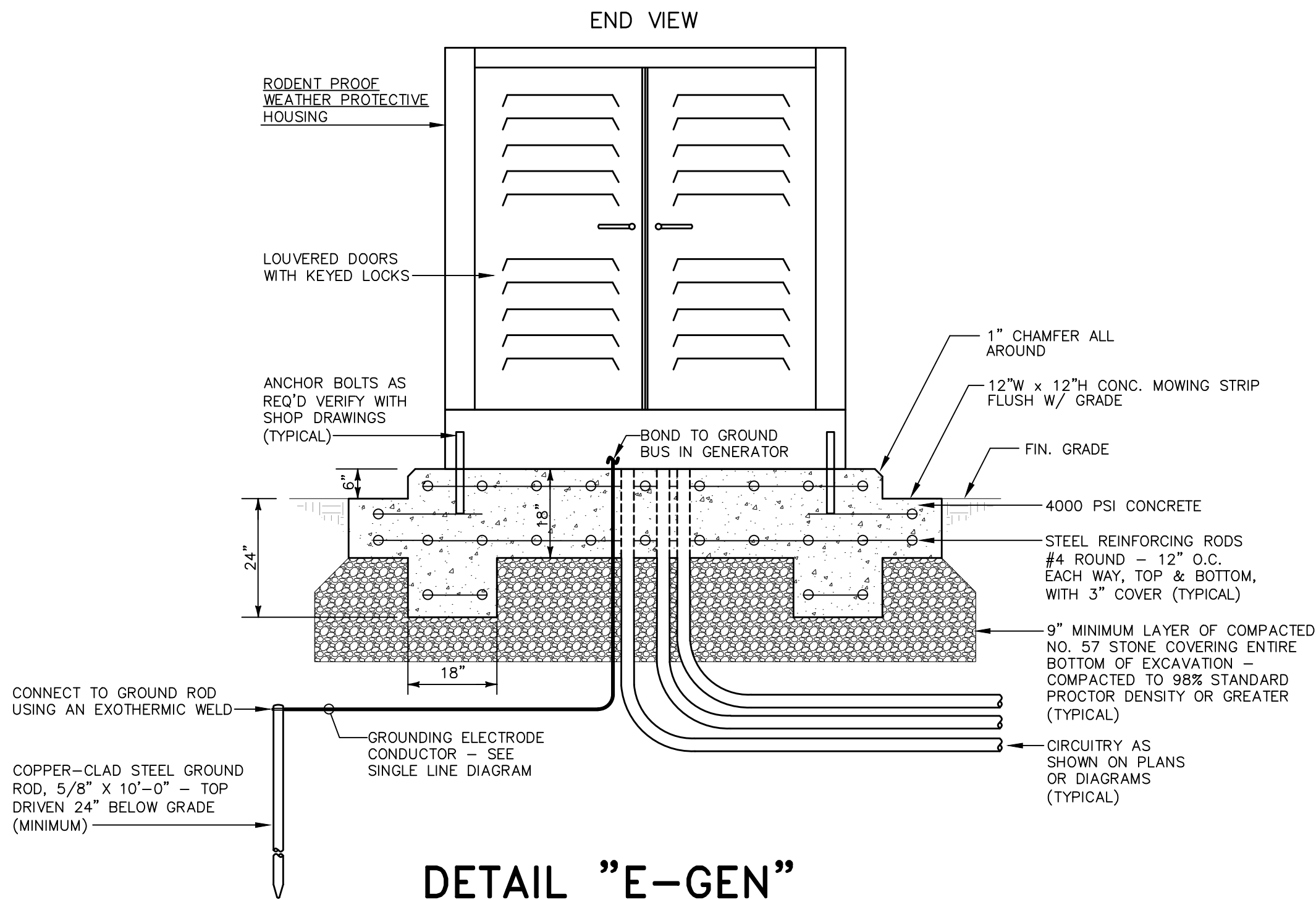
DETAIL "E-MSG"
MAIN SERVICE GROUNDING
SCALE : NONE

DETAIL NOTES	
1.	ALL GROUNDING ELECTRODE CONDUCTORS AND MAIN BONDING JUMPERS SHALL BE INSULATED COPPER, SIZED IN ACCORDANCE WITH NEC TABLE 250.66 UNLESS NOTED OTHERWISE.
2.	THE INTERSYSTEM BONDING JUMPER SHALL BE INSULATED COPPER, SIZED TO MATCH THE GROUNDING ELECTRODE CONDUCTOR OR #6AWG, WHICHEVER IS GREATER.
3.	ADDITIONAL GROUND RODS SHALL BE INSTALLED A MINIMUM OF SIX (6) FEET APART AND CONNECTED BY GROUNDING ELECTRODE CONDUCTORS UNTIL THE GROUND RESISTANCE DOES NOT EXCEED FIVE (5) OHMS.
4.	ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN CONDUIT (TYPE PER SPECIFICATION REQUIREMENTS) UNLESS SPECIFICALLY NOTED OTHERWISE. METAL CONDUITS SHALL BE GROUNDED PER NEC REQUIREMENTS.
5.	REFER TO "GROUNDING" SPECIFICATIONS SECTION FOR ADDITIONAL GROUNDING REQUIREMENTS.



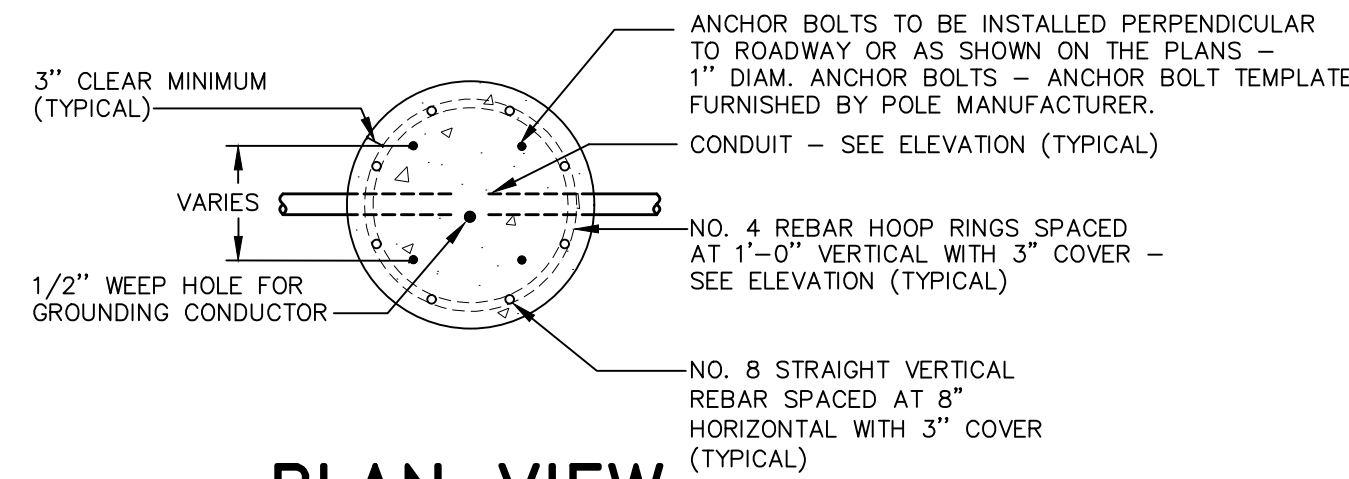
DETAIL "E-HALS"
HAZARDOUS AREA CLASSIFICATION
FOR ENCLOSED WASTEWATER WETWELLS
SCALE : NONE

DETAIL NOTES	
1.	ALL EQUIPMENT, DEVICES, CIRCUITRY, ETC. SHALL BE KEPT OUT OF HAZARDOUS AREAS UNLESS SPECIFICALLY SHOWN OTHERWISE. ENTIRE ELECTRICAL INSTALLATION WITHIN HAZARDOUS AREAS AS (DEFINED ON PLANS OR BY NFPA 820) SHALL COMPLY WITH ALL APPLICABLE NEC REQUIREMENTS FOR INSTALLATION, CONDUIT SEALS, RACEWAY TYPES, MATERIAL/DEVICE TYPES, ETC. GENERAL PROJECT INTENS IS TO NOT REQUIRE CONDUIT SEALS (PER DETAIL "E-WWJB")
2.	WHERE MULTIPLE HAZARDOUS AREA ZONES OVERLAP, THE MORE STRINGENT ZONE CLASSIFICATION SHALL APPLY.

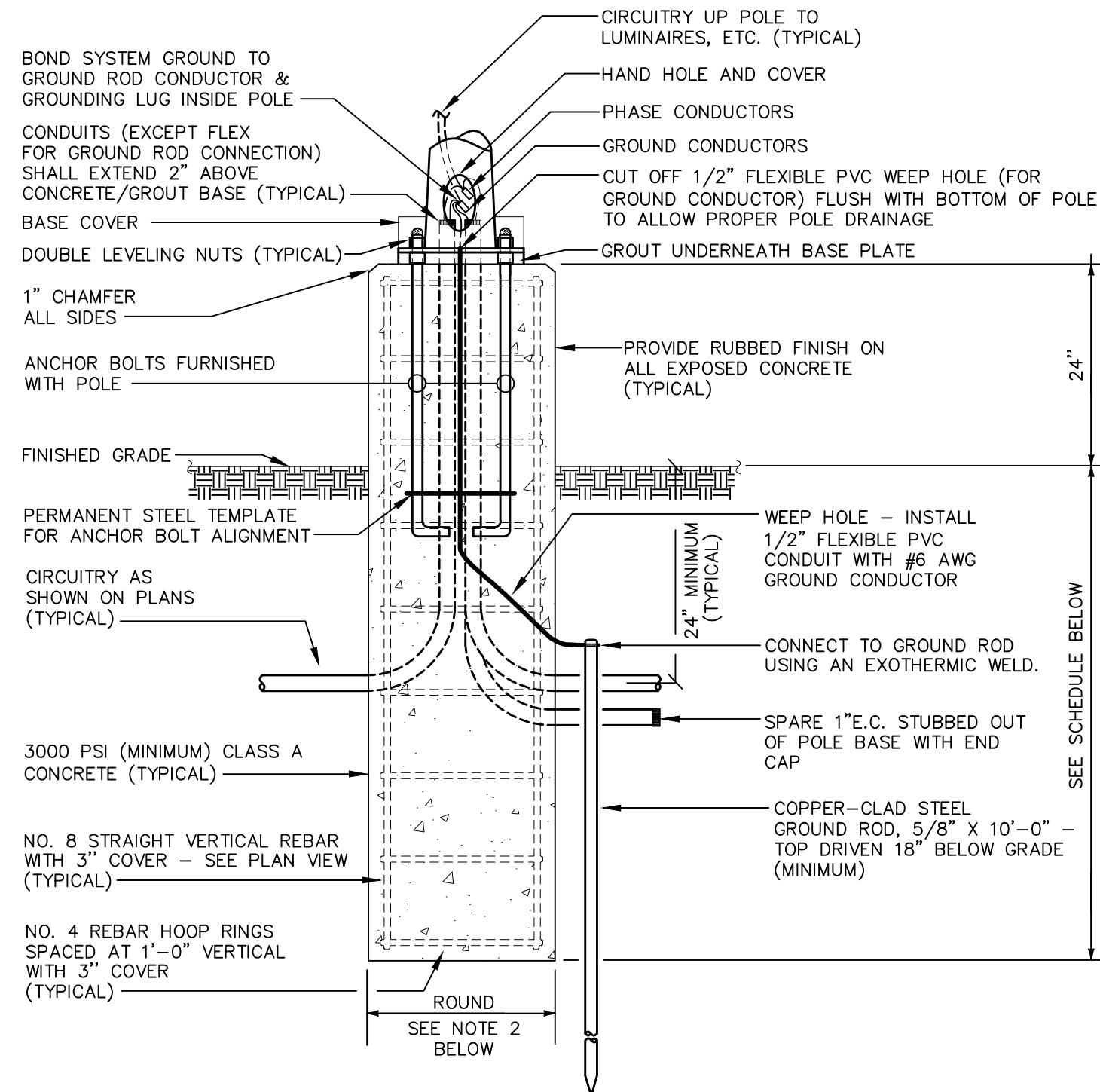


DETAIL "E-GEN"
GENERATOR ELEVATION
SCALE : NONE

DETAIL NOTES	
1.	ALL DIMENSIONS SHOWN ARE TYPICAL AND MINIMUM. ADDITIONALLY, CONTRACTOR SHALL SIZE CONCRETE PAD SUCH THAT THE TOTAL PAD WEIGHT (AT AN ASSUMED CONCRETE DENSITY OF 150 LBS/CUBIC FOOT) IS A MINIMUM OF 1.5 TIMES THE TOTAL GENERATOR SET WEIGHT (INCLUDING ENCLOSURE(S), ACCESSORIES, FUEL, OIL, ETC.).
2.	PROVIDE VIBRATION ISOLATORS, SPRING & PAD TYPE, QUANTITY AS RECOMMENDED BY THE GENERATOR SET MANUFACTURER TO MOUNT GENERATOR SET. ISOLATORS SHALL INCLUDE SEISMIC RESTRAINTS IF REQUIRED BY SITE LOCATION.



PLAN VIEW



ELEVATION

DETAIL "E-LP1"
EXPOSED LIGHT POLE BASE
SCALE : NONE

DETAIL NOTES	
1.	THIS CONTRACTOR SHALL CONFIRM SOIL CONDITIONS PRIOR TO BID OR INSTALLATION. IF SOIL CONDITIONS/TYPES ARE DIFFERENT THAN THE SPECIFIC TYPES INDICATED BELOW, OR THE POLE HEIGHTS ARE IN EXCESS OF THOSE LISTED BELOW, OR THE BASIC WIND SPEED FOR THE PROPOSED POLE LOCATION (PER ASCE 7 BASIC WIND SPEED MAPS) IS IN EXCESS OF 100MP, OR THE COMBINED E.P.A. OF ALL LUMINAIRES/ARMS/ACCESSORIES INSTALLED ON A POLE IS IN EXCESS OF 5.5 S.F., THE CONTRACTOR SHALL RETAIN A QUALIFIED STRUCTURAL ENGINEER (LICENCED IN THE STATE OF THE PROJECT) TO PROVIDE A PROJECT-SPECIFIC STRUCTURAL DESIGN FOR THE PROPOSED POLE BASE(S), AND SHALL INCLUDE ALL COSTS (FOR THE DESIGN AND THE REQUIRED POLE BASES) IN THE BID.
2.	MINIMUM POLE BASE DIAMETER SHALL BE THE GREATER OF THE FOLLOWING: A. ANCHOR BOLT CIRCLE DIAMETER PLUS 8" (TO PROVIDE MINIMUM 4" COVER OVER ALL ANCHOR BOLTS). B. 20" DIAMETER. C. DIAMETER AS REQUIRED BY SOIL CONDITIONS OR BY POLE SUPPLIER.
3.	CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES OR OBSTRUCTIONS TO AVOID CONFLICTS PRIOR TO INSTALLATION OF LIGHT POLE BASE(S).
4.	POLE SHALL BE RATED TO WITHSTAND THE WIND SPEED SPECIFIED FOR THE SPECIFIC PROJECT SITE LOCATION PER LATEST VERSION OF ASCE 7 BASIC WIND SPEED MAPS OR APPLICABLE LOCAL BUILDING CODE REQUIREMENTS (WHICHEVER IS MORE STRINGENT), WITH 1.3 GUST FACTOR WITH ALL LUMINAIRES & ACCESSORIES INSTALLED.

POLE BASE DIMENSIONS				
POLE HEIGHT	MINIMUM BASE DEPTH (BELOW GRADE) (SEE NOTE 1 ABOVE)			BASE DIAMETER
	CLAYEY SOILS (CL, ML, CH, MH)	SANDY SOILS (SW, SP, SM, SC, GM, GC)	GRAVELY SOILS (GW, GP)	
0 - 15 FT.	6'-0"	5'-0"	4'-6"	SEE NOTE 2 ABOVE
16 - 20 FT.	7'-0"	5'-6"	5'-0"	SEE NOTE 2 ABOVE
21 - 25 FT.	8'-0"	6'-0"	5'-6"	SEE NOTE 2 ABOVE
26 - 30 FT.	8'-6"	7'-0"	6'-6"	SEE NOTE 2 ABOVE
31 - 35 FT.	9'-0"	7'-6"	7'-0"	SEE NOTE 2 ABOVE
36 - 40 FT.	10'-0"	8'-0"	7'-6"	SEE NOTE 2 ABOVE
41 - 45 FT.	10'-6"	8'-6"	8'-0"	SEE NOTE 2 ABOVE
46 - 50 FT.	11'-0"	9'-0"	8'-6"	SEE NOTE 2 ABOVE

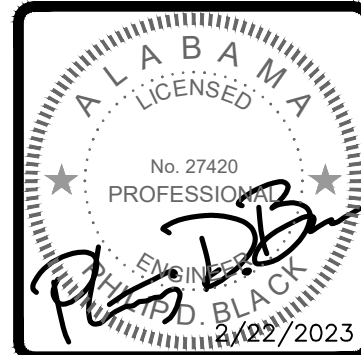


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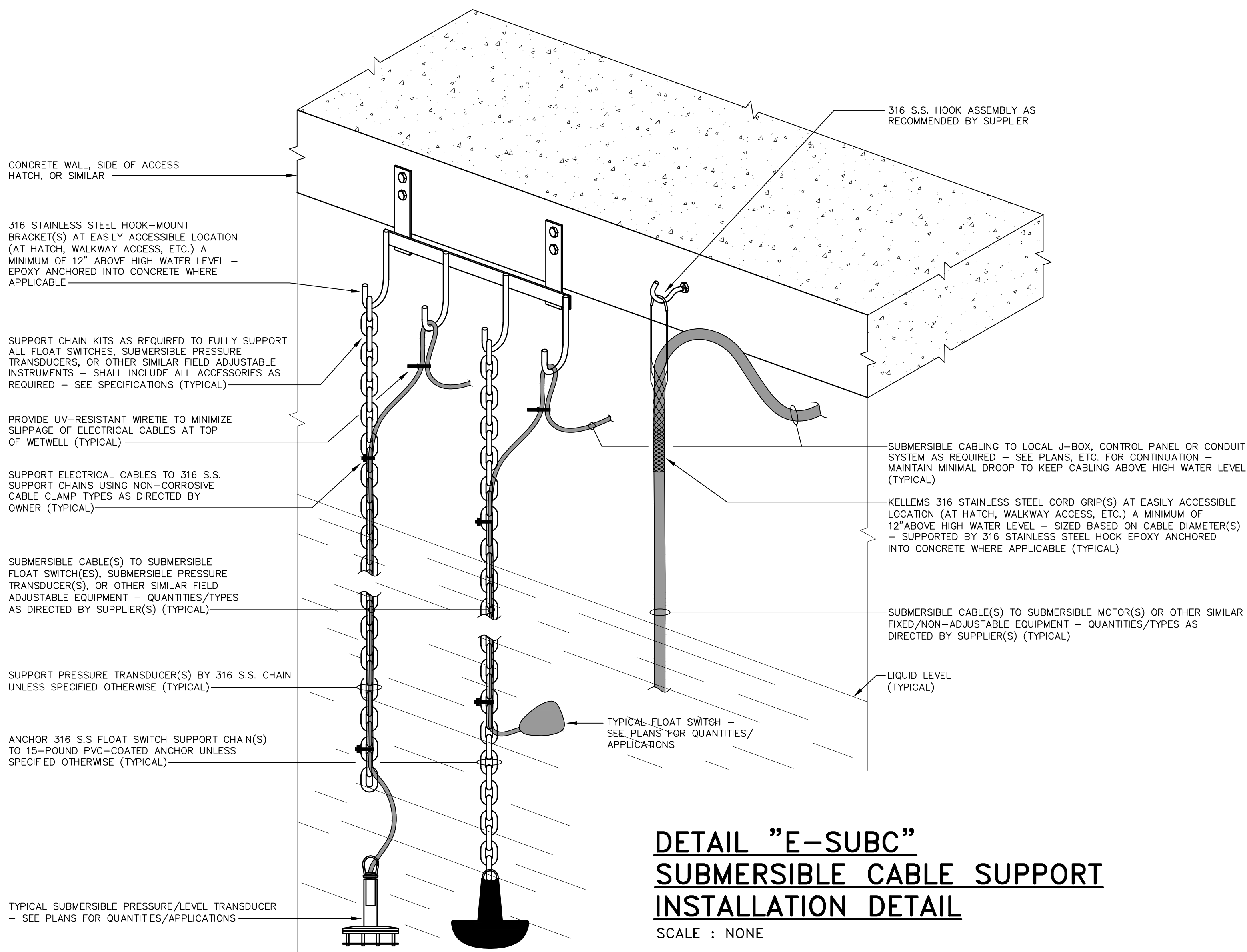
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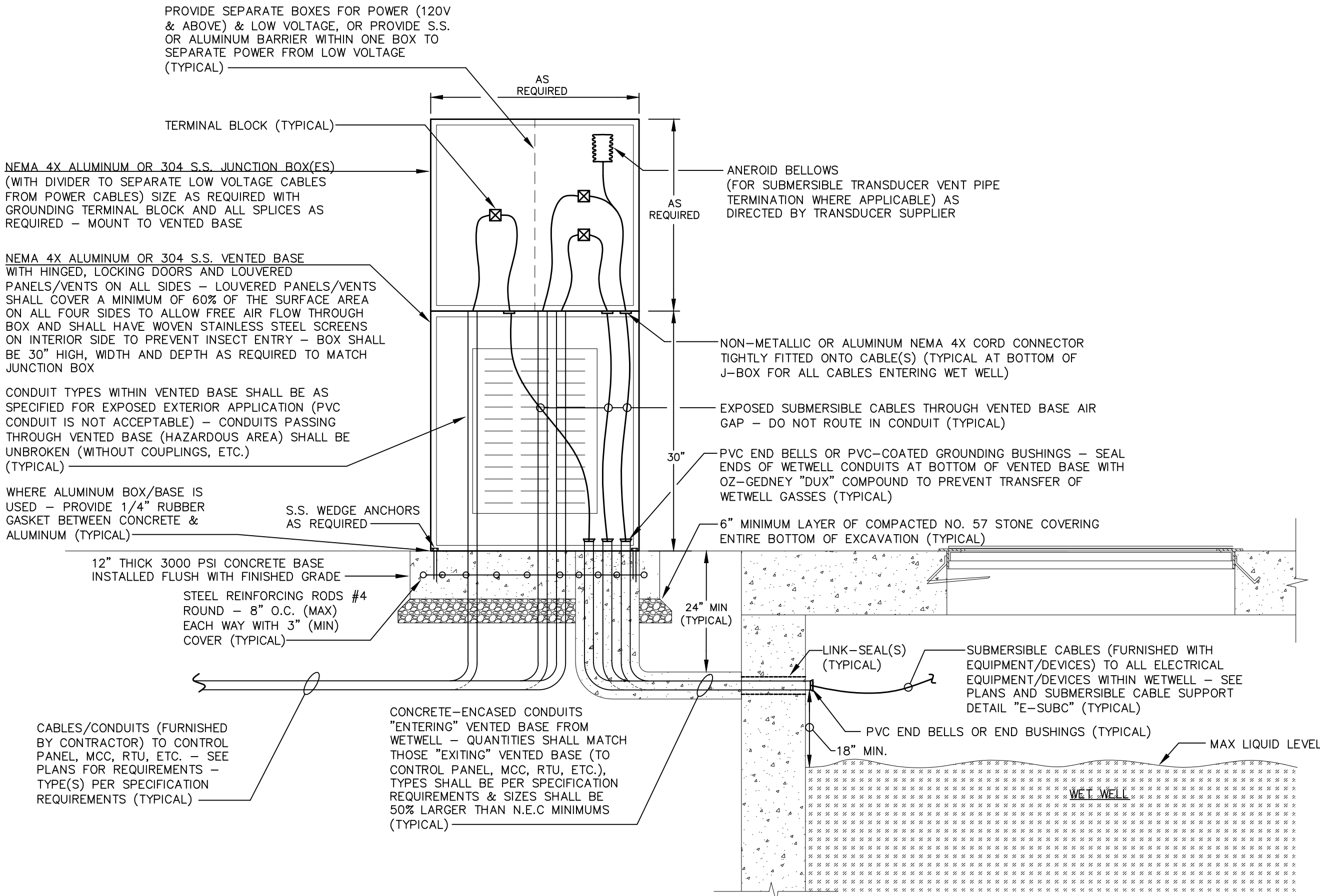
ELECTRICAL DETAILS
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 21-0261	SCALE: AS NOTED	DRAWN BY: RGN
DATE: 2/23/23	CHECKED BY: PDB	

CLIENT: LOWISA ADDRESS ELKMONT, AL	SHEET NUMBER E1.2
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DETAIL "E-SUBC"
SUBMERSIBLE CABLE SUPPORT
INSTALLATION DETAIL
SCALE : NONE



DETAIL "E-WWJB"
WET WELL JUNCTION BOX
SCALE : NONE

- DETAIL NOTES**
- ENTIRE ELECTRICAL INSTALLATION WITHIN HAZARDOUS AREAS AS DEFINED BELOW AND BY NFPA 820 SHALL COMPLY WITH ALL APPLICABLE NEC REQUIREMENTS FOR RACEWAY TYPES, MATERIAL/DEVICE TYPES, ETC. CONTRACTOR SHALL COORDINATE EXACT WETWELL JUNCTION BOX LOCATION(S) TO BE OUTSIDE OF THESE HAZARDOUS AREAS:
 - THE FOLLOWING AREAS SHALL BE CONSIDERED CLASS I, DIVISION I, GROUP D AREAS:
 - AREAS WITHIN WASTEWATER PUMPING STATION WET WELLS AND VALVE VAULTS.
 - AREAS WITHIN 3' OF ANY WASTEWATER WET WELL OR VALVE VAULT VENTILATION OUTLET (SUCH AS PIPE VENT).
 - THE FOLLOWING AREAS SHALL BE CONSIDERED CLASS I, DIVISION II, GROUP D AREAS:
 - AREAS UP TO 18" ABOVE TOP OF WASTEWATER WET WELL SLABS AND WITHIN 3' HORIZONTALLY OF HATCHES OR OTHER OPENINGS.
 - AREAS WITHIN 5' OF ANY WASTEWATER WET WELL VENTILATION OUTLET BUT MORE THAN 3' AWAY.
 - THIS DETAIL IS TYPICAL ONLY. PROVIDE QUANTITIES/ARRANGEMENTS OF WET WELL JUNCTION BOXES AS REQUIRED BY APPLICATION.
 - EXACT HEIGHTS OF ALL LEVEL SENSING TRANSDUCERS & FLOAT SWITCHES SHALL BE AS DIRECTED BY CIVIL ENGINEER.
 - ALL LEVEL SENSING TRANSDUCERS SHALL BE LOCATED WITHIN WETWELL AS DIRECTED BY EQUIPMENT SUPPLIER.
 - CONTRACTOR SHALL PROVIDE ALL FIELD CONNECTIONS AS DIRECTED BY THE EQUIPMENT/DEVICE SUPPLIERS.



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CLIENT:
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ADDRESS
ELKMONT, AL

SHEET NUMBER

E1.3

ELECTRICAL DETAILS
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

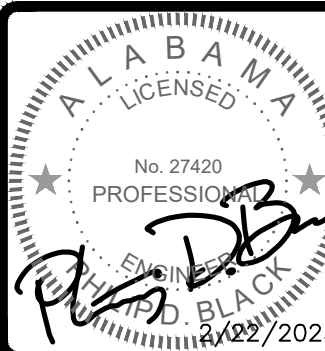
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SCALE: AS NOTED

DRAWN BY: RGN

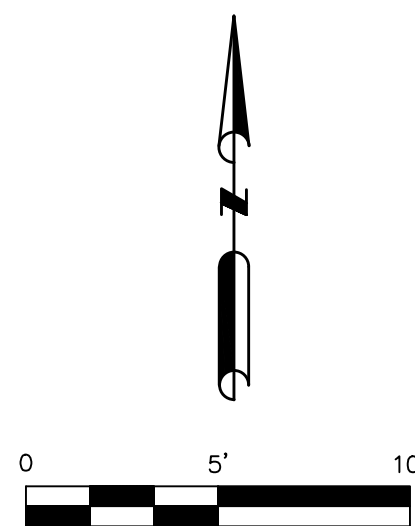
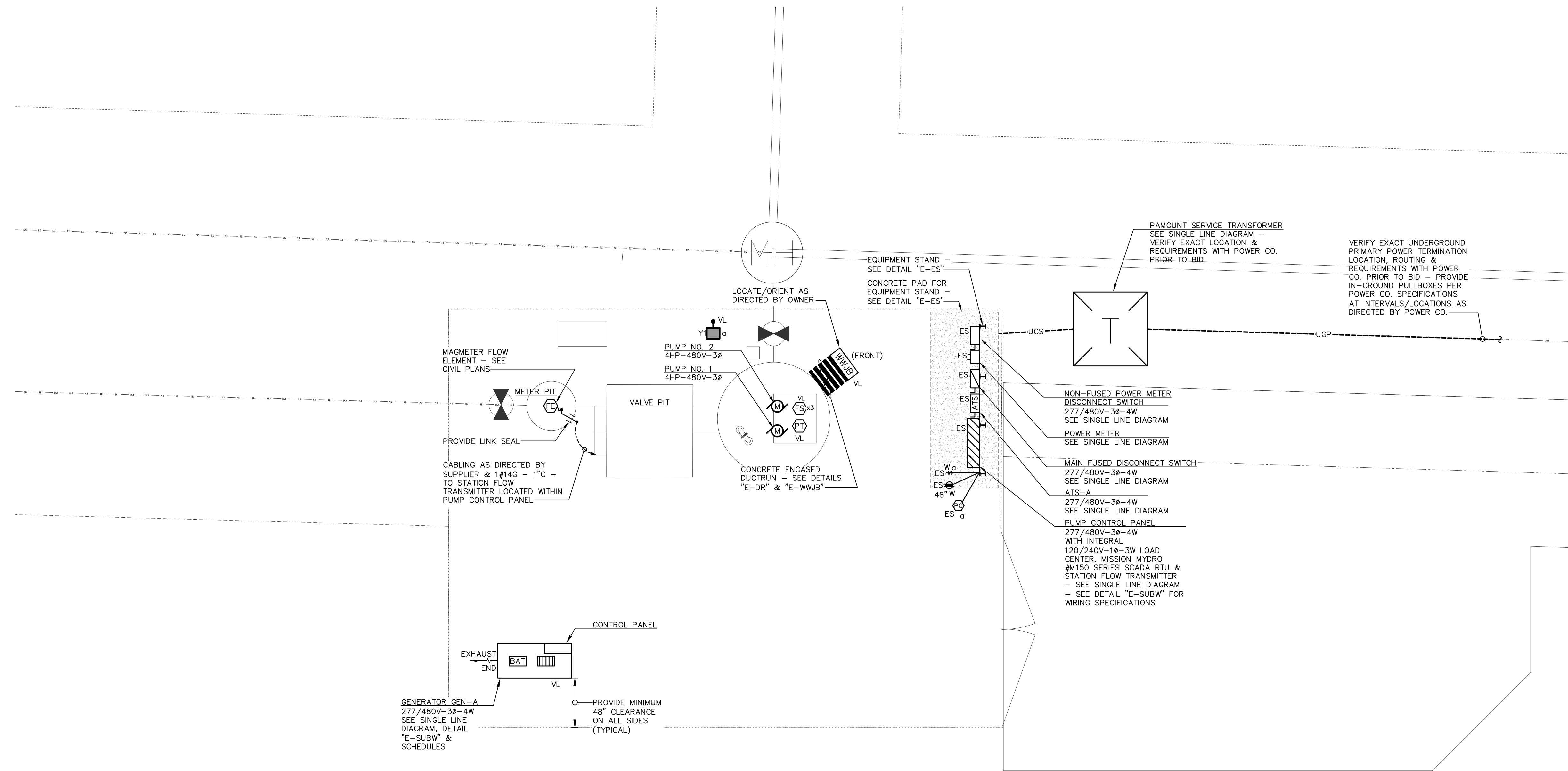
DATE: 2/23/23

CHECKED BY: PDB



REVISIONS

711 E. HOBBS STREET, ATHEENS, AL 35611
PHONE: (256) 867-4857
WWW.MORELLENGINEERING.COM



LIFT STATION
ELECTRICAL PLAN

SCALE : 1" = 5'-0"

PLAN NOTES

1. THIS PLAN IS INTENDED TO SHOW ELECTRICAL EQUIPMENT/DEVICE LOCATIONS & QUANTITIES ONLY. REFER TO SINGLE LINE DIAGRAM & PUMP STATION WIRING DIAGRAM FOR CIRCUITRY REQUIREMENTS, ETC.

REVISIONS	REVISION NO. 1
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LIFT STATION ELECTRICAL PLAN
of
ELKMONT REGIONAL PUMP STATION
UPGRADES

MORELL PROJECT NUMBER: 21-0261	SCALE: AS NOTED	DRAWN BY: RGN
DATE: 2/23/23	CHECKED BY: PDB	

CLIENT: LOWSA ADDRESS ELKMONT, AL	SHEET NUMBER E2.1
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