

Poly, Inc. - G:\CLEANSTUFF-10-14114203 ARPA Water and Sewer Improvements\WP01-GENERAL\WWT\CONT 1 SYSTEM IMPROV\14203_G-0 COVER.dwg [COVER] Last Printed: July 16, 2025 - 10:53am By: JPeaden

ENGINEERING PLANS
FOR
ARPA
2022 SEWER INFRASTRUCTURE IMPROVEMENTS
CONTRACT 1
TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CWSRF PROJECT No. CS010864-02
FOR THE
CITY OF BRUNDIDGE, ALABAMA



MAYOR
ISABELL BOYD
CITY COUNCIL

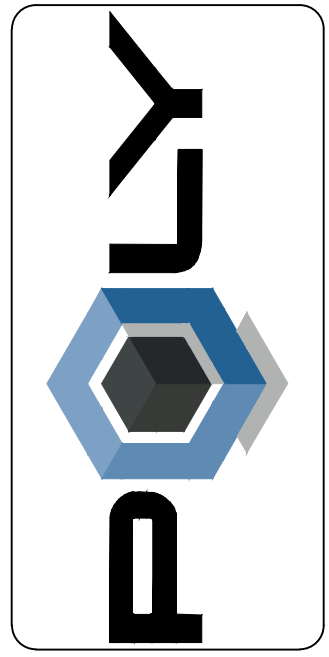
GERALD HOLLAND
LATISHER HALL
MARGARET ROSS
BYRON GAYNOR
MARILYN RODGERS

DISTRICT 1
DISTRICT 2
DISTRICT 3
DISTRICT 4
DISTRICT 5

CITY MANAGER
WILLIE WRIGHT

REVISED JULY 2025
SEPTEMBER 2024
Job No. 14-203
PREPARED BY
POLY, INC.

BID SET



Revision	Description	Date

DESIGNED BY:
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CA-1818

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MAY 2025
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001118

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TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CWSRF PROJECT No. CS010864-02
CITY OF BRUNDIDGE, ALABAMA

COVER SHEET

SHEET No.

PROJECT No.
14-203



VICINITY MAP
SCALE: 1" = 400'

INDEX OF SHEETS

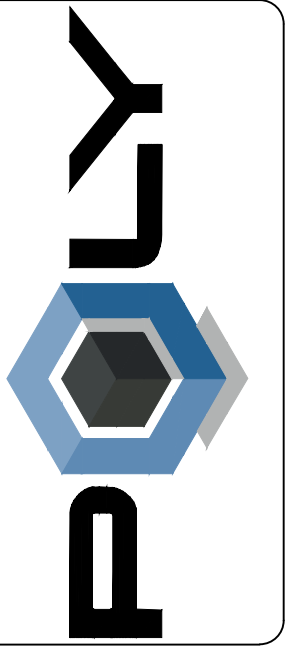
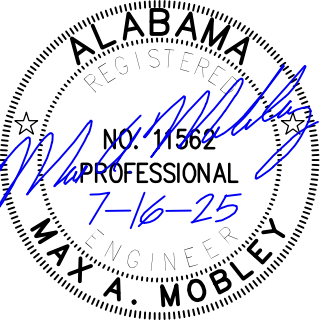
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LEGEND
EXISTING

WATER MAIN		EXISTING IRON PIN (SIZE & TYPE AS SHOWN)	
DRAINAGE PIPE		R.O.W. MONUMENT (SIZE AS SHOWN)	
EXISTING SEWER		CONTROL POINT	
EXISTING GAS LINE		CHAIN LINK FENCE	
FIRE HYDRANT		RAILROAD TRACK	
WATER VALVE		EXISTING TREELINE	
WATER METER		ASPHALT	
MANHOLE		CONCRETE	
SIGN		DIRT	
LIGHT POLE		GRAVEL	
UTILITY POLE			
GUY WIRE			
YARD LIGHT			
TELEPHONE BOX			
MAILBOX			
TREE			
BUSH / SHRUB			

ABBREVIATIONS

ASPH	ASPHALT
CLAY	VITRIFIED CLAY PIPE
CMT	CREPE MYRTLE TREE
CONC	CONCRETE
CP	CONTROL POINT
DIP	DUCTILE IRON PIPE
E	EASTING
EIP	EXISTING IRON PIN
EL	ELEVATION
EX	EXISTING
FH	FIRE HYDRANT
GV	GAS VALVE
GW	GUY WIRE
INV	INVERT
LF	LINEAR FEET
MB	MAILBOX
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTHING
NTS	NOT TO SCALE
OCEW	ON CENTER EACH WAY
OT	OAK TREE
OTP	OPEN TOP PIPE
PCT	PECAN TREE
PP	POWER POLE
PVC	POLYVINYL CHLORIDE PIPE
REQ	REQUIRED/PROPOSED
RJ	RESTRAINED JOINT
SIP	SET IRON PIN
SP	SERVICE POLE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
TP	TELEPHONE POLE
WM	WATER METER
WV	WATER VALVE
W/	WITH
W/O	WITHOUT
YL	YARD LIGHT
Ø	DIAMETER



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TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CWSRF PROJECT No. C5010864-02
CITY OF BRUNNIDGE, ALABAMA

VICINITY MAP, DRAWING INDEX, LEGEND,
AND ABBREVIATIONS

SHEET No.
G-1

PROJECT No.
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ALABAMA

REGISTERED

NO. 1562

7-16-25

PROFESSIONAL

ENGINEER

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CITY OF BRUNNIDGE, ALABAMA

OVERALL IMPROVEMENTS

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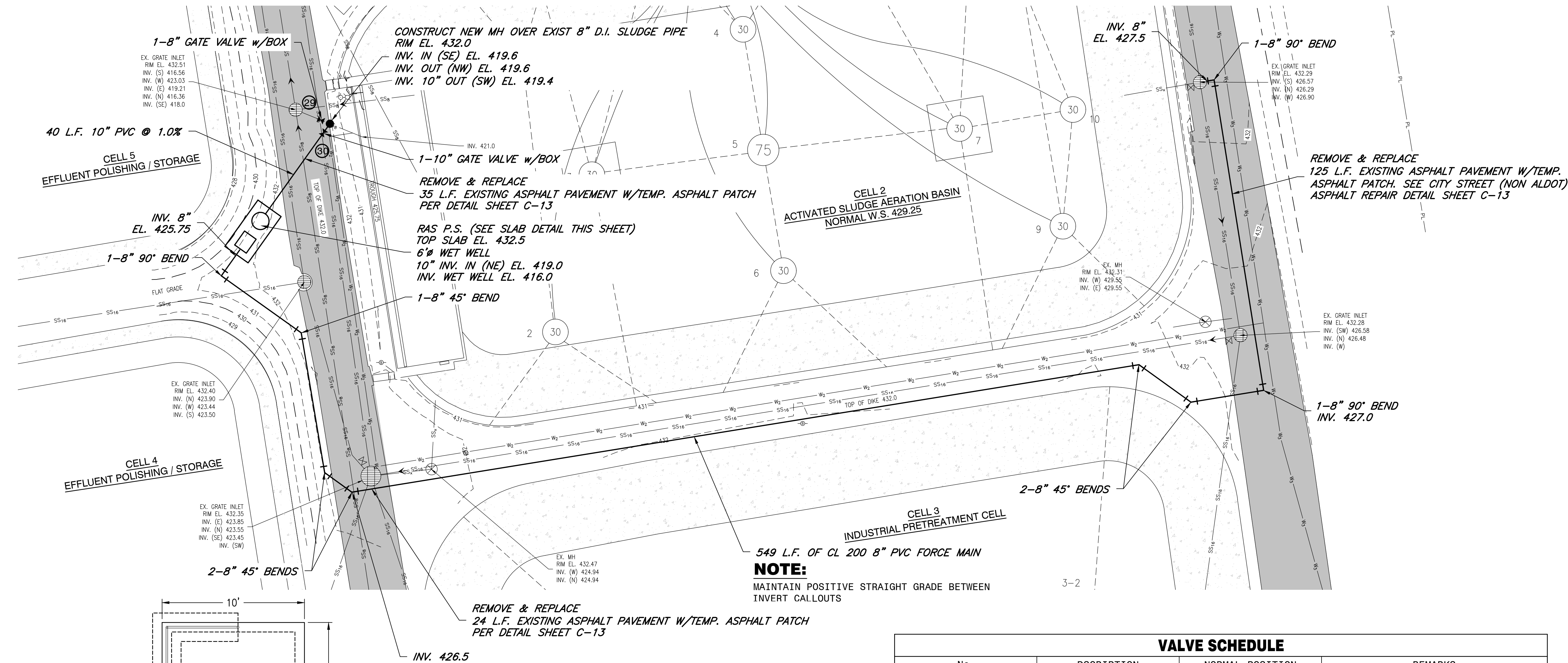
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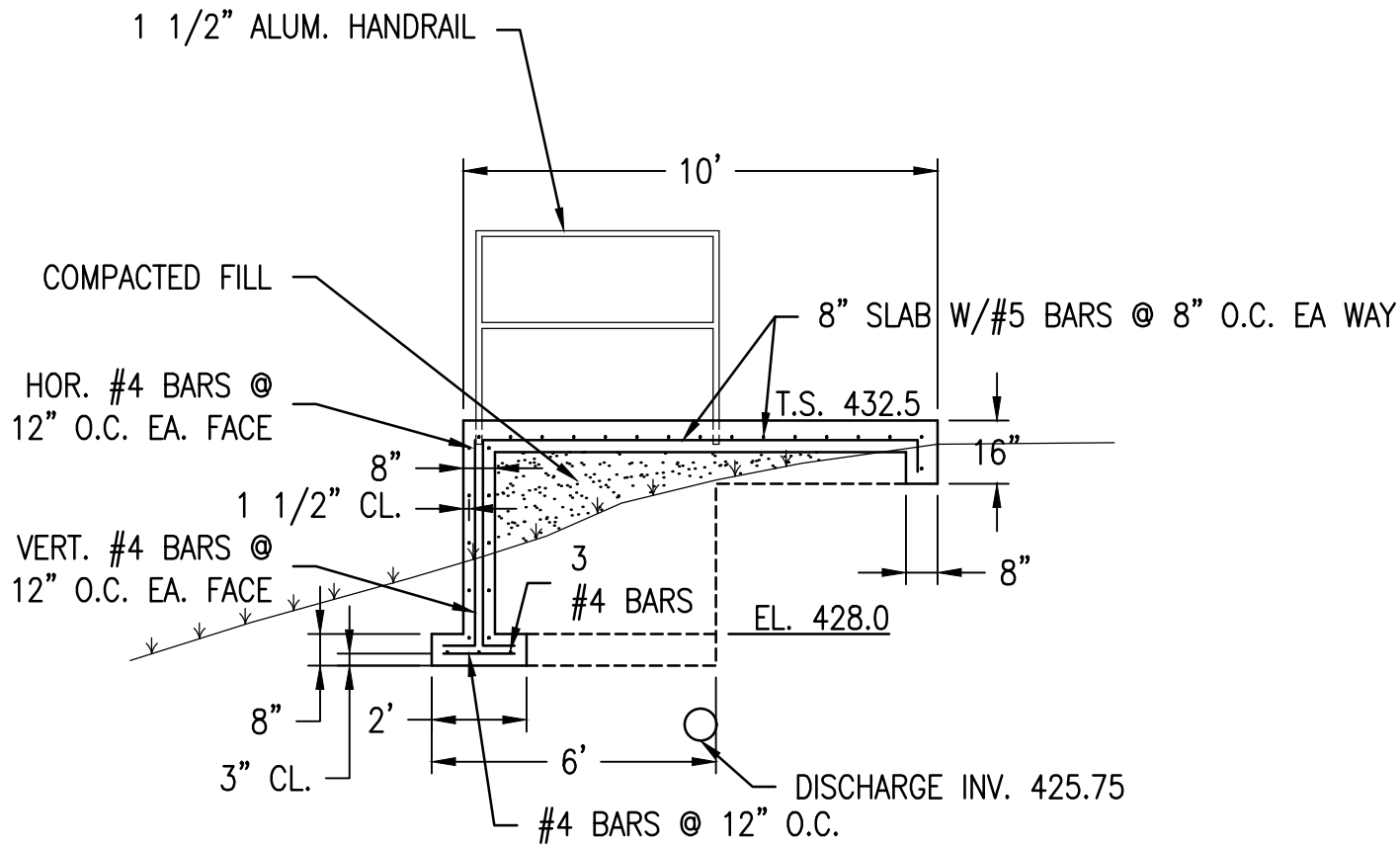
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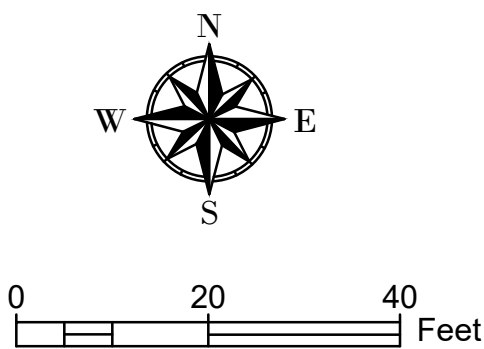


VALVE SCHEDULE			
No.	DESCRIPTION	NORMAL POSITION	REMARKS
29	8" GATE VALVE	CLOSED	OPEN TO WASTE SLUDGE
30	10" GATE VALVE	OPEN	CLOSE TO WASTE SLUDGE



RAS PUMP STATION SLAB

SCALE: 1" = 4'



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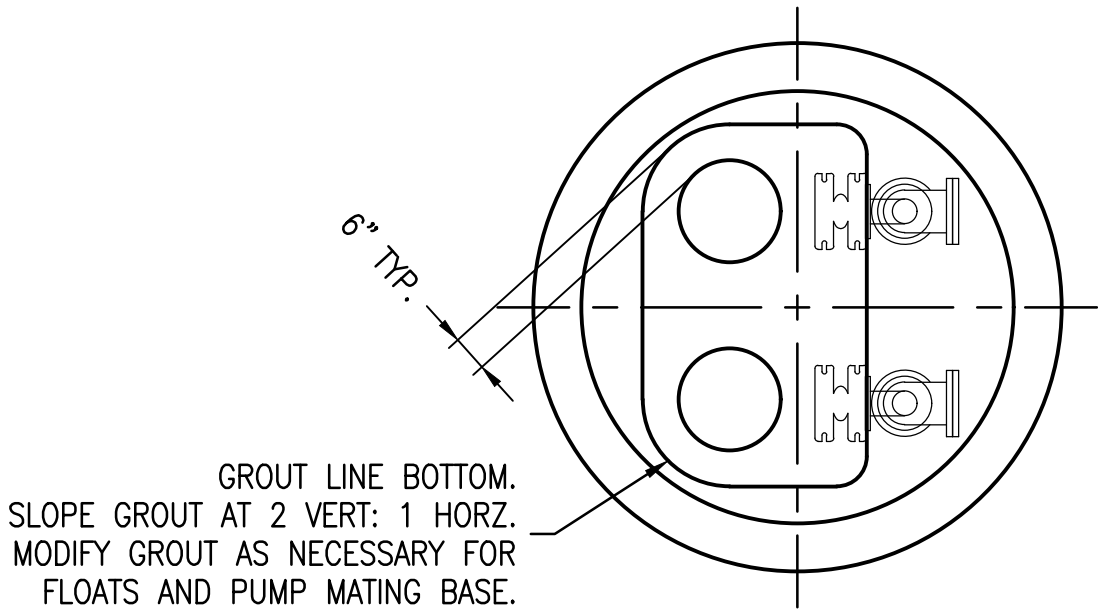
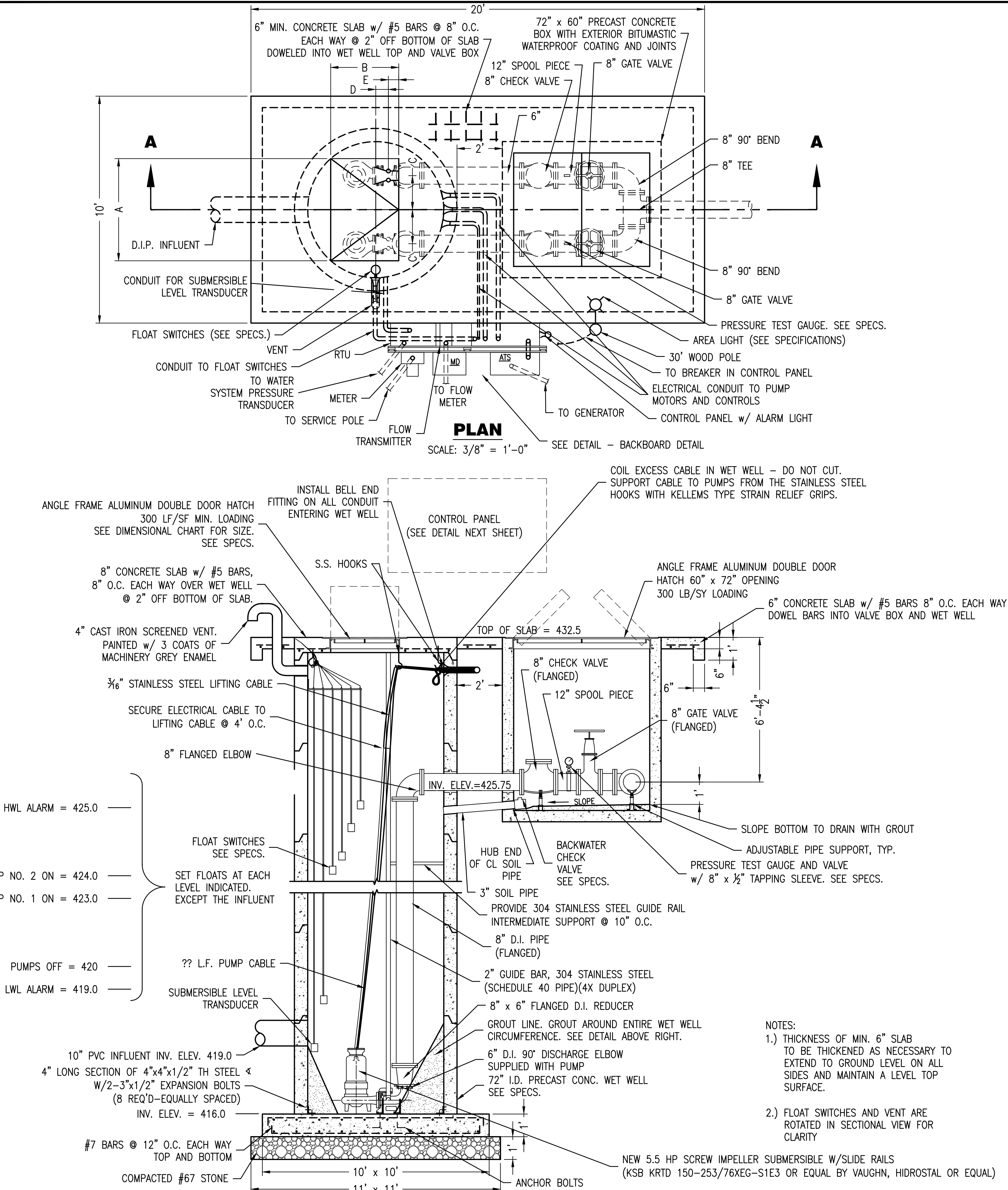
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CITY OF BRUNNIDGE, ALABAMA

RAS
PUMP STATION
PLAN

SHEET No.
C-01

PROJECT No.
14-203



GROUT DETAIL

NOT TO SCALE

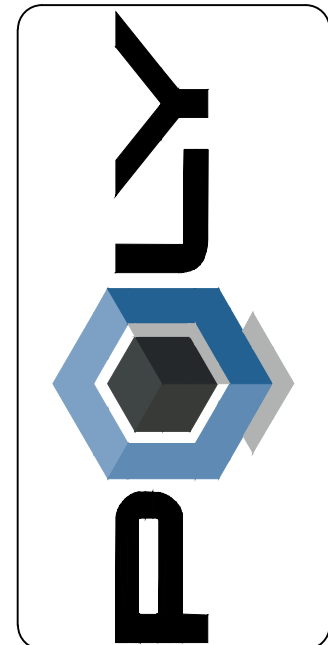
PUMP DATA				MOTOR DATA		
PUMP STATION NAME	CAP. G.P.M.	T.D.H.	R.P.M.	H.P.	VOLTS	PHASES
RAS	520	12	1200	5.5	460	3

DIMENSIONAL CHART				
STATION				
A*	B*	C	D	E
54	36	18	6.6875	5.5

ALL DIMENSIONS IN INCHES
BASED UPON HYDROMATIC PUMPS
*MINIMUM OPENING DIMENSIONS

- NOTES:
- 1.) THICKNESS OF MIN. 6" SLAB TO BE THICKENED AS NECESSARY TO EXTEND TO GROUND LEVEL ON ALL SIDES AND MAINTAIN A LEVEL TOP SURFACE.
 - 2.) FLOAT SWITCHES AND VENT ARE ROTATED IN SECTIONAL VIEW FOR CLARITY

NEW 5.5 HP SCREW IMPELLER SUBMERSIBLE W/SLIDE RAILS
(KSB KRTD 150-253/76XEG-S1E3 OR EQUAL BY VAUGHN, HIDROSTAL OR EQUAL)

[illegible]

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ENGINEER CA-74EE CA-1918 001118		
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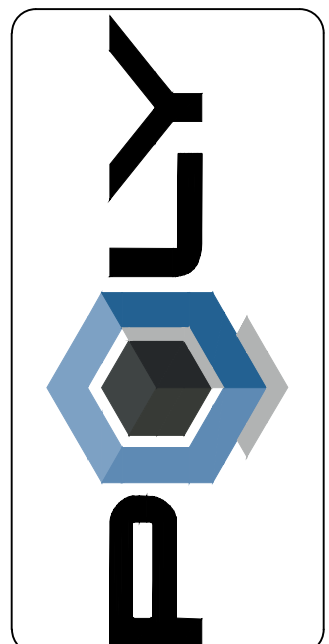
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CONTRACT 1
TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CNSRF PROJECT NUMBER: CSD10864-02
FOR THE
CITY OF BRUNSDIDGE, ALABAMA

RAS
PUMP STATION

SHEET No.
C-02

PROJECT No.
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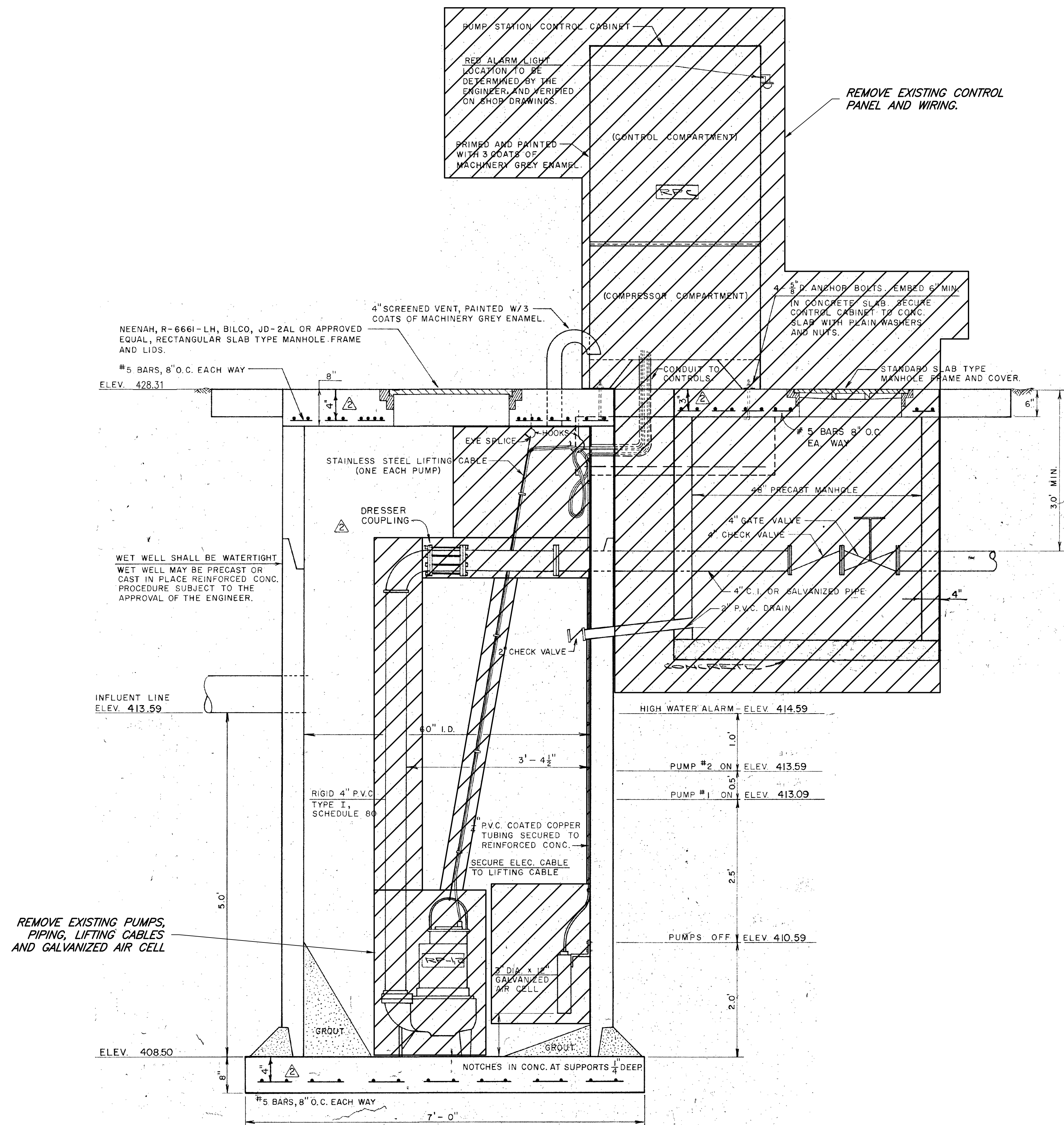
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CWSRF PROJECT No. CS010864-02
FOR THE
CITY OF BRUNDIDGE, ALABAMA

DEMOLITION
RECIRCULATION PUMP STATION

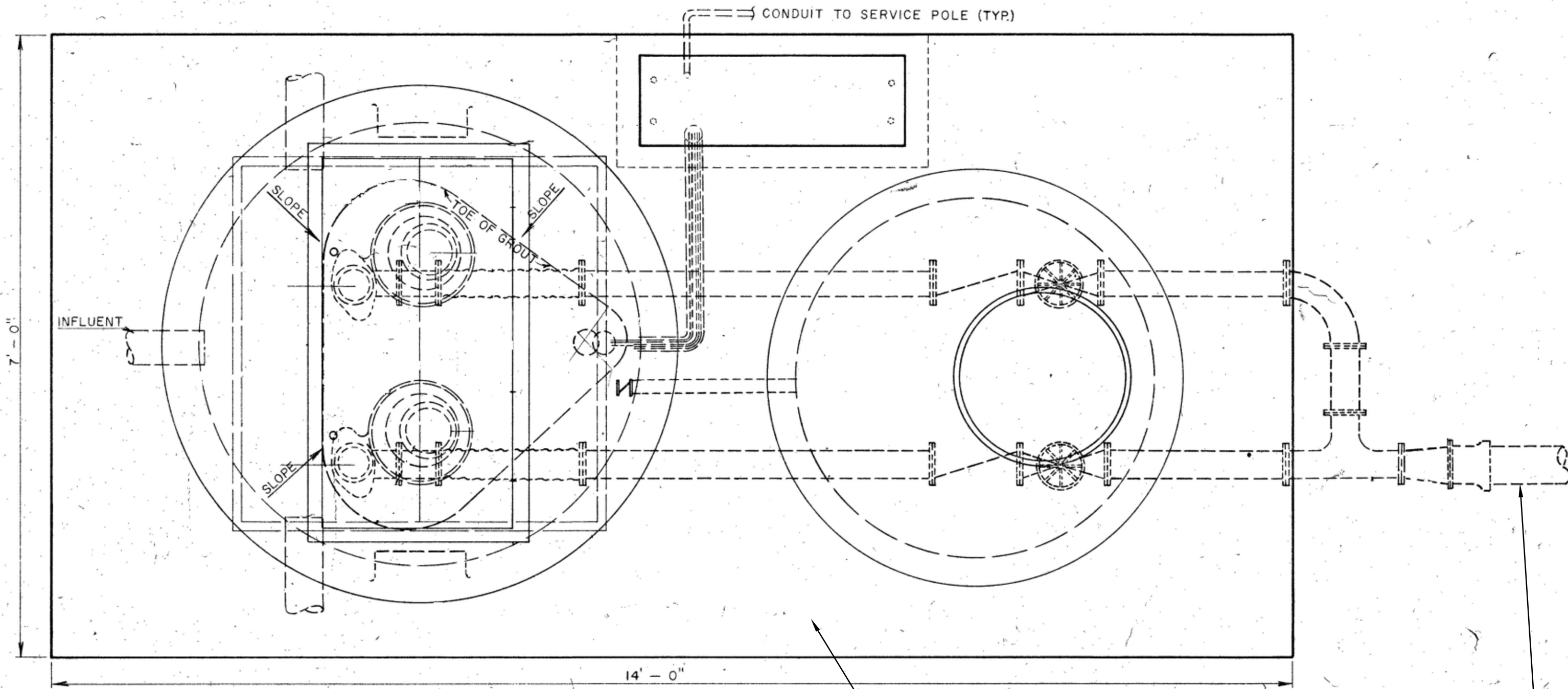
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14-203



DEMOLITION RECIRCULATION PUMP STATION

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RECIRCULATION PUMP STATION SLAB

NOT TO SCALE

TIE NEW 8" DISCHARGE TO EXISTING 8" FORCE MAIN

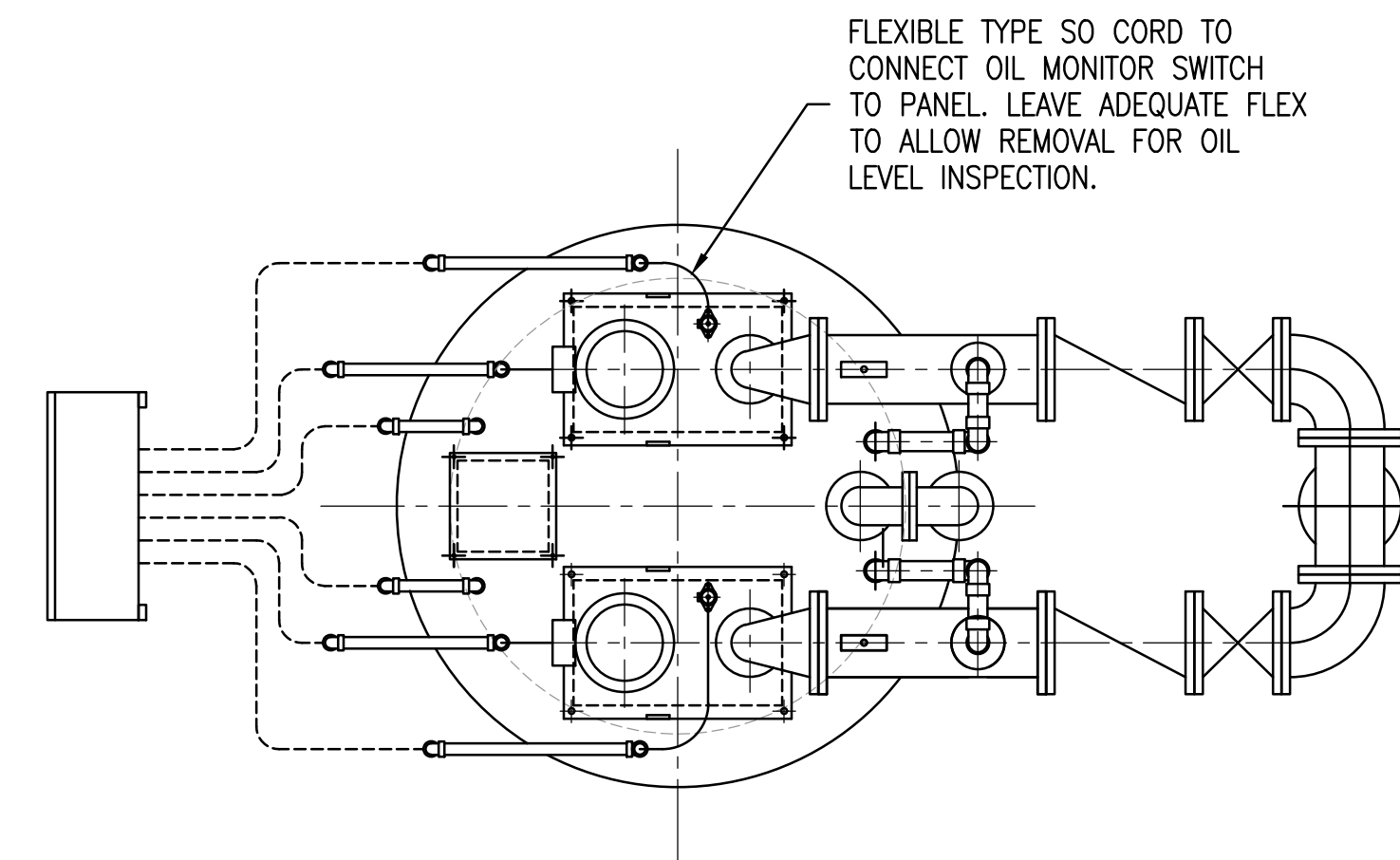
EXISTING 60" I.D. WET WELL TO BE REPURPOSED

FLOAT SWITCHES SHOWN FOR PUMP LEVEL CONTROL - SUBMERSIBLE TRANSDUCER OR OTHER MEANS OF LEVEL CONTROL OPTIONAL

EL. 413.69

SUGGESTED WET WELL INLET IF GRAVITY SEWER IS POSITIONED TO DUMP IN CLOSE PROXIMITY TO PUMPS. DO NOT ALLOW WATER TO CASCADE DIRECTLY ON/NEAR PUMPS TO AVOID PROBLEMS WITH AIR ENTRAINMENT AND CAVITATION

EL. 408.50



V4S PUMP WITH 7.5 HP MOTOR

8"x6" ELBOW

GAUGE ASSEMBLY

2" DIA. AIR RELEASE

8" CHECK VALVE

WET WELL VENT NOT SHOWN FOR CLARITY IN THIS VIEW

8" VALVES AND PIPING SHOWN, FOR 500 GPM, PUMP FLOW

8" RESILIENT SEAT GATE VALVE w/HANDWHEEL OPERATOR

19'-9 3/4"

TIE NEW 8" DISCHARGE TO EXISTING 8" FORCE MAIN

PUMP IS A VAUGHAN MODEL V4S, RATED TO DELIVER 500 GPM @ 24' TDH, AND TO BE DRIVEN BY A 7.5HP X 1200 RPM TEFC MOTOR OR BARNES MODEL ESC 6" CHOPPER w/BASE ELBOW 7.5 HPx1200 RPM TEFC MOTOR OR EQUAL

MODIFICATIONS TO RECIRCULATION PUMP STATION

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ENGINEER: CA-79-E	CA-18-8		

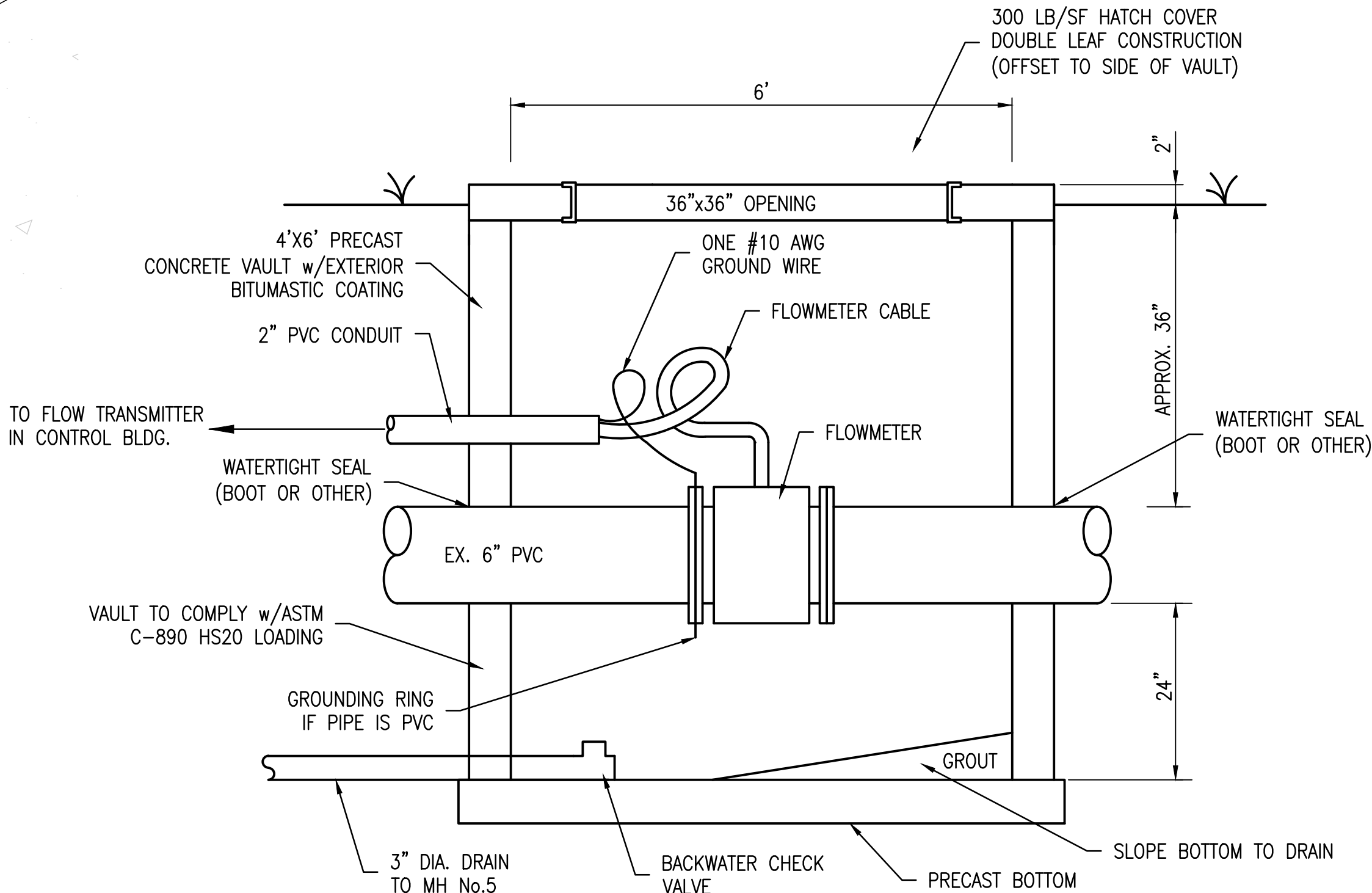
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TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CWSRF PROJECT No. C5010864-02
CITY OF BRUNNIDGE, ALABAMA
RECIRCULATION
PUMP STATION
MODIFICATION DETAIL

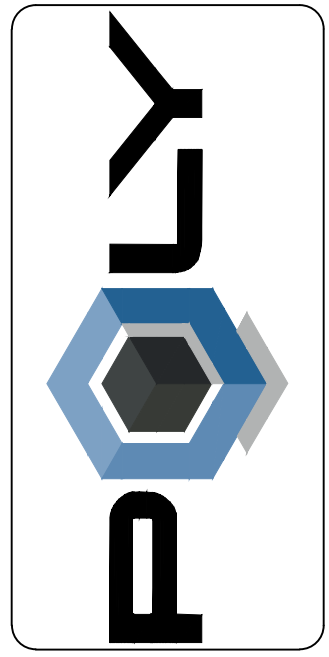
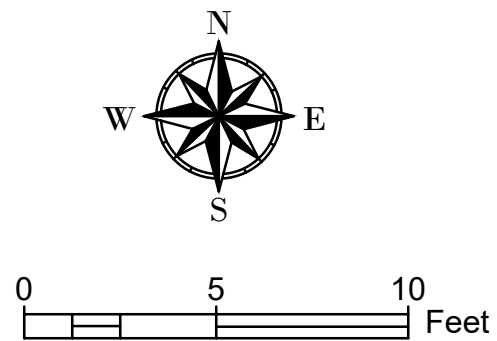
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C-05
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14-203



VALVE SCHEDULE			
No.	DESCRIPTION	NORMAL POSITION	REMARKS
1	EX. 16" BUTTERFLY VALVE	OPEN	
6	EX. 6" BUTTERFLY VALVE	CLOSED	
21	EX. 6" GATE VALVE	OPEN	CLOSE TO RECIRCULATE FLOW TO CELL 2
23	EX. 8" GATE VALVE	CLOSED	OPEN TO RECIRCULATE FLOW TO CELL 2



WASTE SLUDGE FLOWMETER DETAIL
NOT TO SCALE



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DRAWN BY:
JDP

DATE:
MAY 2025

REGISTRATION No.:

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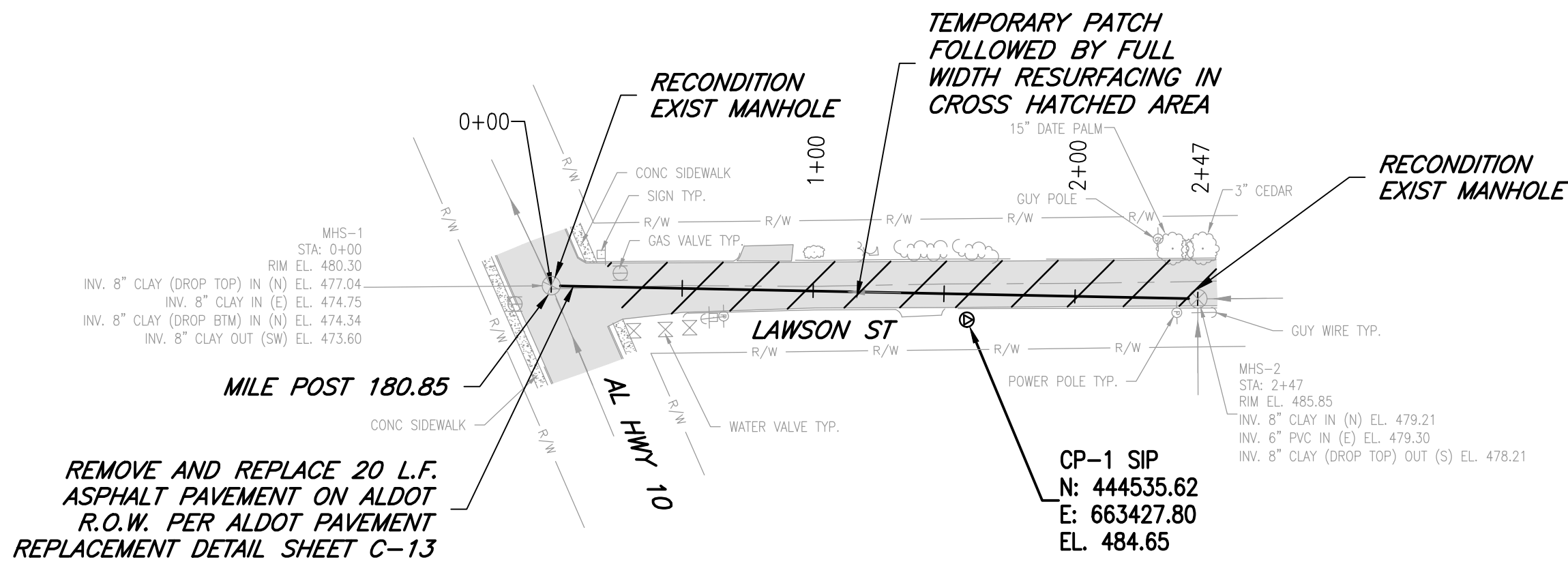
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PIPING MODIFICATIONS

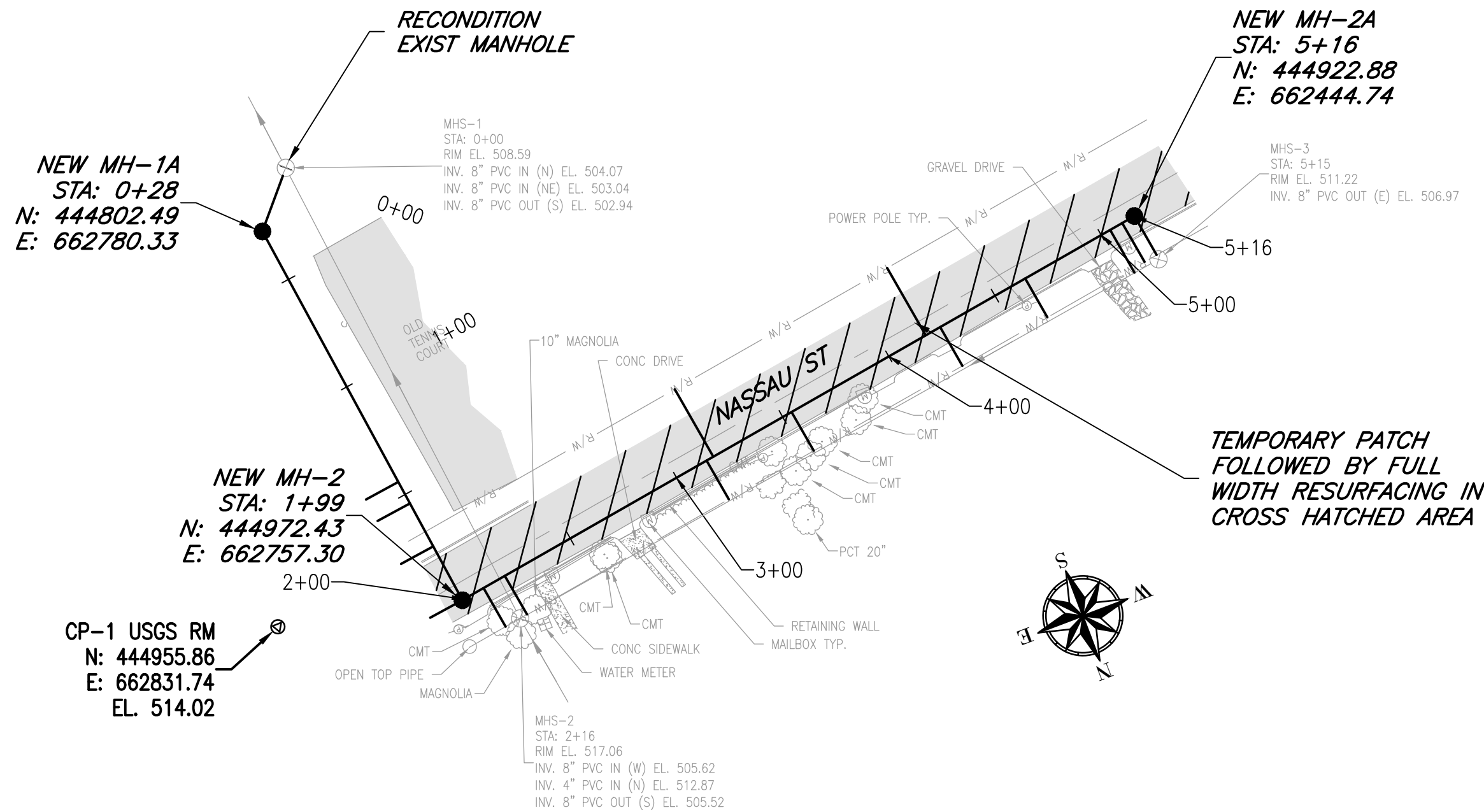
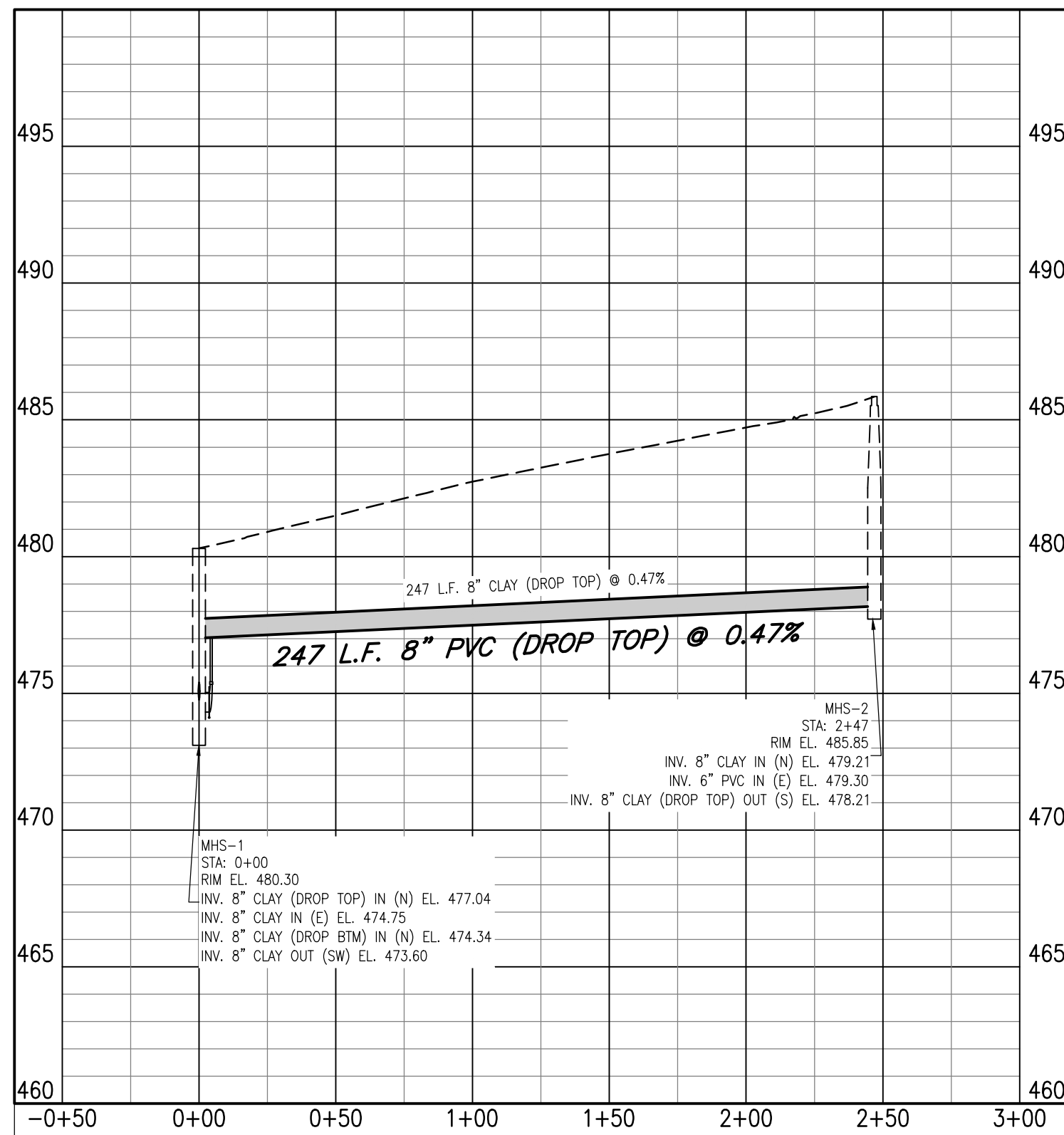
SHEET No.
C-06

PROJECT No.
14-203



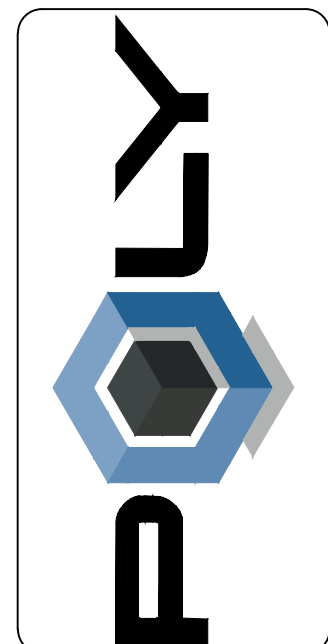
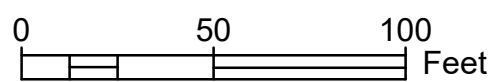
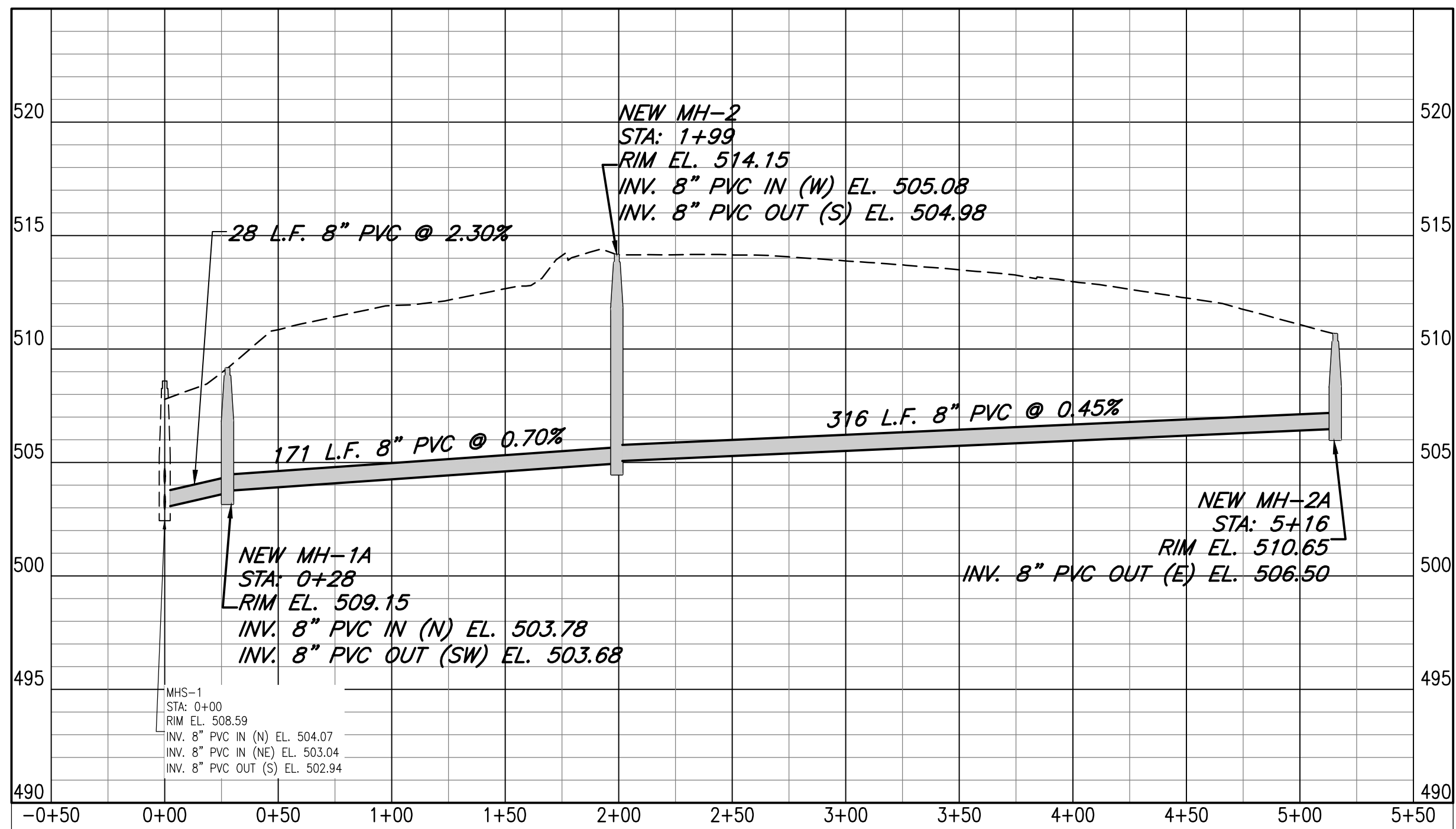
NOTES

- SEE TRAFFIC CONTROL PLAN FOR HIGHWAY 10 SHEET C-16
- BYPASS PUMP AROUND CONSTRUCTION AREA BELOW MH-2 ON LAWSON STREET



NOTES

- PARTIALLY DEMOLISH EXIST. MANHOLES MHS-2 AND MHS-3 DELIVER FRAMES & COVERS TO CITY SHOP.
- TRANSFER ANY SERVICES ENTERING MHS-2 OR MHS-3 TO NEW MANHOLE.
- SERVICE LOCATIONS SHOWN ARE FROM TAP LOCATIONS IN THE EXISTING SEWER FROM TV INSPECTION. CITY MAY ELECT NOT TO INSTALL WYES AT SOME LOCATIONS.
- FOLLOWING TRANSFER OF ALL SERVICES TO NEW LINE REMOVE TOP 4' OF MANHOLES TO BE ABANDONED AND FILL WITH DIRT.



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CWSRF PROJECT No. C5010864-02
CITY OF BRUNNIDGE, ALABAMA
LAWSON ST & NASSAU ST.
SEWER
PLAN & PROFILE

SHEET No.
C-10
PROJECT No.
14-203



NOTES:

1. BEARING SURFACES TO BE MACHINED.
2. DIMENSIONS ARE NOMINAL.

NOTE:

ALL PRECAST MANHOLES SHALL
COMPLY WITH ASTM SPEC. C
476-617, C 478-70 AND C
139-65 AS APPLICABLE

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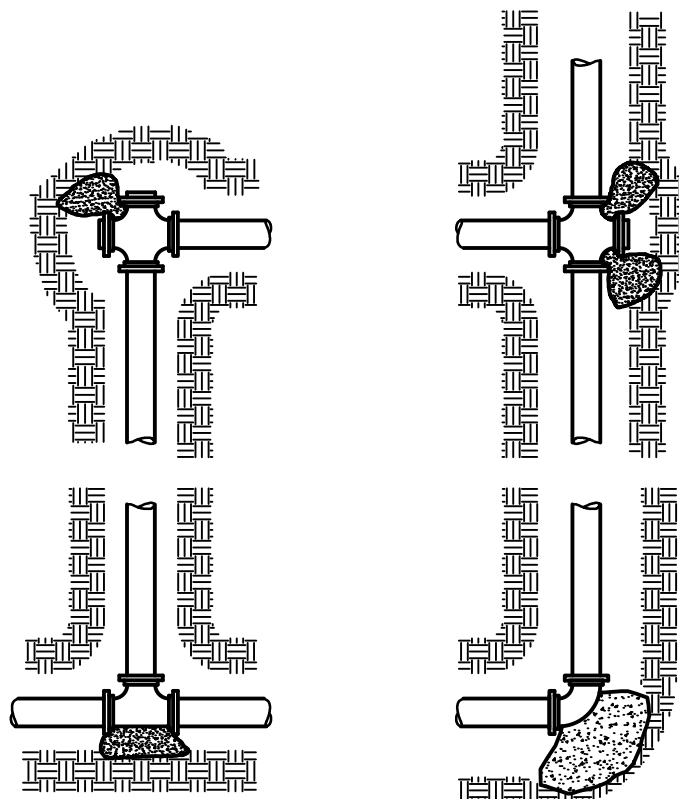
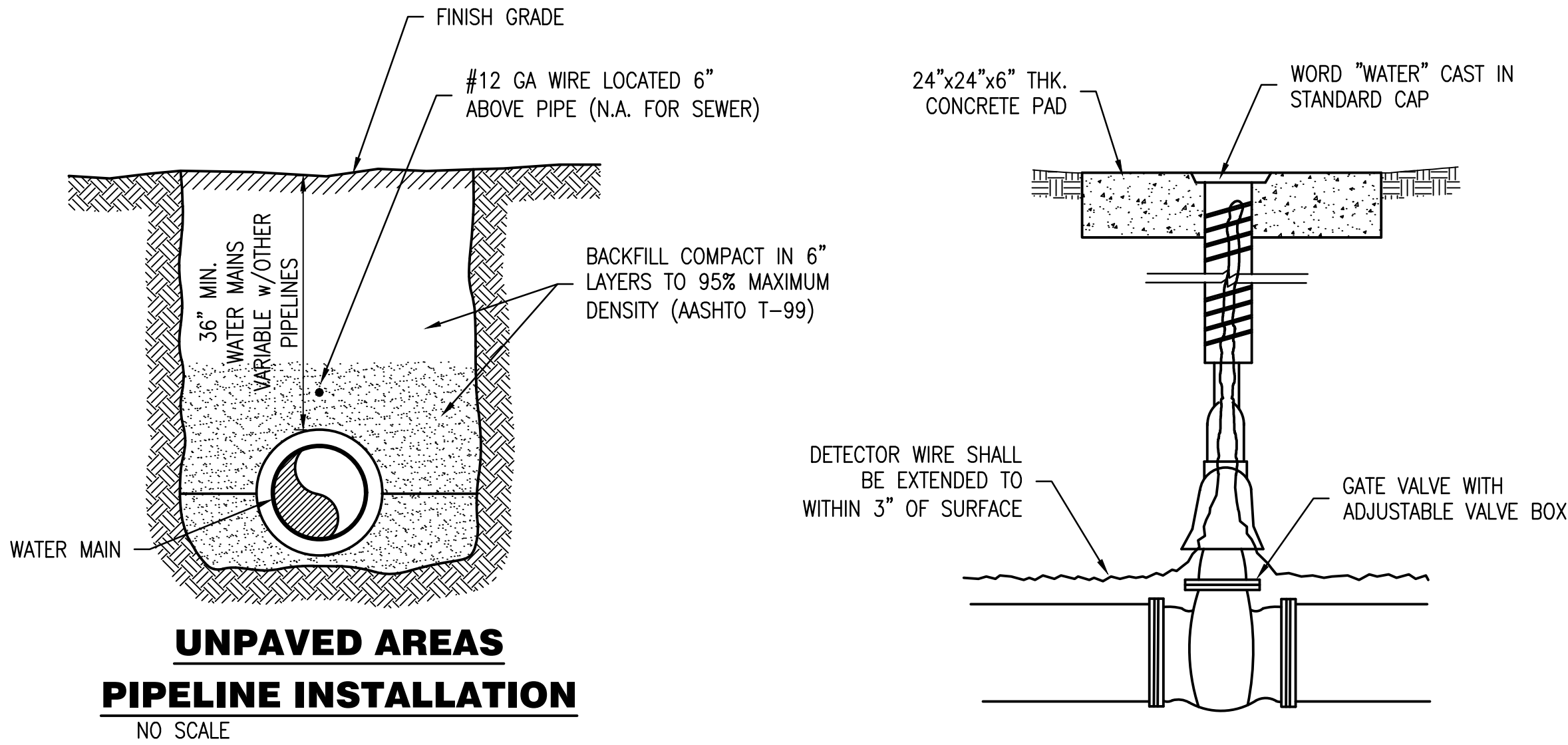
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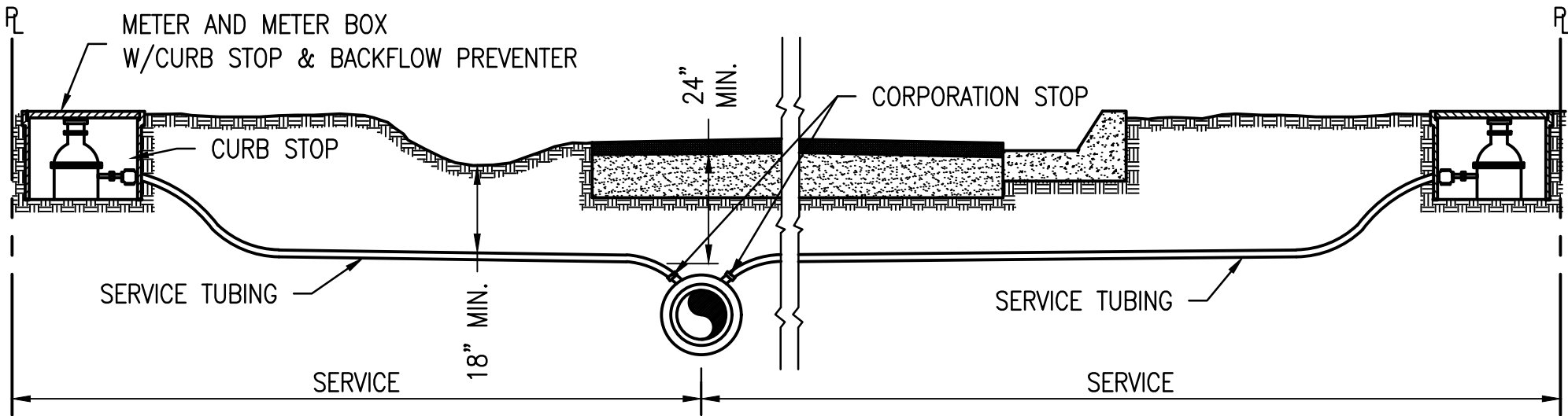
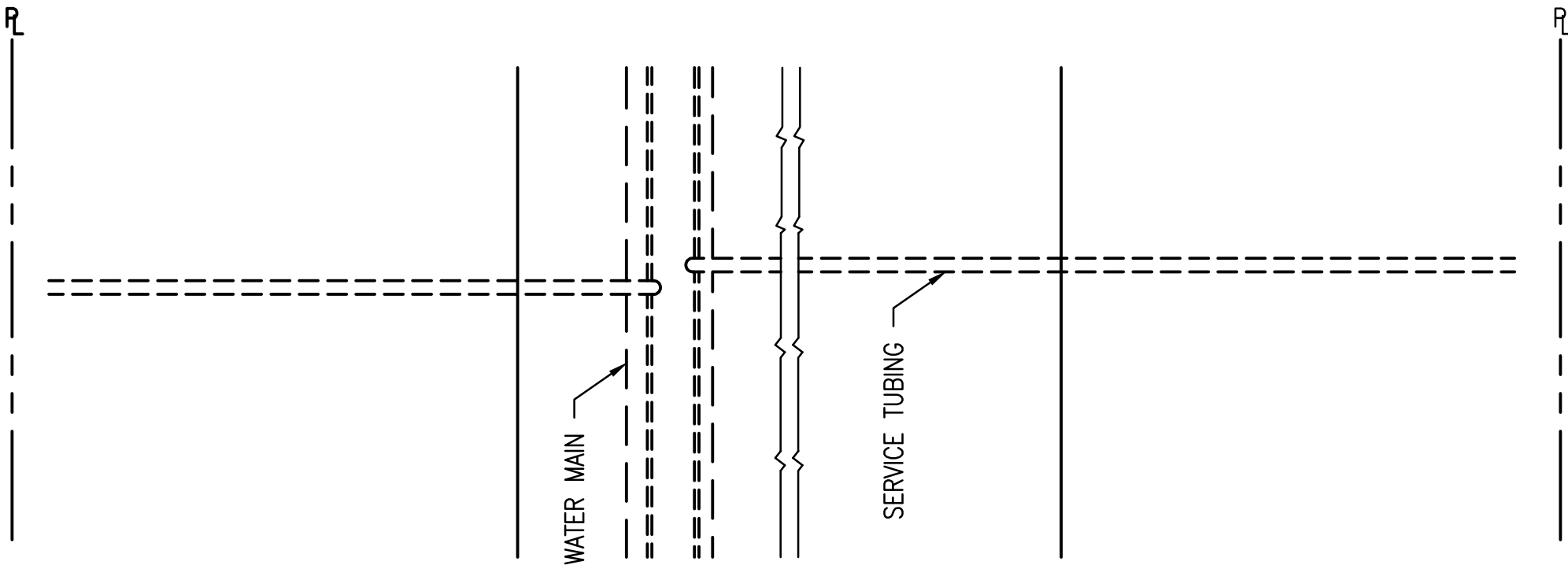
SHEET No.
C-11
PROJECT No.
14-203



PIPE DIAMETER	MINIMUM THRUST BLOCK BEARING AREA
3"	2 SQ.FT.
6"	4.5 SQ.FT.
8"	6.25 SQ. FT.
10"	11 SQ. FT.
12"	22 SQ. FT.

NOTE:
EACH THRUST BLOCK SHALL BE SIZED IN ACCORDANCE WITH PIPE SIZE, SOIL CONDITION AND TEST PRESSURE.

THRUST BLOCK DETAIL
NO SCALE



ELEVATION

TYPICAL SERVICE CONNECTION
NO SCALE



Revision	Description	Date

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ENG / ARCH / SURVEYOR OF RECORD: JDP

DATE: MAY 2025
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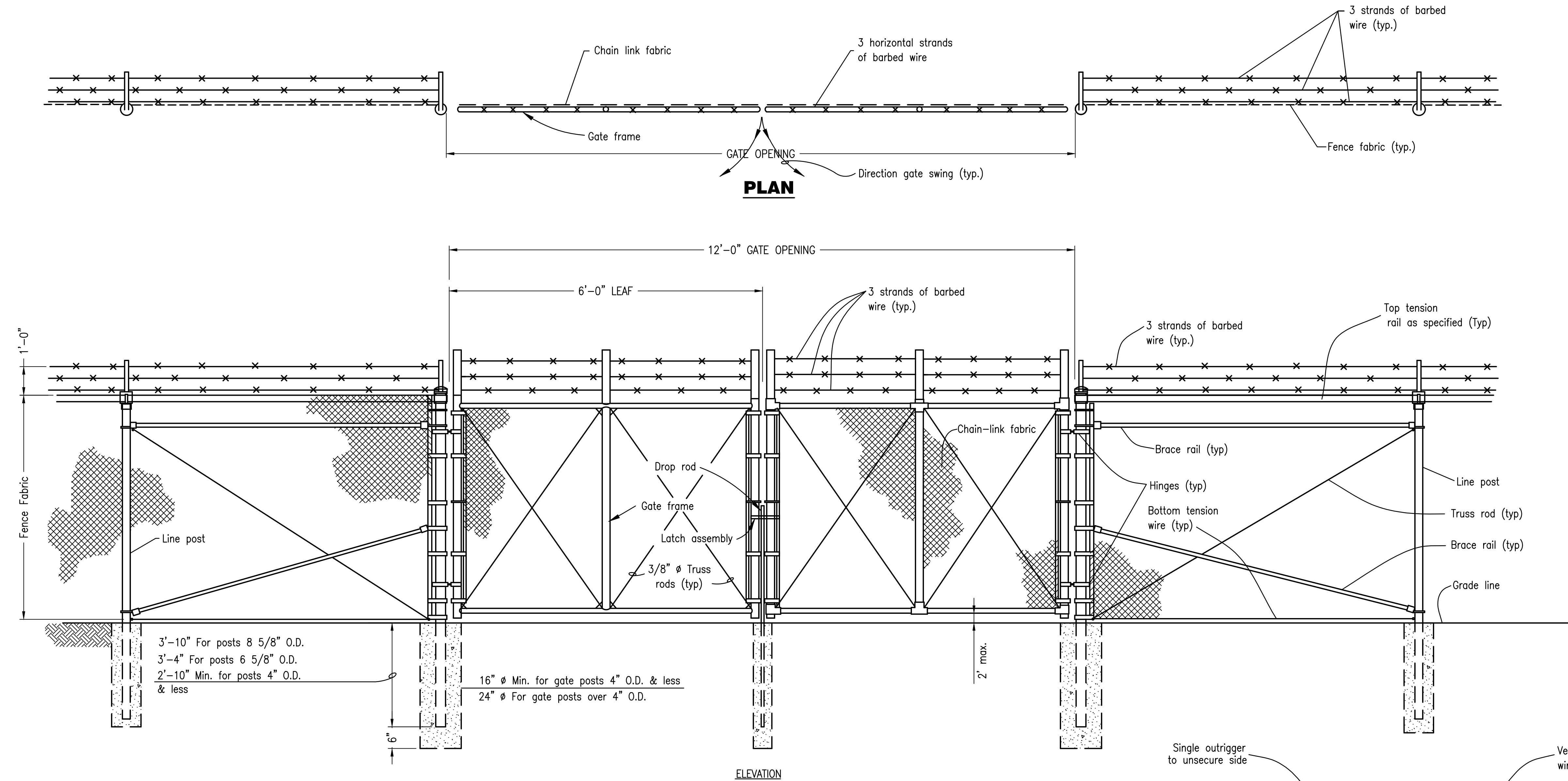
ARPA 2022 SEWER INFRASTRUCTURE IMPROVEMENTS
TREATMENT AND COLLECTION SYSTEM IMPROVEMENTS
CWSRF PROJECT No. C5010864-02
CITY OF BRUNNIDGE, ALABAMA

WATER
DETAILS

SHEET No.
C-12

PROJECT No.
14-203

Poly, Inc. - G:\CLEANSTUFF-10-1414203 ARPA Water and Sewer Improvements\WP03-CIVIL\WWTP\CONT 1 SYSTEM IMPROVEMENTS\14203_02_C-13_FENCE DETAILS.dwg [Layout1] Last Printed: July 16, 2025 - 11:40am By: JPeaden



DOUBLE SWING GATE (TYPE FE6 FENCE)
NO SCALE

GATE POST SCHEDULE	
GATE LEAF WIDTH (NOMINAL)	OUTSIDE DIMENSION (NOMINAL)
6' or less	2.875" OD 2.5" SQ
More than 6' to 13'	4.0" OD
More than 13' to 18'	6.625" OD
More than 18'	8.625" OD

NOTES:

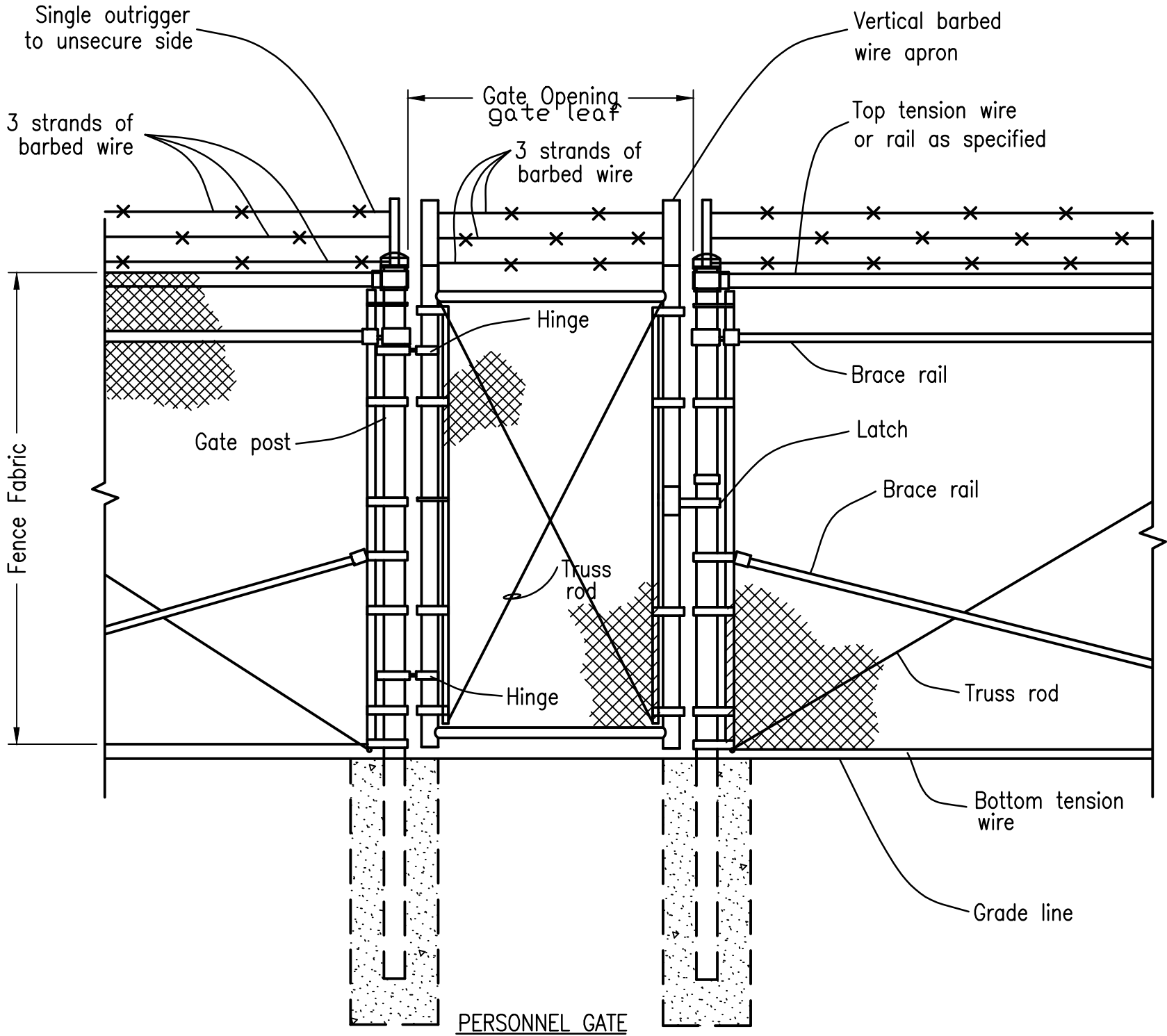
- Details shown are to clarify requirements and are not intended to limit other type of fence sections and methods of installation.
- Swing Gates shall be constructed with drop rods, padlocks, latch assembly and gate keepers except as noted.
- All gate frames shall be a minimum 1.90" nominal (round) or 2.00" nominal (square). Gate frames shall be of welded construction or shall be assembled using heavy fittings. At Contractor's option a welded horizontal brace may be used in lieu of truss rods to brace all welded gate frames. The Contractor shall be responsible for the proper rigid construction of all gates supplied.
- Gates shall be designated as follows:

Fence Type	- FE5, FE6, etc.
Fence Height	- Inches
Type Opening	- SO (single)
	- DO (double)
Hinge	- RA (standard)
	- HO (offset)
Opening	- Feet (clear opening between gate posts)

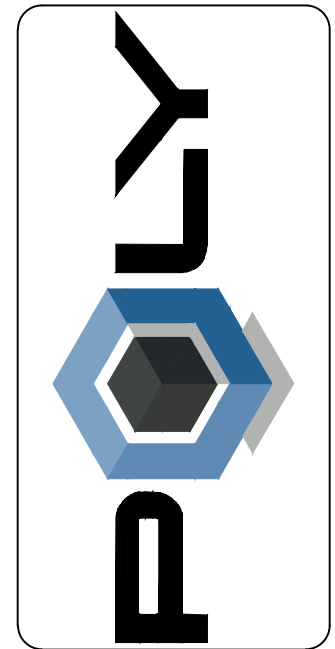
EXAMPLES: FE6-84-DO-RA-24
FE5-48-SO-HO-6

DOUBLE SWING GATE SHALL BE
FE6-72-DO-RA-12

PERSONNEL GATE SHALL BE
FE6-72-SO-RA-4



TYPE FE6 FENCE
NO SCALE



Revision	Description	Date

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FENCE DETAILS

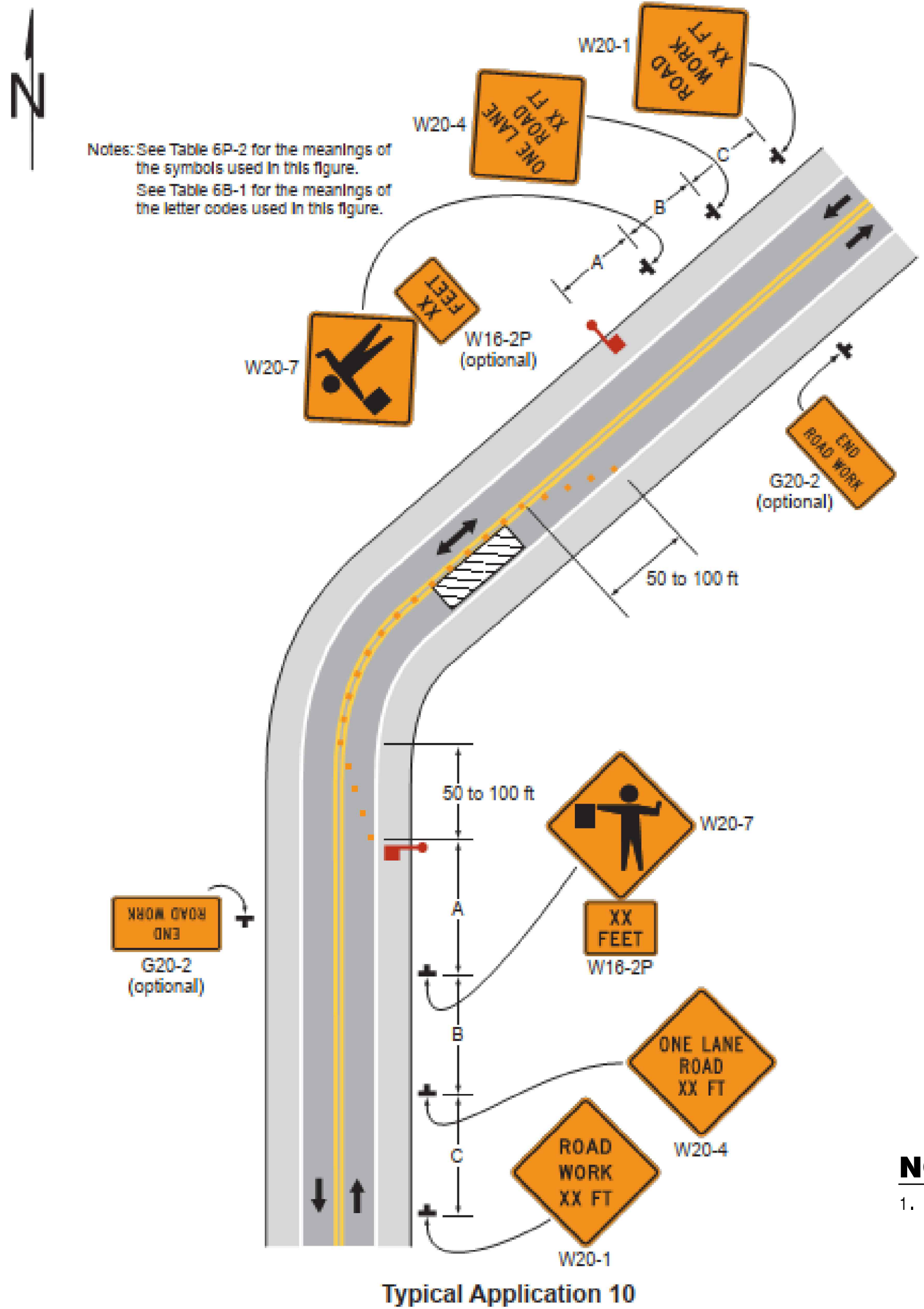
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MUTCD 11th Edition

Page 879

Figure 6P-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)



NOTES:

1. FLAGMEN TO BE USED AT ALL TIMES FOR ONE LANE OPERATIONS

GENERAL NOTES FOR CONSTRUCTION ON ALDOT RIGHT-OF-WAY

1. ALDOT PAVEMENT REPLACEMENT SHOWN ON PLANS SHALL BE INSTALLED PER DETAIL SHOWN ON SHEET C-2 OF PERMIT PLANS.
2. TRAFFIC CONTROL SHALL BE INSTALLED PER DETAIL 6H-11, SHOWN BELOW.
3. THE POSTED SPEED LIMIT THRU THE WORK ZONE IS 35 M.P.H.
4. ALL CONTACT PERSONS APPLICABLE TO THIS JOB ARE SHOWN ON SHEET G-1
5. ONE LANE OF ALABAMA HWY. 10 SHALL REMAIN OPEN FOR THRU TRAVEL AT ALL TIMES.
6. ALL TRAFFIC CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF PART 6 OF MUTCD.
7. ANY DISTURBED AREAS SHALL BE RESODDED OR SEEDED IN ACCORDANCE WITH THE LATEST SPECIFICATION FOR GRASSING OR AS DIRECTED BY ALDOT.
8. AREA THAT IS OPEN CUT ON ALABAMA HWY 10 SHALL BE BACKFILLED FLUSH WITH EXISTING PAVEMENT BEFORE NIGHTFALL AND REFLECTORIZED DRUMS PLACED ON TOP UNTIL PAVEMENT IS COMPLETELY RESTORED PER ALDOT DETAIL SHOWN ON SHEET C-2 OF PERMIT PLANS.
9. ONE LANE OF ROADWAY TO REMAIN OPEN AT ALL TIMES.
10. BITUMINOUS ASPHALT TO BE PLACED NO LATER THAN THE FOLLOWING DAY AFTER BACKFILL HAS BEEN COMPLETED ALONG AL 10. PER ALDOT SPECIFICATIONS. ALDOT PAVEMENT DETAILS SHOWN ON SHEET C-2.

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

	Arrow board		Shadow vehicle
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or support trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Traffic or pedestrian signal
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type 3 barricade
	High-level warning device (Flag tree)		Warning light
	Longitudinal channelizing device		Work space
	Luminaire		Work vehicle
	Pavement markings that should be removed for a long-term project		

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

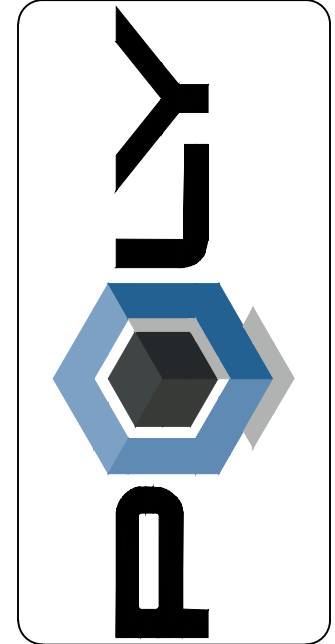
Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

LANE CLOSURE ON TWO LANE ROAD USING FLAGGERS

TRAFFIC CONTROL SYMBOLS AND FORMULAS FOR TAPER LENGTH



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TRAFFIC CONTROL SIGNAGE

SHEET No.
C-14
PROJECT No.
14-203

December 2023

Sect. 6P.01

December 2009

Sect. 6H.01

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ELECTRICAL SYMBOL LEGEND:

Miscellaneous Symbols

⊙ JUNCTION BOX. SIZE AS REQUIRED.

Power System Symbols

TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR.

MOTOR. # INDICATES MOTOR HORSEPOWER.

Raceway Symbols

LP-R CONDUIT CONCEALED IN WALL OR ABOVE CEILING. ARROW INDICATES HOME RUN (PANEL "LP-R" INDICATED). NUMBER AND SIZE OF CONDUCTORS INDICATED, EITHER BY CALLOUTS OR HASHMARKS. NO HASHMARKS MEANS TWO (2) CONDUCTORS. THE NUMBER OF HASHMARKS DOES NOT INLCUDE THE GROUNDING CONDUCTOR. EMBEDDED NUMBER INDICATES WIRE SIZE IN AWG. NO NUMBER INDICATES 12 AWG. WIRING CALLOUTS SHALL USE THE FOLLOWING PATTERN: "3#3,1#8G - 1-1/2" C." MEANS THREE SIZE 3 AWG CONDUCTORS AND ONE SIZE 8 AWG GROUNDING CONDUCTOR, INSTALLED IN A 1-1/2" SIZE CONDUIT. THE TYPE OF CONDUIT IS DICTATED BY THE SPECIFICATIONS UNLESS NOTED.

CONDUIT CONCEALED IN FLOOR OR BELOW GRADE

EXPOSED CONDUIT

GENERAL ELECTRICAL NOTES:

- SERVICE TO RAS PUMP STATION IS 120/240 VOLTS, 1 PHASE, 3 WIRE.
- VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
- CHECK THE CORRESPONDING MECHANICAL SHEETS AND INSTALL PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL SYSTEMS SHOWN THEREON, REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
- FURNISH AND INSTALL FUSES IN FUSIBLE DISCONNECTS PER EQUIPMENT MANUFACTURER’S RECOMMENDATIONS.
- A GREEN EQUIPMENT GROUNDING CONDUCTOR (SIZED PER THE NEC) SHALL BE INSTALLED IN EACH CONDUIT.
- ALL WIRING DEVICES SHALL BE MOUNTED AS INDICATED IN THE SPECIFICATIONS UNLESS NOTED OTHERWISE IN THESE PLANS. ALL LIGHTING FIXTURES SHALL BE MOUNTED AS NOTED IN THE FIXTURE SCHEDULE UNLESS OTHERWISE INDICATED.
- TYPICAL MOUNTING HEIGHTS:
A. DISCONNECT SWITCHES, CONTROLLERS 6’–7” A.F.F. MAXIMUM
- ALL EXTERIOR EXPOSED CONDUIT SHALL BE RIGID ALUMINUM, ALL EXTERIOR BOXES SHALL BE NEMA 4X STAINLESS STEEL.
- PROVIDE ACCURATE AS–BUILTS OF ALL CONDUITS INCLUDING SITE PLAN, DUCT BANK DETAILS, AND ENLARGED PLANS AT PROJECT COMPLETION

ABBREVIATIONS:

ABV	ABOVE	FVNR	FULL–VOLTAGE NON–REVERSING (FOR STARTERS)
AFC	ABOVE FINISHED COUNTER	G	GROUND
AFCI	ARC–FAULT INTERRUPTING	GEC	GROUNDING ELECTRODE CONDUCTOR
AFF	ABOVE FINISHED FLOOR	GFCI	GROUND FAULT CIRCUIT INTERRUPTING
AFG	ABOVE FINISHED GRADE	MAC	MOUNT ABOVE COUNTER
BFG	BELOW FINISHED GRADE	MTD	MOUNTED
C	CONDUIT	NEC	NATIONAL ELECTRICAL CODE (NFPA 70).
CKT	CIRCUIT	NFDS	NON–FUSED DISCONNECT
CLG	CEILING	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
EGC	EQUIPMENT GROUNDING CONDUCTOR	WP	WEATHER PROOF
EX	EXISTING	4X SS	NEMA 4X STAINLESS STEEL
FDS	FUSED DISCONNECT SWITCH		



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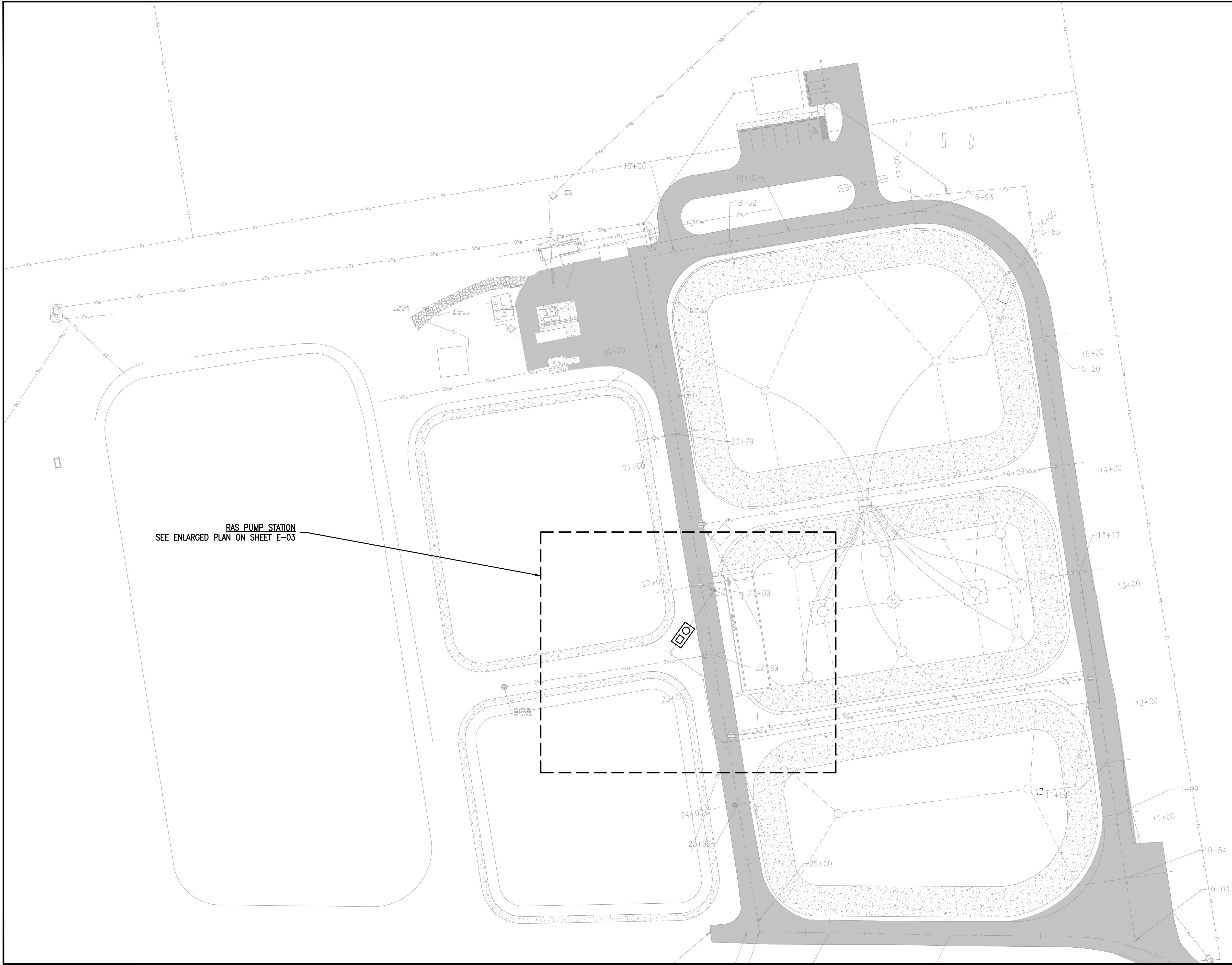
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ELECTRICAL
LEGEND, NOTES
& ABBREVIATIONS

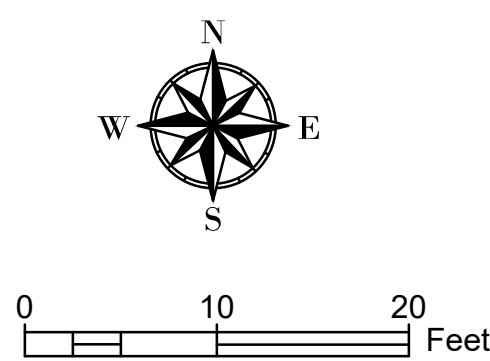
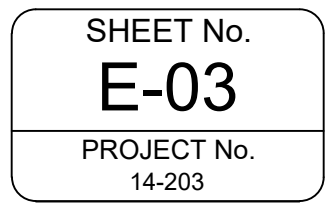
SHEET No.
E-01

PROJECT No.
14-203

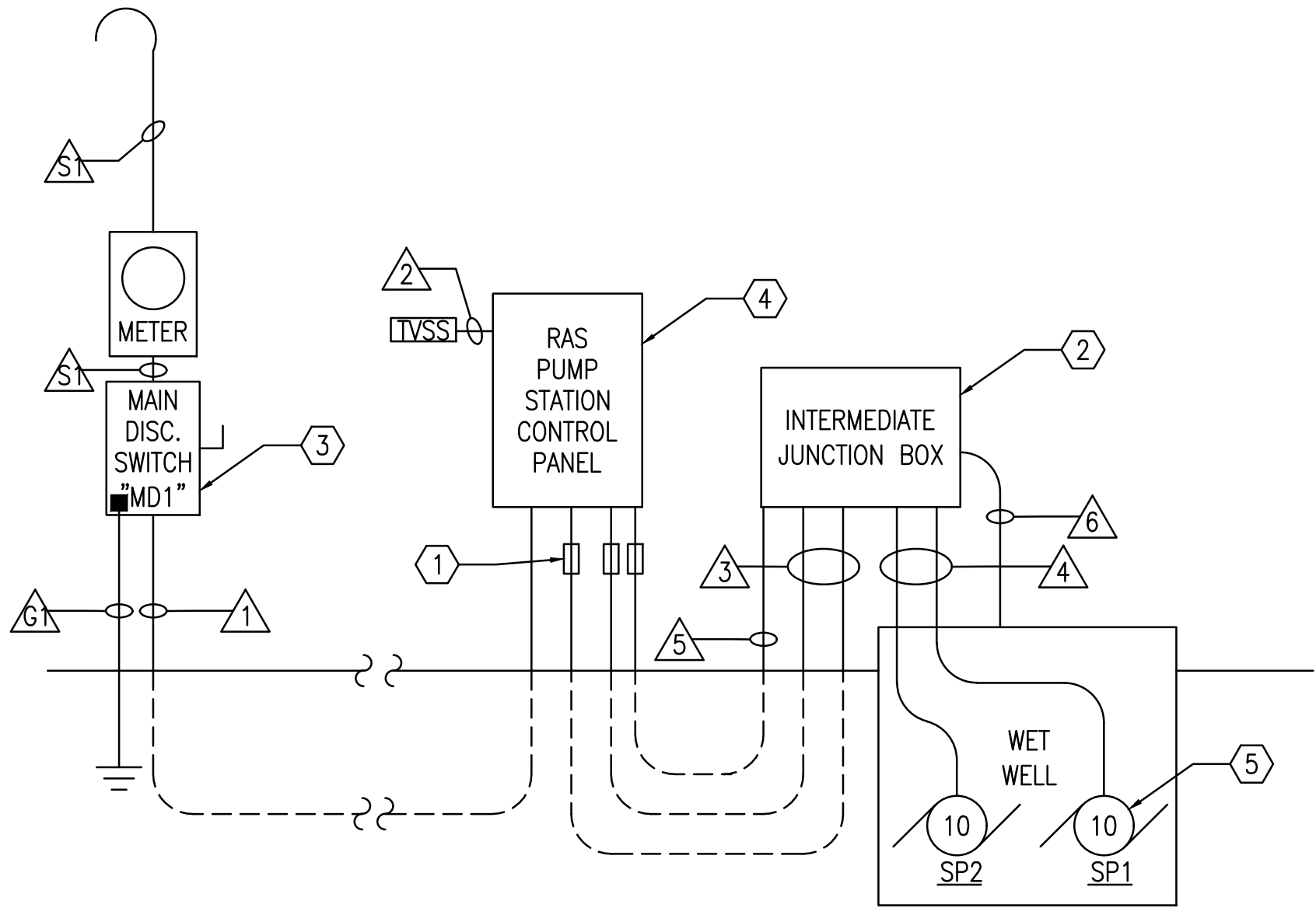


RETURN SLUDGE
PUMP STATION

- ## NOTES:
1. REFER TO SHEET E-04 FOR POWER RISER DIAGRAM.
 2. REFER TO SHEET E-04 FOR DETAILS.
 3. REFER TO SHEET E-02 FOR OVERALL ELECTRICAL SITE PLAN.
 4. COORDINATE ALL SERVICE REQUIREMENTS WITH POWER COMPANY.

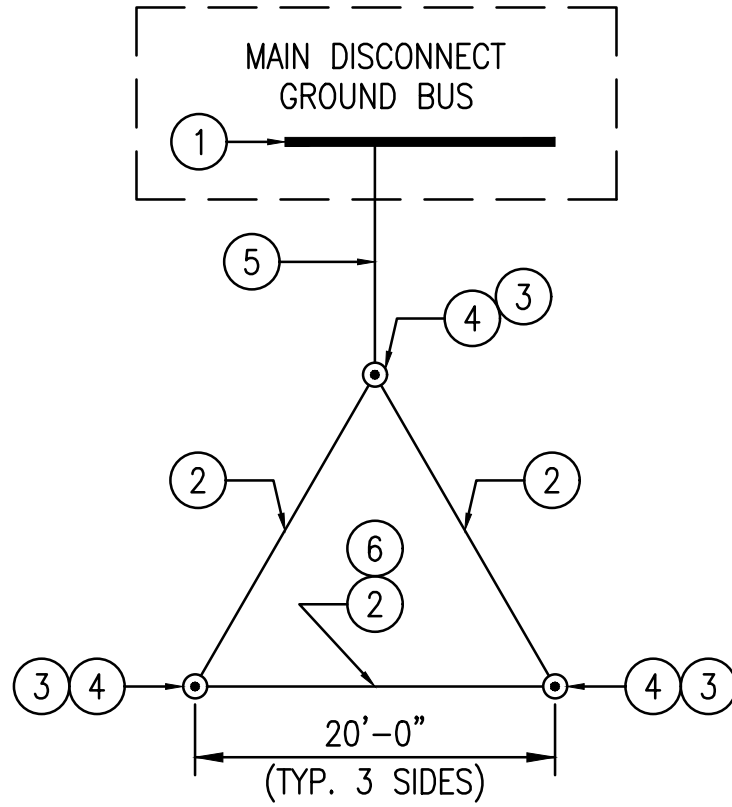


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POWER RISER DIAGRAM - RAS PUMP STATION

SCALE: NONE



GROUNDING LEGEND

- GROUND BUS LOCATED IN AUTOMATIC TRANSFER SWITCH
- #2 BARE CU GROUND CONDUCTOR
- EXOTHERMIC CONNECTION
- 5/8" X 10'-0" LONG COPPER CLAD STEEL COPPERWELD GROUND ROD DRIVEN WITH TOP 1'-0" BELOW GRADE
- REFER TO CONDUCTOR & CONDUIT SCHEDULE THIS SHEET
- QUANTITY OF REQUIRED GROUND RODS TO BE DETERMINED PER SITE CONDITIONS

GROUNDING ELECTRODE SYSTEM DETAIL

SCALE: NONE

GENERAL ELECTRICAL NOTES:

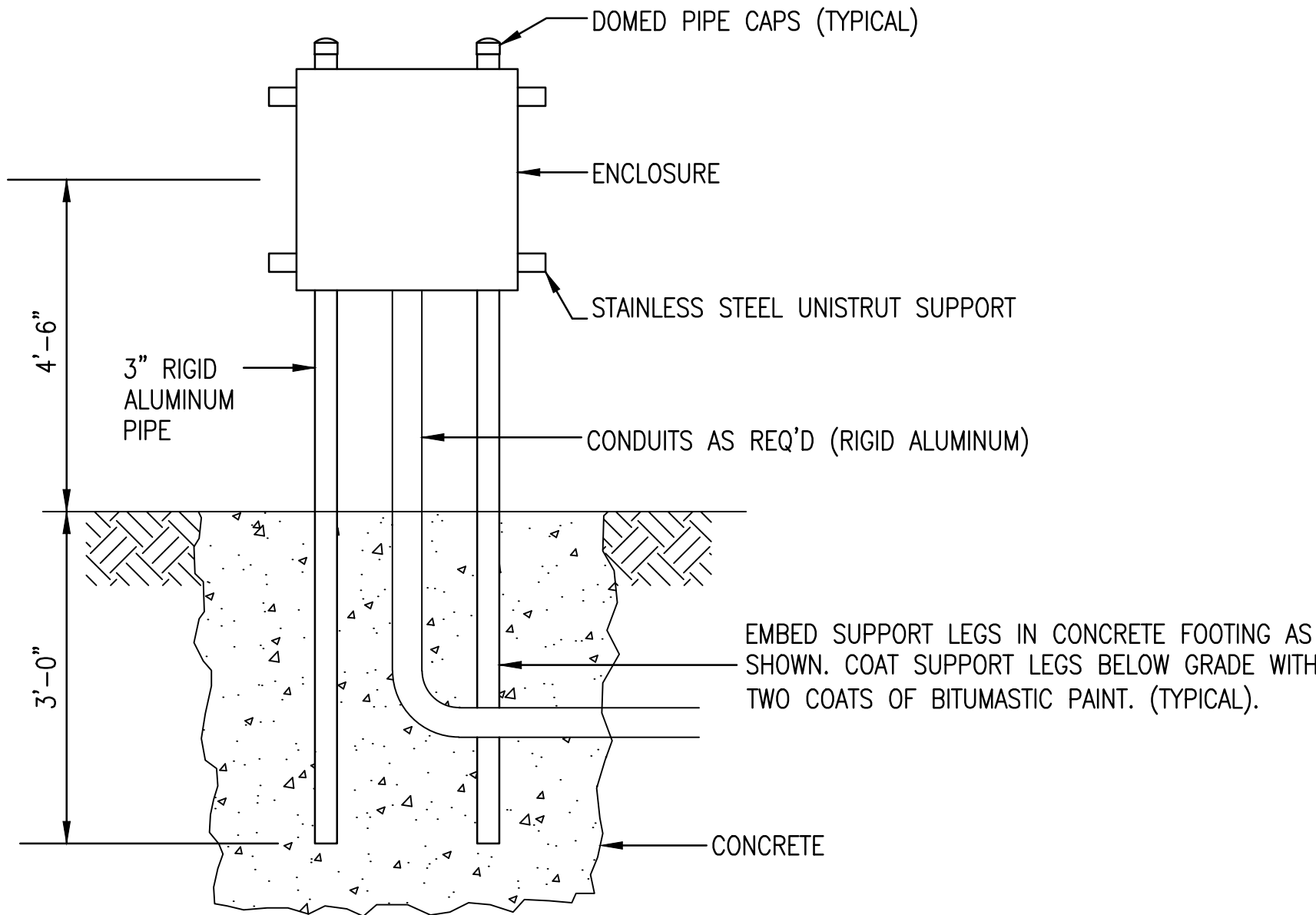
- SERVICE TO RAS PUMP STATION SHALL BE 277/480 VOLTS, 3-PHASE, 4-WIRE.
- REFER TO SHEET E-03 FOR RAS PUMP STATION ENLARGED SITE PLAN.

NUMBERED NOTES

- EXPLOSIVE GAS SEAL OFF FITTINGS (TYPICAL FOR POWER & CONTROL CONDUITS).
- NEMA 4X ENCLOSURE WITH CONTINUOUS PIANO HINGE, FULL BACKPLANE, AND PADLOCKABLE HASP. SIZE AS REQUIRED. TERMINATE ALL CABLES USING APPROPRIATELY SIZED TERMINAL BLOCKS, MOUNTED TO BACKPLANE OF JUNCTION BOX. PROVIDE CABINET SEALING BUSHING EQUAL TO O-Z/GEDNEY CSB SERIES FOR ALL CONDUITS ENTERING JUNCTION BOX.
- MAIN DISCONNECT "MD1" SHALL BE 100 AMP, 3-POLE, FUSED AT 100A, NEMA 4X STAINLESS STEEL ENCLOSURE.
- RAS PUMP STATION CONTROL PANEL FURNISHED BY PUMP SUPPLIER, INSTALLED BY CONTRACTOR.
- RAS SEWAGE PUMPS (SP1 & SP2) ARE MINIMUM 10HP. HOWEVER, 15HP PUMPS ARE USED AS BASIS OF SIZING ELECTRICAL DISTRIBUTION FOR ANY FUTURE UPGRADES.

PUMP STATION EQUIPMENT SIZES								
MARK	ITEM DESCRIPTION	VOLTS/ PHASE	HP	AMPS	STARTER			REMARKS
					SIZE	TYPE	LOCATION	
SP1	SEWAGE PUMP NO. 1	480/3	10	14	NEMA 2	FVNR	CONTROL PANEL	STARTER & DISCONNECT SUPPLIED WITH PUMP STATION CONTROL PANEL
SP2	SEWAGE PUMP NO. 2	480/3	10	14	NEMA 2	FVNR	CONTROL PANEL	STARTER & DISCONNECT SUPPLIED WITH PUMP STATION CONTROL PANEL

POWER RISER DIAGRAMS CONDUCTOR & CONDUIT SCHEDULE					
TAG NO.	CONDUCTORS	CONDUIT	FROM	TO	NOTES
1	4#2	1 1/2" C.	SERVICE RISER POLE & WEATHERHEAD	METER & MAIN DISCONNECT	277/480 VOLTS, 3-PHASE, 4-WIRE
2	1#6G	1" C.	MAIN DISCONNECT "MD1"	SYSTEM GROUND	REFER TO GROUNDING DETAIL THIS SHEET
3	4#2, 1#6G	1 1/2" C.	MAIN DISCONNECT "MD1"	RAS PUMP STATION CONTROL PANEL	
4	4#10, 1#10G	1" C.	RAS PUMP STATION CONTROL PANEL	TVSS	TVSS SHALL INCLUDE INTEGRAL DISCONNECT
5	TWO RUNS OF 3#8, 1#10G	2 RUNS OF 1" C.	RAS PUMP STATION CONTROL PANEL	INTERMEDIATE JUNCTION BOX	
6	TWO RUNS OF 3#8, 1#10G PUMP CABLES	2 RUNS OF 1" C.	INTERMEDIATE JUNCTION BOX	WET WELL PUMPS	
7	INSTRUMENT CABLES	2 RUNS OF 1" C.	RAS PUMP STATION CONTROL PANEL	INTERMEDIATE JUNCTION BOX	FOR FLOATS, SEAL FAILURE(S), & OVERTEMP(S)
8	INSTRUMENT CABLES	1" C.	INTERMEDIATE JUNCTION BOX	WET WELL	FOR FLOATS

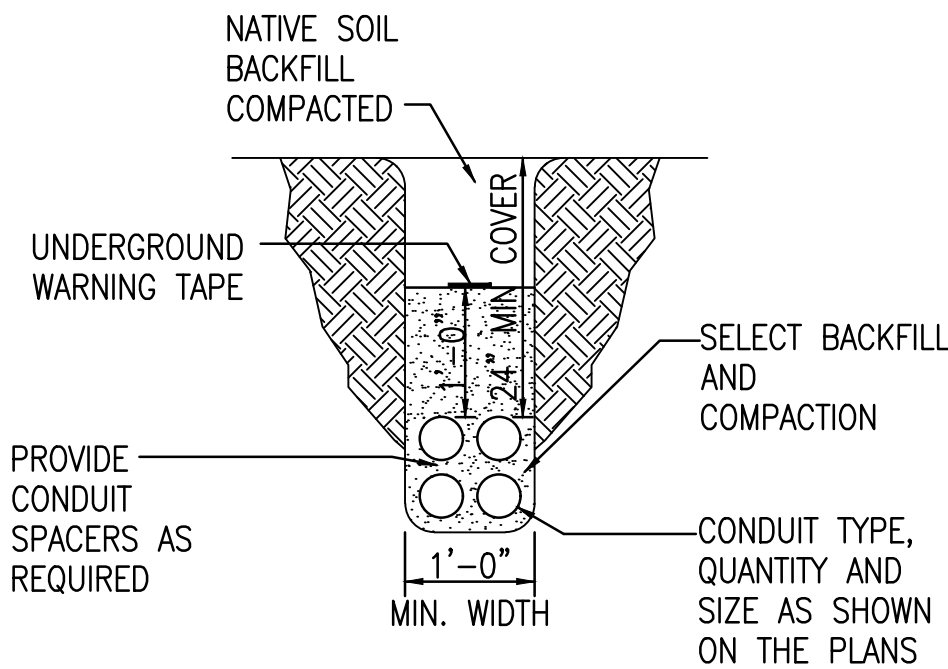


TYPICAL ENCLOSURE MOUNTING DETAIL

SCALE: NONE

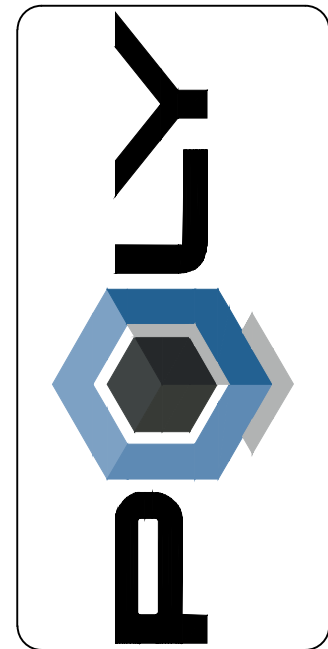
NOTES:

- BOND STEEL TO GROUND



DUCT IN TRENCH (TYP.)

SCALE: NONE



Revision	Date	Description

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DRAWN BY:
JJP

DATE:
MAY 2025

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POWER RISER DIAGRAMS

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