

ARKANSAS DEPARTMENT OF HUMAN SERVICES

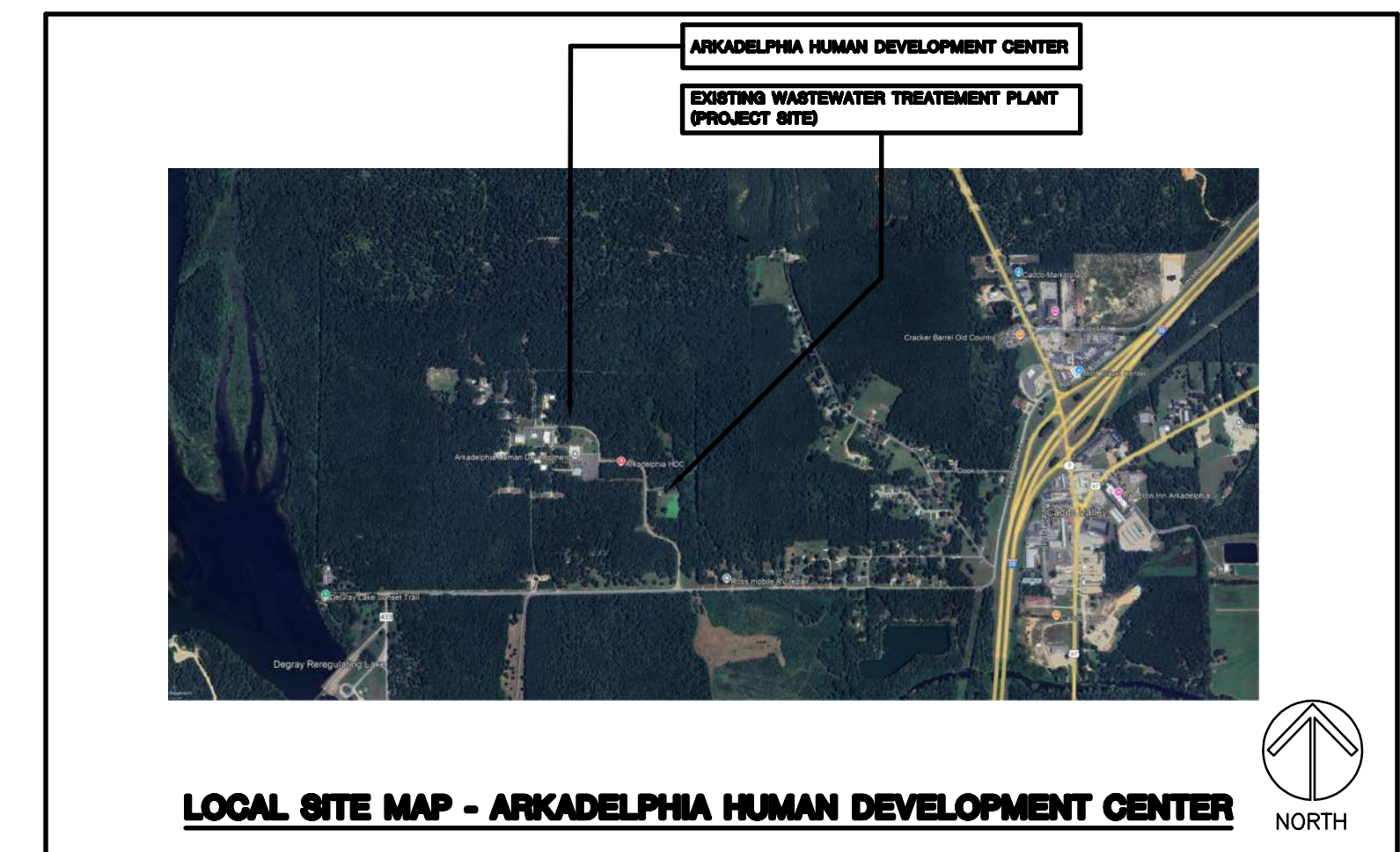
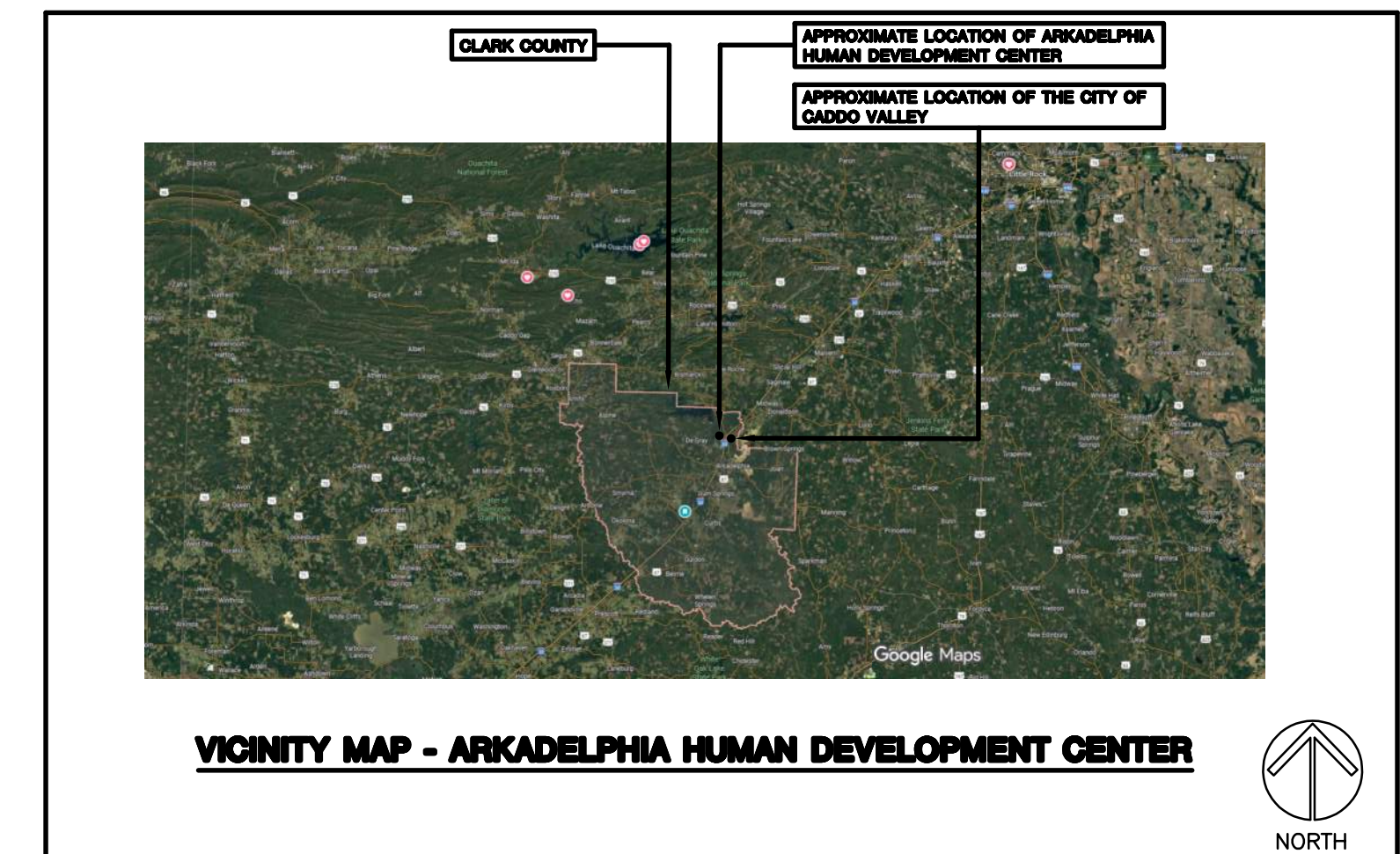
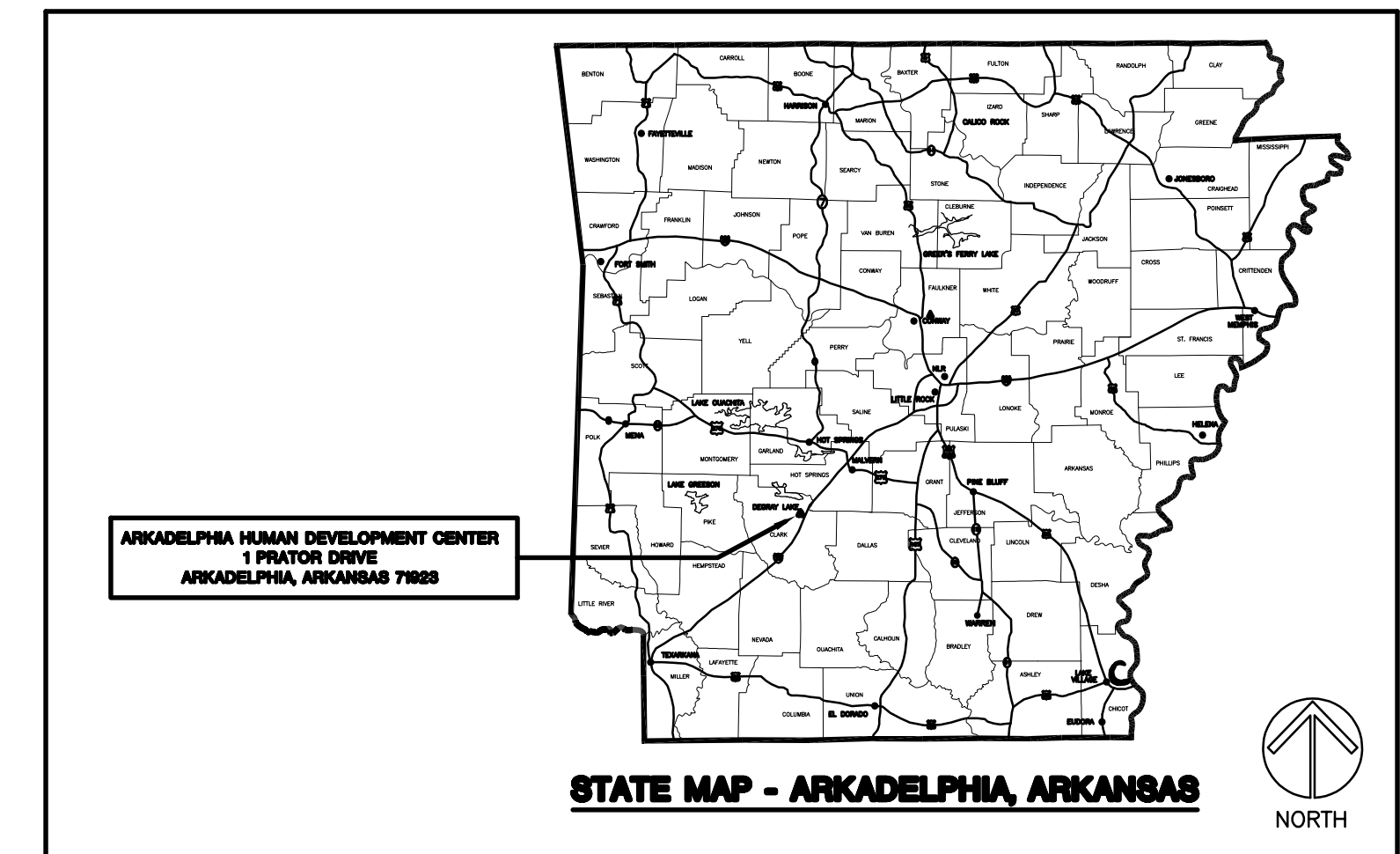
UPGRADE OF WASTEWATER SYSTEM

Arkadelphia Human Development Center
 1 Prator Drive
 Arkadelphia, Arkansas 71923

April 22, 2026

FOR CONSTRUCTION

DRAWING INDEX		
NO.	SHEET	TITLE
1	T1.1	TITLE SHEET
2	C1.1	GENERAL LAYOUT
3	C1.2	PUMP STATION SITE PLAN
4	C2.1	FORCE MAIN P&P - Sta. 0+00 TO 5+50
5	C2.2	FORCE MAIN P&P - Sta. 5+50 TO 12+00
6	C2.3	FORCE MAIN P&P - Sta. 12+00 TO 16+45
7	C2.4	PUMP STATION DETAILS
8	C3.1	MISCELLANEOUS DETAILS
9	E1.1	ELECTRICAL SITE PLAN - DEMOLITION
10	E1.2	ELECTRICAL SITE PLAN - CONSTRUCTION
11	E2.1	ELECTRICAL DETAILS



ARKANSAS DEPARTMENT OF HUMAN SERVICES - UPGRADE OF WASTEWATER SYSTEM
FOR CONSTRUCTION - LOCKEBY & ASSOCIATES, INC. - April 22, 2026

QUALITY CONTROL CERTIFICATION

A QUALITY CONTROL CHECK, INCLUDING THE APPROPRIATE COORDINATION AMONG DISCIPLINES, HAS BEEN MADE ON THIS PROJECT'S DOCUMENTS, AND CORRECTIONS RELATED TO THIS CHECK HAVE BEEN MADE. THE UNDERSIGNED PRINCIPAL/OWNER STATES THAT THESE PLANS AND SPECIFICATIONS AS SUBMITTED FOR REVIEW ARE, TO THE BEST OF HIS OR HER KNOWLEDGE AND ABILITY, COMPLETE AND READY FOR REVIEW.

SIGNED Glenn Lockeby DATE 04/22/2026
 GLENN LOCKEBY, P.E.

AFPC COMPLIANCE CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE AS REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE FOR THE STATE OF ARKANSAS.

Glenn Lockeby GLENN LOCKEBY, P.E.
 ARKANSAS REGISTRATION #7848



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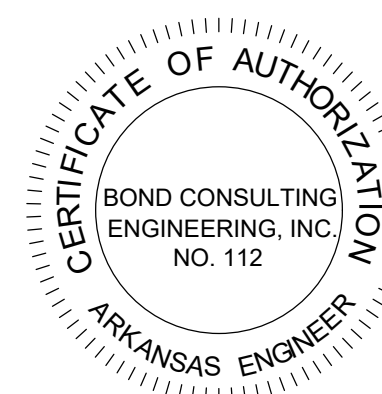
SHEET TITLE: **TITLE SHEET**
 PROJECT TITLE: **UPGRADE OF WASTEWATER SYSTEM**
 LOCATION: ARKADELPHIA HUMAN DEVELOPMENT CENTER ARKADELPHIA, AR

DATE: 04-22-2026
 SHEET NO: T-1
 1 OF 11

LOCKEBY & ASSOCIATES PROJECT NUMBER: 24-29
 DBA AGENCY PROJECT NUMBER: 7102601



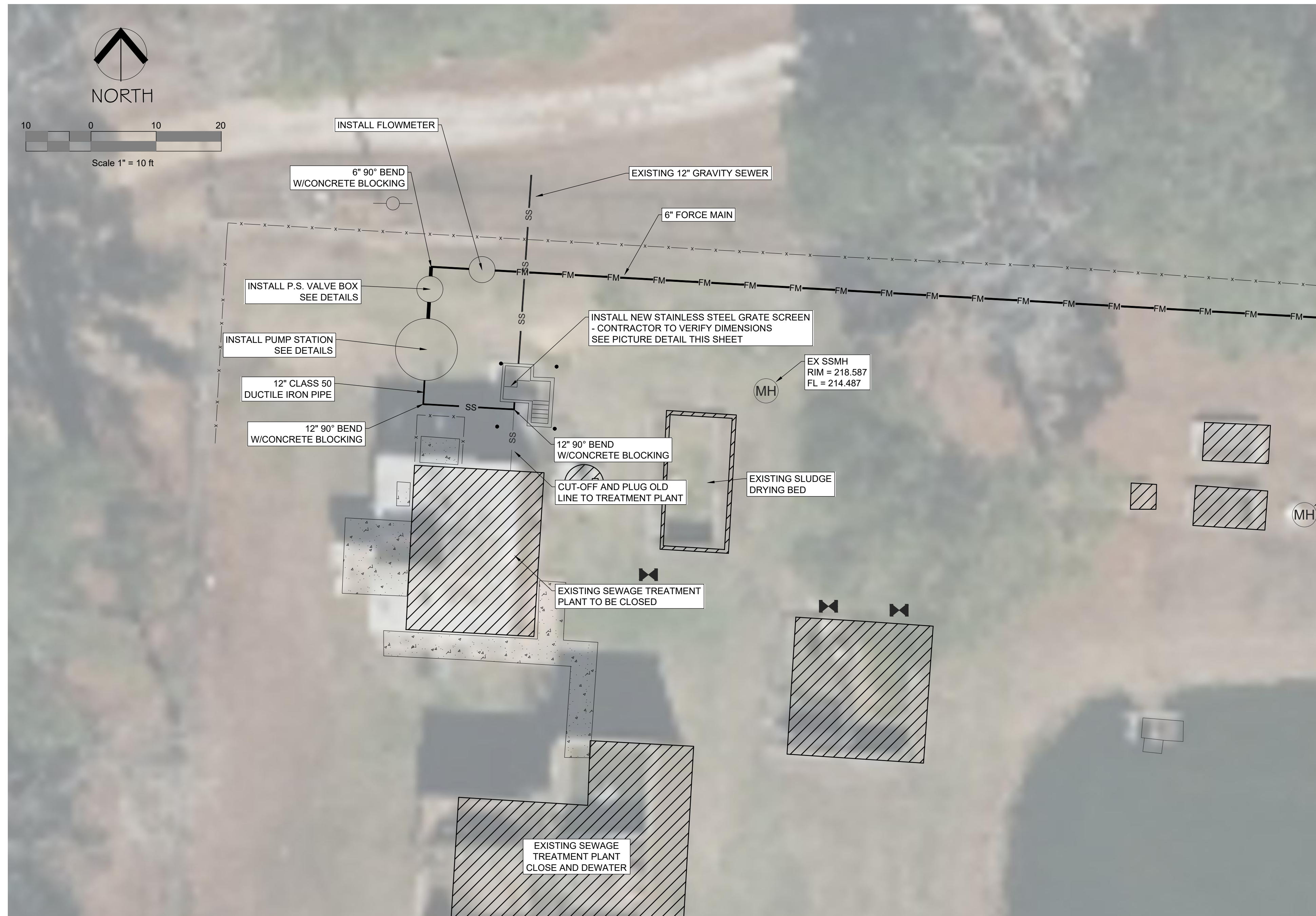
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SHEET TITLE: General Layout
 PROJECT TITLE: Upgrade of Wastewater System
 LOCATION: ARKADDELPHIA HUMAN DEVELOPMENT CENTER ARKADDELPHIA, AR

DATE: 10-3-2025
 SHEET NO: 1A of 6



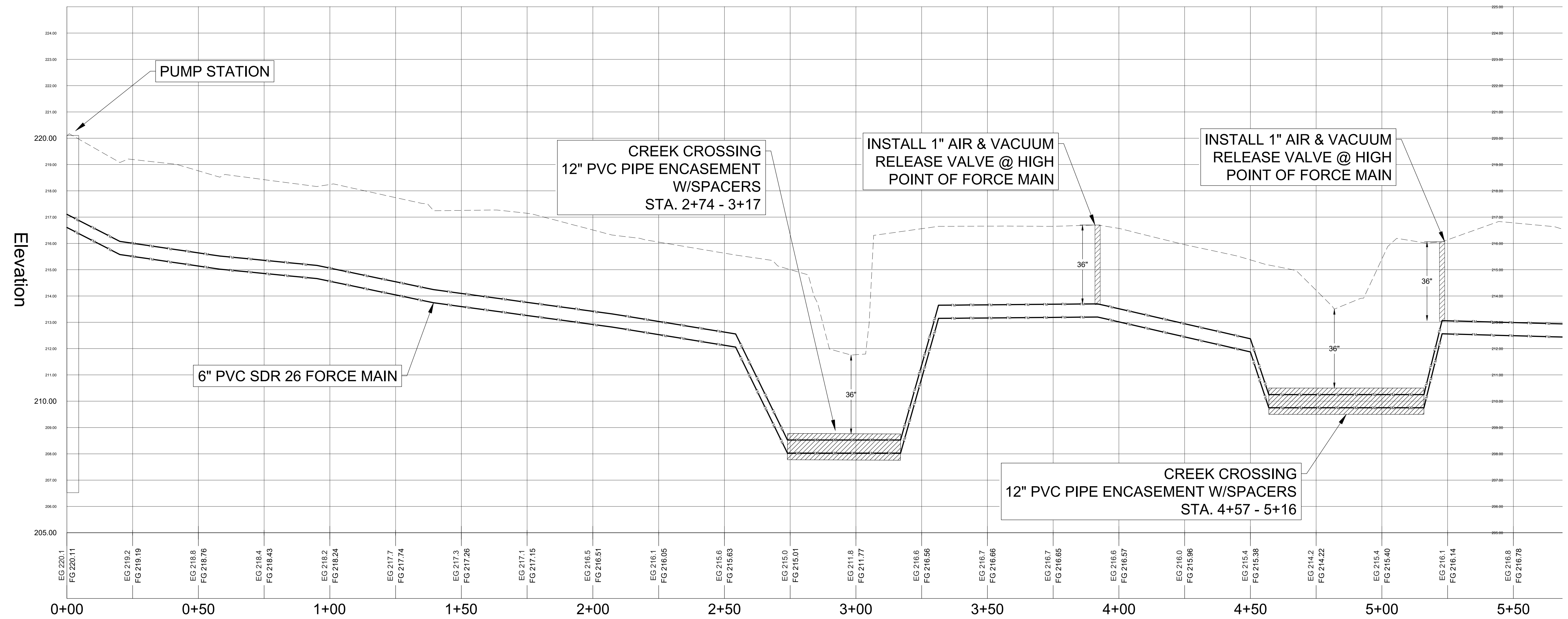
PUMP STATION SITE PLAN



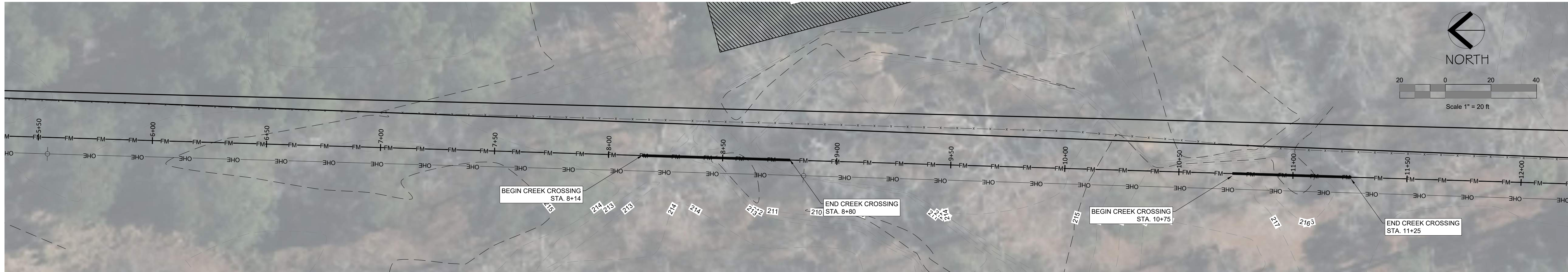
STAINLES STEEL GRATE SCREEN



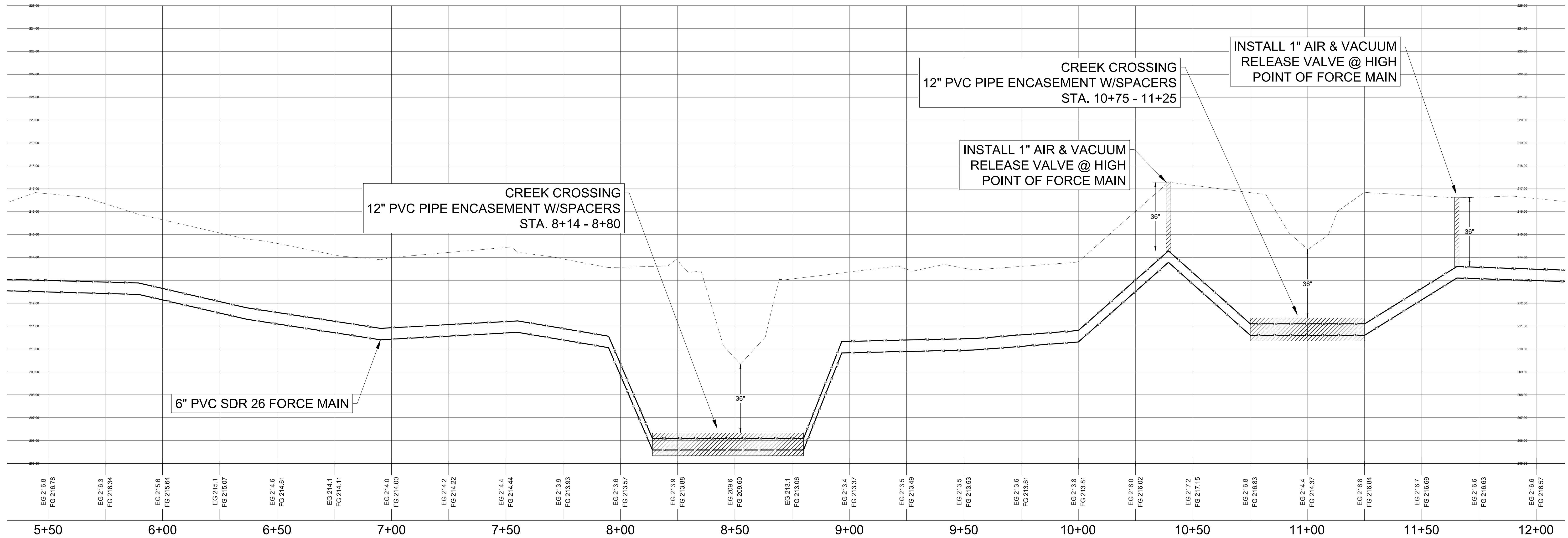
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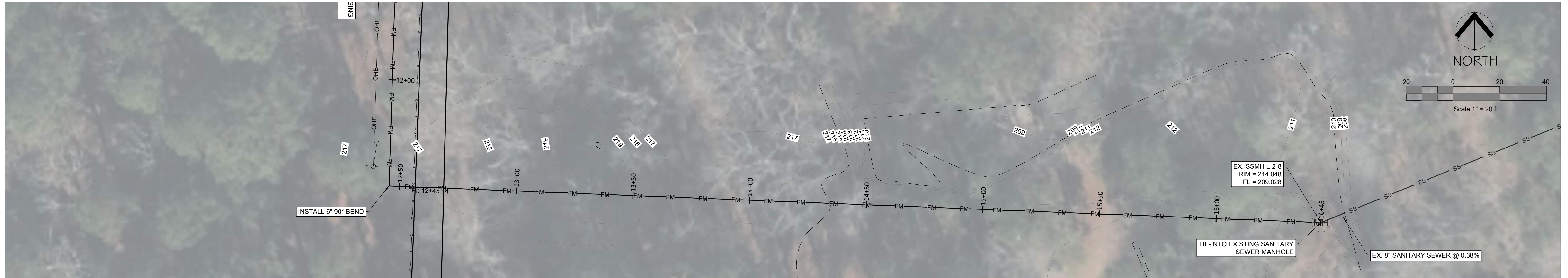
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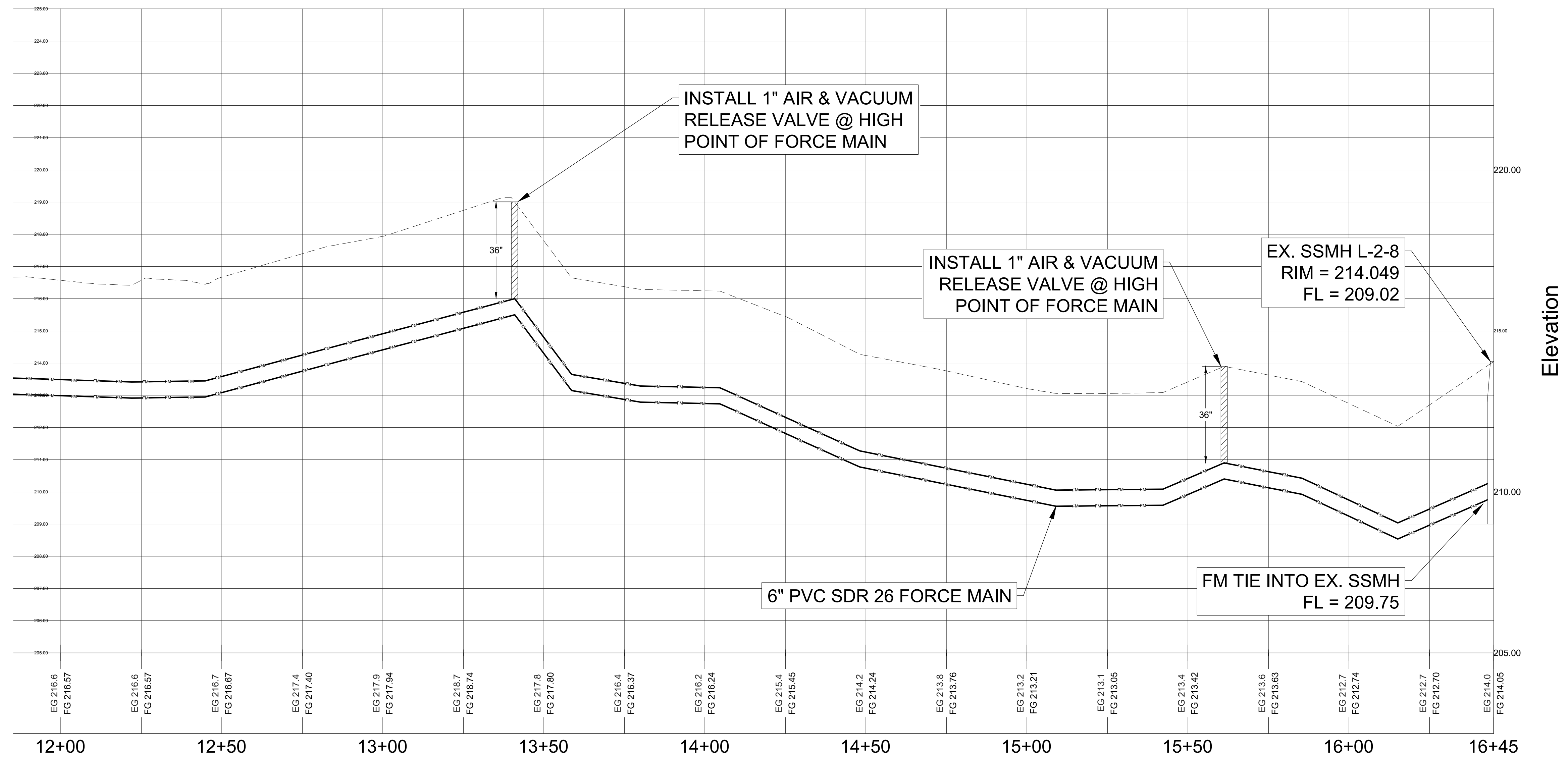
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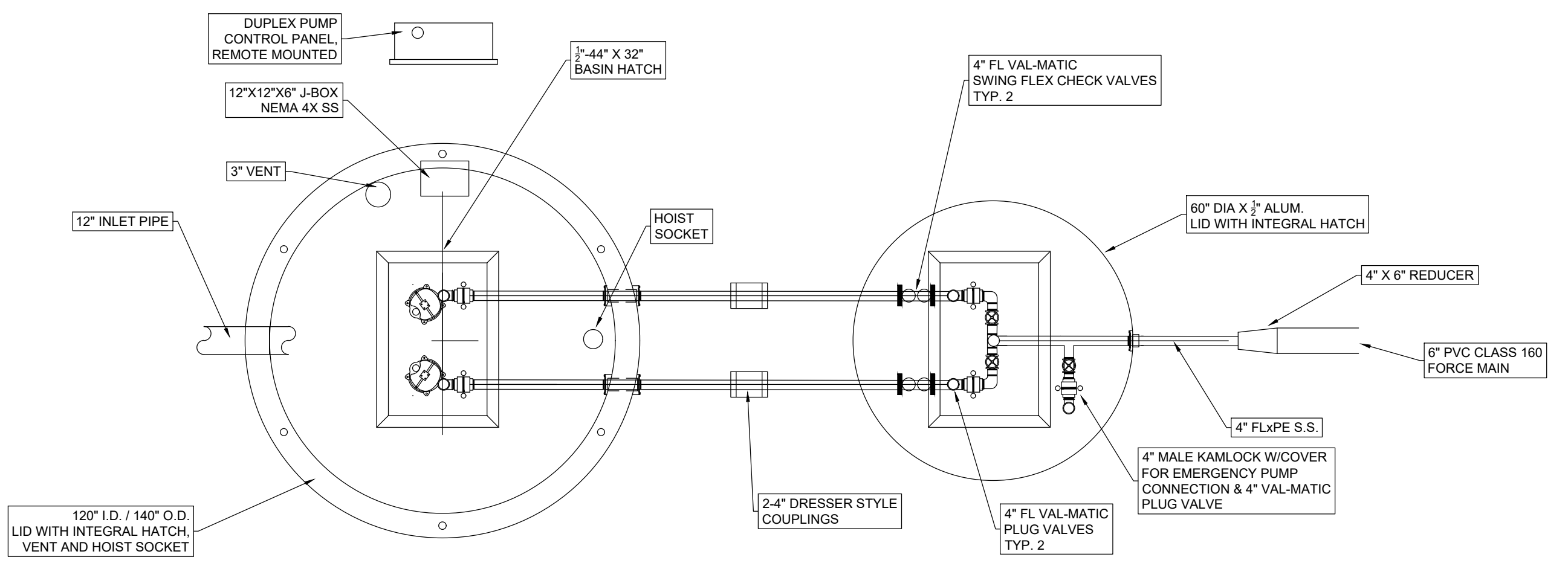
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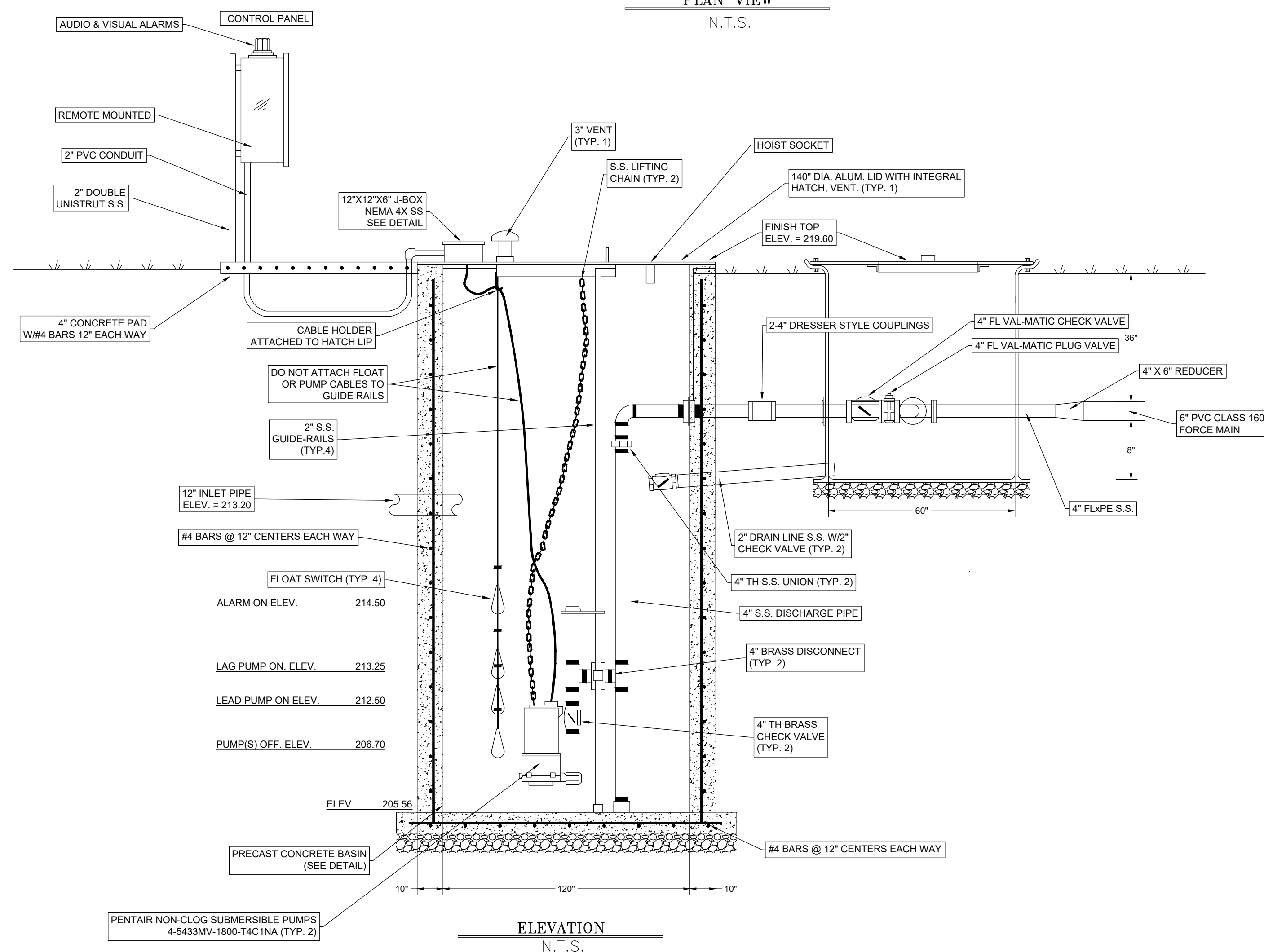
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FORCE MAIN PROFILE - STA. 12+00 - 16+45

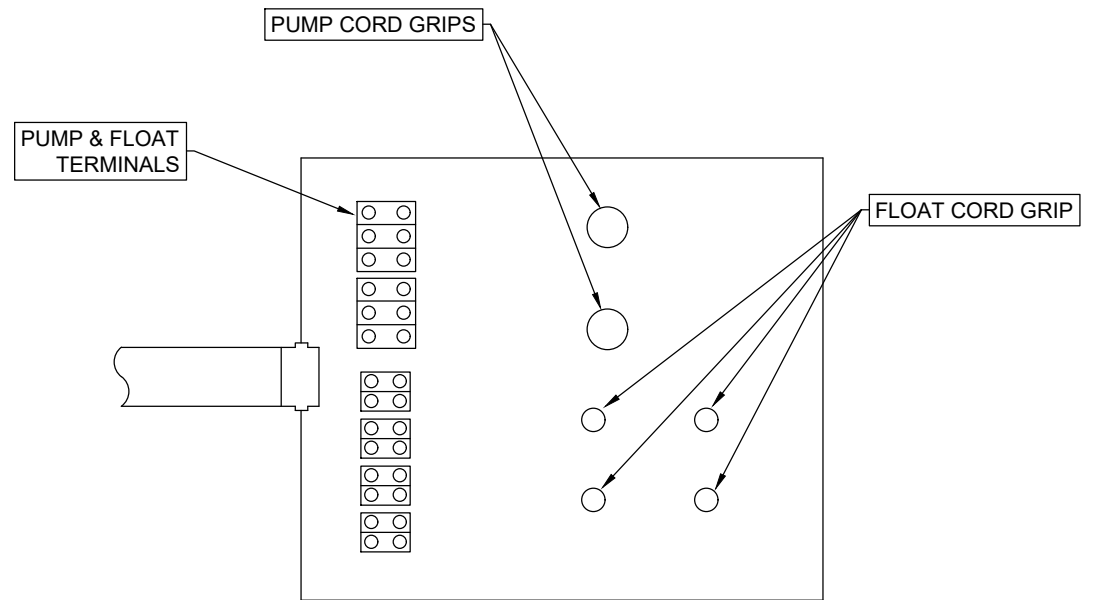


PLAN VIEW
N.T.S.

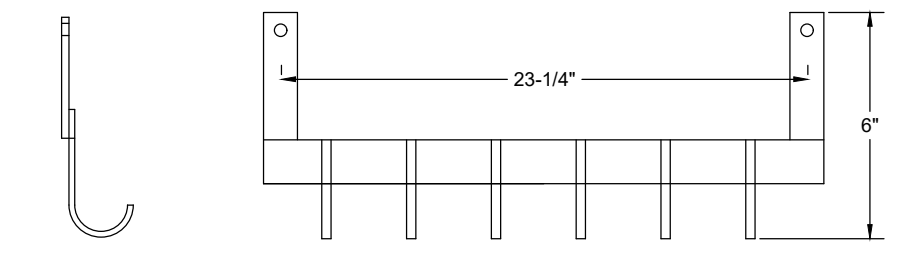


ELEVATION
N.T.S.

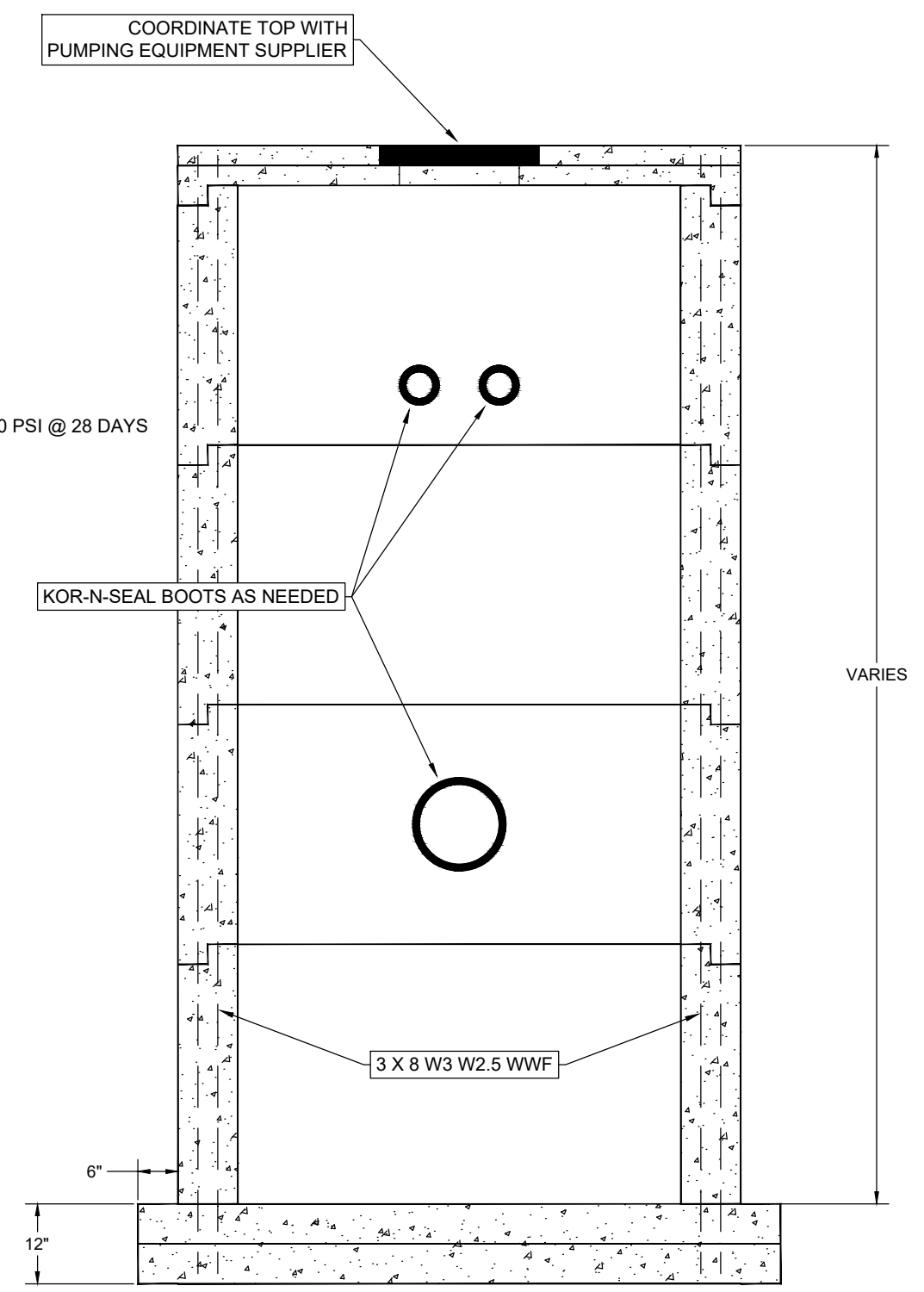
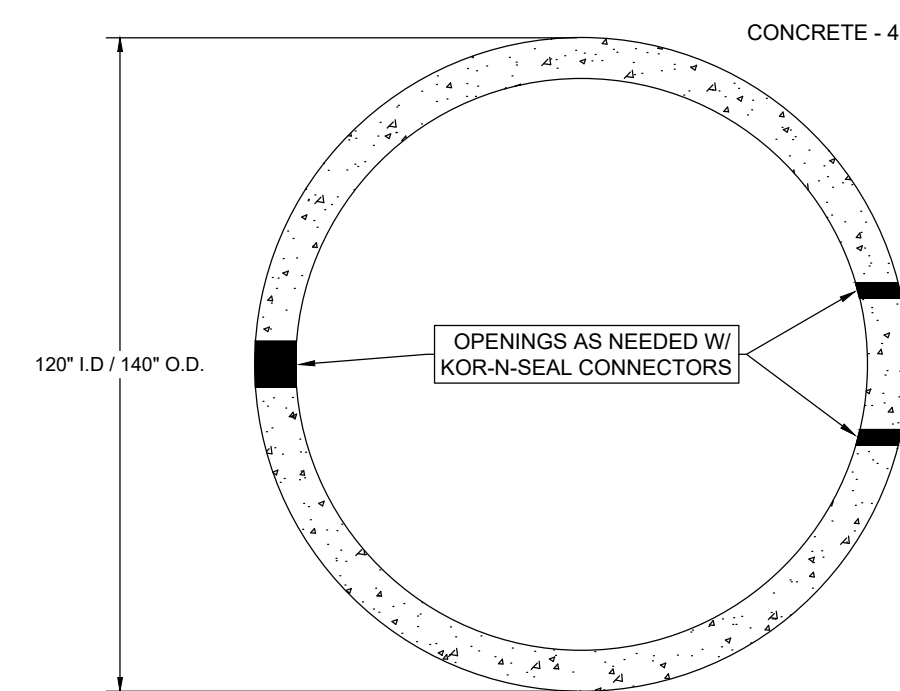
POURED-IN-PLACE CONCRETE PUMP STATION



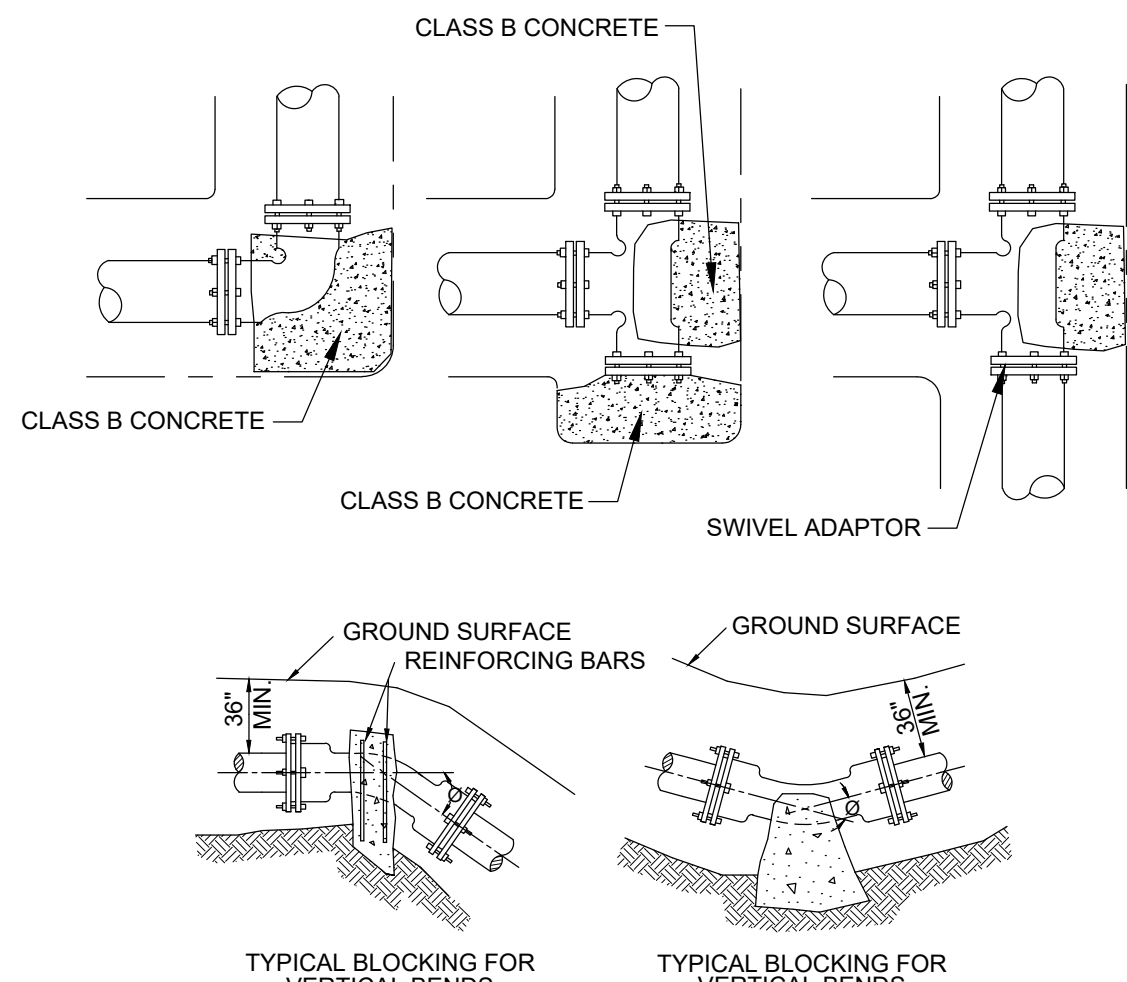
J-BOX INTERIOR & TERMINAL DETAIL
N.T.S.



CABLE HOLDER DETAIL
N.T.S.



PRECAST CONCRETE PUMP STATION

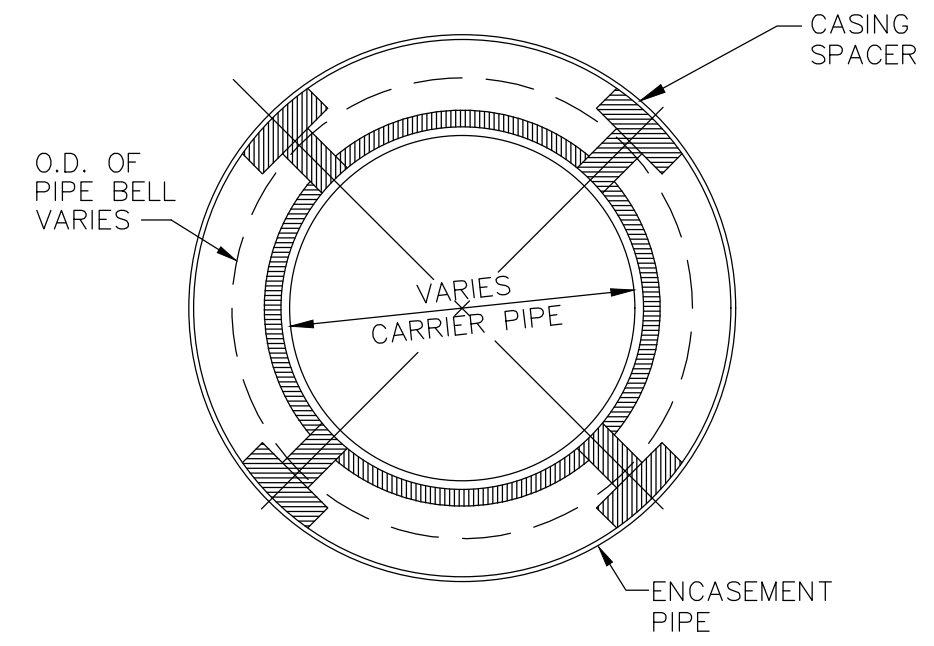
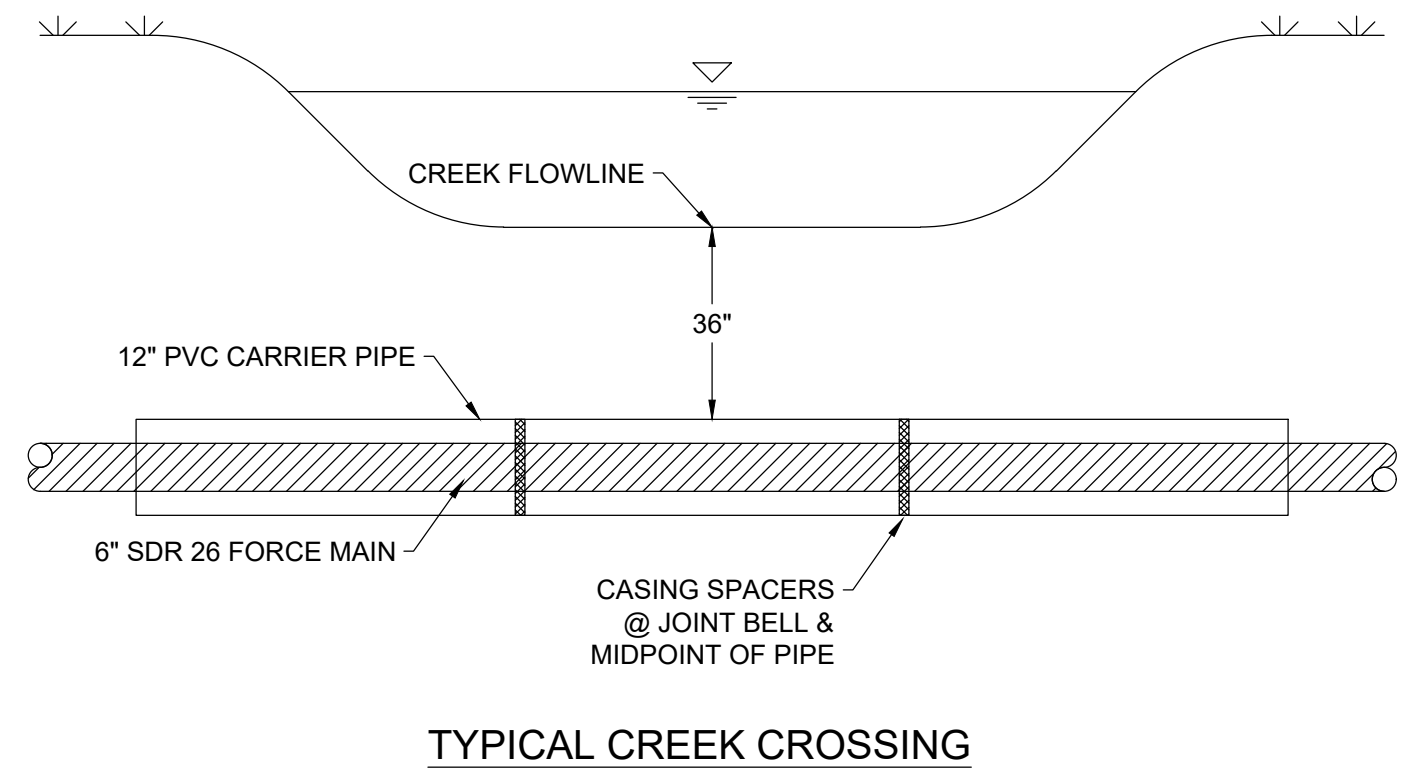
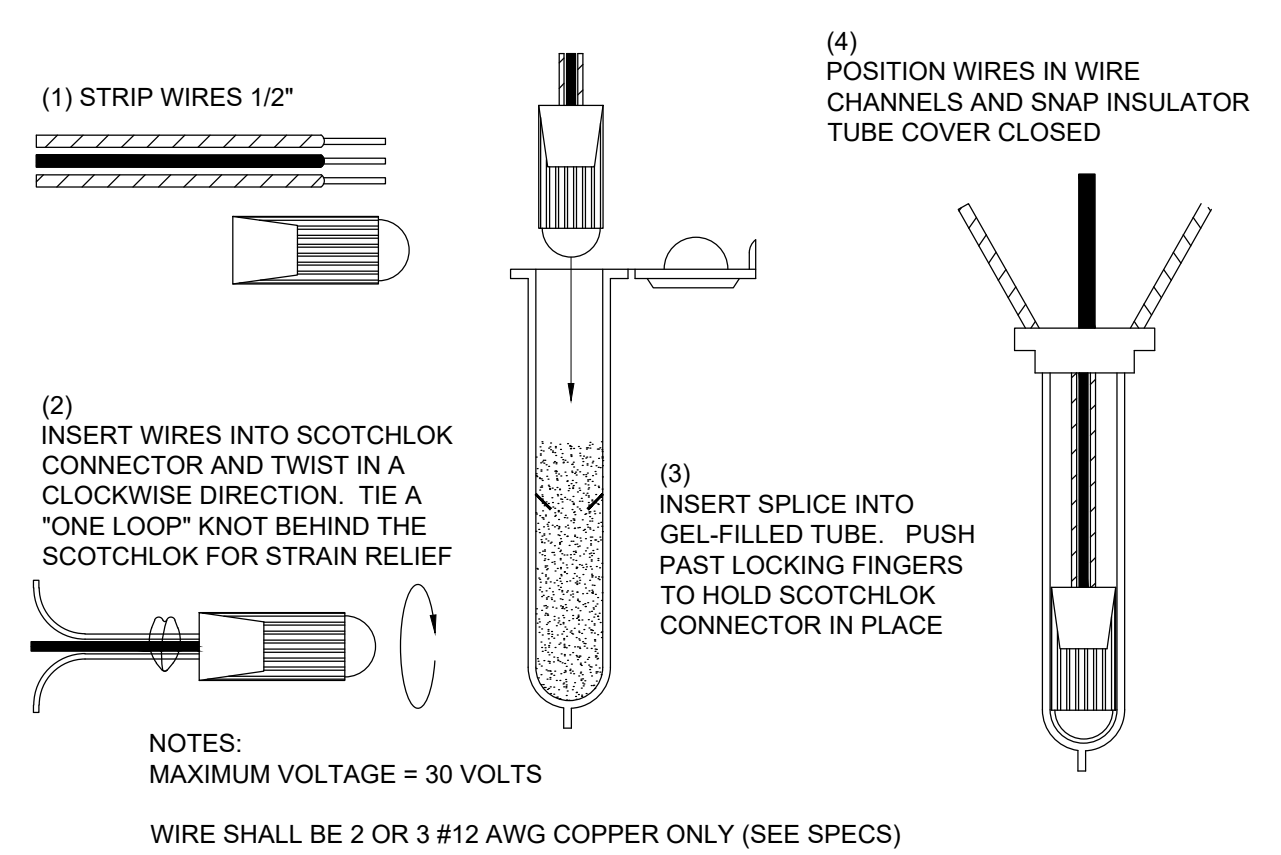
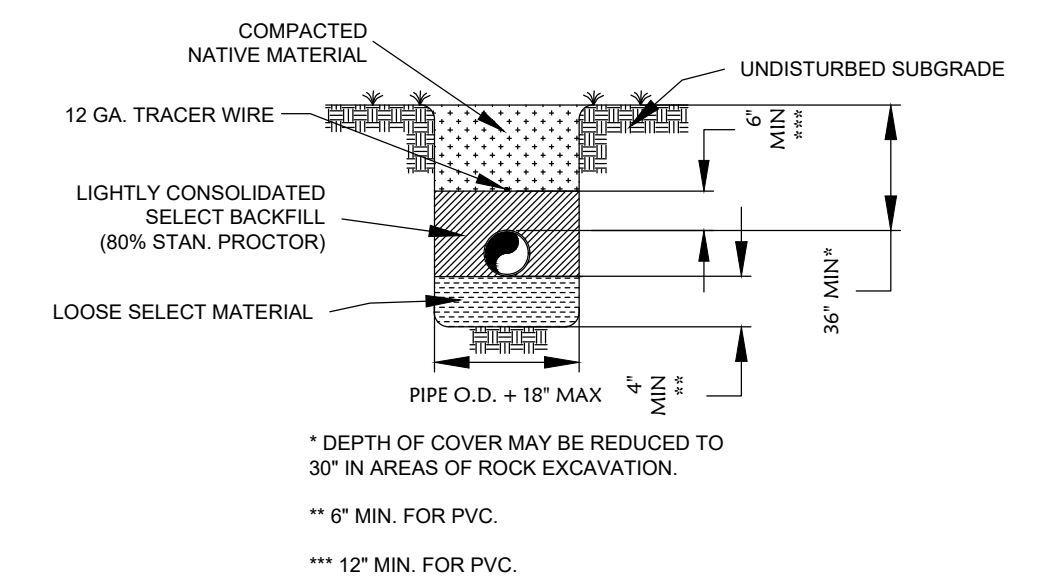
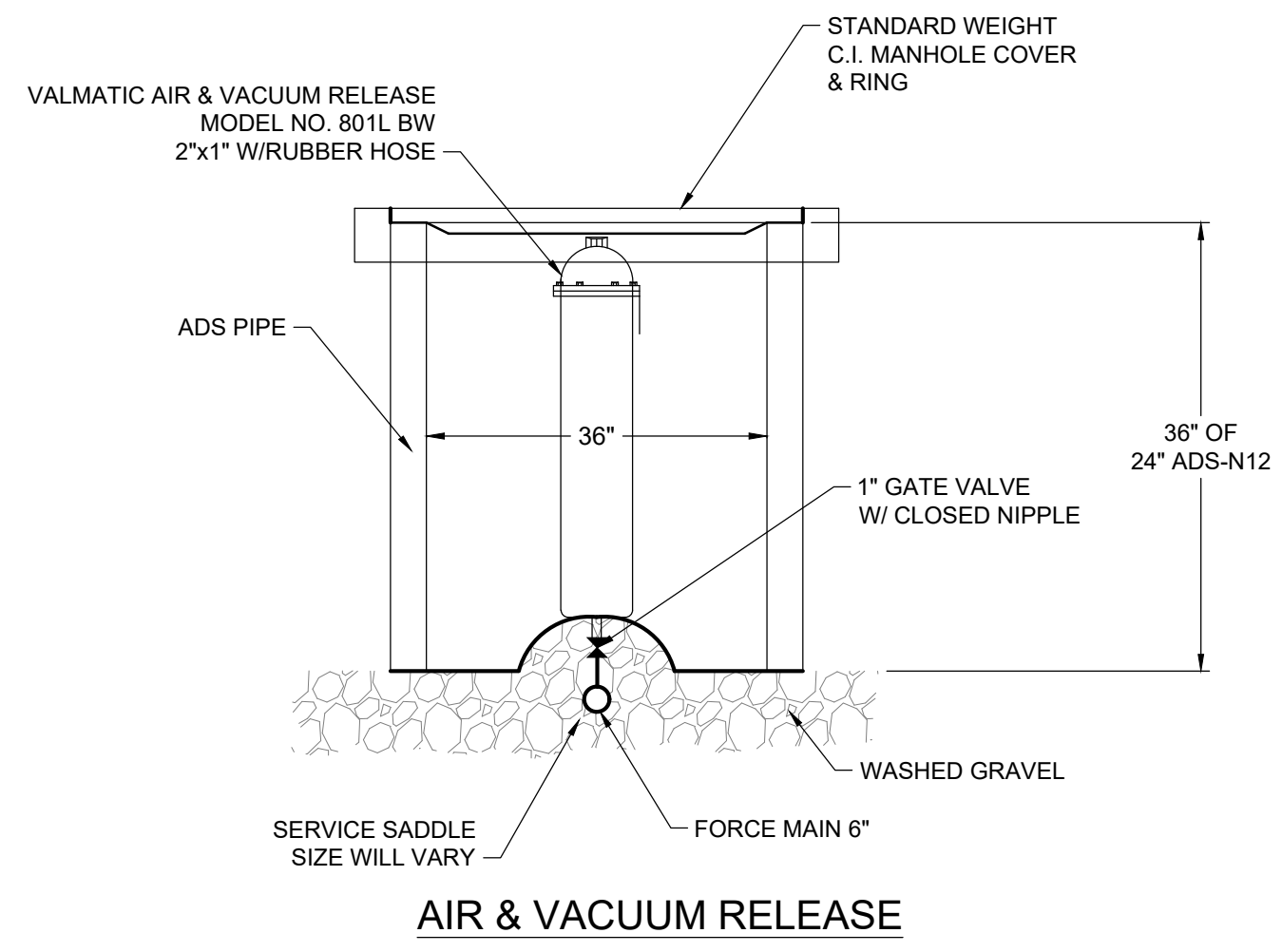


NOTES:
 1.) DO NOT CONCRETE AROUND CONNECTIONS OF FITTINGS.
 2.) WRAP ALL D.I. FITTINGS WITH VISQUEEN BEFORE PLACING CONCRETE BLOCKING.

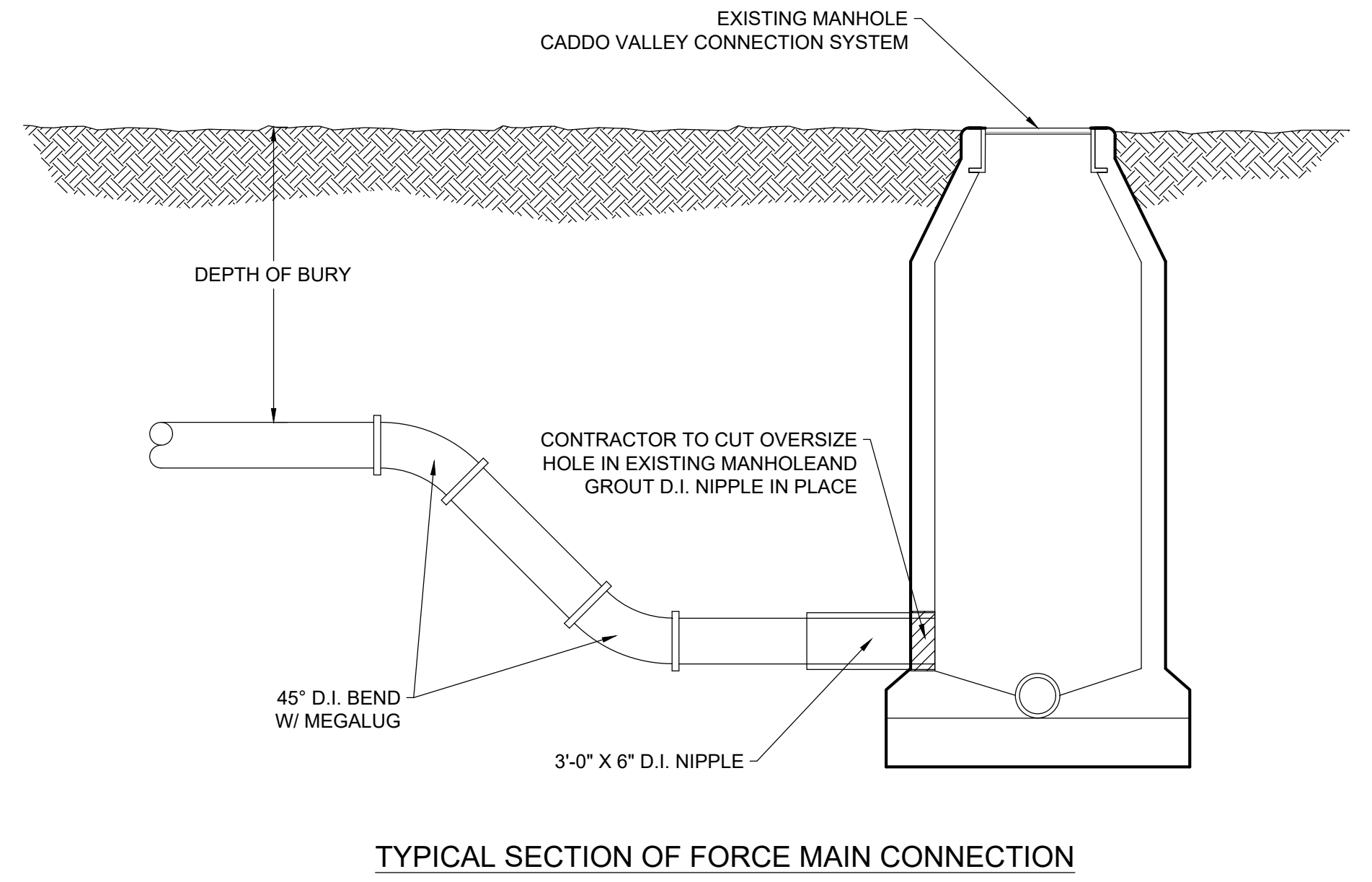
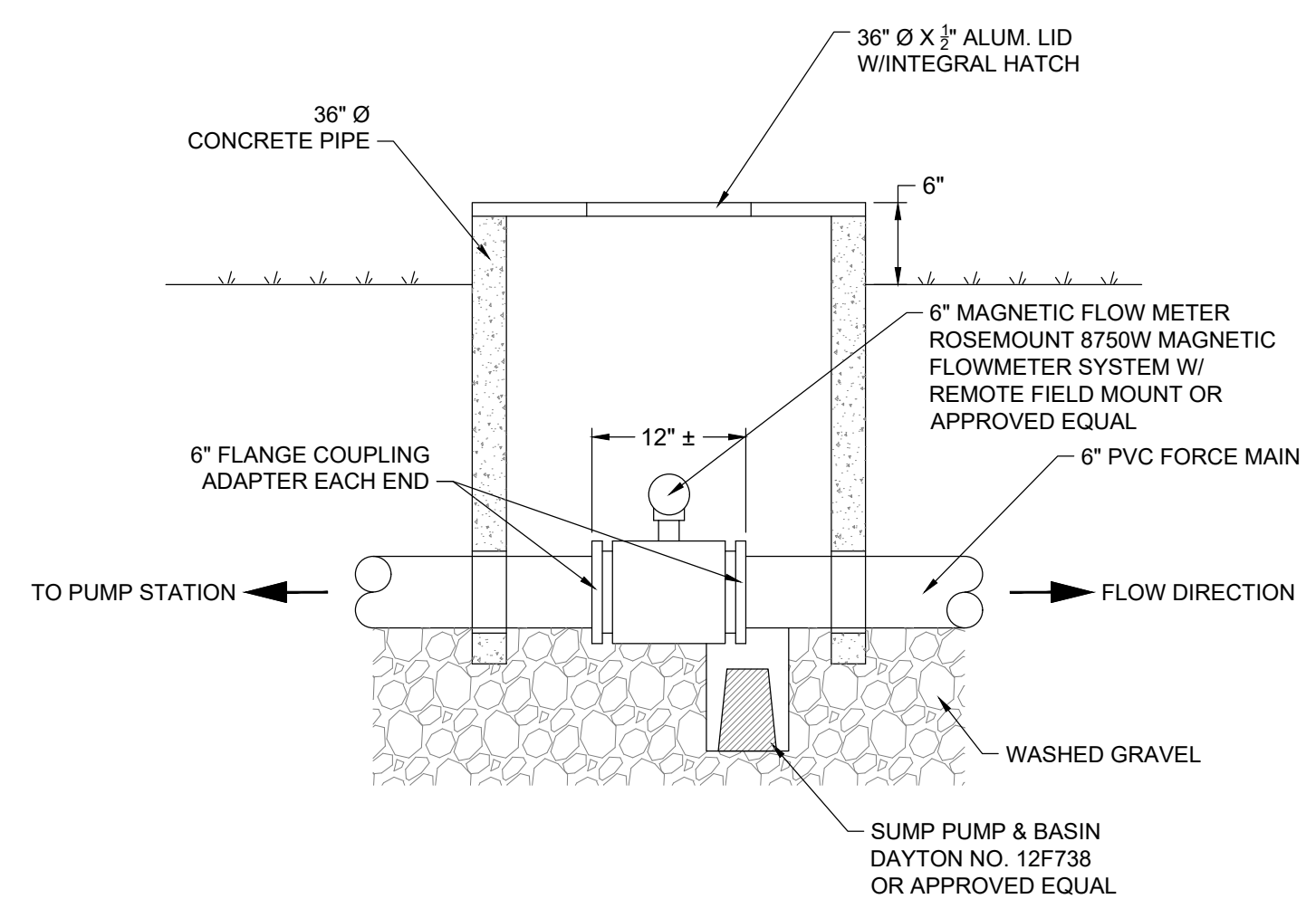
TYPICAL BLOCKING FOR FITTINGS

REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS BASED ON TEST PRESSURE OF 200 P.S.I.									
ALL AREAS GIVEN IN SQUARE FEET									
SIZE AND DEGREE OF BEND	87% TC, THROST IN PVC RISER	ASPERATED DRY CLAY 4000 LB/SYFT	DRY CLAY 2000 LB/SYFT	DRY CLAY 4000 LB/SYFT	DRY CLAY 8000 LB/SYFT	DRY CLAY 16000 LB/SYFT	DRY CLAY 32000 LB/SYFT	DRY CLAY 64000 LB/SYFT	DRY CLAY 128000 LB/SYFT
6"									
11 1/4"	1,108	1	1	1	1	1	2	1	
22 1/2"	2,207	1	2	2	1	1	1	3	1
45°	4,328	2	3	3	1	1	2	5	1
90°	7,996	2	4	5	1	1	2	8	1
PLUG	5,655	2	3	4	1	1	2	6	1
8"									
11 1/4"	1,970	1	1	2	1	1	1	2	1
22 1/2"	3,922	1	2	3	1	1	1	4	1
45°	7,694	2	4	5	1	1	2	8	1
90°	14,215	4	8	9	2	2	4	15	2
PLUG	10,053	3	5	6	2	2	3	10	1
12"									
11 1/4"	4,433	2	3	3	1	1	2	5	1
22 1/2"	8,826	3	5	6	2	2	3	9	1
45°	17,312	5	9	11	4	3	5	18	2
90°	31,983	8	16	19	4	4	8	32	4
PLUG	22,619	6	12	14	3	3	6	23	3
16"									
11 1/4"	7,881	2	4	5	1	1	2	8	1
22 1/2"	15,691	4	8	10	2	2	4	16	2
45°	30,779	8	16	19	4	4	8	31	4
90°	56,861	15	29	35	8	8	15	57	6
PLUG	40,213	10	21	25	5	5	10	41	5

NOTES:
 1. REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
 2. USE 6" 90 BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.



NOTE:
 SEWER FORCE MAIN LINES SHALL BE CENTERED AND RESTRAINED SUBSTANTIALLY AS DETAILED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS OF HIS PROPOSED CENTERING AND RESTRAINT SYSTEM FOR REVIEW AND POSSIBLE APPROVAL. THERE SHALL BE A CASING SPACER INSTALLED AT THE MIDPOINT OF EACH PIPE BARREL. A RESTRAINED CASING SPACER AT EACH JOINT POSITIONED AS SHOWN IN THIS DETAIL, AND RUBBER END SEALS.

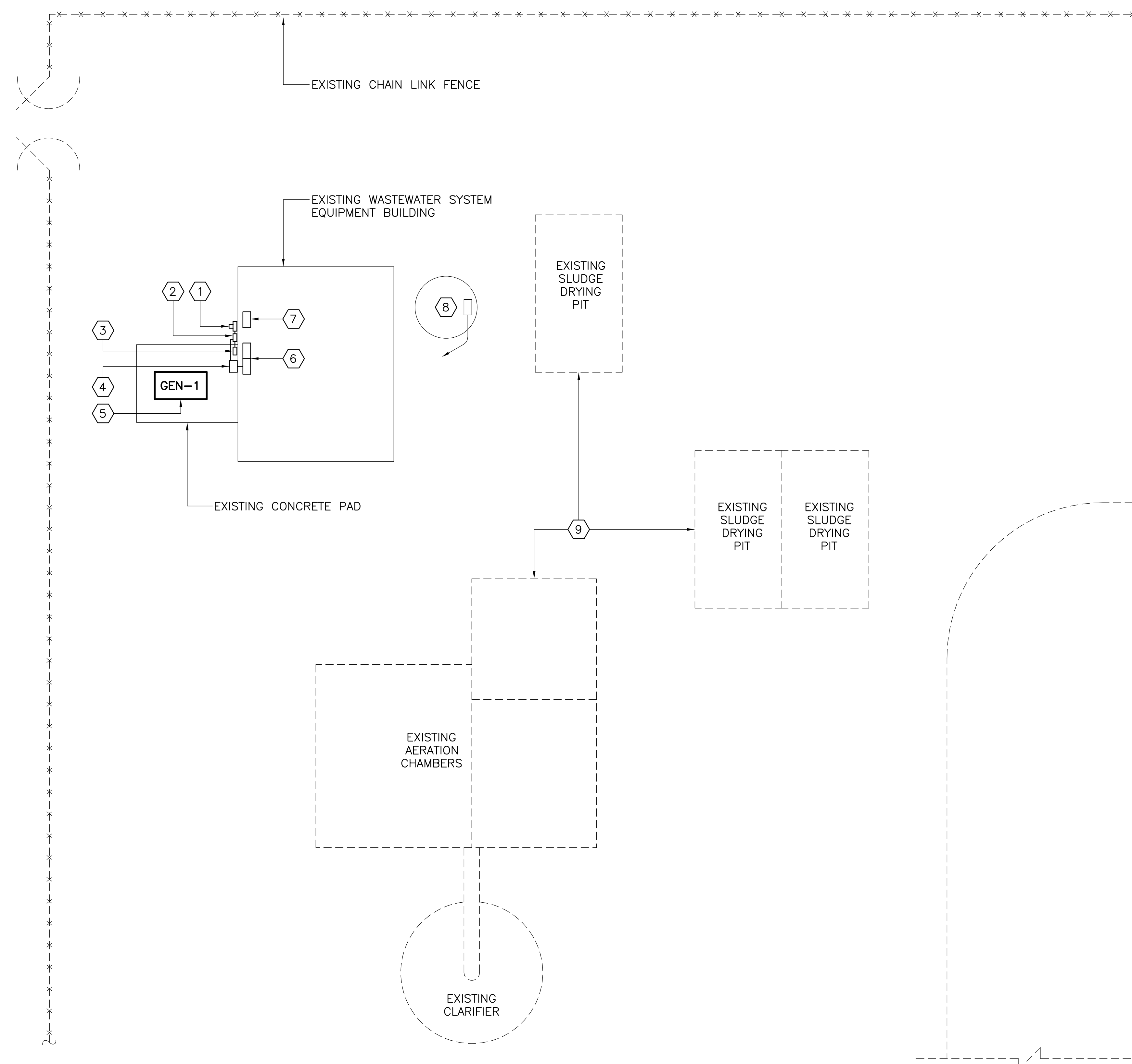


GENERAL NOTES

- A. THE ROUTING SHOWN OF EXISTING CIRCUITS IS SCHEMATIC AND ACTUAL CONDITIONS MAY VARY FROM THE ROUTING SHOWN ON THIS DRAWING. CONTRACTOR SHALL VERIFY ACTUAL ROUTING OF EXISTING CIRCUITS AND PERFORM HIS WORK ACCORDINGLY WITH NO CHANGES IN CONTRACT PRICE.
- B. EXISTING SURFACES AFFECTED BY CONNECTION OF THE NEW WORK SHALL BE RESTORED TO ORIGINAL CONDITION.

KEYED NOTES

- 1 EXISTING ELECTRIC METER, TO REMAIN.
- 2 EXISTING 100 AMP FUSIBLE SAFETY SWITCH, TO REMAIN.
- 3 EXISTING 125 AMP LOAD CENTER PROVIDING POWER TO THE GENERATOR'S BLOCK HEATER AND BATTERY CHARGER, TO REMAIN.
- 4 EXISTING AUTOMATIC TRANSFER SWITCH, TO REMAIN.
- 5 EXISTING 40 kW GENERATOR, TO REMAIN.
- 6 EXISTING AUTOCON MOTOR CONTROL CENTER. DEMOLISH THIS MOTOR CONTROL CENTER ENTIRELY. LEAVE THE BRANCH CIRCUITS POWERED BY THE "LIGHTING PANEL" WITHIN THIS MOTOR CONTROL CENTER. THESE CIRCUITS SHALL BE TRANSFERRED OVER INTO THE NEW SINGLE PHASE PANEL. SEE THE "ELECTRICAL SITE PLAN - CONSTRUCTION".
- 7 EXISTING ALLEN-BRADLEY STARTER CENTER. DEMOLISH THIS EQUIPMENT ENTIRELY.
- 8 EXISTING LIFT STATION, TO BE ABANDONED.
- 9 EXISTING WASTEWATER PLANT AND SLUDGE DRYING PITS, TO BE ABANDONED.

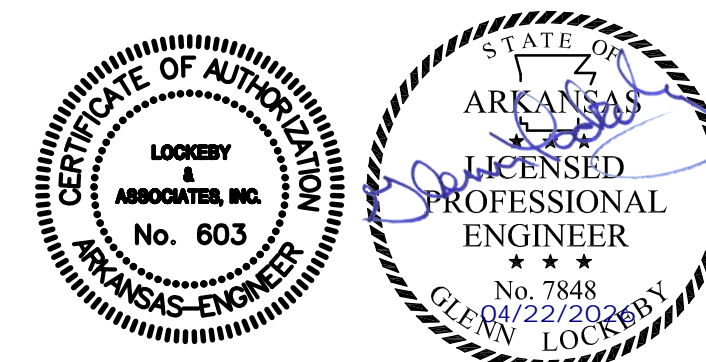


1 ELECTRICAL SITE PLAN - DEMOLITION
SCALE: 1/8" = 1'-0"



GRAPHIC SCALE

SCALE: 1/8" = 1'-0"



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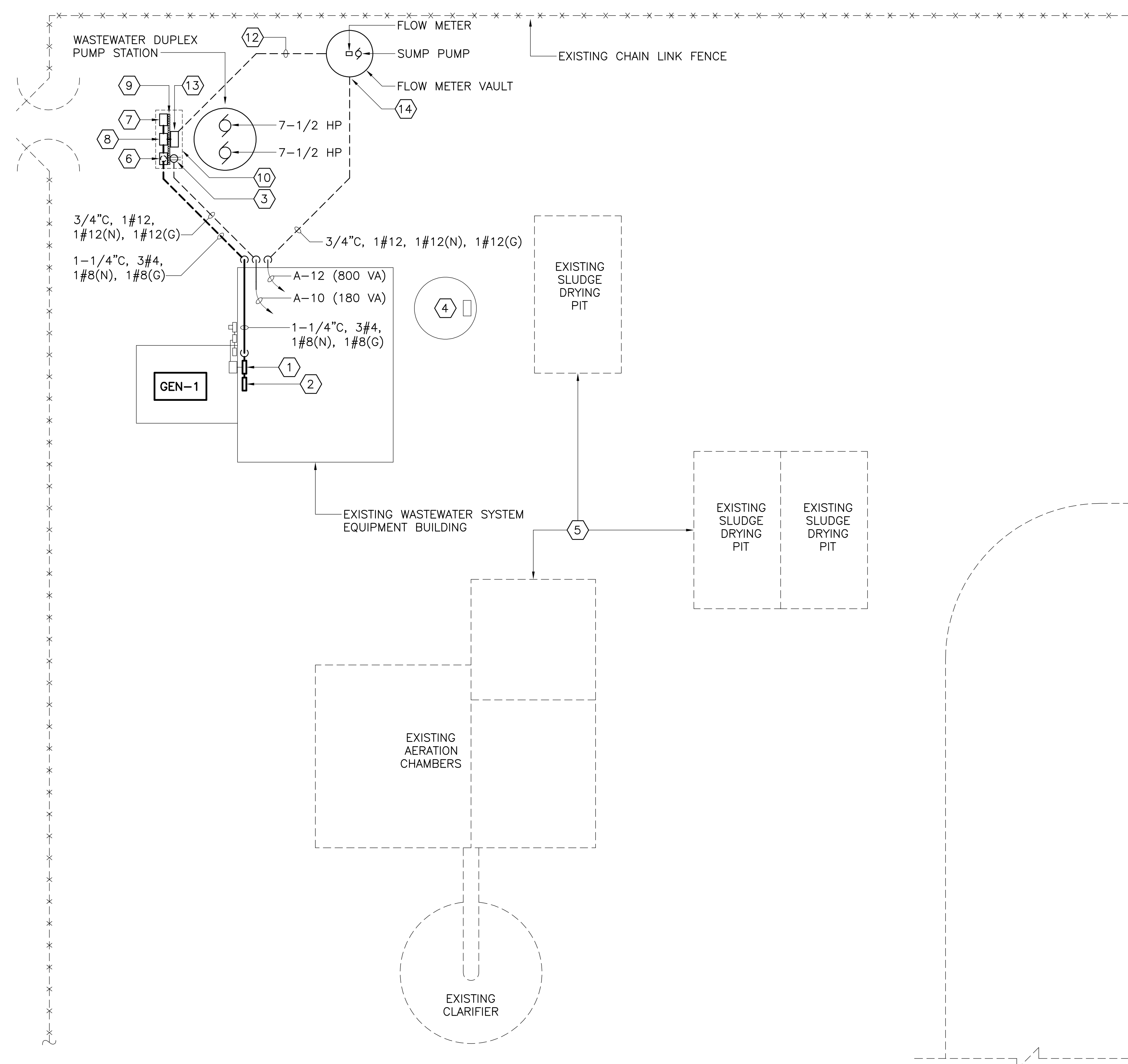
SHEET TITLE:	ELECTRICAL SITE PLAN - DEMOLITION	DATE: 04-22-2026
PROJECT TITLE:	UPGRADE OF WASTEWATER SYSTEM	SHEET NO: E1.1
LOCATION:	ARKADELPHIA HUMAN DEVELOPMENT CENTER ARKADELPHIA, AR	9 OF 11

GENERAL NOTES

- A. THE ROUTING SHOWN OF EXISTING CIRCUITS IS SCHEMATIC AND ACTUAL CONDITIONS MAY VARY FROM THE ROUTING SHOWN ON THIS DRAWING. CONTRACTOR SHALL VERIFY ACTUAL ROUTING OF EXISTING CIRCUITS AND PERFORM HIS WORK ACCORDINGLY WITH NO CHANGES IN CONTRACT PRICE.
- B. EXISTING SURFACES AFFECTED BY CONNECTION OF THE NEW WORK SHALL BE RESTORED TO ORIGINAL CONDITION.

KEYED NOTES

- 1 NEW PANEL "MDP". POWER THIS NEW PANEL FROM THE EXISTING AUTOMATIC TRANSFER SWITCH LOCATED ON THE EXTERIOR WALL. SEE "POWER RISER DIAGRAM" AND PANEL SCHEDULES FOR MORE INFORMATION.
- 2 NEW PANEL "A". PROVIDE POWER TO THIS PANEL FROM NEW PANEL "MDP". TRANSFER THE EXISTING CIRCUITS FROM THE DEMOLISHED "LIGHTING PANEL" THAT WAS LOCATED WITHIN THE DEMOLISHED MOTOR CONTROL CENTER OVER TO THIS PANEL. SEE PANEL SCHEDULE FOR MORE INFORMATION.
- 3 PROVIDE A GFCI RECEPTACLE IN A WEATHERPROOF ENCLOSURE. PROVIDE POWER TO THIS RECEPTACLE FROM NEW PANEL "A" AS INDICATED. MOUNT RECEPTACLE ON THE UNISTRUT STRUCTURE DESCRIBED IN KEYED NOTE #9 BELOW.
- 4 EXISTING LIFT STATION, TO BE ABANDONED.
- 5 EXISTING WASTEWATER PLANT AND SLUDGE DRYING PITS, TO BE ABANDONED.
- 6 PROVIDE A 100A3P FUSIBLE DISCONNECT SWITCH AT THIS LOCATION. SWITCH SHALL HAVE A NEMA 4X STAINLESS STEEL ENCLOSURE. PROVIDE 80 AMP FUSES IN SWITCH. LABEL THIS SWITCH AS "BUILDING POWER".
- 7 PROVIDE A 100A3P FUSIBLE DISCONNECT SWITCH AT THIS LOCATION. SWITCH SHALL HAVE A NEMA 4X STAINLESS STEEL ENCLOSURE. PROVIDE 80 AMP FUSES IN SWITCH. LABEL THIS SWITCH AS "TEMPORARY GENERATOR".
- 8 PROVIDE A 1003P MANUAL TRANSFER SWITCH AT THIS LOCATION. SWITCH SHALL HAVE A NEMA 4X STAINLESS STEEL ENCLOSURE. LABEL THIS SWITCH AS "MANUAL TRANSFER SWITCH".
- 9 PROVIDE A STAINLESS STEEL UNISTRUT SUPPORT STRUCTURE FOR THE THREE SWITCHES AND THE PUMP STATION'S CONTROL PANEL. BOLT THE UNISTRUT ONTO THE CONCRETE SLAB DESCRIBED IN KEYED NOTE #10.
- 10 PROVIDE A 12" THICK CONCRETE SLAB TO SUPPORT THE UNISTRUT STRUCTURE. THE CONCRETE SLAB SHALL EXTEND A MINIMUM OF 6" BEYOND ALL THE SWITCHES. PROVIDE ONE LAYER OF #4 BARS AT 8" ON CENTER BOTH WAYS IN THE APPROXIMATE MIDDLE OF THIS CONCRETE SLAB. THE TOP OF THIS SLAB SHALL BE NO MORE THAN 4" ABOVE THE ADJACENT GRADE. PROVIDE 1" CHAMFER ON ALL EXPOSED EDGES.
- 11 EXTEND 120 VOLT POWER FROM PANEL "A" TO THE SUMP PUMP AND THE FLOW METER. CONNECT AS REQUIRED, COMPLETE AND OPERATIVE.
- 12 PROVIDE CABLING AS REQUIRED FOR FLOW DATA BACK TO A DISPLAY LOCATED WITHIN THE PUMP STATION CONTROL PANEL. SEE KEYED NOTE #13 BELOW FOR FURTHER DETAILS. ALL WIRING AND CABLING TO BE IN CONDUIT AS SPECIFIED.
- 13 PUMP STATION CONTROL PANEL. PROVIDE (FURNISH AND INSTALL) A DISPLAY FOR THE FLOW METER INSIDE THE CONTROL PANEL ENCLOSURE. THE FLOW METER SHALL DISPLAY THE FLOW IN GALLONS PER MINUTE AND SHALL ALSO DISPLAY A "TOTALIZER" READING OF THE TOTAL FLOW THAT HAS BEEN PUMPED BY THE PUMP STATION.
- 14 PROVIDE POWER (CIRCUIT #A-12) TO THE SUMP PUMP AND THE FLOW METER WITHIN THE FLOW METER VAULT AS REQUIRED, COMPLETE AND OPERATIVE.



1 ELECTRICAL SITE PLAN - CONSTRUCTION

SCALE: 1/8" = 1'-0"

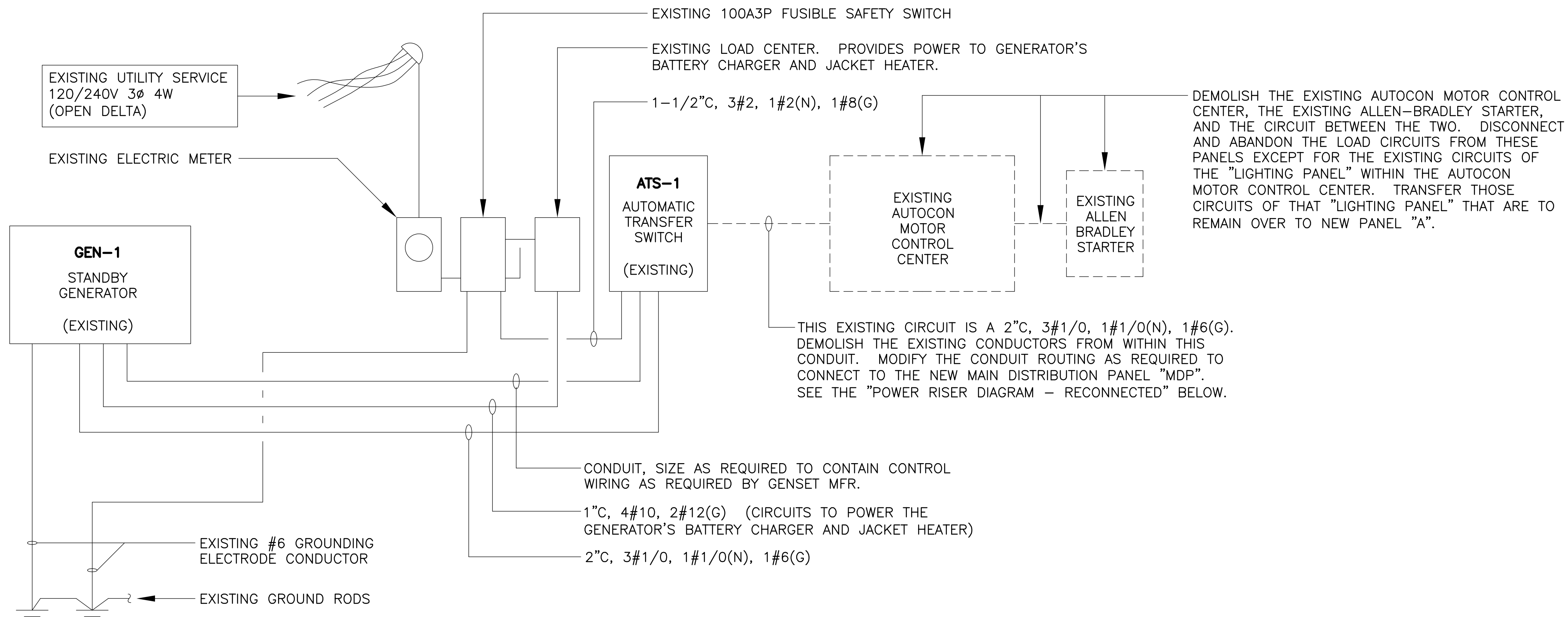


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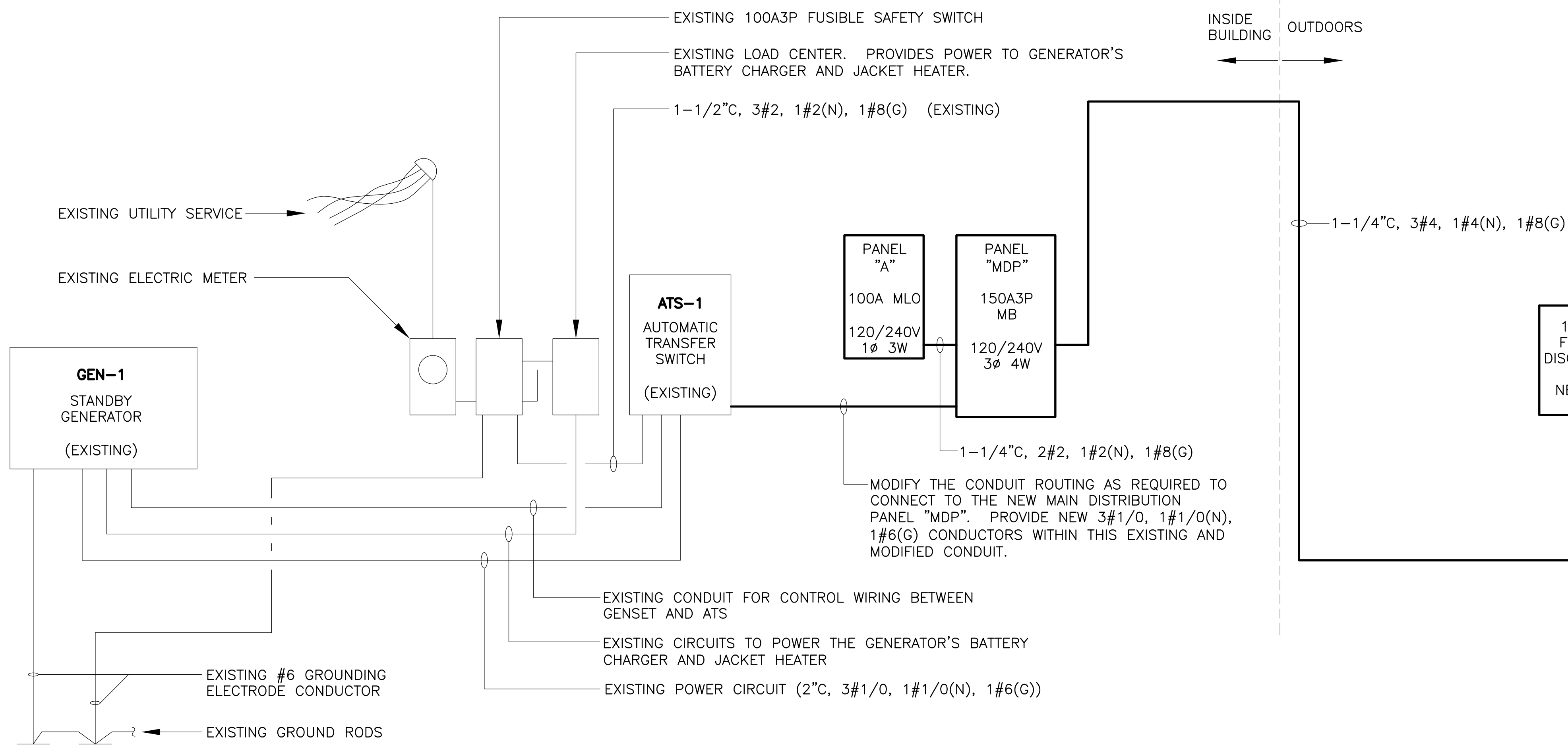
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SHEET TITLE: **ELECTRICAL SITE PLAN - CONSTRUCTION**
PROJECT TITLE: **UPGRADE OF WASTEWATER SYSTEM**
LOCATION: ARKADDELPHIA HUMAN DEVELOPMENT CENTER ARKADDELPHIA, AR

DATE: 04-22-2026
SHEET NO: **E1.2**
10 OF 11



1 POWER RISER DIAGRAM - EXISTING
NOT TO SCALE



2 POWER RISER DIAGRAM - RECONNECTED
NOT TO SCALE

PANEL "MDP"		120/240 VOLTS 3Ø 4W 150A3P MAIN BREAKER COPPER BUS		SQUARE D TYPE NF 18,000 AIC BRANCH BRKRS		NEMA 1 ENCLOSURE SURFACE MOUNTED EQUIP. GROUND BAR		
SERVICE	CKT. NO.	CONN. LOAD	BRKR.	PHASE A B C	BRKR.	CONN. LOAD	CKT. NO.	SERVICE
PANEL "A"	1	4 180	100	2	80	6 000	2	PUMP STATION
	3	4 800				6 000	4	
SPACE	5					6 000	6	
"	7						8	SPACE
"	9						10	"
"	11						12	"
"	13						14	"
"	15						16	"
"	17						18	"
"	19						20	"
"	21						22	"
"	23						24	"
"	25						26	"
"	27						28	"
"	29						30	"
TOTALS		ØA	ØB	ØC	TOTALS			
VA		10 180	10 800	6 000	VA			
AMPS		84.8	90.0	50.0	AMPS			

- NOTE 1. THE "HIGH LEG" OF THE EXISTING 120/240 VOLT, 3-PHASE, 4-WIRE POWER SYSTEM OF THIS FACILITY WAS CONNECTED TO THE "C" PHASE OF THE EXISTING ELECTRICAL SERVICE EQUIPMENT. LEAVE THAT ARRANGEMENT AS IT CURRENTLY EXISTS WITHIN THE EXISTING ELECTRICAL SERVICE EQUIPMENT, AND EXTEND THAT SAME ASSIGNMENT INTO THE NEW ELECTRICAL EQUIPMENT. THE "HIGH LEG" OF THE EXISTING ELECTRICAL SYSTEM SHALL BE CONNECTED TO THE "C" PHASE WITHIN NEW PANELBOARD "MDP".
- NOTE 2. PROVIDE APPROPRIATE LABEL WITHIN PANEL "MDP" THAT INFORMS MAINTENANCE PERSONNEL THAT THIS PANELBOARD CONTAINS A "HIGH LEG" ON THE "C" PHASE.
- NOTE 3. CONTRACTOR SHALL PROVIDE A **TYPED** CIRCUIT DIRECTORY IN A PROTECTIVE PLASTIC COVER ON THE INSIDE OF THE PANELBOARD DOOR.

PANEL "A"		120/240 VOLTS 1Ø 3W 100 AMP MAIN LUGS ONLY COPPER BUS		SQUARE D TYPE NQ 10,000 AIC BRANCH BREAKERS		NEMA 1 ENCLOSURE SURFACE MOUNTED EQUIP. GROUND BAR		
SERVICE	CKT. NO.	CONN. LOAD	BRKR.	LEG A B	BRKR.	CONN. LOAD	CKT. NO.	SERVICE
EXISTING LOADS (NOTE 1)	1	1 000	20/1		20/1	1 000	2	EXISTING LOADS (NOTE 1)
EXISTING LOADS (NOTE 1)	3	1 000	20/1		20/1	1 000	4	EXISTING LOADS (NOTE 1)
EXISTING LOADS (NOTE 1)	5	1 000	20/1		20/1	1 000	6	EXISTING LOADS (NOTE 1)
EXISTING LOADS (NOTE 1)	7	1 000	20/1		20/1	1 000	8	EXISTING LOADS (NOTE 1)
SPARE	9		20/1		20/1	180	10	EXTERIOR GFCI RECEPTACLE
"	11		20/1		20/1	800	12	SUMP PUMP, FLOW METER
"	13		20/1		20/1		14	SPARE
"	15		20/1		20/1		16	"
"	17		20/1		20/1		18	"
TOTALS		LEG "A"	LEG "B"	TOTALS				
VA		4 180	4 800	VA				
AMPS		34.8	40.0	AMPS				

- NOTE 1. CONTRACTOR SHALL TRACE OUT ALL EXISTING CIRCUITS AND PROVIDE A **TYPED** CIRCUIT DIRECTORY IN A PROTECTIVE PLASTIC COVER ON THE INSIDE OF THE PANELBOARD DOOR.



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SHEET TITLE: **ELECTRICAL DETAILS**
PROJECT TITLE: **UPGRADE OF WASTEWATER SYSTEM**
LOCATION: ARKADDELPHIA HUMAN DEVELOPMENT CENTER ARKADDELPHIA, AR

DATE: 04-22-2026
SHEET NO: **E2.1**
11 OF 11