

CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA

SITE DATA

OWNER INFORMATION:
 NAME: CULPEPER COUNTY
 CONTACT: PAUL HOWARD JR., DIRECTOR OF ENVIRONMENTAL SERVICES
 ADDRESS: 118 W DAVIS ST.
 SUITE 101
 CULPEPER, VA 22701
 TELEPHONE: (540) 727-3409

ENGINEER INFORMATION:
 NAME: WW ASSOCIATES, INC.
 CONTACT: HERBERT F. WHITE III, P.E.
 ADDRESS: 110 VISTA CENTRE DRIVE, SUITE 1
 FOREST, VA 24551
 TELEPHONE: (434) 316-6080
 E-MAIL: HWHITE@WVASSOCIATES.NET
 TOWN, STATE: CULPEPER COUNTY, VA

UTILITY CONTACTS

MISS UTILITY DESIGN TICKET NO. A621700579-00A

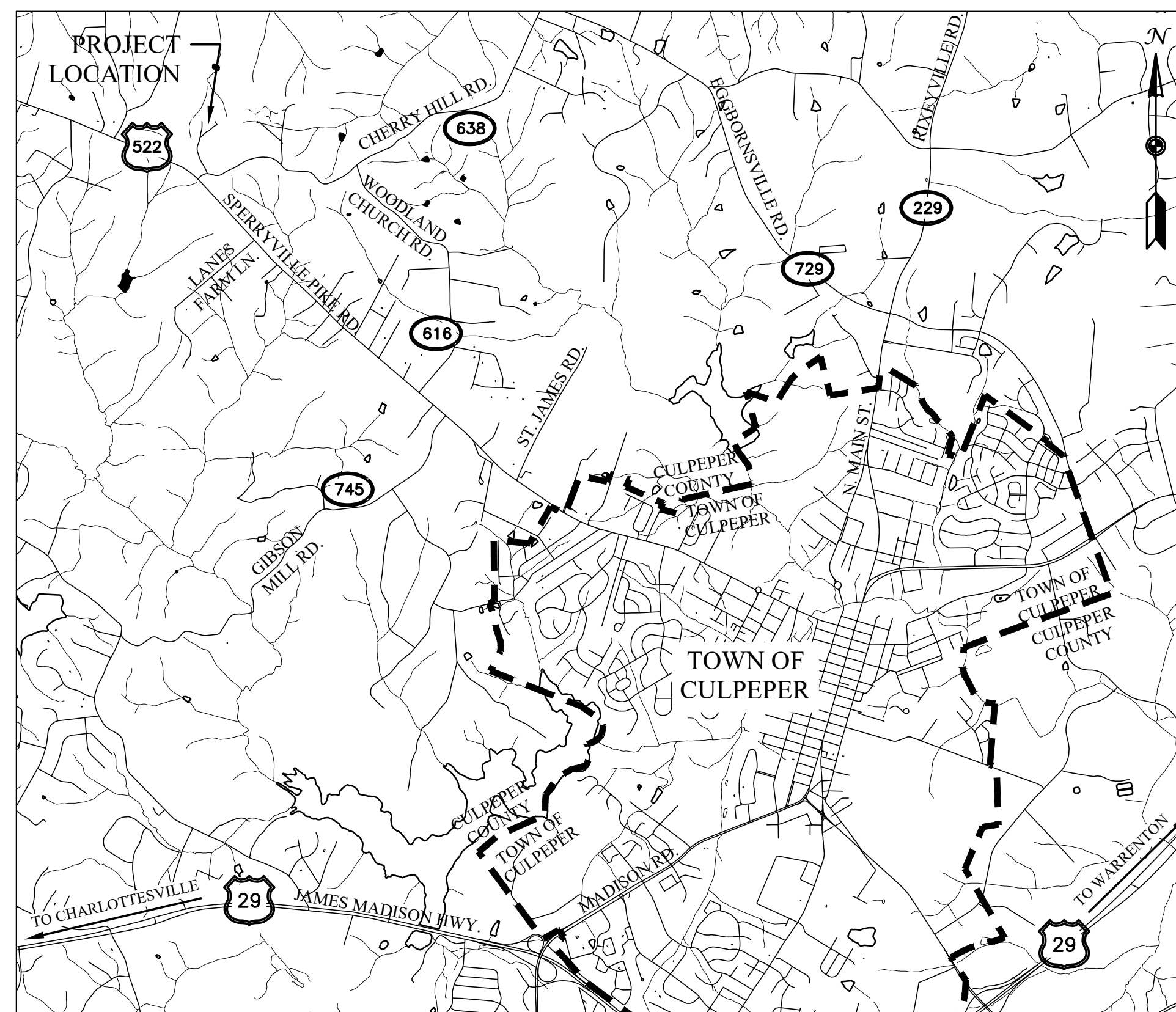
GAS: COLUMBIA GAS TRANSMISSION - (CGT909)
 LOCATOR OR UTILITY OPERATOR MUST CONTACT
 EXCAVATOR AND MUST BE PRESENT DURING EXCAVATION
 FIELD CONTACT: TERRY COLE (304) 357-3468
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 835-7191

ELECTRICITY: DOMINION VA POWER ELEC DI - (DOM710)
 FIELD CONTACT: S & N (804) 608-5640
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (888) 667-3000

RAPPAHANNOCK ELECTRIC - (REC502)
 FIELD CONTACT: UTILIQUEST (703) 754-2116
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 891-5945

TELEPHONE/FIBER OTIC: VERIZON - (VZN)
 FIELD CONTACT: UTILIQUEST (703) 754-2116 AND
 DAVE RUSSELL - VERIZON ENGINEERING
 TELEPHONE: (540) 368-8176
 E-MAIL: DAVID.A.RUSSELL@VERIZON.COM
 IN THE EVENT OF DAMAGE TO A FACILITY CALL:
 MIKE JOHNSON - VERIZON CONSTRUCTION
 TELEPHONE: (540) 270-0581
 E-MAIL: MICHAEL.DAVID.JOHNSON@VERIZON.COM

CABLE: COMCAST - (502)
 FIELD CONTACT: CABLE PROTECTION SERVICES (804) 562-3861
 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 441-6917 EXT. OPT. 1



VICINITY MAP
SCALE: 1" = 3000'

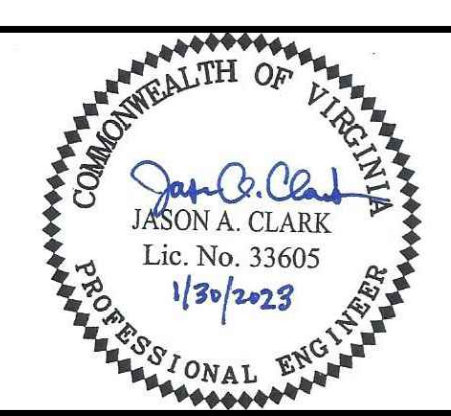
SHEET NO.	DRAWING NO.	TITLE
1 OF 19	C-1	COVER SHEET
2 OF 19	C-2	GENERAL NOTES
3 OF 19	C-3	OVERALL LAYOUT
4 OF 19	C-4	EXISTING CONDITIONS AND DEMOLITION PLAN - WATER TREATMENT FACILITY SITE
5 OF 19	C-5	SITE PLAN - WATER TREATMENT FACILITY
6 OF 19	C-6	EXISTING CONDITIONS AND DEMOLITION PLAN - FINISHED WATER TANK SITE
7 OF 19	C-7	SITE PLAN - FINISHED WATER TANK
8 OF 19	C-8	EXISTING CONDITIONS, DEMOLITION PLAN, AND SITE PLAN - WELL SITE
9 OF 19	C-9	WATER TREATMENT FACILITY PLAN
10 OF 19	C-10	WATER TREATMENT FACILITY SECTIONS
11 OF 19	C-11	WATER TREATMENT FACILITY SECTIONS
12 OF 19	C-12	FINISHED WATER STORAGE TANK PLAN AND SECTIONS
13 OF 19	C-13	BACKWASH WASTEWATER STORAGE WETWELL PLAN AND SECTION AND MISCELLANEOUS DETAILS
14 OF 19	C-14	MISCELLANEOUS DETAILS
15 OF 19	I-1	PROCESS AND INSTRUMENTATION DIAGRAM
16 OF 19	E-1	LEGEND, ABBREVIATIONS, GENERAL NOTES AND PARTIAL SITE PLANS
17 OF 19	E-2	WATER TREATMENT PLANT, WELL SITE POWER DISTRIBUTION DIAGRAMS, DETAILS AND CONTROL SCHEMATICS
18 OF 19	E-3	WATER TREATMENT BUILDING PLAN POWER AND LIGHTING
19 OF 19	E-4	SCHEDULES AND DETAILS

ABBREVIATIONS					
AFF	ABOVE FINISHED FLOOR	FC	FACE OF CURB	R/W	RIGHT OF WAY
ARV	AIR RELEASE VALVE	GALV	GALVANIZED	SAN	SANITARY SEWER
BC	BACK OF CURB	GE	GROUND ELEVATION	SD	STORM DRAIN
BM	BENCH MARK	GV	GATE VALVE	SQ	SQUARE
BK	BACK	HB	HORIZONTAL BEND	S.S.	STAINLESS STEEL
BV	BALL VALVE	HDPE	HIGH DENSITY POLYETHYLENE	SSMH	SANITARY SEWER MANHOLE
CG	CURB & GUTTER	HP	HIGH PRESSURE	STA	STATION
CIP	CAST IRON PIPE	ID	INNER DIAMETER	STD	STANDARD
CL	CENTER LINE	INV	INVERT	SW	SIDEWALK
C.L.	CHAIN LINK	IPS	IRON PIN SET	TBA	TO BE ABANDONED
CMP	CORRUGATED METAL PIPE	IPF	IRON PIN FOUND	TC	TOP OF CURB
CO	CLEAN OUT	LAT	LATERAL	TYP	TYPICAL
CONC	CONCRETE	LF	LINEAR FEET	UG	UNDERGROUND
CP	CONTROL POINT	LP	LOW PRESSURE	UON	UNLESS OTHERWISE NOTED
CY	CUBIC YARDS	MH	MANHOLE	VB	VERTICAL BEND
D.I.	DUCTILE IRON	NTS	NOT TO SCALE	WL	WATER LINE
DIA	DIAMETER	O.C.	ON CENTER	WM	WATER METER
DIP	DUCTILE IRON PIPE	PE	POLYETHYLENE	WT	WATERTIGHT
EL	ELEVATION	PED	PEDESTRIAN	WWF	WOVEN WIRE FABRIC
ELEC	ELECTRIC	PROP	PROPOSED	YD	YARD DRAIN
EOP	EDGE OF PAVEMENT	PVC	POLYVINYL CHLORIDE	YDS	YARDS
EX/EXIST	EXISTING	PVMT	PAVEMENT		
FF	FINISHED FLOOR	RCP	REINFORCED CONCRETE PIPE		
FH	FIRE HYDRANT	REQ'D	REQUIRED		

NOTES:
 1. ALL ABBREVIATIONS SHOWN MAY NOT BE USED.

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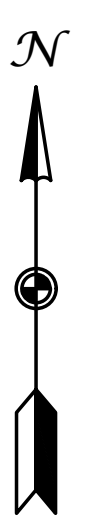
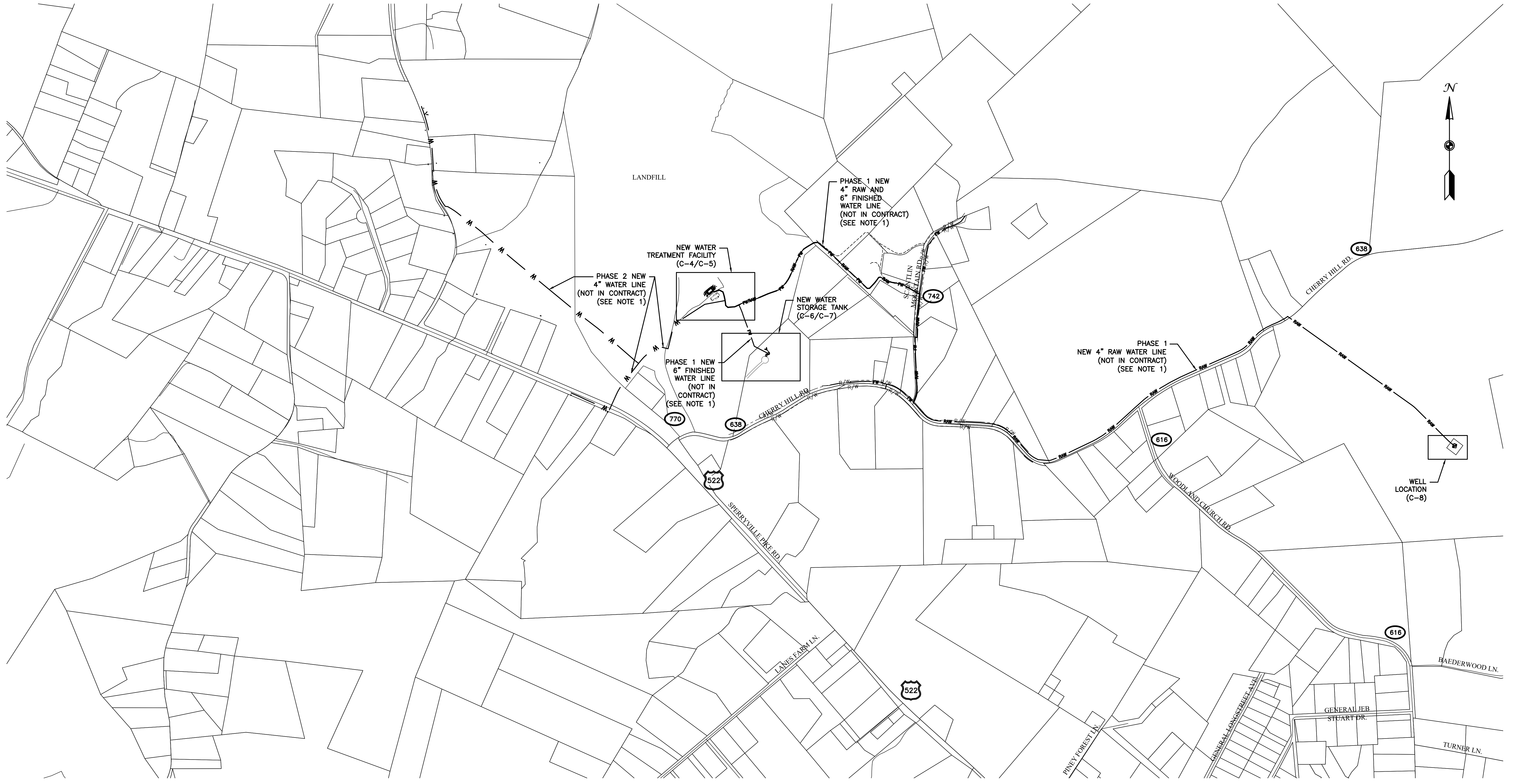


BID SET
PART A



DESIGNED BY: SAR/JAC	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: SAR/DJC	TITLE: COVER SHEET	DRAWING NUMBER: C-1
DIHR BY: HFV	WVA NUMBER: 216038.02	SHEET NUMBER: 1 of 19
FILE NAME: 603802C_CS-1.dwg	DISCIPLINE: CIVIL	SCALE: H: AS NOTED V: N/A
DATE: 1/30/23		

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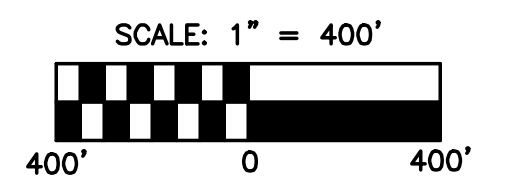


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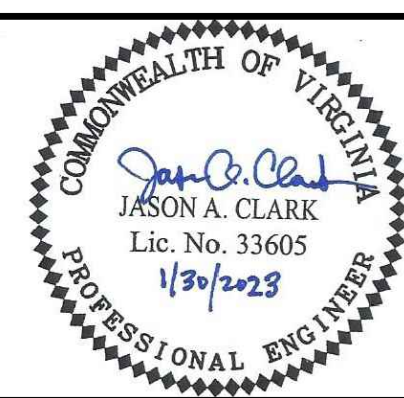
1. PROPOSED RAW AND FINISHED WATER LINE IMPROVEMENTS SHOWN IN THESE DRAWINGS FOR THE WATER TREATMENT FACILITY, WATER STORAGE TANK, AND WELL SITES ARE BASED ON WWA DESIGN DRAWINGS ENTITLED "CULPEPER COUNTY - CHERRY HILL WATER SYSTEM" AND ARE APPROXIMATE. THESE IMPROVEMENTS ARE BEING CONSTRUCTED BY OTHERS UNDER SEPARATE CONTRACT. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR DISINFECTION AND PRESSURE/LEAKAGE TESTING OF PIPING IN THEIR RESPECTIVE SCOPES. CONNECTION POINTS TO THE WATER LINE PROJECT ARE SHOWN ON THE CONTRACT DRAWINGS FOR REFERENCE. COORDINATE FINAL PIPING LOCATIONS AND DEPTHS AT THESE POINTS WITH THE WATER LINE CONTRACTOR TO PREVENT CONSTRUCTION CONFLICTS.

OVERALL LAYOUT
SCALE: 1" = 400'

IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED



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PART A



DESIGNED BY: SAR/JAC	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: SAR/DJC	TITLE: OVERALL LAYOUT	DRAWING NUMBER: C-3
DIHR BY: HFW	WVA NUMBER: 216038.02	SHEET NUMBER: 3 of 19
FILE NAME: 603802C_OV-1.dwg	DISCIPLINE: CIVIL	SCALE: H: AS NOTED V: N/A
DATE: 1/30/23		

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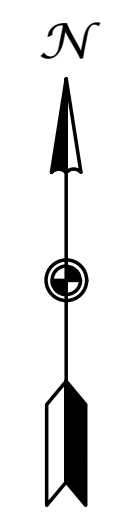
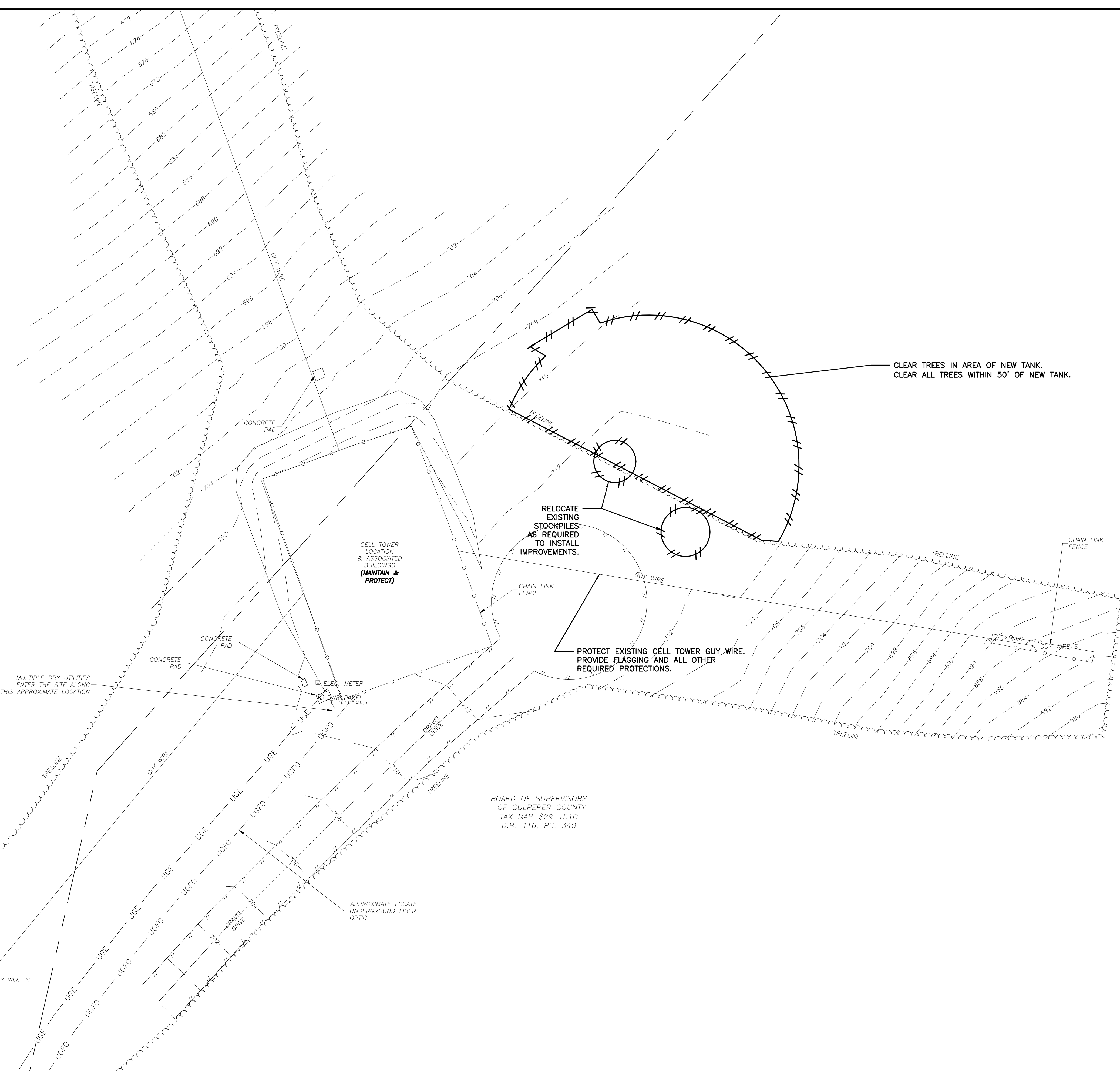
PART A



DESIGNED BY: SAR/JAC	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: DMP/DJC	TITLE: EXISTING CONDITIONS AND DEMOLITION PLAN WATER TREATMENT FACILITY SITE	DRAWING NUMBER: C-4
DIHR BY: HFW	WVA NUMBER: 216038.02	SHEET NUMBER: 4 of 19
FILE NAME: 603802C_EX-1.dwg	DISCIPLINE: CIVIL	SCALE: H: AS NOTED V: N/A
DATE: 1/30/23		

IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED
SCALE: 1" = 20'
20' 0 20'

COUNTY OF CULPEPER
TAX MAP #29 149
D.B. 279, PG. 134



IF THIS DRAWING IS A REDUCTION
GRAPHIC SCALE MUST BE USED
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20' 0 20'

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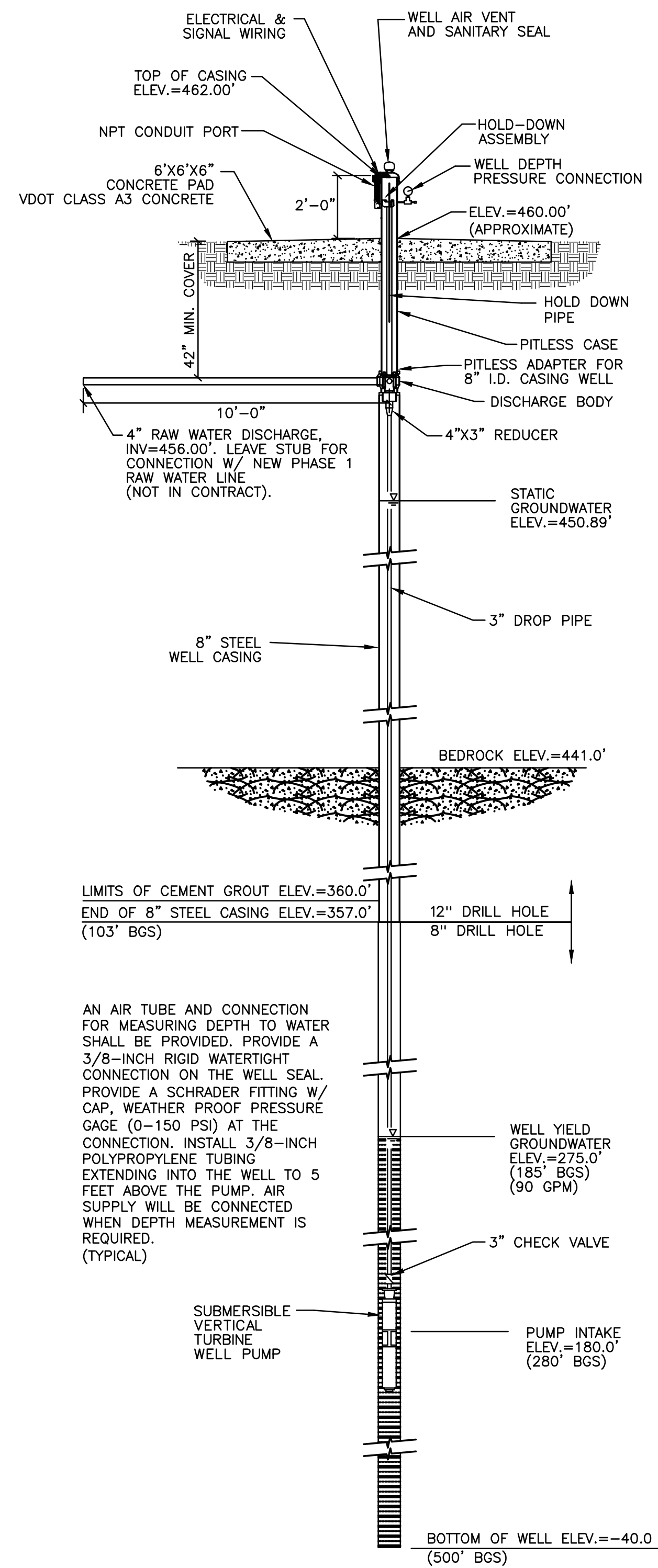
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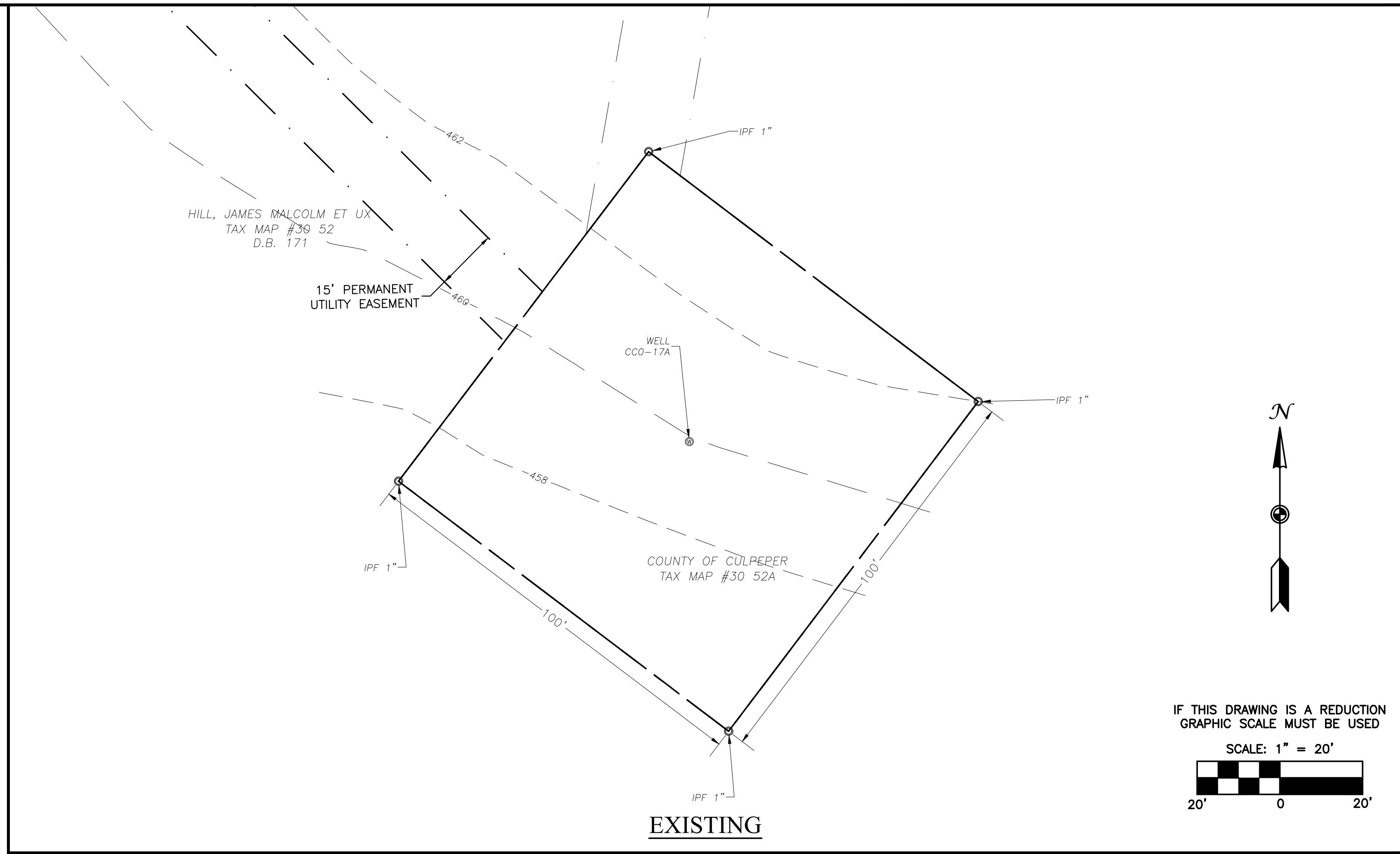
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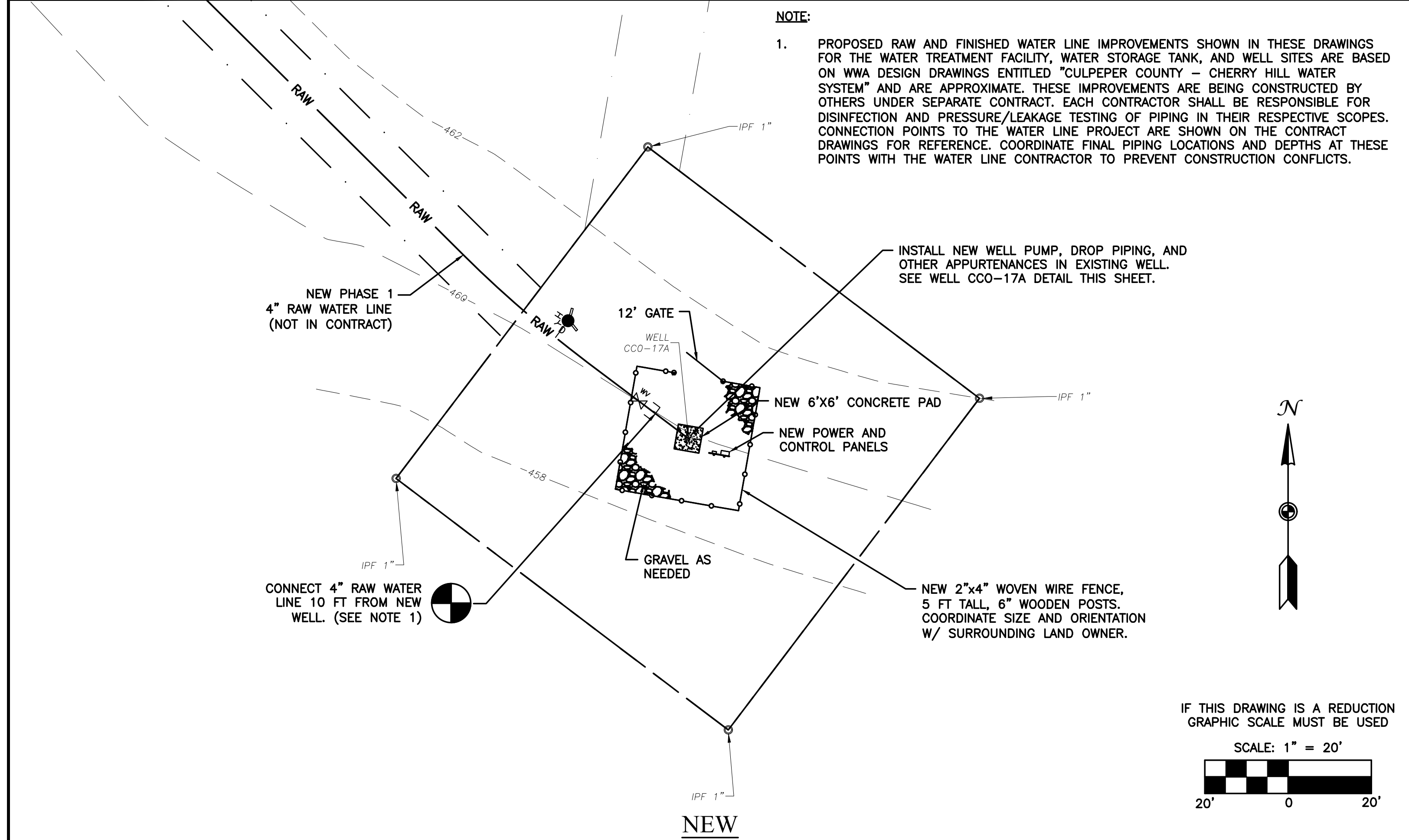
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DIHR BY: HFW	DISCIPLINE: CIVIL	SHEET NUMBER: 6 of 19
WWA NUMBER: 216038.02	FILE NAME: 603802C_EX-2.dwg	SCALE: H: 1"=20' V: N/A
		DATE: 1/30/23



DETAIL - WELL CC0-17A
SCALE: N.T.S.



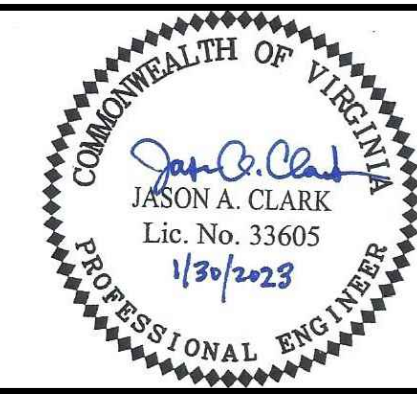
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SCALE: 1" = 20'



IF THIS DRAWING IS A REDUCTION GRAPHIC SCALE MUST BE USED
SCALE: 1" = 20'

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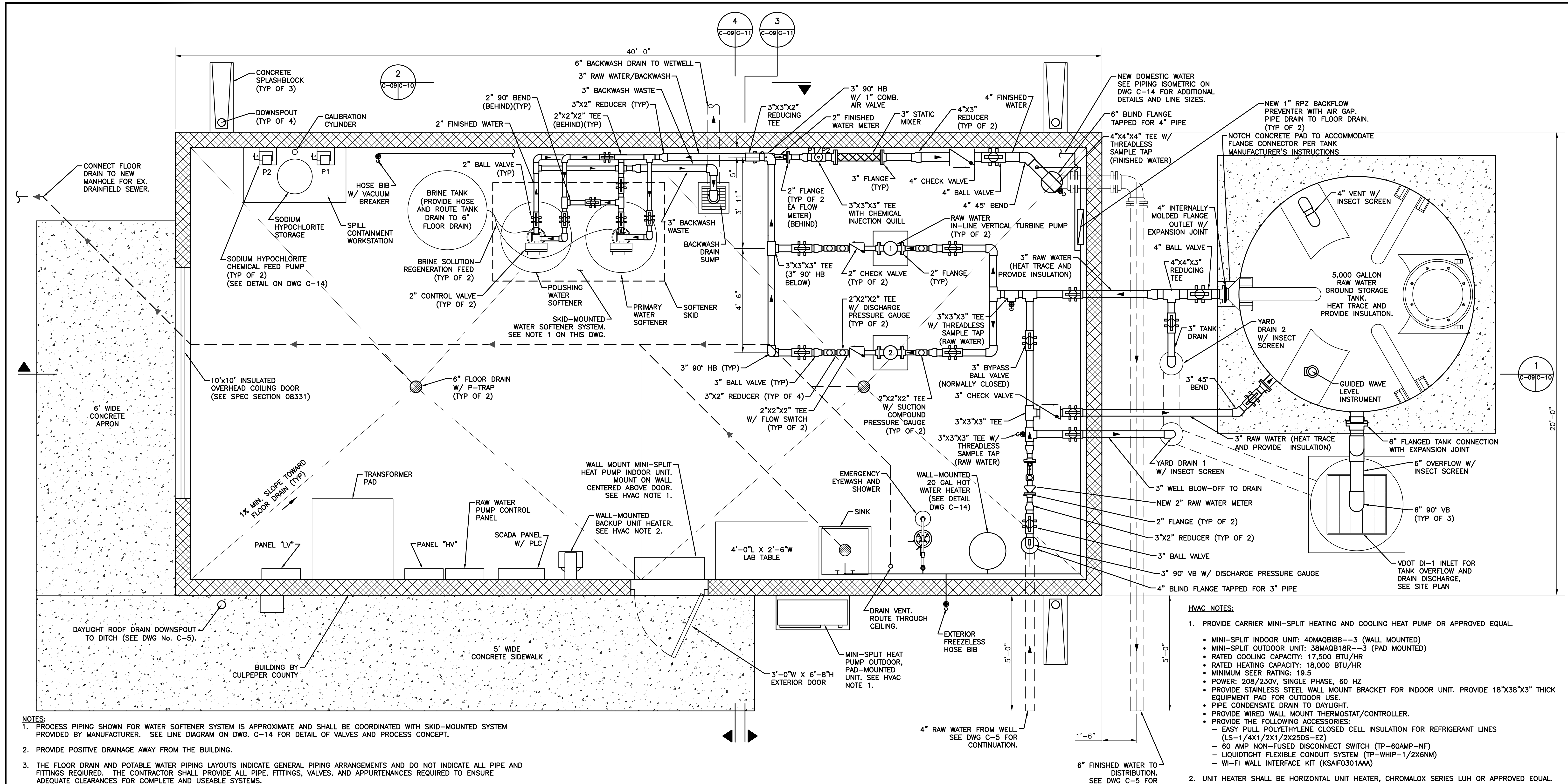
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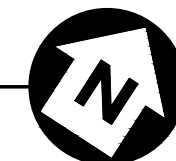
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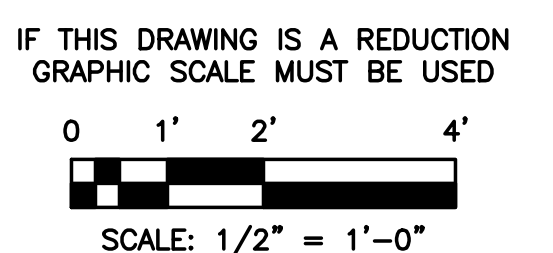
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DRAWN BY: DMP/DJC	TITLE: EXISTING CONDITIONS, DEMOLITION PLAN, AND SITE PLAN WELL SITE		DRAWING NUMBER: C-8
DIHR BY: HFW	FILE NAME: 603802C_SP-3.dwg	DISCIPLINE: CIVIL	SHEET NUMBER: 8 of 19
WWA NUMBER: 216038.02	SCALE: H: AS NOTED V: N/A	DATE: 1/30/23	



WATER TREATMENT FACILITY - PLAN
SCALE: 1/2" = 1'-0"



- HVAC NOTES:**
- PROVIDE CARRIER MINI-SPLIT HEATING AND COOLING HEAT PUMP OR APPROVED EQUAL.
 - MINI-SPLIT INDOOR UNIT: 40MAQB18B--3 (WALL MOUNTED)
 - MINI-SPLIT OUTDOOR UNIT: 38MAQB18R--3 (PAD MOUNTED)
 - RATED COOLING CAPACITY: 17,500 BTU/HR
 - RATED HEATING CAPACITY: 18,000 BTU/HR
 - MINIMUM SEER RATING: 19.5
 - POWER: 208/230V, SINGLE PHASE, 60 HZ
 - PROVIDE STAINLESS STEEL WALL MOUNT BRACKET FOR INDOOR UNIT. PROVIDE 18"x38"x3" THICK EQUIPMENT PAD FOR OUTDOOR USE.
 - PIPE CONDENSATE DRAIN TO DAYLIGHT.
 - PROVIDE WIRED WALL MOUNT THERMOSTAT/CONTROLLER.
 - PROVIDE THE FOLLOWING ACCESSORIES:
 - EASY PULL POLYETHYLENE CLOSED CELL INSULATION FOR REFRIGERANT LINES (LS-1/4X1/2X1/2X25DS-EZ)
 - 60 AMP NON-FUSED DISCONNECT SWITCH (TP-60AMP-NF)
 - LIQUIDTIGHT FLEXIBLE CONDUIT SYSTEM (TP-WHIP-1/2X6NM)
 - WI-FI WALL INTERFACE KIT (KSAIF0301AAA)
 - UNIT HEATER SHALL BE HORIZONTAL UNIT HEATER, CHROMALOX SERIES LUH OR APPROVED EQUAL.
 - HEATING CAPACITY: 17,076 BTU/HR
 - POWER: 5 KW, 480V, THREE PHASE, 60 HZ
 - HEATER SHALL HAVE UNIT MOUNTED THERMOSTAT.
 - PROVIDE WALL MOUNTING BRACKETS.
 - INSTALL HEATER 8 FEET ABOVE FINISHED FLOOR TO THE BOTTOM OF THE HEATER
 - PROVIDE ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR COMPLETE AND OPERABLE HVAC SYSTEMS. INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS AND INSTRUCTIONS.



- NOTES:**
- PROCESS PIPING SHOWN FOR WATER SOFTENER SYSTEM IS APPROXIMATE AND SHALL BE COORDINATED WITH SKID-MOUNTED SYSTEM PROVIDED BY MANUFACTURER. SEE LINE DIAGRAM ON DWG. C-14 FOR DETAIL OF VALVES AND PROCESS CONCEPT.
 - PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
 - THE FLOOR DRAIN AND POTABLE WATER PIPING LAYOUTS INDICATE GENERAL PIPING ARRANGEMENTS AND DO NOT INDICATE ALL PIPE AND FITTINGS REQUIRED. THE CONTRACTOR SHALL PROVIDE ALL PIPE, FITTINGS, VALVES, AND APPURTENANCES REQUIRED TO ENSURE ADEQUATE CLEARANCES FOR COMPLETE AND USEABLE SYSTEMS.
 - PROVIDE PIPE HANGERS AND FLOOR SUPPORTS AS REQUIRED TO INSTALL ABOVEGROUND PIPING IN THE BUILDING PER SECTION 02735.
 - VENT UTILITY SINK IN ACCORDANCE WITH THE IBC AND LOCAL CONTROL BUILDING CODE REQUIREMENTS.
 - INSTALL ALL EQUIPMENT IN THE BUILDING IN ACCORDANCE WITH THE WRITTEN RECOMMENDATIONS OF THE MANUFACTURER.
 - SEE SECTION 02660 FOR ADDITIONAL INFORMATION ON PIPING MATERIALS.
 - SEE DWGS. E-1 THROUGH E-4 FOR ELECTRICAL WORK ASSOCIATED WITH THE WATER TREATMENT FACILITY.
 - COORDINATE LOCATION, ELEVATION, AND DIMENSIONS OF PIPING PENETRATIONS AND EQUIPMENT OPENINGS WITH THE OWNER PRIOR TO CONSTRUCTION. PROVIDE SLEEVES WITH MECHANICAL LINK SEALS FOR ALL PIPING PENETRATIONS IN THE BUILDING WALLS AND FLOOR SLAB TO ENSURE WATERTIGHT CONNECTIONS.
 - PROVIDE HEAT TRACING, INSULATION, AND ALUMINUM JACKET FOR ALL ABOVEGROUND EXTERIOR PIPING. SEE SECTION 02660 FOR REQUIREMENTS.
 - GEOTECHNICAL EXPLORATION HAS INDICATED LOOSE/SOFT SOILS BENEATH THE EXISTING TOPSOIL. UNDERCUT UNSUITABLE SUBGRADE SOIL MATERIALS BENEATH STRUCTURAL FOUNDATIONS TO ELEVATIONS INDICATED, AND REPLACE WITH SELECT MATERIAL (VDOT No 57 STONE) AT NO ADDITIONAL COST TO THE OWNER. SEE SECTION 02200 FOR ADDITIONAL REQUIREMENTS.

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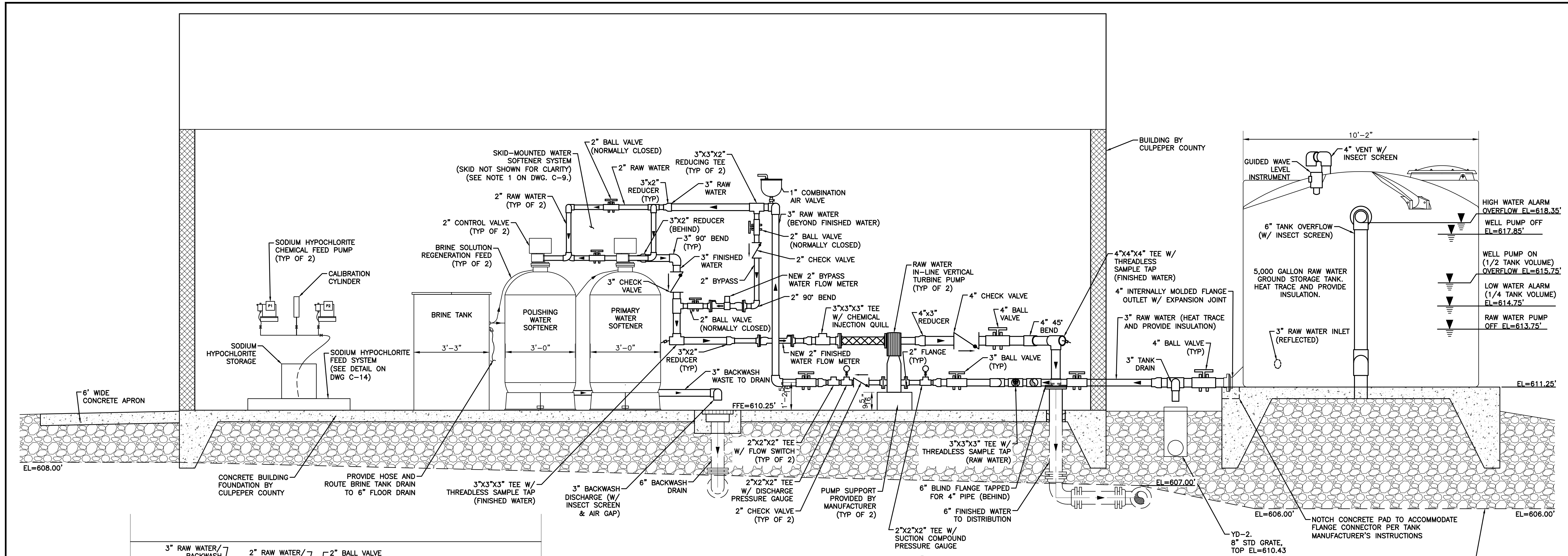
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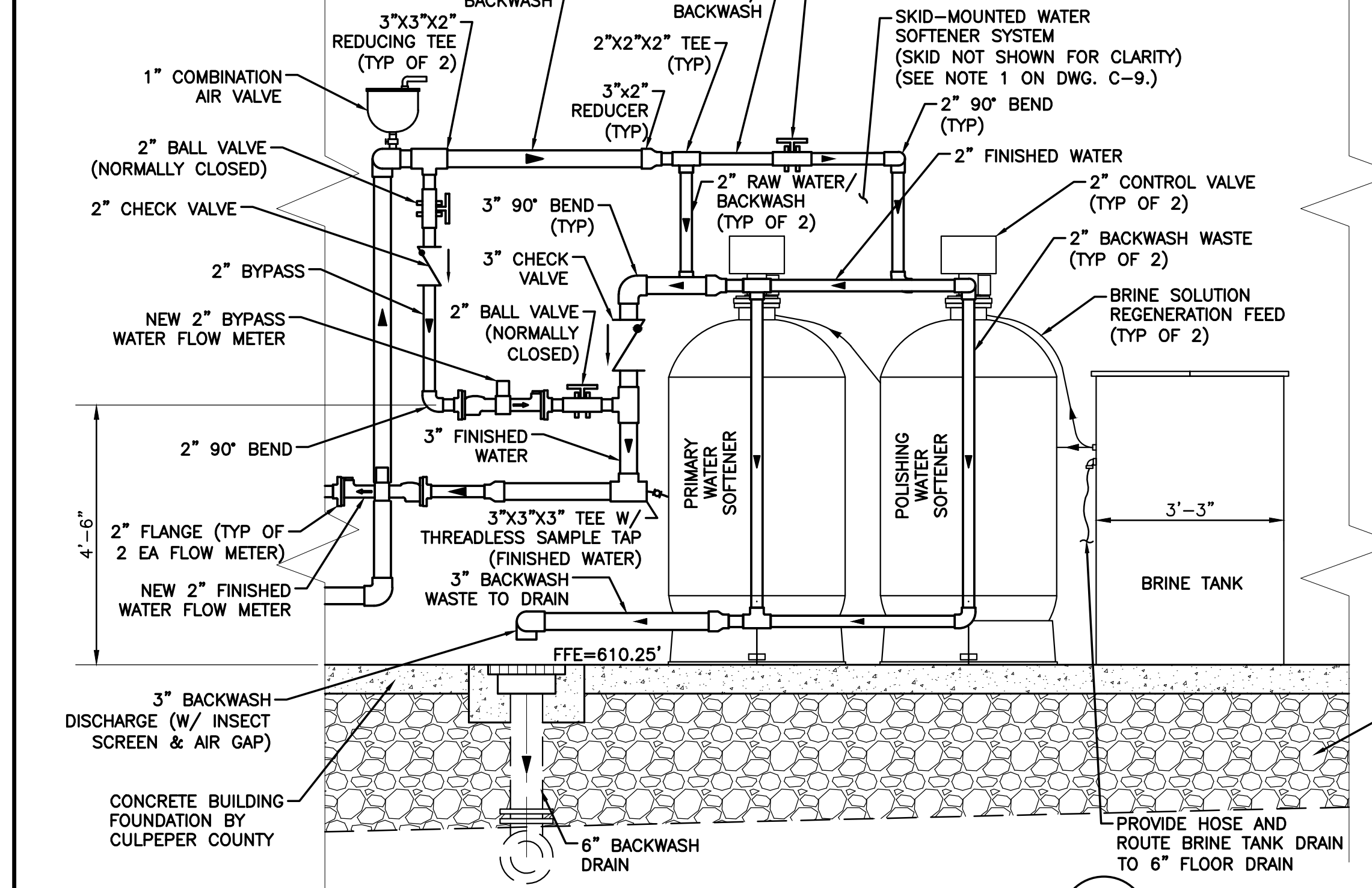
PART A



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DRAWN BY: DMP/DJC	TITLE: WATER TREATMENT FACILITY PLAN	DRAWING NUMBER: C-9
DIHR BY: HFW	FILE NAME: 603802C_DET-1.dwg	SHEET NUMBER: 9 of 19
WWA NUMBER: 216038.02	DISCIPLINE: CIVIL	SCALE: 1/2" = 1'
	DATE: 1/30/23	



WATER TREATMENT FACILITY - SECTION 1
SCALE: 1/2" = 1'-0"



WATER TREATMENT FACILITY - SECTION 2
SCALE: 1/2" = 1'-0"

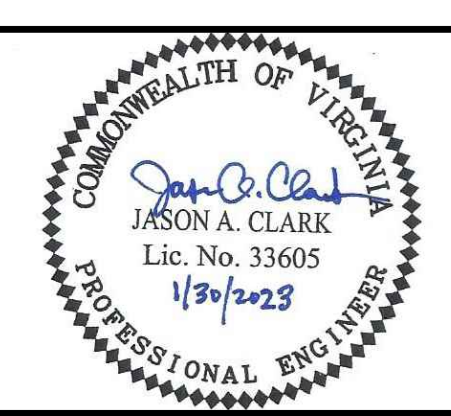
GEOTECHNICAL EXPLORATION HAS INDICATED LOOSE/SOFT SOILS BENEATH THE EXISTING TOPSOIL. UNDERCUT UNSUITABLE SUBGRADE SOIL MATERIALS BENEATH STRUCTURAL FOUNDATIONS TO ELEVATIONS INDICATED, AND REPLACE WITH SELECT MATERIAL (VDOT NO 57 STONE) AT NO ADDITIONAL COST TO THE OWNER. SEE SECTION 02200 FOR ADDITIONAL REQUIREMENTS.

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

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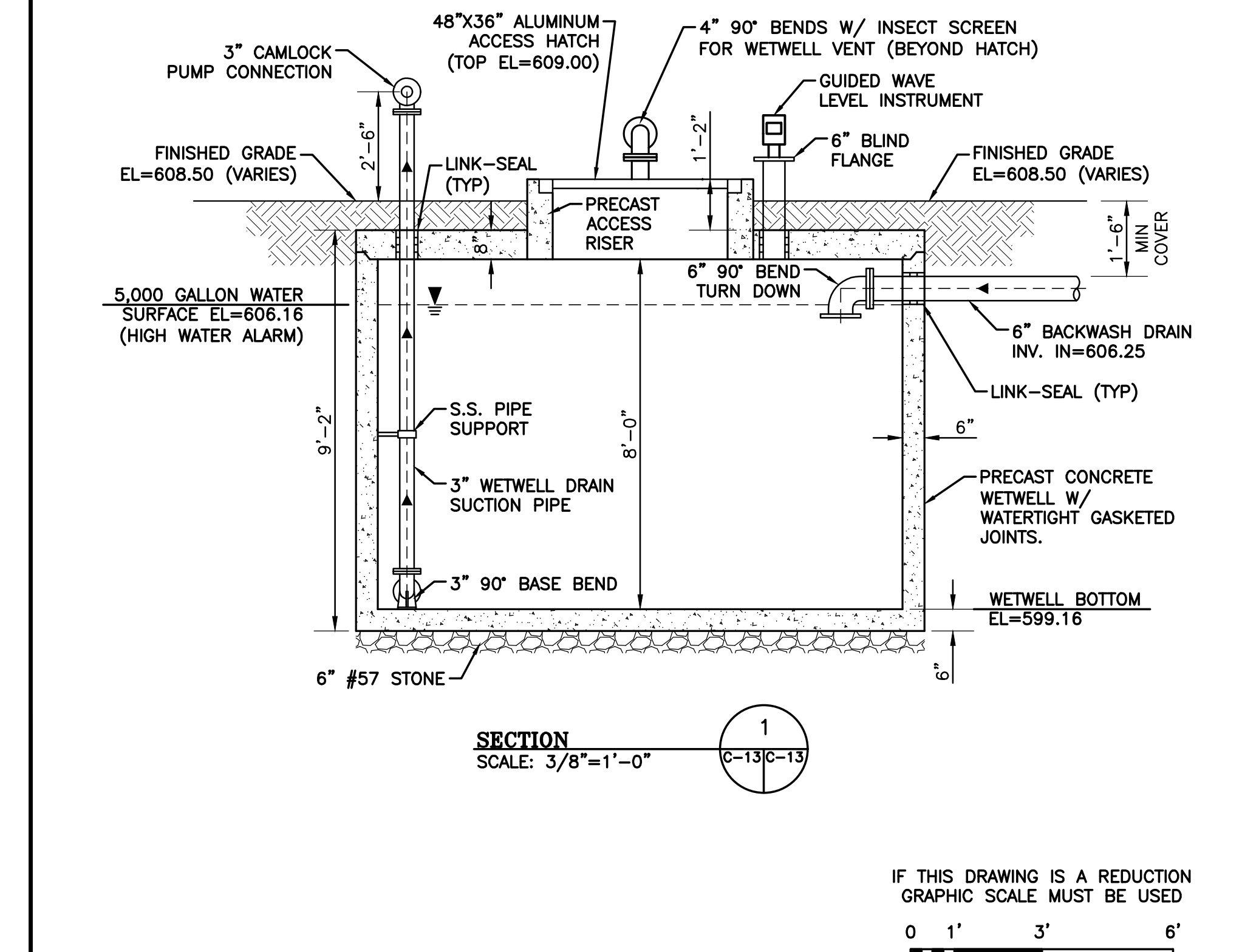
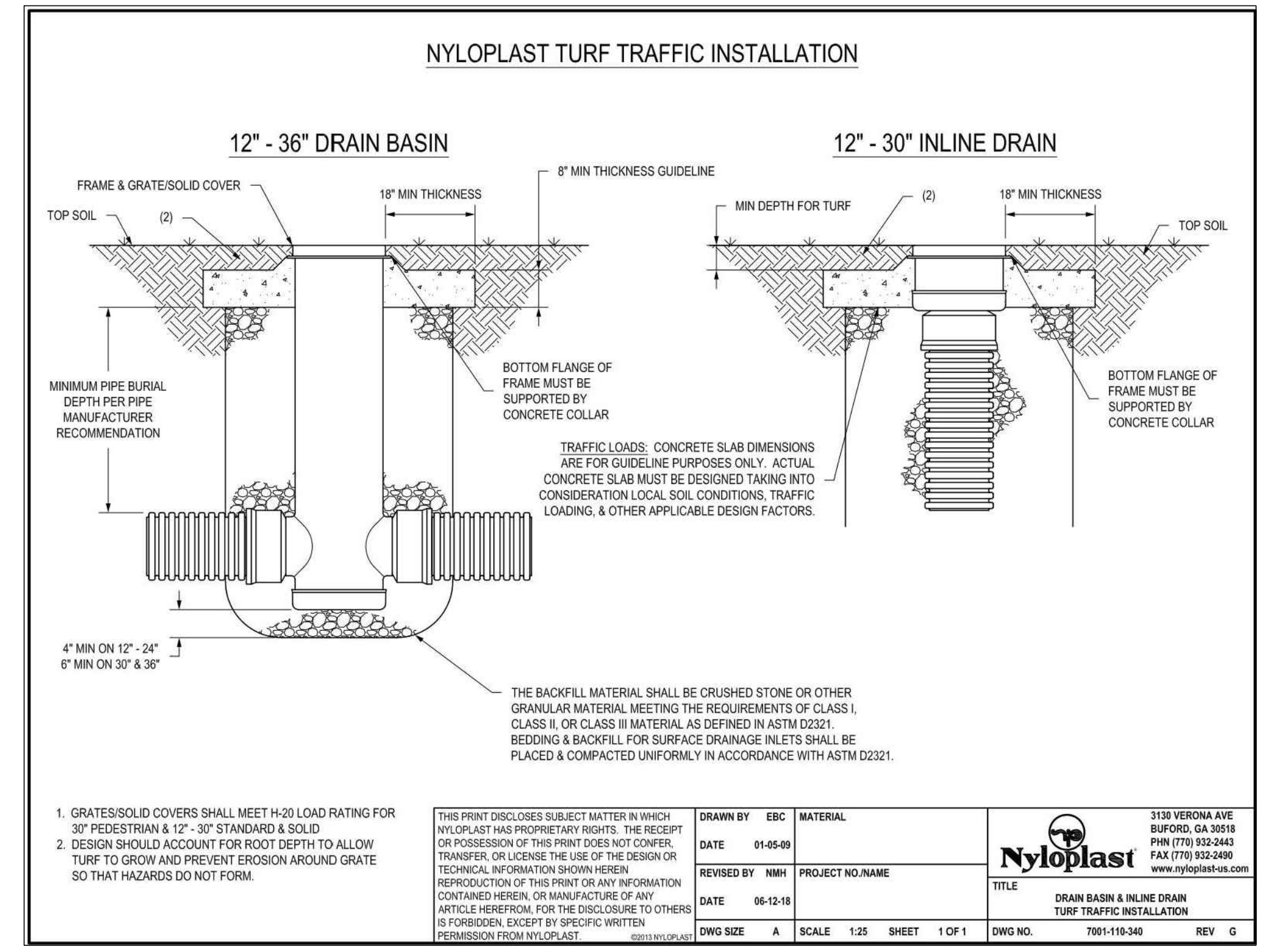
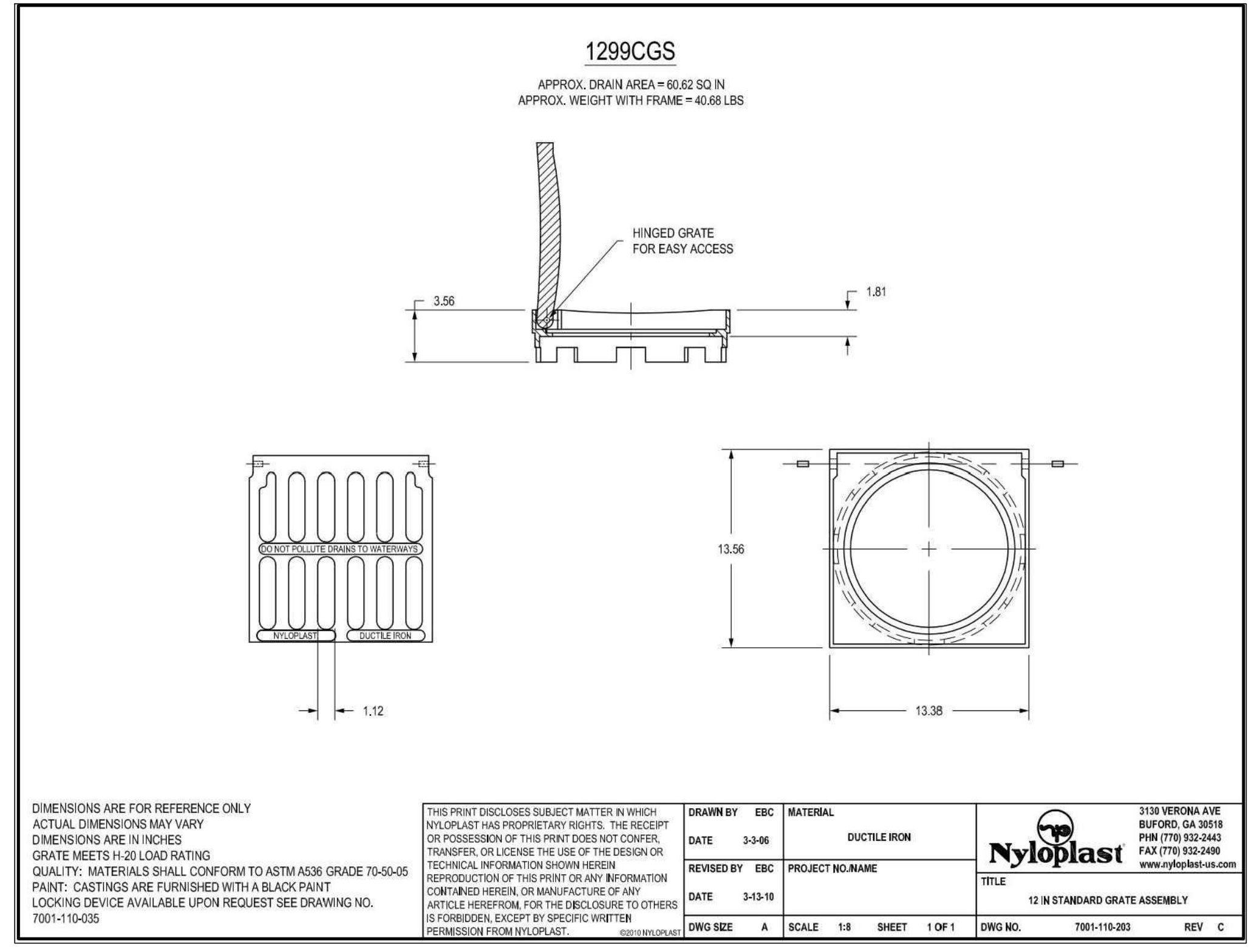
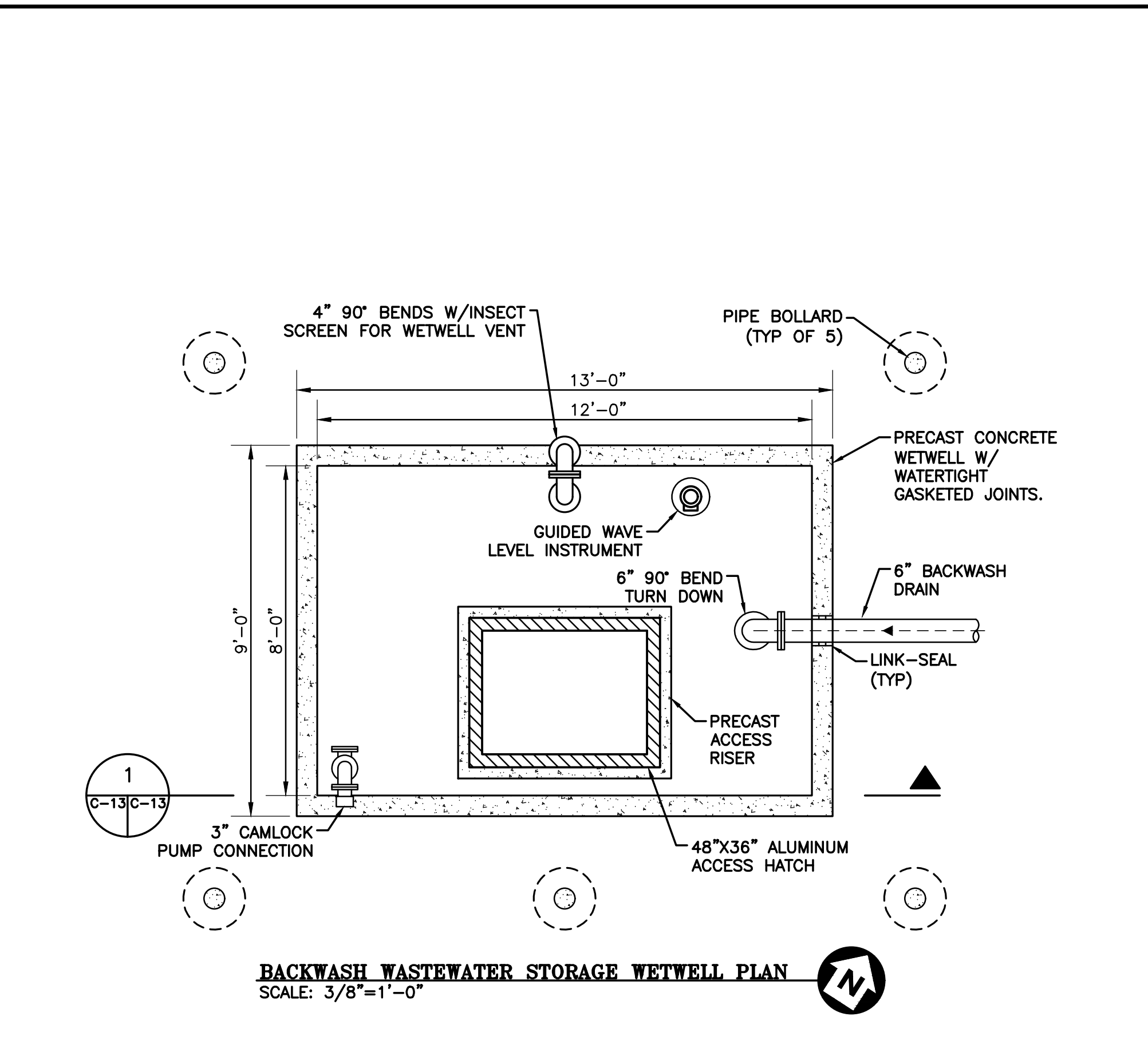
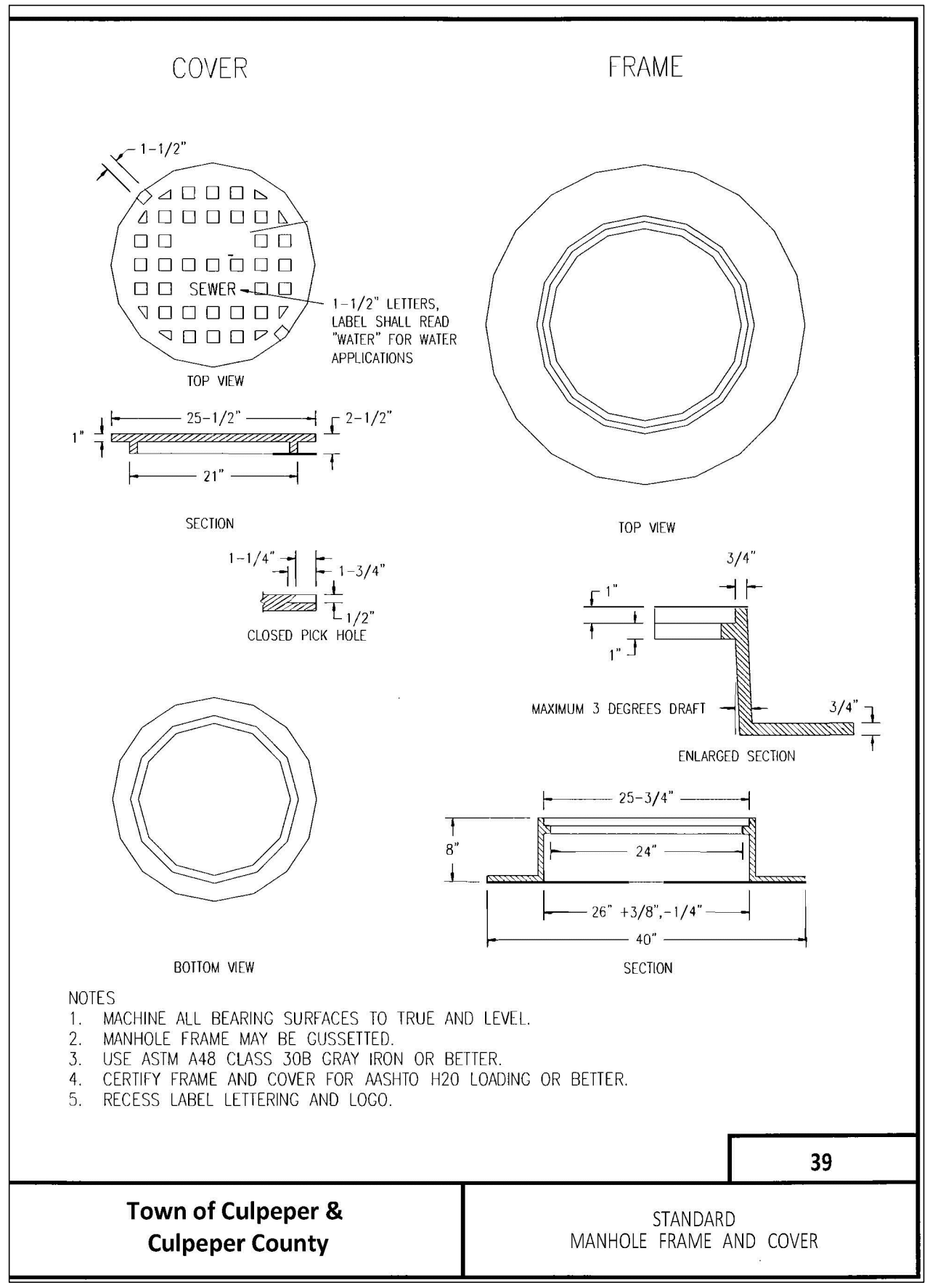
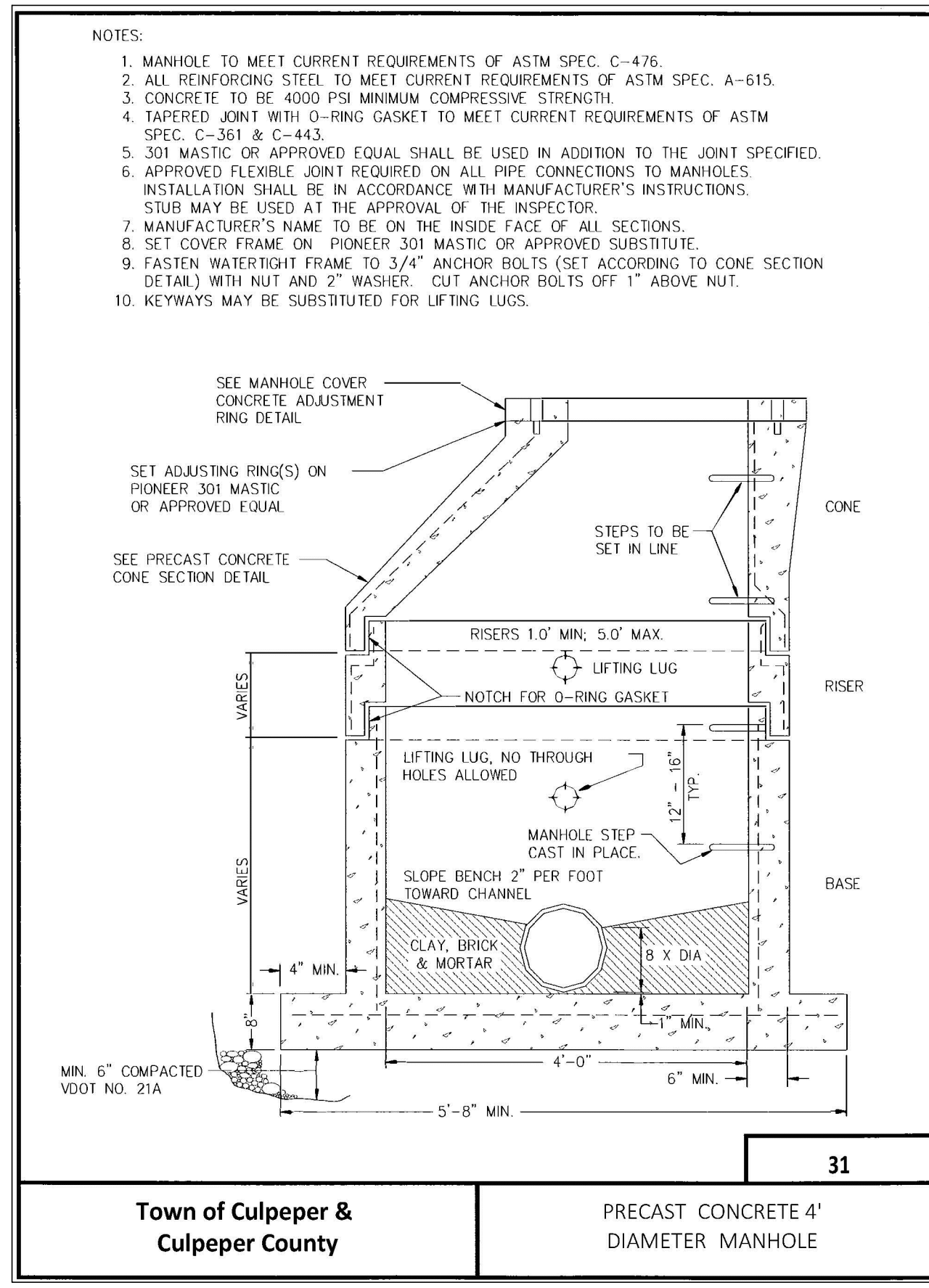
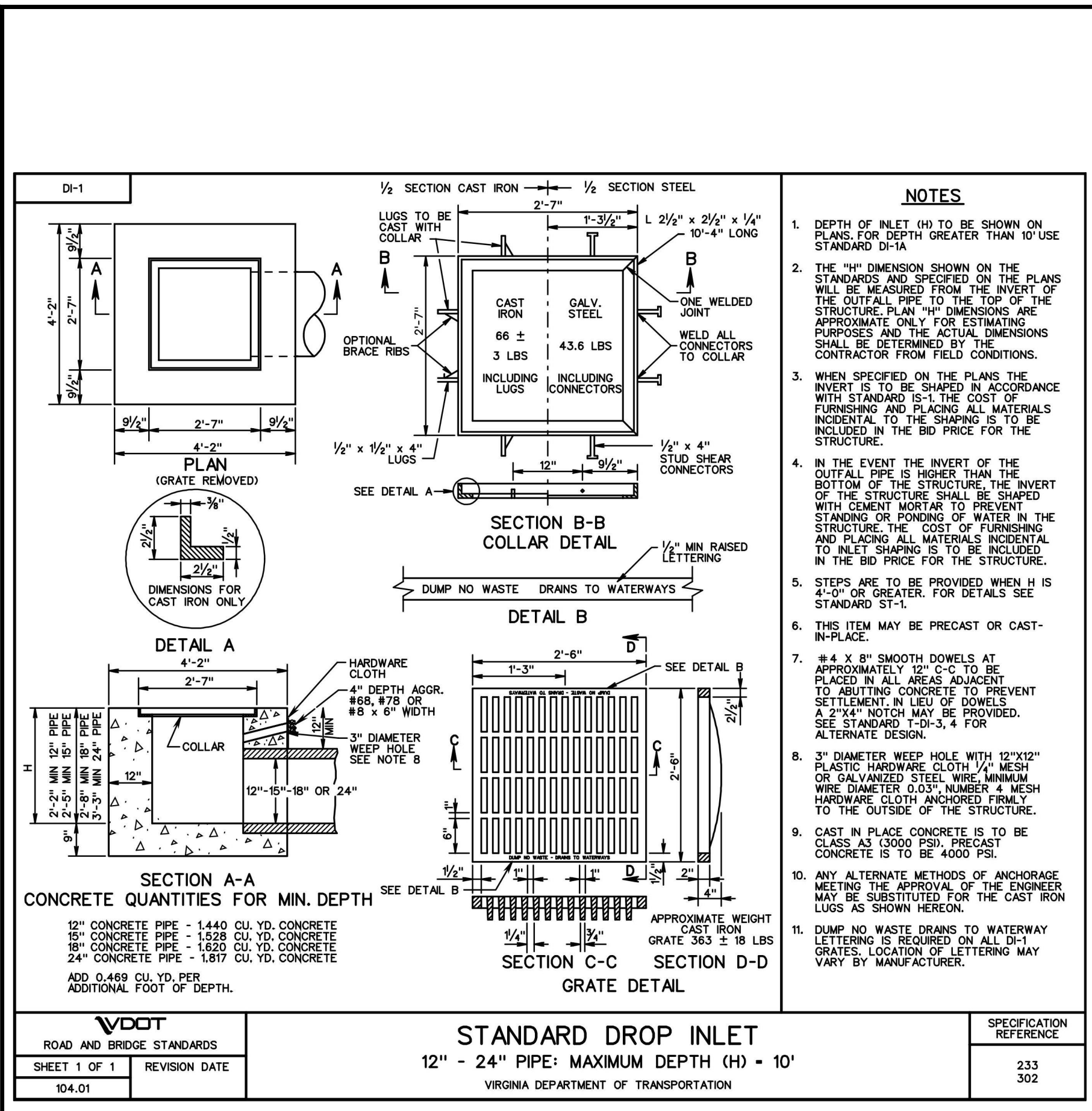
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PART A



DESIGNED BY: SAR/JAC	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: DMP/DJC	TITLE: WATER TREATMENT FACILITY SECTIONS	DRAWING NUMBER: C-10
DIHR BY: HFW	FILE NAME: 603802C_DET-2.dwg	SHEET NUMBER: 10 of 19
WWA NUMBER: 216038.02	DISCIPLINE: CIVIL	SCALE: H: AS NOTED V: N/A
	DATE: 1/30/23	



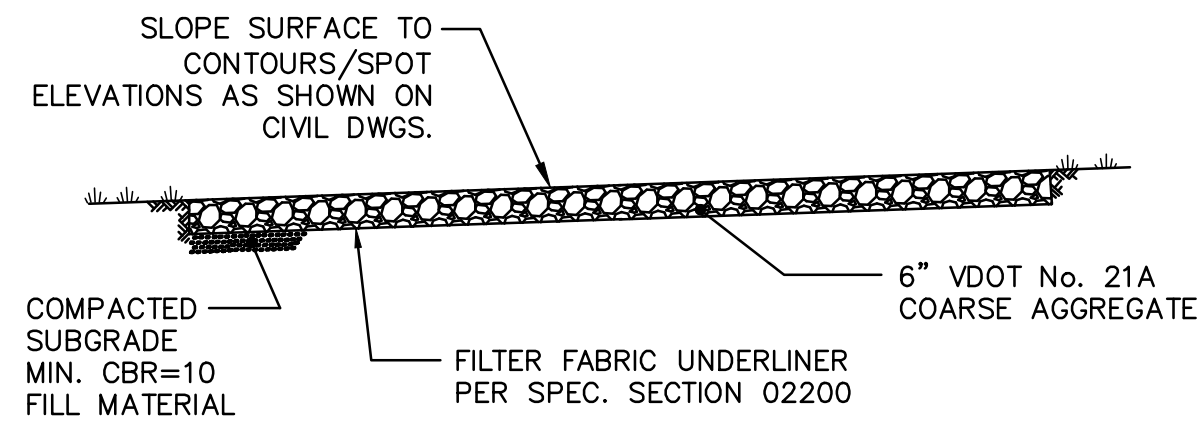
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DRAWN BY: DMP/DJC	TITLE: BACKWASH WASTEWATER STORAGE WETWELL PLAN AND SECTION AND MISCELLANEOUS DETAILS	DRAWING NUMBER: C-13
DIHR BY: HFW	DISCIPLINE: CIVIL	SHEET NUMBER: 13 of 19
WWA NUMBER: 216038.02	FILE NAME: 603802C_DET-5.dwg	DATE: 1/30/23
	SCALE: H: AS NOTED V: N/A	



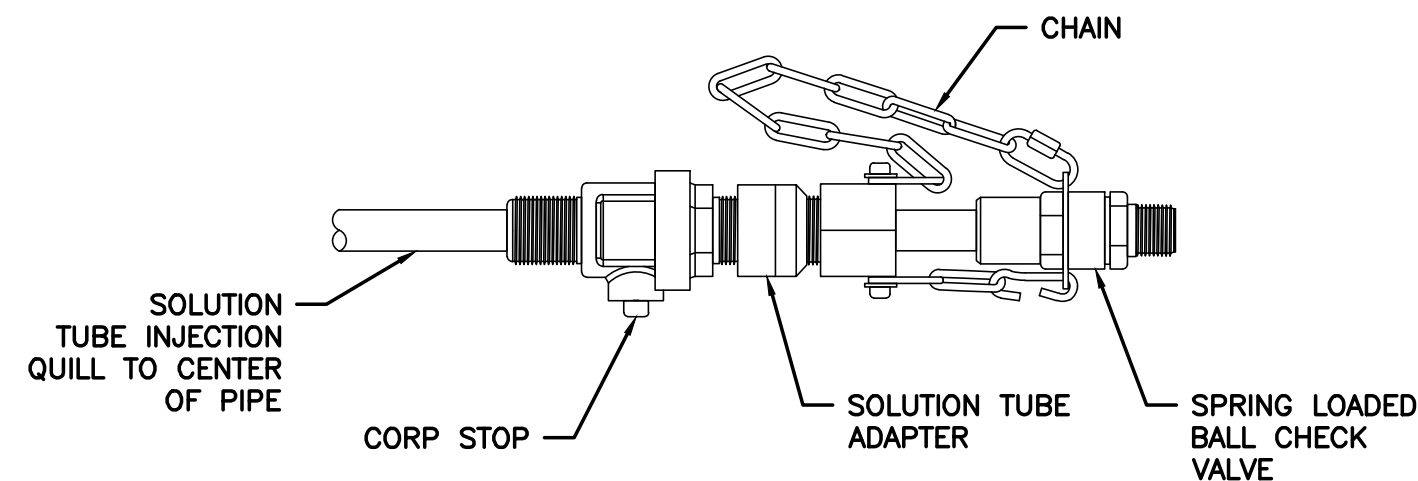
PART A



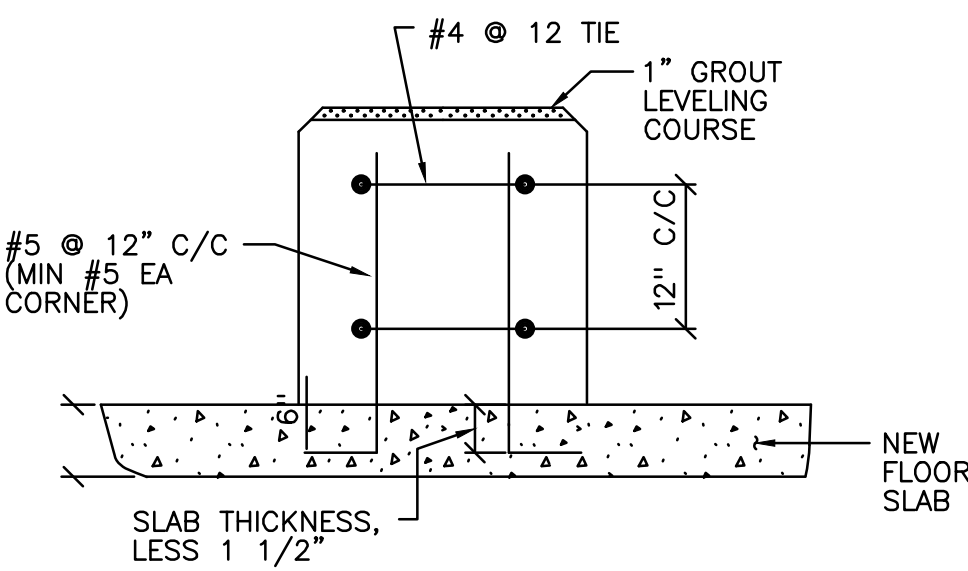


- NOTES:**
1. PROVIDE NEW GRAVEL SURFACE AT LOCATIONS AS SHOWN ON CIVIL DWGS.
 2. THE CONTRACTOR SHALL MAINTAIN AND SUPPLEMENT COARSE AGGREGATE FOR GRAVEL DRIVEWAY AS REQUIRED FOR CONSTRUCTION TRAFFIC. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL DEVELOP SUITABLE SUBGRADE AND PROVIDE FINISHED GRAVEL ROAD COURSE AS DETAILED AT NO ADDITIONAL COST TO THE OWNER.

GRAVEL DRIVEWAY
SCALE: N.T.S.

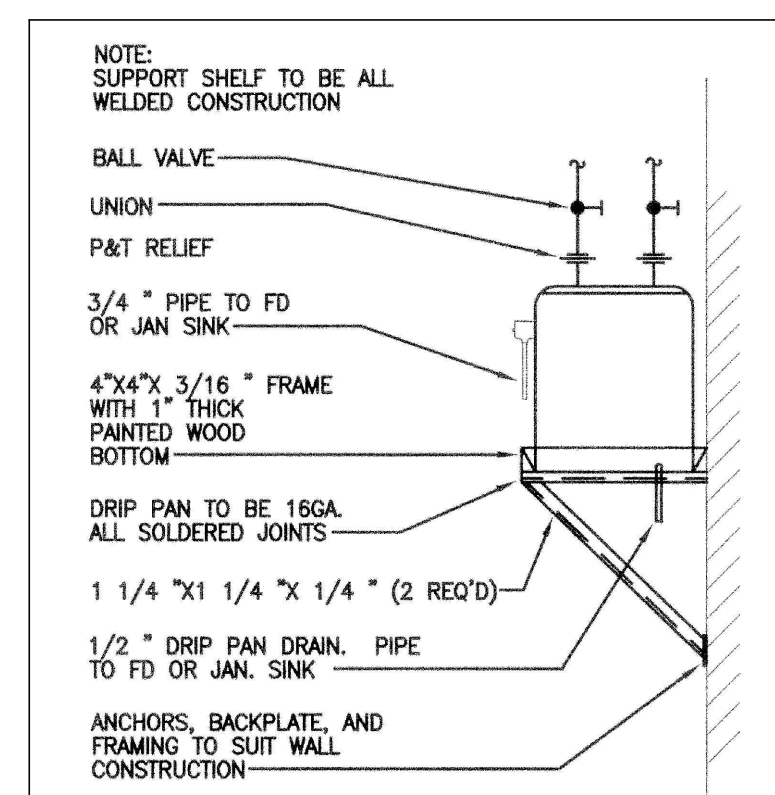


DETAIL-TYPICAL CHEMICAL FEED INJECTOR
SCALE: N.T.S.

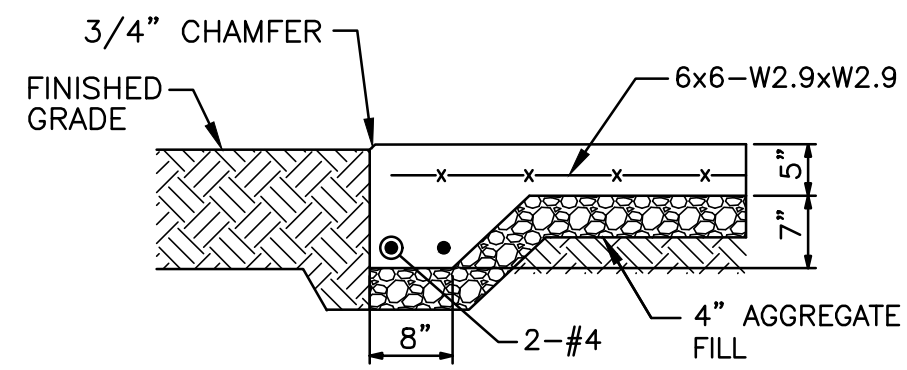


PIPE SUPPORT DETAIL
SCALE: N.T.S.

- NOTES:**
1. VERIFY PUMP BASE DETAILS AND DIMENSIONS TO SUIT PUMP PROVIDED.
 2. PROVIDE ANCHOR BOLTS AS REQUIRED BY PUMP MANUFACTURER.

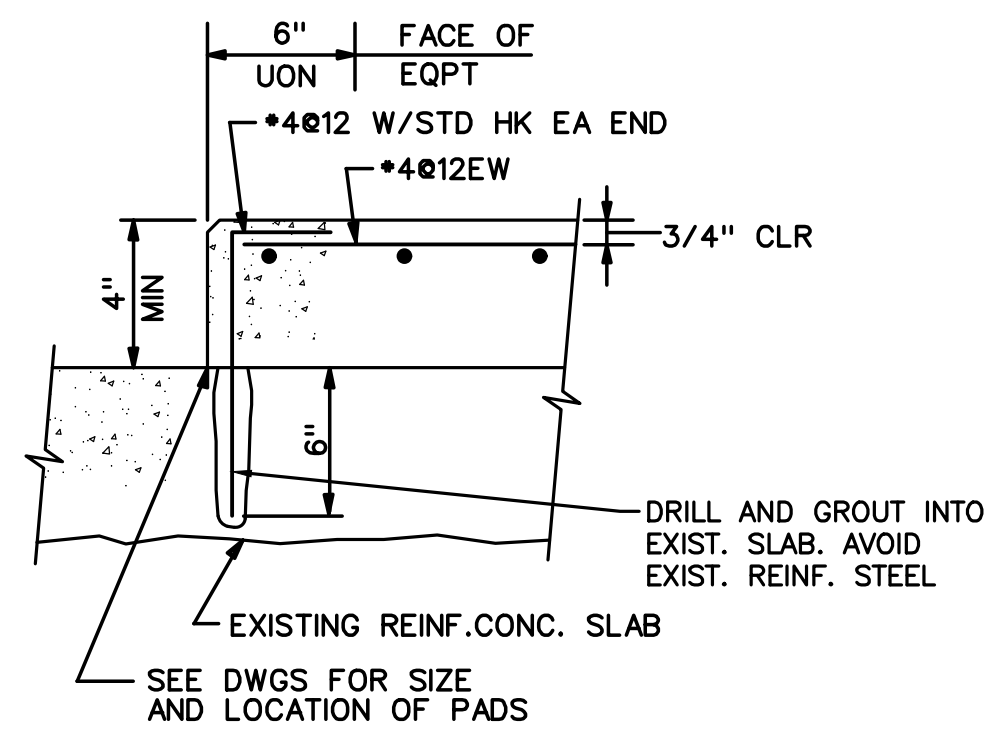


WALL MOUNTED ELECTRIC WATER HEATER DETAIL
SCALE: N.T.S.

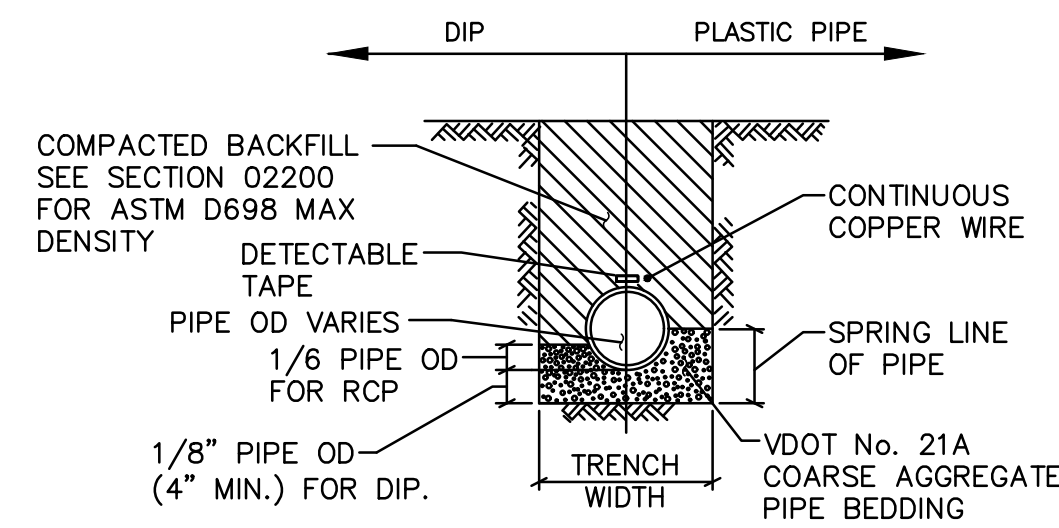


- NOTES:**
1. SIDEWALK SHALL BE CONSTRUCTED FROM CAST-IN-PLACE CONCRETE PER SPEC. SECTION 03300.
 2. DISTANCE BETWEEN SCORE LINE SHALL NOT EXCEED 5' IN LONGITUDINAL DIRECTION.
 3. SLOPE ON SIDEWALK SHALL PROMOTE POSITIVE DRAINAGE AWAY FROM BUILDING.
 4. 1/2" PREMOLDED EXPANSION FILLER TO BE PLACED BETWEEN SIDEWALK AND BUILDING.
 5. REFER TO CIVIL DWGS FOR SIDEWALK WIDTHS AND LOCATIONS.

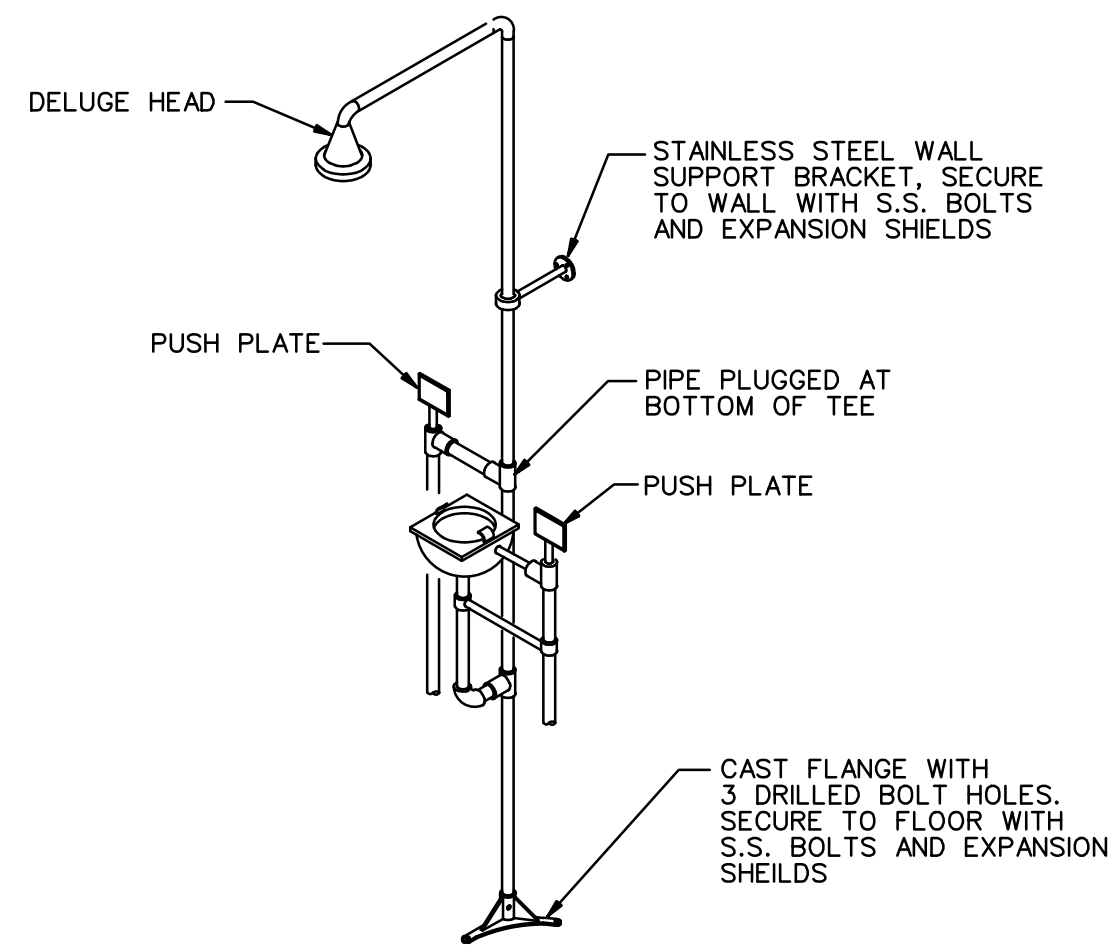
SIDEWALK DETAIL
SCALE: N.T.S.



TYPICAL INTERIOR EQUIPMENT PAD
SCALE: N.T.S.

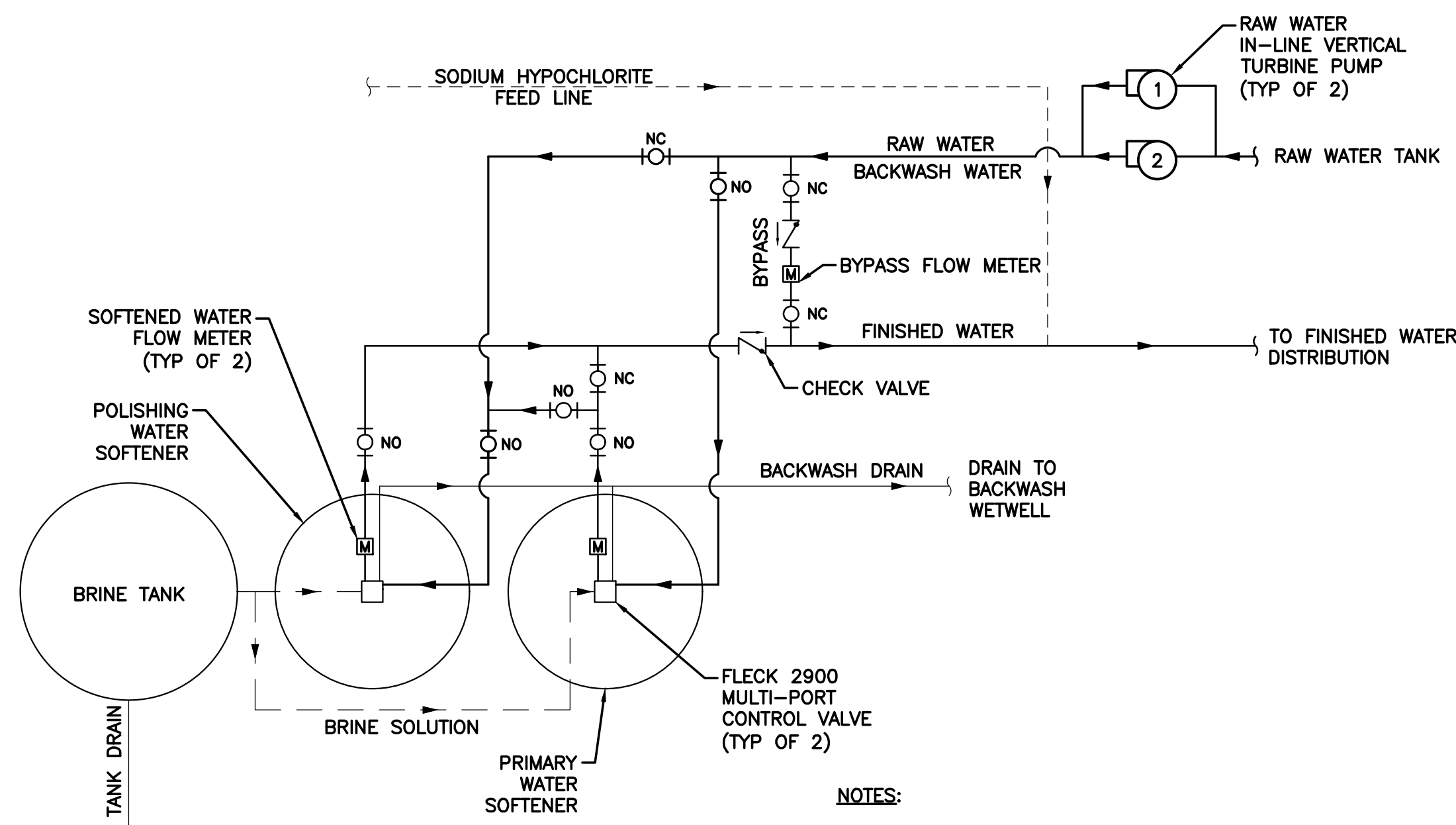


PIPE BEDDING
SCALE: N.T.S.



- NOTES:**
1. SEE SPEC. SECTION 15051 FOR ADDITIONAL INFORMATION.
 2. PROVIDE STAINLESS STEEL BOLTS, HARDWARE, AND BRACKETS.

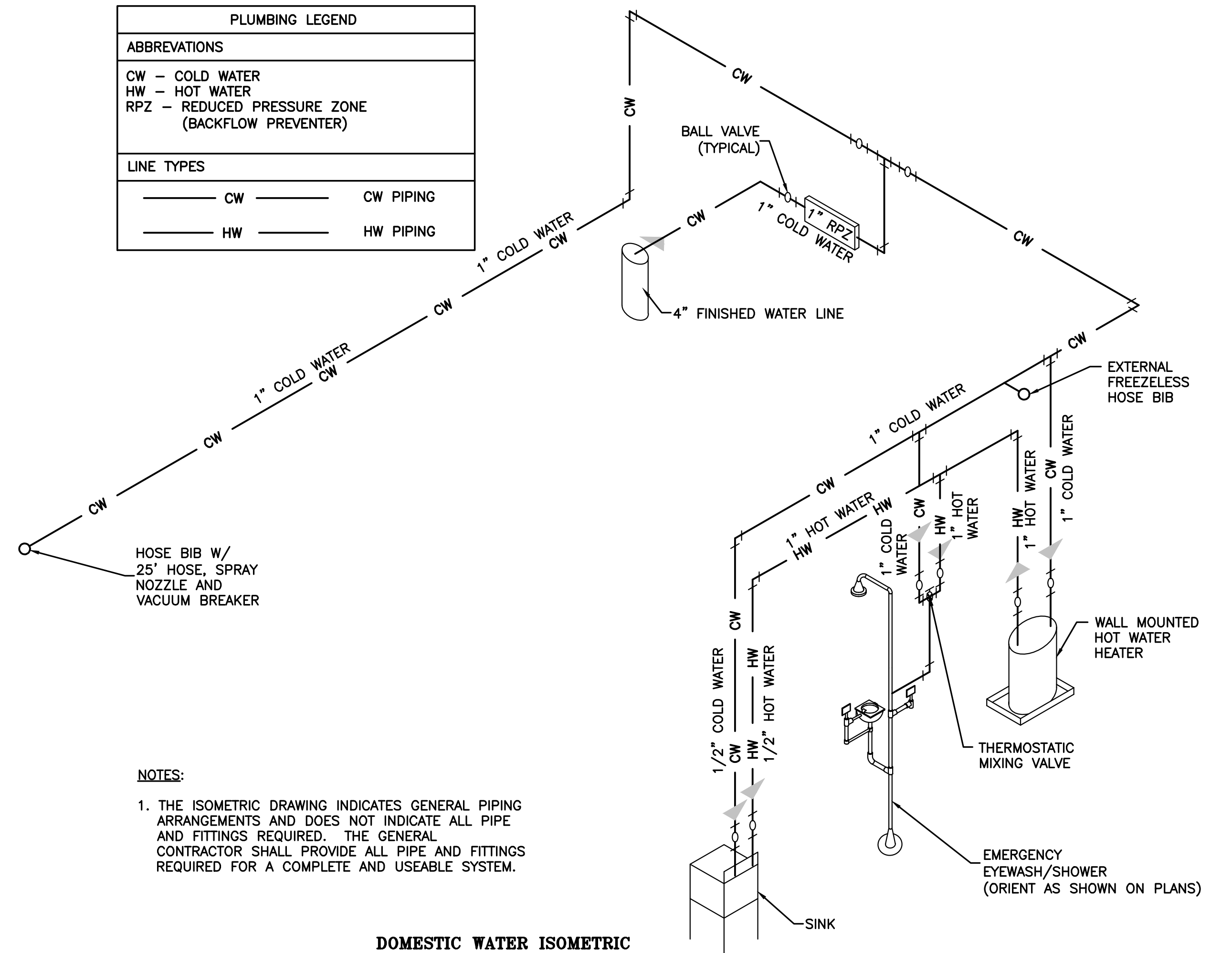
EMERGENCY EYEWASH AND SHOWER DETAIL
SCALE: N.T.S.



WATER SOFTENERS LINE DIAGRAM
SCALE: N.T.S.

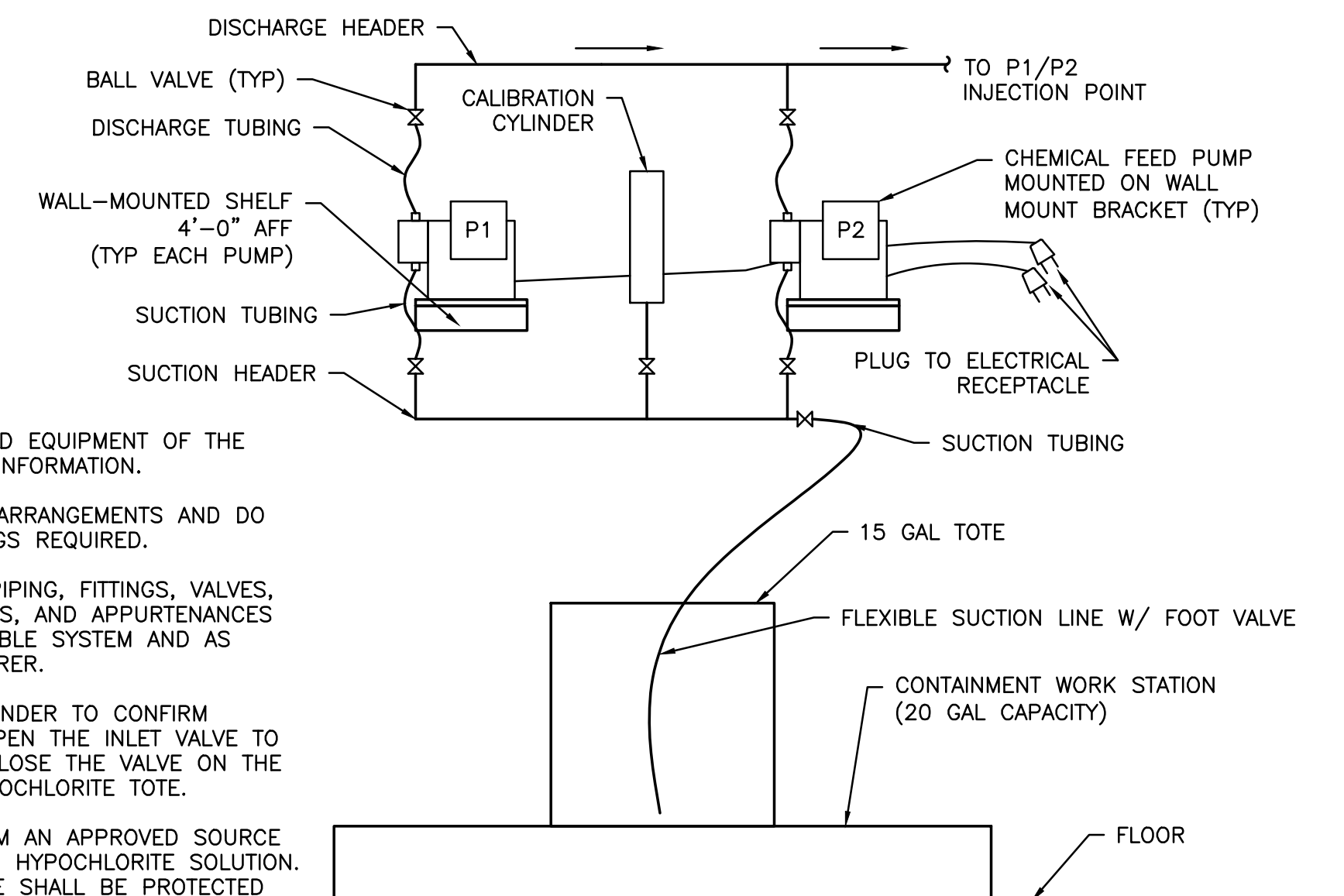
- NOTES:**
1. DETAIL INDICATES GENERAL PIPING ARRANGEMENTS AND DO NOT INDICATE ALL PIPE AND FITTINGS REQUIRED.
 2. CONTRACTOR SHALL PROVIDE ALL PIPING, FITTINGS, VALVES, UNIONS, GAUGES, SUPPORTS, AND APPURTENANCES REQUIRED FOR A COMPLETE OPERABLE SYSTEM AND AS RECOMMENDED BY THE MANUFACTURER.
 3. MAKE-UP WATER FOR THE BRINE TANK SHALL BE EVENLY DISTRIBUTED IN THE TANK. MAKE-UP WATER LINE TO THE BRINE TANK SHALL BE PROTECTED AGAINST BACKSIPHONAGE.
 4. NSF 60 APPROVED SALT SHALL BE USED FOR BRINE PREPARATION.

PLUMBING LEGEND	
ABBREVIATIONS	
CW	- COLD WATER
HW	- HOT WATER
RPZ	- REDUCED PRESSURE ZONE (BACKFLOW PREVENTER)
LINE TYPES	
—	CW PIPING
—	HW PIPING



- NOTES:**
1. THE ISOMETRIC DRAWING INDICATES GENERAL PIPING ARRANGEMENTS AND DOES NOT INDICATE ALL PIPE AND FITTINGS REQUIRED. THE GENERAL CONTRACTOR SHALL PROVIDE ALL PIPE AND FITTINGS REQUIRED FOR A COMPLETE AND USEABLE SYSTEM.

DOMESTIC WATER ISOMETRIC
SCALE: N.T.S.

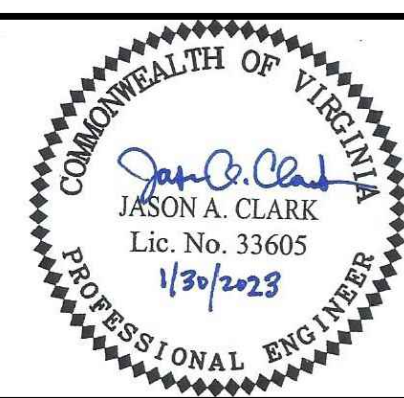


SODIUM HYPOCHLORITE FEED SYSTEM
SCALE: N.T.S.

- NOTES:**
1. SEE SECTION 11248 CHEMICAL FEED EQUIPMENT OF THE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
 2. DETAIL INDICATES GENERAL PIPING ARRANGEMENTS AND DO NOT INDICATE ALL PIPE AND FITTINGS REQUIRED.
 3. CONTRACTOR SHALL PROVIDE ALL PIPING, FITTINGS, VALVES, UNIONS, GAUGES, SUPPORT SHELVES, AND APPURTENANCES REQUIRED FOR A COMPLETE OPERABLE SYSTEM AND AS RECOMMENDED BY THE MANUFACTURER.
 4. WHEN USING THE CALIBRATION CYLINDER TO CONFIRM METERING PUMP DELIVERY RATE, OPEN THE INLET VALVE TO THE CALIBRATION CYLINDER, AND CLOSE THE VALVE ON THE SUCTION LINE TO THE SODIUM HYPOCHLORITE TOTE.
 5. IF REQUIRED, FINISHED WATER FROM AN APPROVED SOURCE SHALL BE USED TO DILUTE SODIUM HYPOCHLORITE SOLUTION. THE FINISHED WATER DELIVERY LINE SHALL BE PROTECTED AGAINST BACKFLOW AND BACKSIPHONAGE.

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NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



PART A



DESIGNED BY: SAR/JAC	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: DJC	TITLE: MISCELLANEOUS DETAILS	DRAWING NUMBER: C-14
DIHR BY: HFW	FILE NAME: 603802C_ND-2.dwg	SHEET NUMBER: 14 of 19
WVA NUMBER: 216038.02	DISCIPLINE: CIVIL	SCALE: H: AS NOTED V: N/A
DATE: 1/30/23		

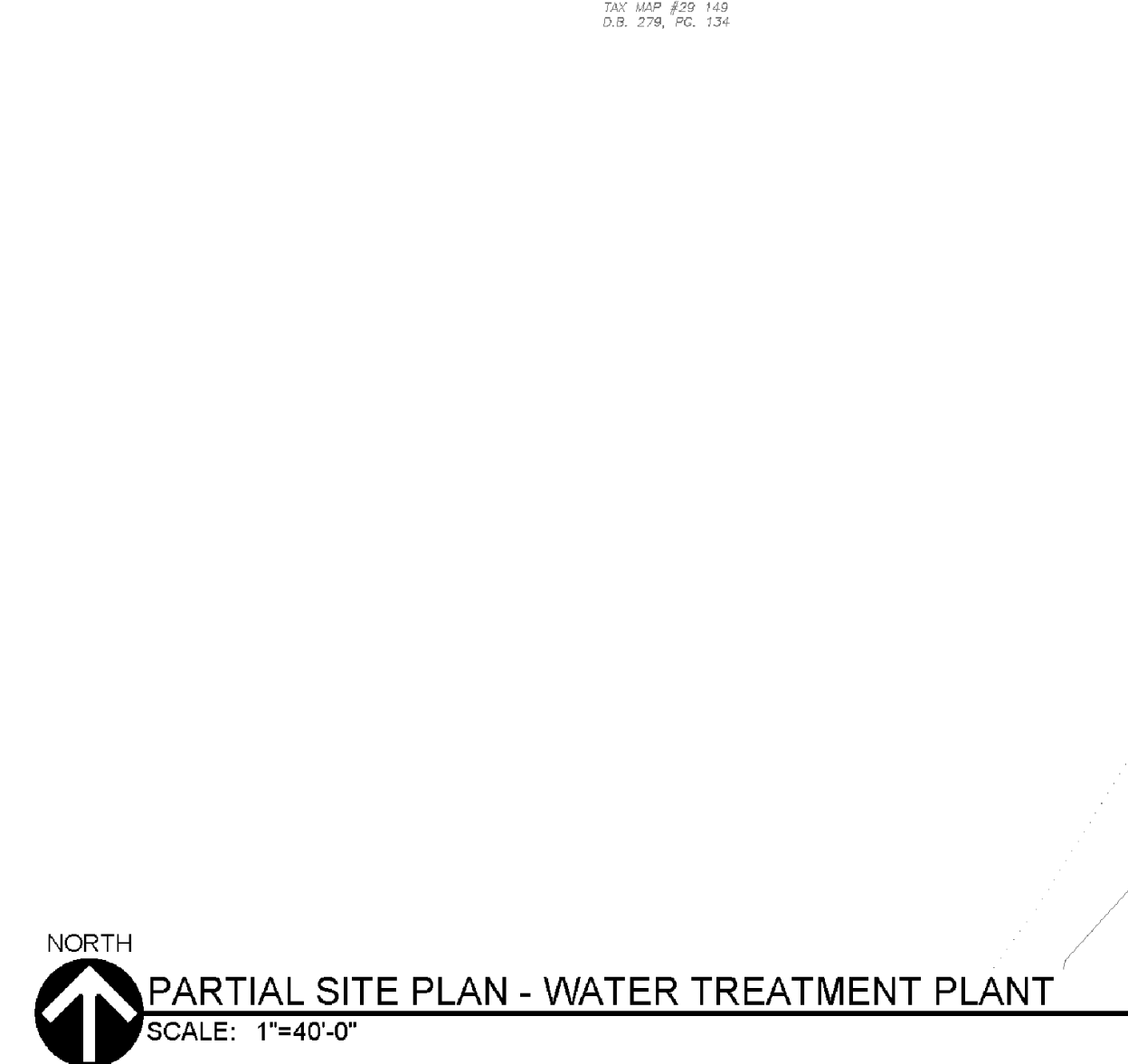
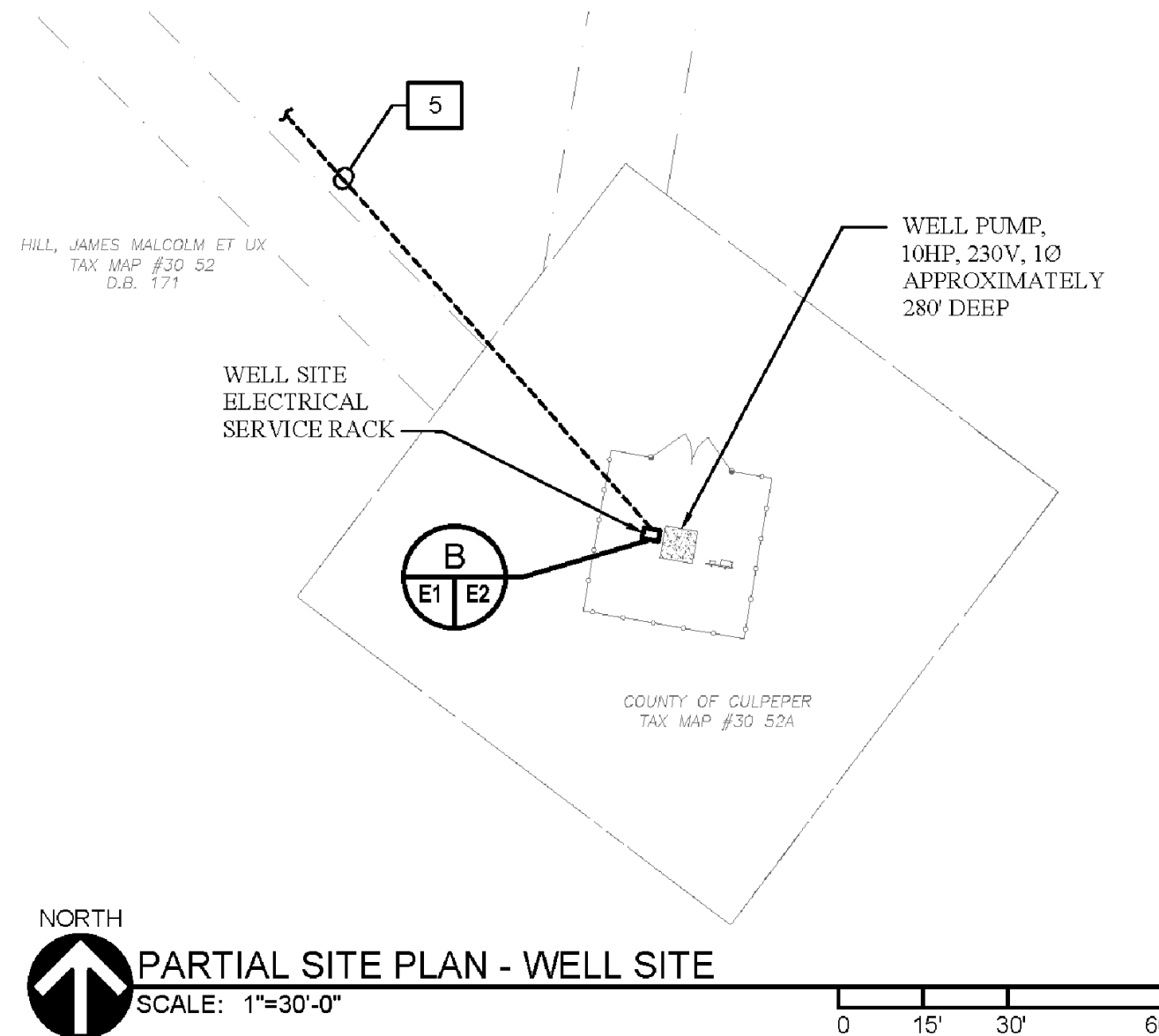
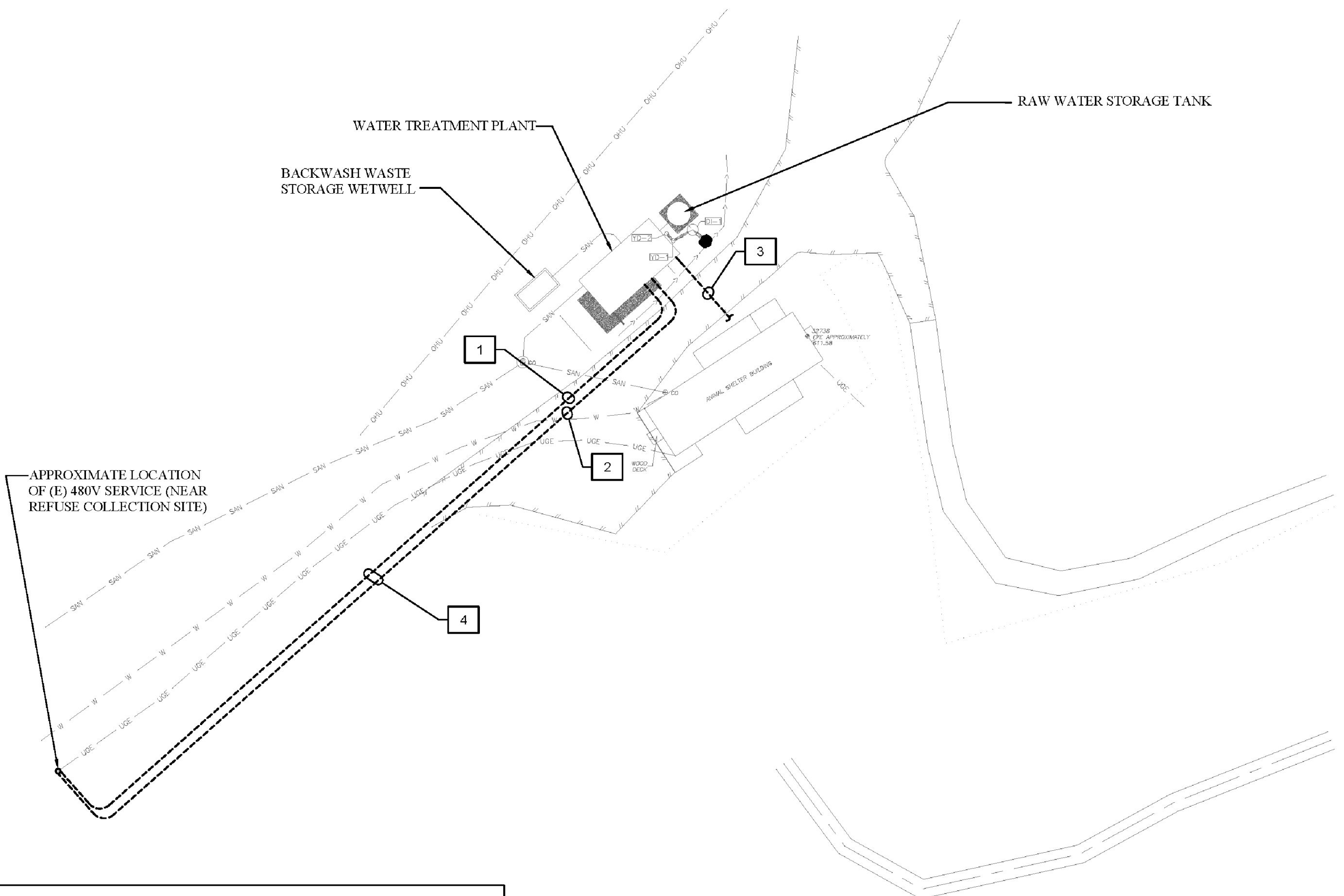
LEGEND

- HOMERUN TO POWER PANEL
- CONDUIT RUN
- GROUND CONDUCTOR
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- S SINGLE POLE SWITCH
- ⊕ GFI DUPLEX RECEPTACLE, NEMA 5-20
- ⊕ QUAD RECEPTACLES (2) NEMA 5-20
- ⊕ SIMPLEX RECEPTACLE, NEMA L6-20
- ⊕ JUNCTION BOX
- ⊕ MOTOR
- ⊕ SAFETY SWITCH, NONFUSIBLE
- ⊕ MOLDED CASE CIRCUIT BREAKER
- ⊕ COPPER CLAD 3/4" DIAMETER X 10' LONG GROUND ROD
- ⊕ GROUND
- ⊕ LED LIGHTING FIXTURE SEE LIGHT FIXTURE SCHEDULE
- ⊕ LED LIGHTING FIXTURE, WALL MOUNTED
- ⊕ COMBINATION EGRESS LED LIGHT FIXTURE, WALL MOUNTED
- ⊕ DUAL TECHNOLOGY OCCUPANCY SENSOR
- ⊕ 480/277 VOLT PANELBOARD
- ⊕ 208/120 VOLT PANELBOARD

ABBREVIATIONS

- A,AMP AMPERE
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GROUND
- ATS AUTOMATIC TRANSFER SWITCH
- BCSD BARE COPPER SOFT DRAWN
- BKR BREAKER
- C CONDUIT
- CKT CIRCUIT
- CONC CONCRETE
- DWG DRAWING
- (E) EXISTING
- ECB ENCLOSED CIRCUIT BREAKER
- EGC EQUIPMENT GROUNDING CONDUCTOR
- FVNR FULL VOLTAGE NON-REVERSING
- G GROUND
- GEN GENERATOR
- GFI GROUND FAULT INDICATOR
- HP HORSEPOWER
- HZ HERTZ
- kemil THOUSAND CIRCULAR MILS
- kVA KILOVOLT AMPERE
- kW KILOWATT
- MCB MAIN CIRCUIT BREAKER
- MIN MINIMUM
- MISC MISCELLANEOUS
- MTD MOUNTED
- NEC NATIONAL ELECTRICAL CODE
- NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
- N, NEUT NEUTRAL
- PH PHASE
- PSKVA PEAK STARTING KILOVOLT AMPERES
- PVC POLYVINYL CHLORIDE CONDUIT
- RMS ROOT MEAN SQUARE
- RTM RUN TIME METER
- SCH SCHEDULE
- SYM SYMMETRICAL
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION
- TWSP TWISTED SHIELDED PAIR
- TYP TYPICAL
- UGC UNDERGROUND CONDUIT
- V VOLTS
- VFD VARIABLE FREQUENCY DRIVE
- W WIRE
- WP WEATHERPROOF
- WTP WATER TREATMENT PLANT
- XFMR TRANSFORMER

CONDUCTOR COLOR CODE			
CONDUCTOR	120/240 V	208/120 V	480/277 V
φA	BLACK	BLACK	BROWN
φB	RED	RED	ORANGE
φC	---	BLUE	YELLOW
NEUTRAL	WHITE	WHITE	GRAY
GROUND	GREEN	GREEN	GREEN



GENERAL NOTES:

1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE GENERAL AND APPROXIMATE LOCATION OF EQUIPMENT AND CONSTRUCTION. FIELD-VERIFY ALL DIMENSIONS AND LOCATIONS. INDICATED UNDERGROUND OBSTRUCTIONS WERE DEVELOPED FROM EXISTING RECORDS AND ABOVE-GROUND INSPECTION. ACCURACY OR COMPLETENESS OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES CANNOT BE GUARANTEED. VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND FACILITIES BEFORE STARTING WORK.
2. THESE DRAWINGS DO NOT INDICATE ALL FITTINGS, PARTS AND ACCESSORIES THAT ARE REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM. NO EXCLUSION FROM OR LIMITATION IN THE SYMBOLISM USED ON THE DRAWINGS FOR THE WORK, OR THE LANGUAGE USED IN THE SPECIFICATIONS FOR THE WORK SHALL BE INTERPRETED AS A REASON FOR OMITTING THE APPURTENANCES OR ACCESSORIES NECESSARY TO COMPLETE AND REQUIRED WORK, SYSTEM, OR ITEM OF EQUIPMENT.
3. ALL ELECTRICAL WORK ON THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE 2012 VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND THE NFPA 70-2014 (NATIONAL ELECTRICAL CODE).
4. COORDINATE ARRANGEMENT, MOUNTING, AND SUPPORT OF ELECTRICAL EQUIPMENT TO AVOID INTERFERENCES WITH ELECTRICAL AND OTHER TRADES. COORDINATE WORK WITH SITE FEATURES, AND OTHER CONSTRUCTION WHETHER OR NOT SUCH IS SHOWN ON THE DRAWINGS. SET SLEEVES IN CAST-IN-PLACE CONCRETE, AS THEY ARE CONSTRUCTED. COORDINATE AMPACITY, VOLTAGE, PHASING, OVERCURRENT PROTECTION, AND LOCAL DISCONNECT REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED.
5. MAINTAIN A SET OF AS-BUILT RED-LINE MARKUPS INDICATING ACTUAL INSTALLATION. DELIVER TO OWNER AT CONCLUSION OF PROJECT.
6. CONTRACTOR SHALL ADVISE ENGINEER IMMEDIATELY OF DISCREPANCIES WITHIN DRAWINGS. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO AVOID MINOR CONFLICTS. WHERE MAJOR CONFLICTS ARE ENCOUNTERED, THE AFFECTED WORK SHALL NOT BE INSTALLED UNTIL THE CONFLICT HAS BEEN RESOLVED. THE ENGINEER IS NOT RESPONSIBLE FOR THE CONSEQUENCES OF PROCEEDING WITH WORK BASED ON CONTRACTOR INTERPRETATION OR ON DIRECTION FROM OTHER PARTIES.
7. SEE SPECIFICATIONS FOR COMPLETE DETAILS ON EQUIPMENT TO BE PROVIDED.

CONSTRUCTION NOTES:

1. UNDERGROUND ELECTRICAL SERVICE CONDUIT FROM EXISTING 200 AMP, 480 VOLT, 3 PHASE SERVICE PANEL. PROVIDE CONDUIT AND WIRE PER WATER TREATMENT PLANT ELECTRICAL SERVICE DIAGRAM.
2. UNDERGROUND TELEPHONE/DATA SERVICE CONDUIT FROM EXISTING SERVICE RACK. PROVIDE 3" PVC SCHEDULE 80 CONDUIT FROM SERVICE POLE TO WATER TREATMENT PLANT EQUIPMENT BACKBOARD.
3. (2) 2" PVC SCH 80 CONDUITS (ONE FOR POWER AND ONE FOR COMMUNICATIONS) FROM THE WATER TREATMENT PLANT UNDERGROUND TO THE FINISHED WATER STORAGE TANK. ELECTRICAL SERVICE RACK. PROVIDE FIELDER CONDUCTORS FROM PANEL "HV" TO RACK PER PANEL SCHEDULE. PROVIDE A 20 x 20 x 10" DEEP NEMA 4 ENCLOSURE ON ELECTRICAL RACK FOR COMMUNICATION EQUIPMENT. ENCLOSURE SHALL HAVE A HINGED DOOR AND RATED FOR EXTERIOR INSTALLATION.
4. PROVIDE PULL BOXES ALONG POWER AND TELEPHONE/COMMUNICATION CONDUITS AT A MAXIMUM OF 15' SPACING FROM EXISTING 480 VOLT ELECTRICAL SERVICE RACK NEAR THE REFUSE COLLECTION SITE TO THE WATER TREATMENT FACILITY. INSTALL PULL BOXES SEPARATE FOR POWER AND COMMUNICATIONS PER DETAIL ON DRAWING E-4.
5. PROVIDE (2) 2 1/2" PVC SCH 80 CONDUITS (1) FOR UNDERGROUND ELECTRIC SERVICE FROM WELL PUMP ELECTRIC SERVICE RACK TO UTILITY SERVICE POLE AND (1) FOR UNDERGROUND TELEPHONE/DATA CABLES FROM COMMUNICATION UTILITY.

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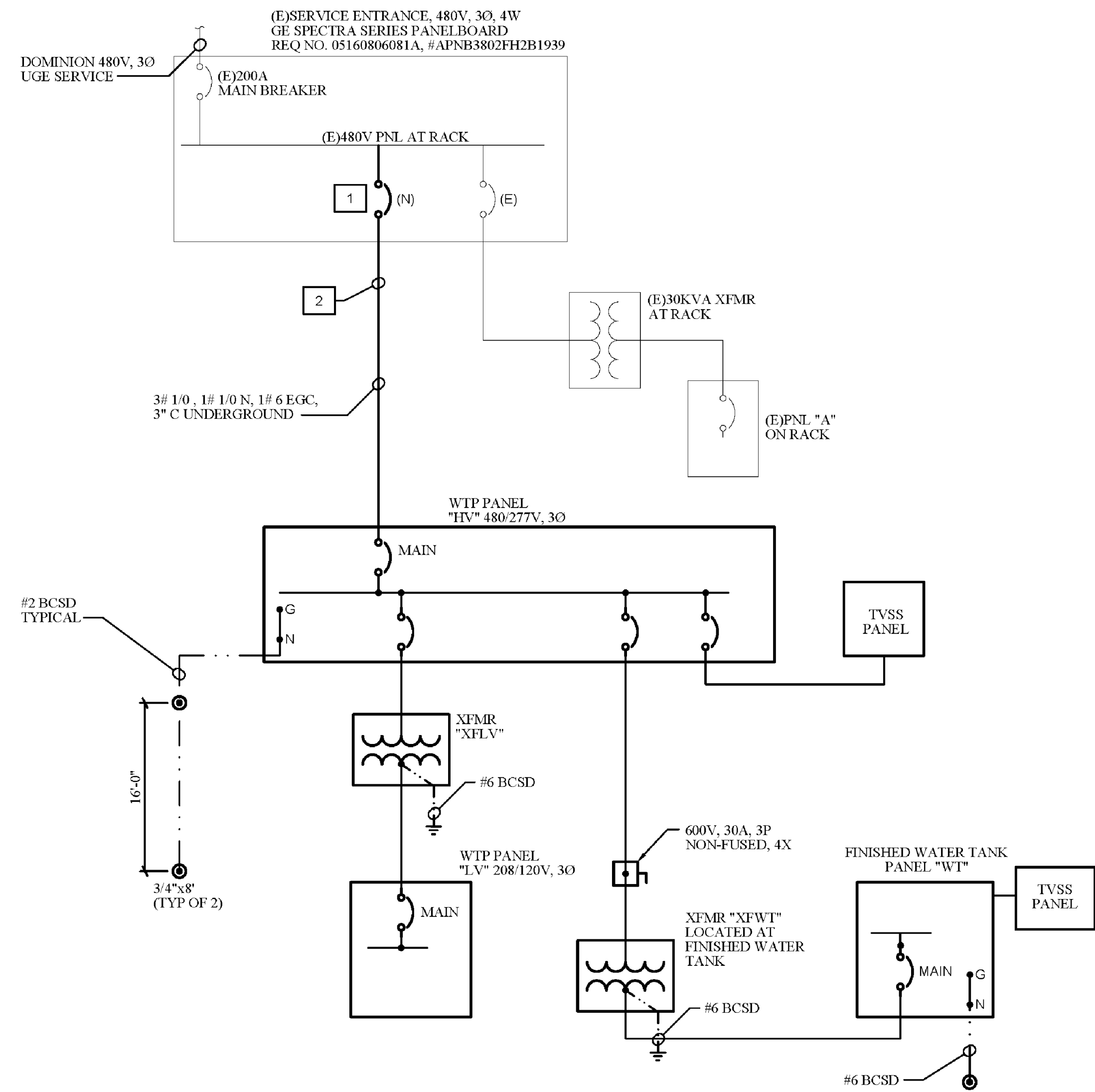
NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



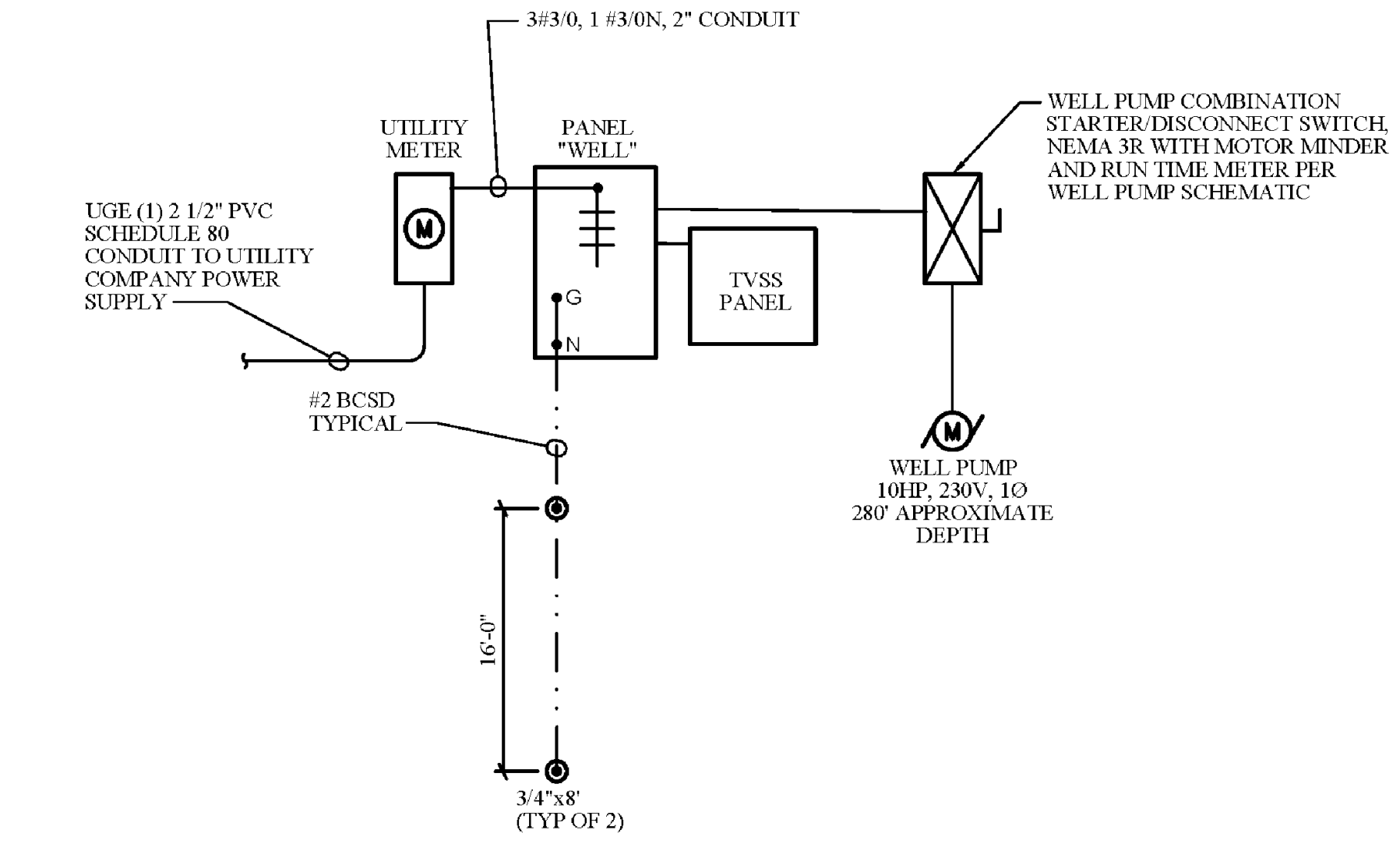
PART A



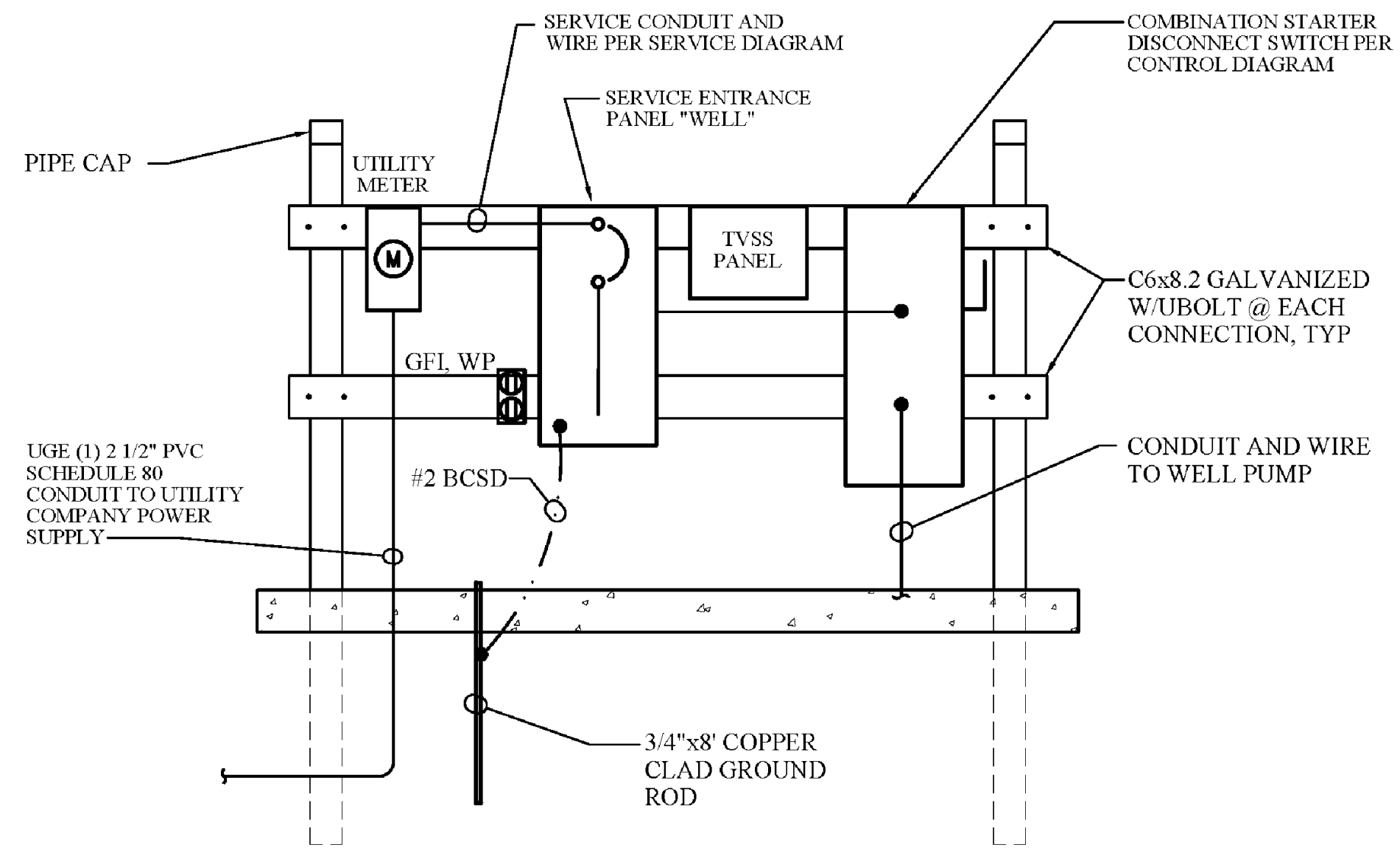
DESIGNED BY: WKH	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: STAFF	TITLE: LEGENDS, ABBREVIATIONS, GENERAL NOTES AND PARTIAL SITE PLANS	DRAWING NUMBER: E-1
DIHR BY: HFV	DISCIPLINE: ELECTRICAL	SHEET NUMBER: 16 of 19
WWA NUMBER: 216038.02	FILE NAME: 603802C_EL-1.dwg	SCALE: H: N.T.S. V: N/A
	DATE: 1/30/23	



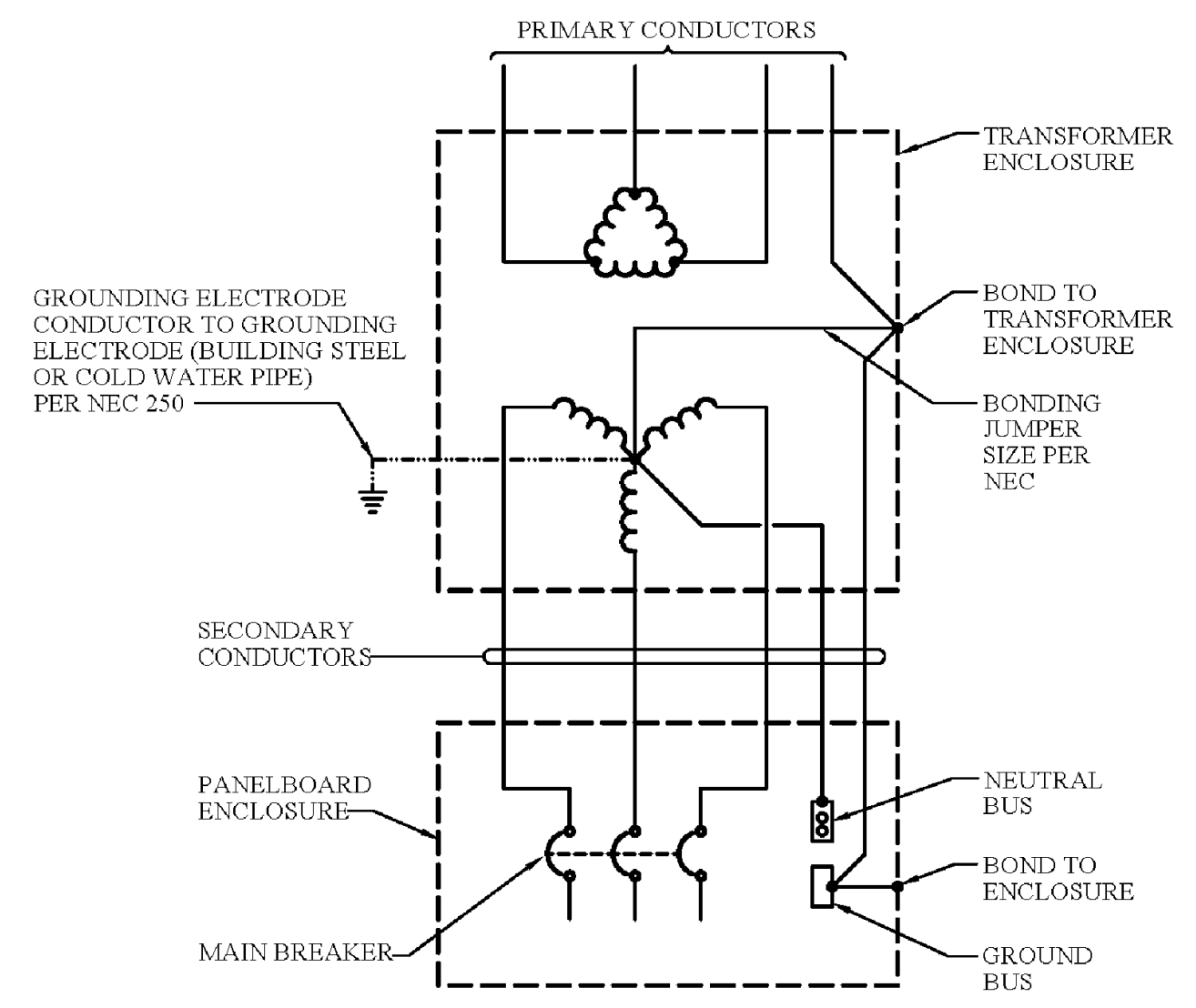
WATER TREATMENT PLANT - POWER DISTRIBUTION DIAGRAM
NO SCALE



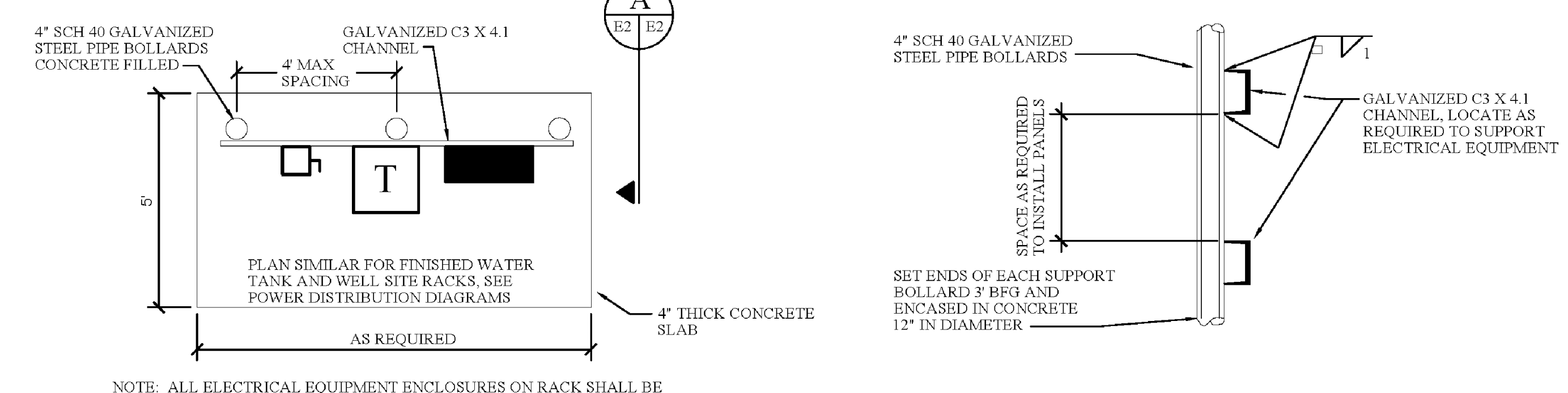
WELL SITE - POWER DISTRIBUTION DIAGRAM
NO SCALE



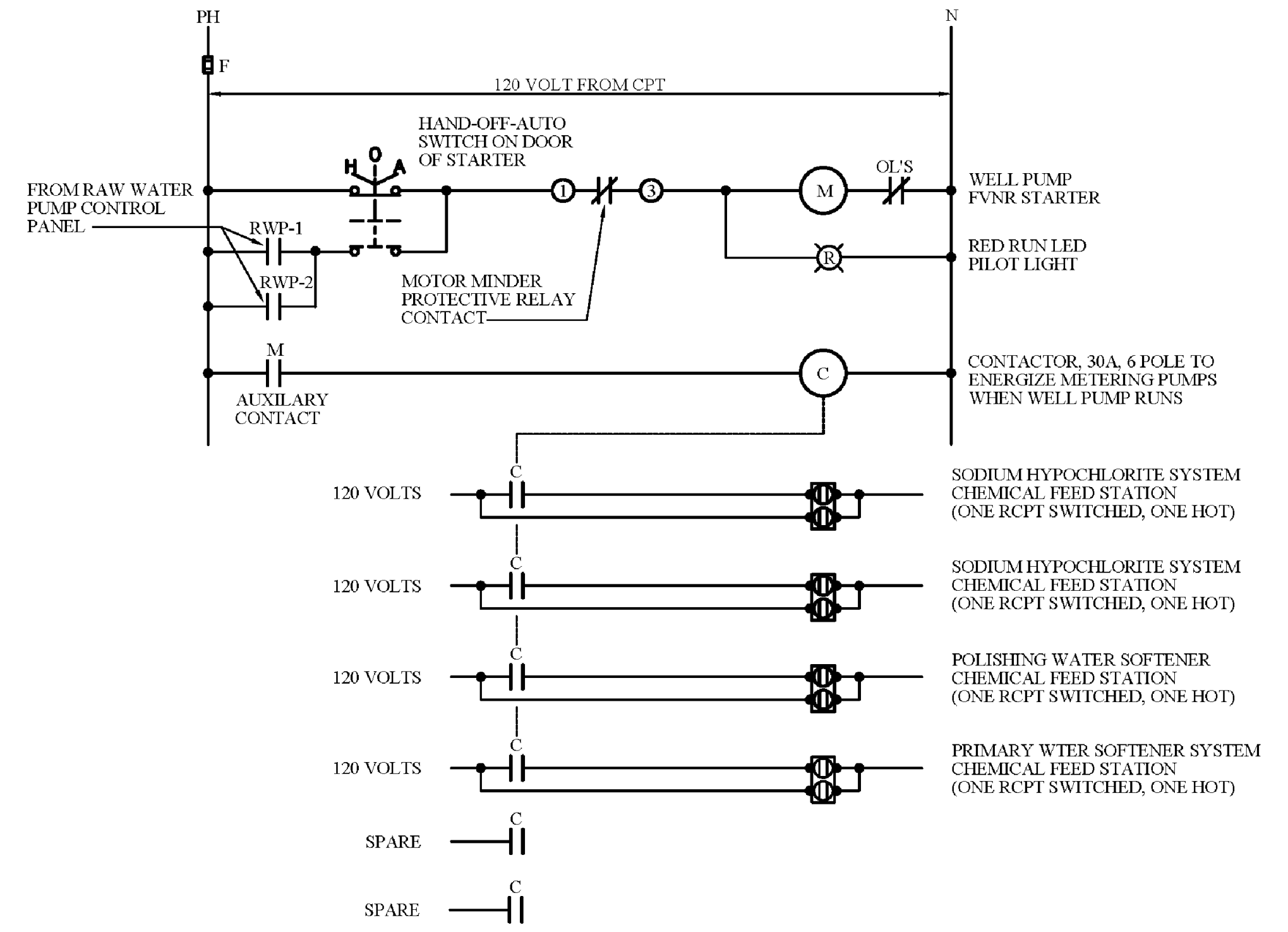
B WELL SITE ELECTRICAL SERVICE RACK
NOT TO SCALE



DRY TYPE TRANSFORMER WIRING DIAGRAM
NO SCALE



A ELECTRICAL RACK DETAIL
NOT TO SCALE



WELL PUMP & CHEMICAL FEED CONTROL DIAGRAM

- CONSTRUCTION NOTES:**
- PROVIDE 100 AMP, 3 POLE, 480 VOLT CIRCUIT BREAKER, 42KAIC RATED. CONTRACTOR SHALL PROVIDE CLEAR TAPS WHEN REQUIRED TO INSTALL FEEDER CIRCUIT TO WATER TREATMENT FACILITIES. IF THE CIRCUIT BREAKER WILL NOT ACCEPT CONDUCTOR SIZES INDICATED, PROVIDE THE LARGEST CONDUCTOR SIZE FROM THE CIRCUIT BREAKER AND UTILIZE CLEAR TAPS AS REQUIRED TO SPLICE TO FEEDER CONDUCTORS.
 - PROVIDE RSC FROM EXISTING 480 VOLT PANEL, CROSS EXISTING CONCRETE PAD AND UNDERGROUND TO WATER TREATMENT PLANT PANEL "HV". PROVIDE 12" W X 18" L X 20" DEEP COMPOSITE PULL BOXES ALONG CONDUIT RUN A MINIMUM OF 3 - 90 DEGREE BENDS PER THE NEC WITH NO LONGER DISTANCES BETWEEN PULL BOXES THAN 150'. NO SPLICES SHALL BE MADE IN ANY OF THE PULL BOXES.

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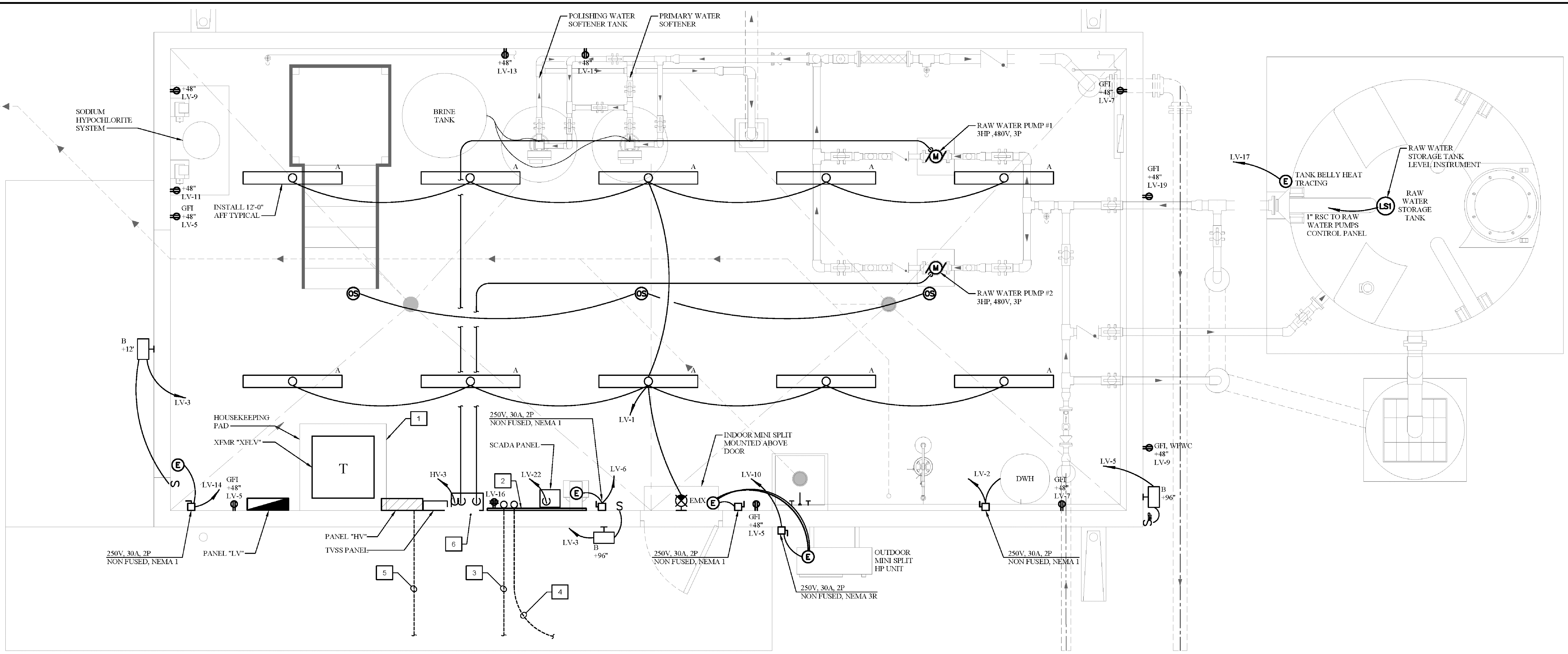


PART A

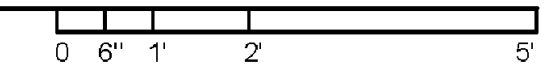


DESIGNED BY: WKH	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: STAFF	TITLE: WATER TREATMENT PLANT, WELL SITE POWER DISTRIBUTION DIAGRAMS, DETAILS AND CONTROL SCHEMATICS	DRAWING NUMBER: E-2
DIHR BY: HFV	FILE NAME: 603802C_EL-2.dwg	SHEET NUMBER: 17 of 19
WVA NUMBER: 216038.02	DISCIPLINE: ELECTRICAL	SCALE: N.T.S.
	DATE: 1/30/23	

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WATER TREATMENT BUILDING
SCALE: 1/2"=1'-0"



- CONSTRUCTION NOTES:**
1. PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD, SIZE AS REQUIRED.
 2. 4 X 8 X 3/4" EXTERIOR GRADE PLYWOOD BACKBOARD FOR TELEPHONE/DATA COMMUNICATION EQUIPMENT AND SERVICE EQUIPMENT.
 3. 3" PVC SCH 80 COMMUNICATION CONDUIT UNDERGROUND TO COMMUNICATION SERVICE POLE NEAR THE EXISTING ELECTRICAL SERVICE RACK.
 4. (2) 2" PVC SCH 80 CONDUITS, ONE FOR FIBER OPTIC CABLE AND ONE SPARE UNDERGROUND TO FINISHED WATER STORAGE TANK PER DRAWING E-1.
 5. UGE FEEDER TO FINISHED WATER STORAGE TANK. PROVIDE CONDUIT AND WIRE PER PANEL "HV" SCHEDULE. PROVIDE IN SAME TRENCH WITH WATER LINE.
 6. RAW WATER PUMPS RWP-1 AND RWP-2 CONTROL PANEL PER SPECIFICATIONS.

NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE



PART A



DESIGNED BY: WKH	PROJECT: CHERRY HILL WATER SYSTEM WATER TREATMENT FACILITY-REBID CULPEPER COUNTY, VIRGINIA	SET REV. NO. -
DRAWN BY: STAFF	TITLE: WATER TREATMENT BUILDING PLAN POWER AND LIGHTING	DRAWING NUMBER: E-3
DIHR BY: HFW	WVA NUMBER: 216038.02	FILE NAME: 603802C_EL-3.dwg
DISCIPLINE: ELECTRICAL	SCALE: H: N.T.S. V: N/A	DATE: 1/30/23
SHEET NUMBER: 18 of 19		

PANEL "HV" SCHEDULE													
PANEL BOARD CHARACTERISTICS:				PHASE TO PHASE VOLTS: 480									
VOLTS: 480/277				PHASE TO NEUT. VOLTS: 277									
PHASES: 3				100 AMP MAIN CIRCUIT BREAKER									
WIRES: 4				MINIMUM SHORT CIRCUIT RATING: 42,000 RMS SYM AMPS									
SOLID NEUTRAL, GROUND BAR				NEMA 1 RATED, DOOR-IN-DOOR CONSTRUCTION									
CKT. NO.	POLE NO.	DESCRIPTION	LOAD TYPE	CONN. KVA	CONN. AMPS			BREAKER		NO. & WIRE SIZE			COND. SIZE
					A	B	C	P	AT	PHASE	NEUT.	GND	
3	3	RAW WATER PUMP #1 & #2	E	8.0	9.6	9.6		3	30	10	-	10	1"
	5	PUMP CONTROL PANEL				9.6				10			
9	7	SPARE						3	20				
15	11	SPARE											
21	13	SPARE						3	15				
27	15	SPARE											
27	17	SPARE											
27	19	SPARE											
27	21	SPARE											
27	23	SPARE											
27	25	SPARE											
27	27	SPARE											
27	29	SPARE											
4	2	TRANSFORMER "XFLV"	E	30.0	36.1			3	45	6	-	10	1"
	6	FINISHED WATER TREATMENT PLANT			36.1					6			
	8					36.1				6			
10	10	TRANSFORMER "XFWT"	E	15	18.0			3	25	1	-	3	2"
	12	ELEVATED WATER TANK FEED			18.0					1			
	14					18.0				1			
16	16	TVSS	E	0.1	0.1			3	60	6	6	6	1 1/2"
	18					0.1				6			
20	20	SPACE											
22	22	SPACE											
24	24	SPACE											
26	26	SPACE											
28	28	SPACE											
30	30	SPACE											
TOTALS					53.1	63.9	63.9	63.9					

PANEL "LV" SCHEDULE													
PANEL BOARD CHARACTERISTICS:				PHASE TO PHASE VOLTS: 208									
VOLTS: 120/208				PHASE TO NEUT. VOLTS: 120									
PHASES: 3				100 AMP MAIN CIRCUIT BREAKER									
WIRES: 4				MINIMUM SHORT CIRCUIT RATING: 14,000 RMS SYM AMPS									
SOLID NEUTRAL, GROUND BAR				NEMA 1 ENCLOSURE									
CKT. NO.	POLE NO.	DESCRIPTION	LOAD TYPE	CONN. KVA	CONN. AMPS			BREAKER		NO. & WIRE SIZE			COND. SIZE
					A	B	C	P	AT	PHASE	NEUT.	GND	
1	1	INTERIOR LIGHTING	L	1.0	8.3			1	20	12	12	12	3/4"
3	3	EXTERIOR LIGHTING	L	1.0		8.3		1	20	12	12	12	3/4"
5	5	RECEPTACLES	R	0.6			5.0	1	20	12	12	12	3/4"
7	7	RECEPTACLES	R	0.6	5.0			1	20	12	12	12	3/4"
9	9	SODIUM HYPOCHLORITE FEED RECEPTACLE	R	0.5		4.2		1	20	12	12	12	3/4"
11	11	SODIUM HYPOCHLORITE FEED RECEPTACLE	R	0.5		4.2		1	20	12	12	12	3/4"
13	13	POLISHING WATER SOFTENER FEED RECEPTACLE	R	0.5	4.2			1	20	12	12	12	3/4"
15	15	PRIMARY WATER SOFTENER FEED RECEPTACLE	R	0.5	4.2			1	20	12	12	12	3/4"
17	17	RAW WATER TANK, BELLY HEAT TRACING	E	1.6			13.3	1	20	12	12	12	3/4"
19	19	EXTERIOR RECEPTACLE AT RAW WATER TANK	R	0.2	1.7			1	20	12	12	12	3/4"
21	21	SPARE											
23	23	SPARE											
25	25	SPARE											
27	27	SPARE											
29	29	SPARE											
2	2	DOMESTIC WATER HEATER	M	4.5	21.6			2	30	10	-	10	3/4"
	4					21.6				10			
	6							2	30	10			
	8												
10	10	MINI-SPLIT UNIT	M	2.0		9.6		2	15	12	12	12	3/4"
	12					9.6				12			
14	14	ROLL UP DOOR	E	1.6	13.3			1	25	10	10	10	3/4"
16	16	COMMUNICATION BACKBOARD RCPT	E	0.6		5.0		1	20	12	12	12	3/4"
18	18	SPARE											
	20												
22	22	DATA/COMMUNICATION PANEL	E	0.5		4.2		1	20	12	12	12	3/4"
24	24	SPACE											
26	26	SPACE											
28	28	SPACE											
30	30	SPACE											
TOTALS					54.1	57.1	32.1						

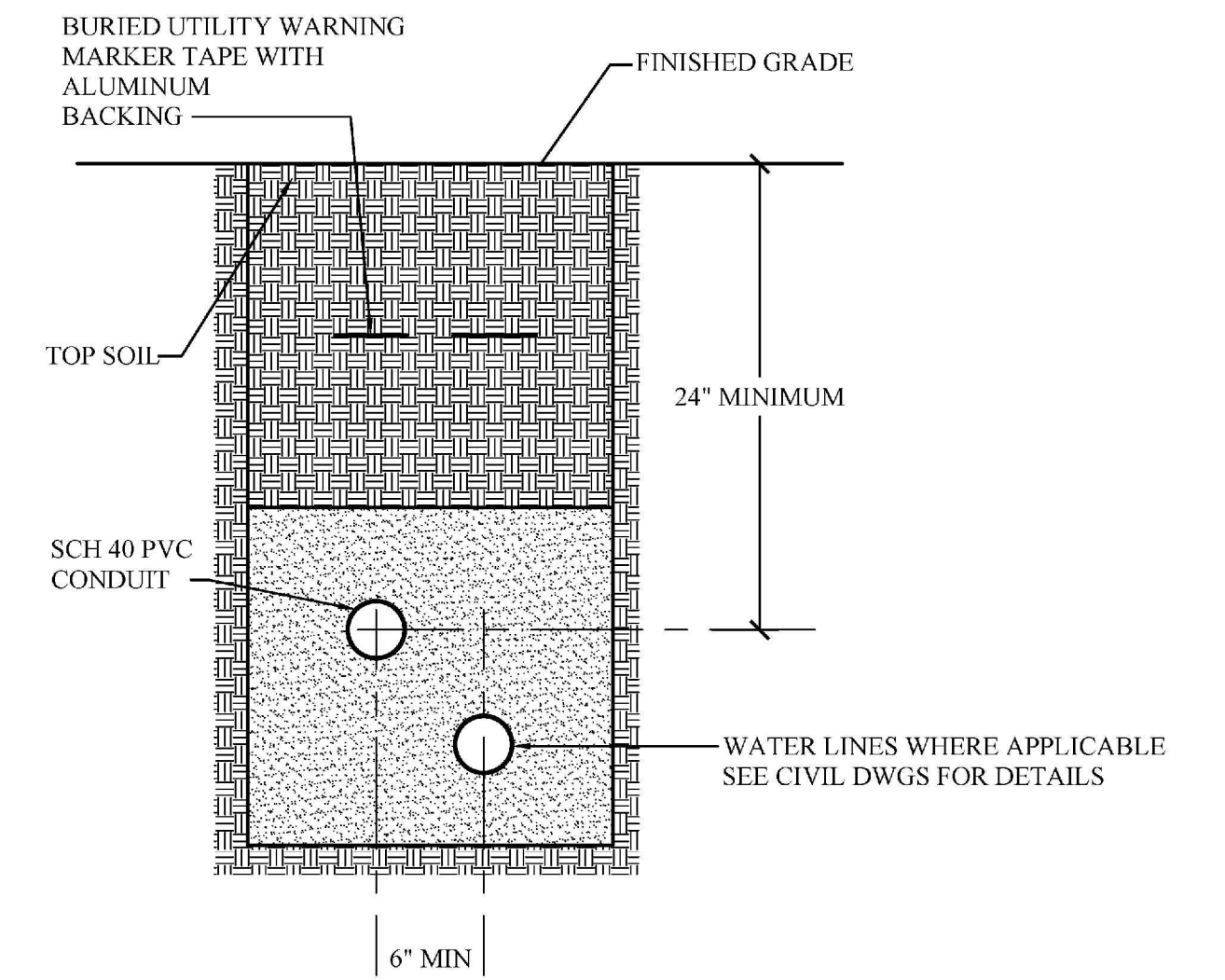
PANEL "WELL" SCHEDULE													
PANEL BOARD CHARACTERISTICS:				PHASE TO PHASE VOLTS: 240									
VOLTS: 120/240				PHASE TO NEUT. VOLTS: 120									
PHASES: 1				200 MAIN CIRCUIT BREAKER									
WIRES: 3				MINIMUM SHORT CIRCUIT RATING: 14,000 RMS SYM AMPS									
SOLID NEUTRAL, GROUND BAR				NEMA 3R ENCLOSURE, SERVICE ENTRANCE RATED									
CKT. NO.	POLE NO.	DESCRIPTION	LOAD TYPE	CONN. KVA	CONN. AMPS			BREAKER		NO. & WIRE SIZE			COND. SIZE
					A	B	C	P	AT	PHASE	NEUT.	GND	
1	1	WELL PUMP	E	13.2	55.0			2	100	1	-	6	1 1/2"
	3	10HP PUMP, APPROX 280' BELOW GRADE				55.0				1			
5	5	SPARE						2	30				
	7												
9	9	PLC/MODEM	E	0.1	0.8			1	20	12	12	12	3/4"
11	11	SPACE											
13	13	SPACE											
15	15	SPACE											
17	17	SPACE											
19	19	SPACE											
2	2	HEAT TRACING	E	1.0	8.3			1	20	12	12	12	3/4"
4	4	HEAT TRACING	E	1.0	8.3			1	20	12	12	12	3/4"
6	6	TVSS PANEL	E	0.1	0.4			2	60	6	6	6	1 1/4"
	8					0.4				6			
10	10	SPACE											
12	12	SPACE											
14	14	SPACE											
16	16	SPACE											
18	18	SPACE											
20	20	SPACE											
TOTALS					15.4	64.6	63.8						

PANEL "WT" SCHEDULE													
PANEL BOARD CHARACTERISTICS:				PHASE TO PHASE VOLTS: 208									
VOLTS: 120/208				PHASE TO NEUT. VOLTS: 120									
PHASES: 3				60 AMP MAIN CIRCUIT BREAKER									
WIRES: 4				MINIMUM SHORT CIRCUIT RATING: 14,000 RMS SYM AMPS									
SOLID NEUTRAL, GROUND BAR				NEMA 3R ENCLOSURE, LOCATED AT FINISHED WATER TANK									
CKT. NO.	POLE NO.	DESCRIPTION	LOAD TYPE	CONN. KVA	CONN. AMPS			BREAKER		NO. & WIRE SIZE			COND. SIZE
					A	B	C	P	AT	PHASE	NEUT.	GND	
1	1	HEAT TRACING	M	1.0	8.3			1	20	12	12	12	3/4"
3	3	HEAT TRACING	M	1.0		8.3		1	20	12	12	12	3/4"
5	5	RECEPTACLE	R	0.2			1.7	1	20	12	12	12	3/4"
7	7	SPARE											
9	9	SPARE											
11	11	SPARE											
2	2	PLC/ETHERNET SWITCH	E	0.2	1.7			1	20	12	12	12	3/4"
4	4	TVSS PANEL	E	0.1		0.5		2	60	6	6	6	1 1/4"
	6					0.5				6			
8	8	SPACE											
10	10	SPACE											
12	12	SPACE											
TOTALS					10.0	8.8	2.1						

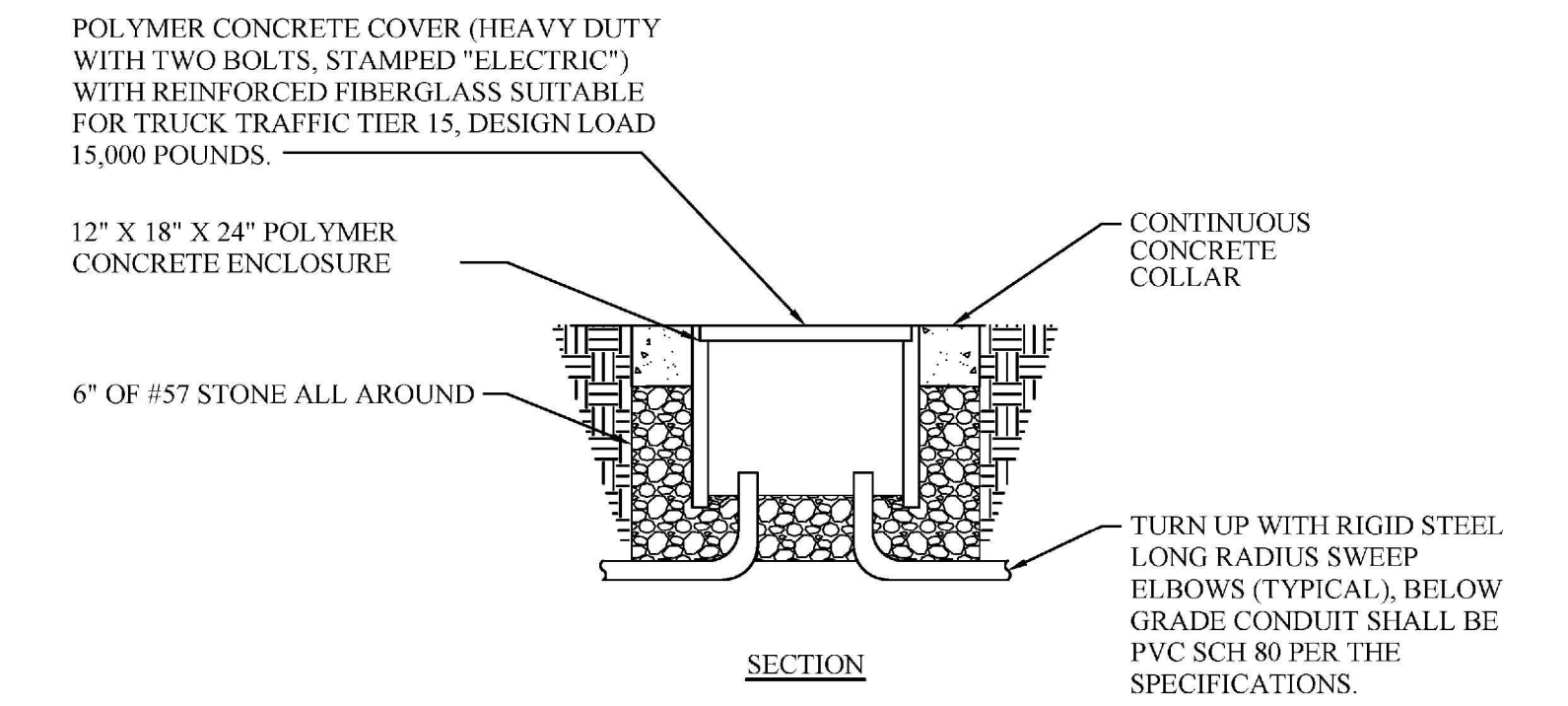
LIGHTING FIXTURE SCHEDULE							
SYM	BASIS OF DESIGN MANUFACTURER AND MODEL	VOLTS	VOLT-AMPS	MOUNTING	LAMPS		REMARKS
					LUMENS	TYPE	
A	LITHONIA FEM L48 8000LM LPACL MD MVOLT 50K 90CRI WLFEND2	120	69	SURFACE	8000	LED'S	GENERAL LIGHTING, DAMP LOCATION
B	LITHONIA TWRI-LED-P4-50K-MVOLT-DDBTXD	120	51	WALL	5550	LED'S	EXTERIOR MOUNTED
EMX	LITHONIA LHQM-LED-R-HO	120	0.04	WALL	-	LED'S	EXIT EGRESS COMBO UNIT

NOTES:

POWER TRANSFORMER SCHEDULE												
DESIGNATION	TYPE	NUMBER PHASES	KVA	MINIMUM IMPEDENCE IN %	VOLTAGE		LOAD CIRCUIT DATA				"K" FACTOR (NON-LINEAR LOADS)	REMARKS
					PRIMARY	SECONDARY	WIRE NUMBER & SIZE			CONDUIT NO. & SIZE		
							PHASE	NEUTRAL	EGC			
"TRLV"	DRY	3	30	4.50%	480	208/120	#6	-	#10	1"	-	FEEDS PANEL "LV", FLOOR MOUNTED
"TRWT"	DRY	3	15	3.00%	480	208/120	#4	-	#8	2"	-	FEEDS FINISHED WATER TANK PANEL "WT"



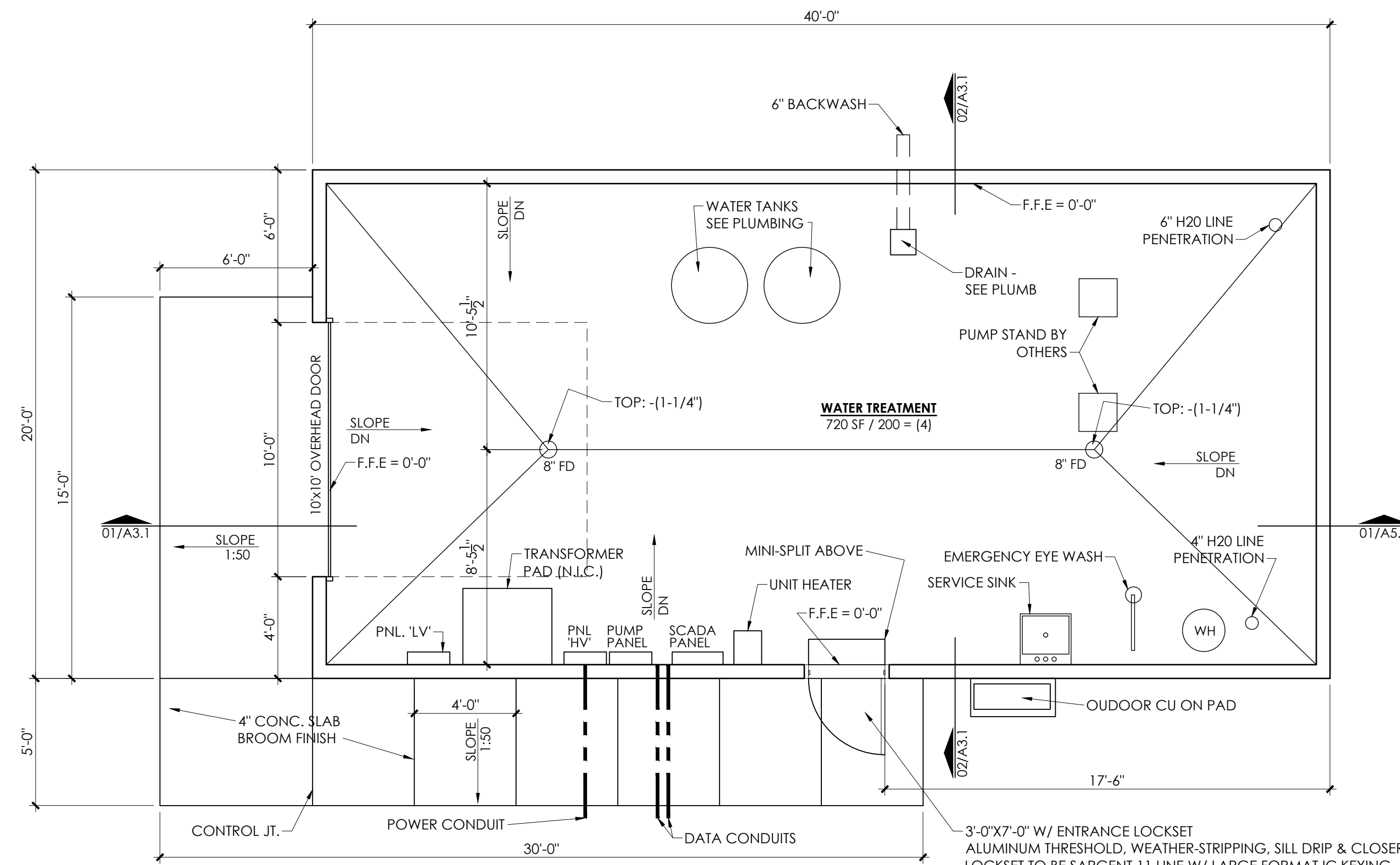
TYPICAL DIRECT BURY CONDUIT DETAIL
NOT TO SCALE



UGR HANDHOLE/PULL BOX DETAIL
NOT TO SCALE

M:\216038 Culppeper County - Cherry Hill Water System\216038.00 Cherry Hill\603802C_EL-4.dwg

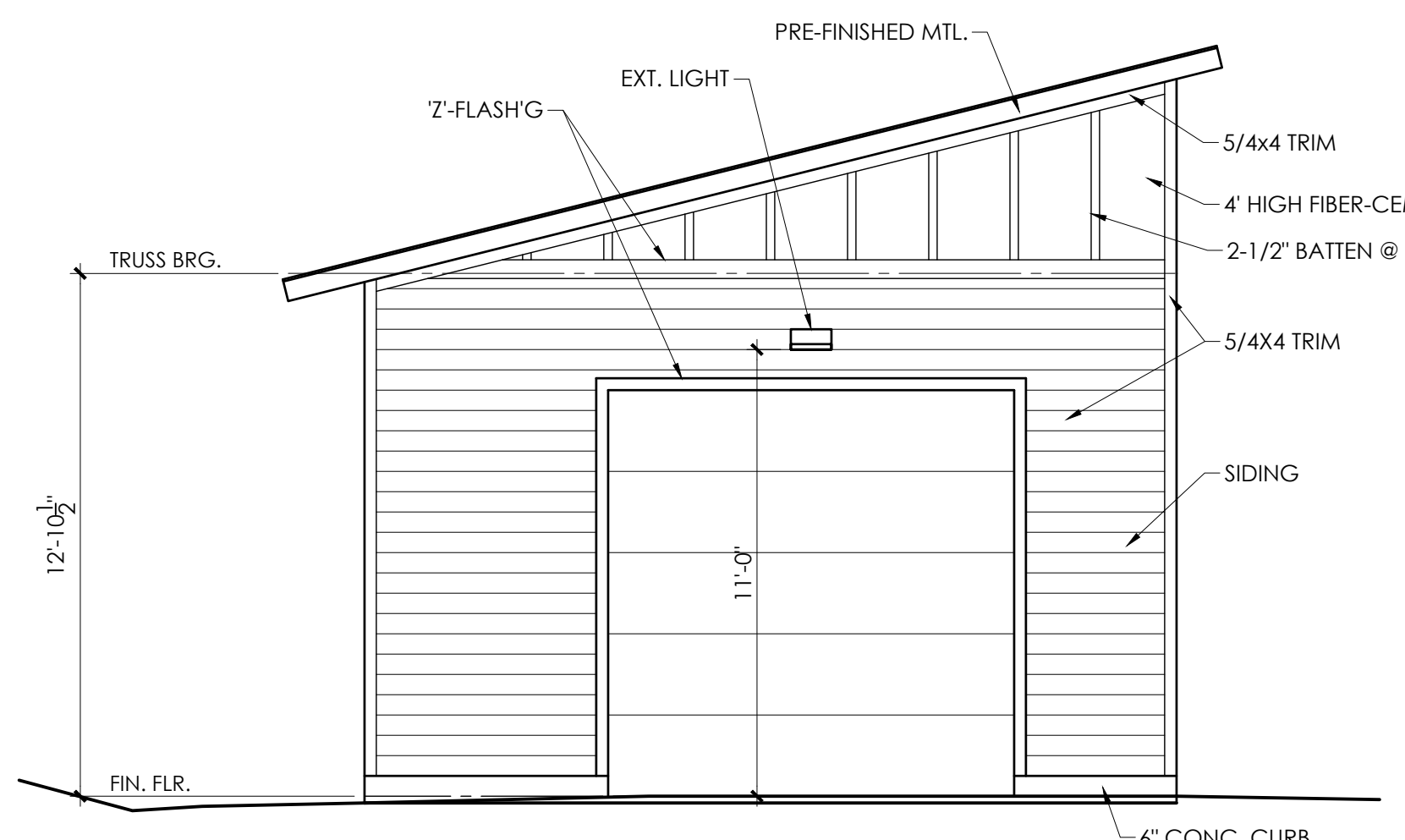
NO.	SHEET REVISION	BY	DATE	NO.	SHEET REVISION	BY	DATE	
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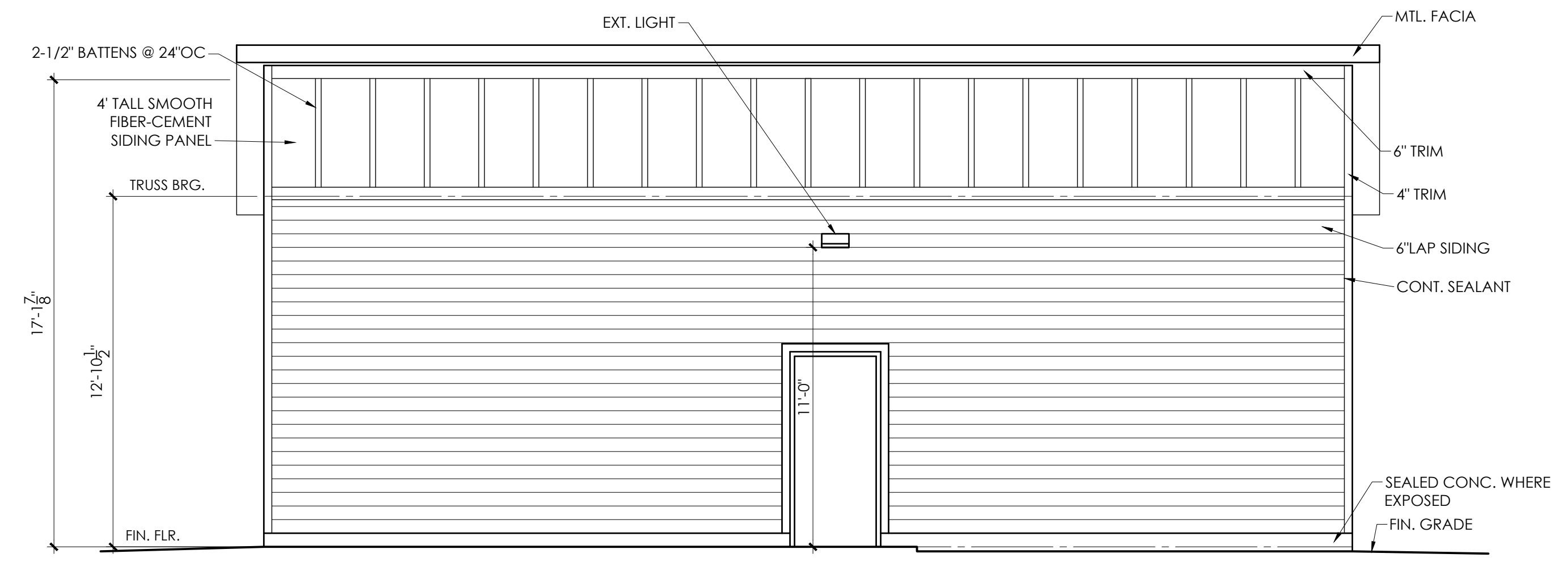
- PLAN NOTES**
1. ALL UNDERSLAB PLUMBING IS IN THE CONTRACT. EXTEND 5'-0" OUTSIDE BUILDING. COORDINATE ALL SLAB PENETRATIONS WITH WW ASSOCIATES DESIGN DOCUMENTS.
 2. UNDERSLAB WATER LINES TO BE SCHEDULE 80 PVC.
 3. RUN DOMESTIC WATER FOR SERVICE SINK & SHOWER INSIDE INSULATED SPACE.
 4. PROVIDE SLEEVES FOR ELECTRIC SERVICE AND FEEDS.
 5. SLEEVE WALL & SEAL W/ FOAM AROUND ALL WALL PIPING PENETRATIONS.
 6. SEE WW ASSOCIATES PLANS FOR LIGHTING / CEILING PLAN.

FLOOR PLAN
SCALE: 1/4" = 1'-0"

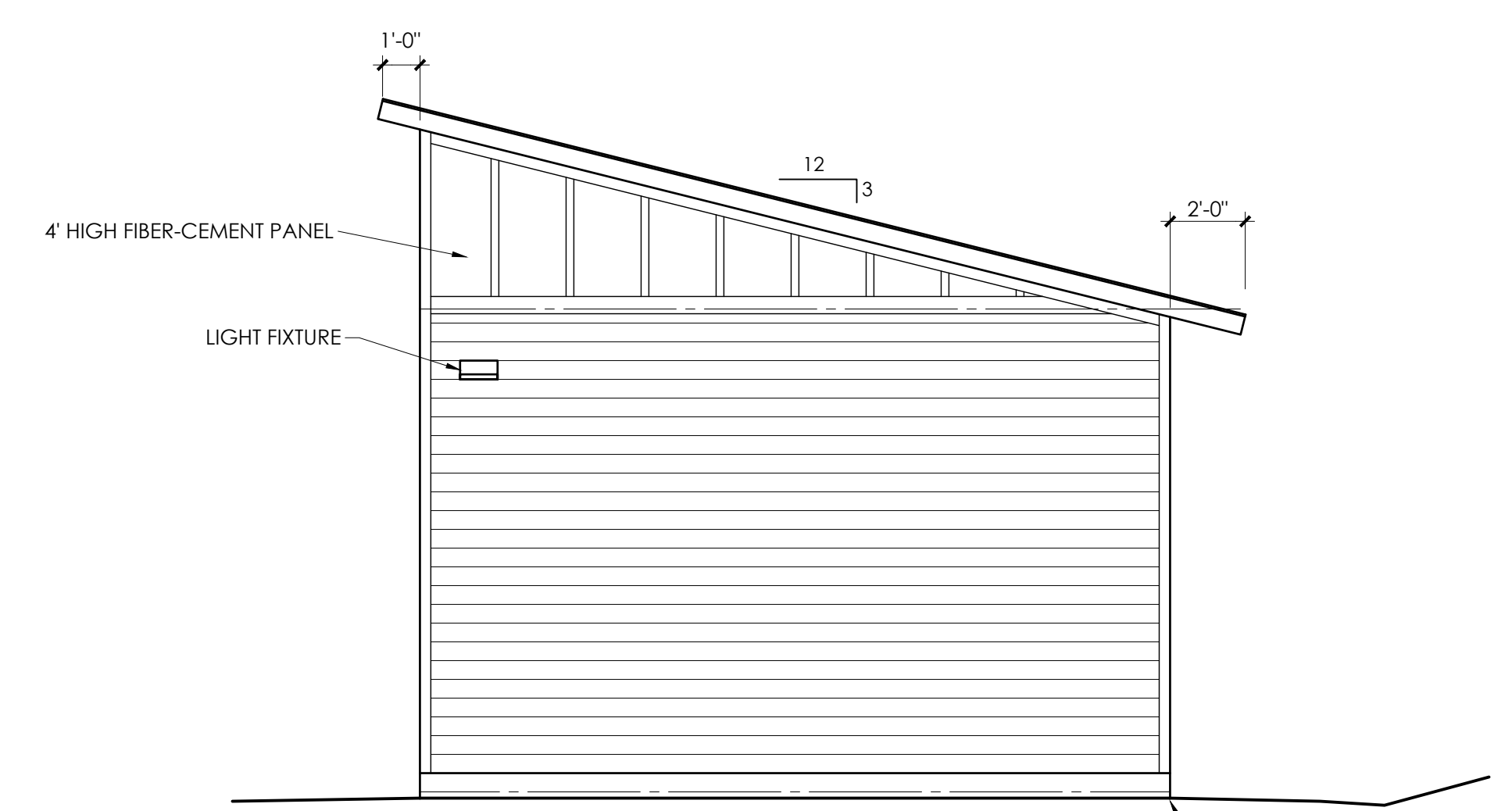
NOTE: SEE WW ASSOCIATES PLANS FOR PIPE PENETRATIONS AND CONDUIT STUB UP IN SLAB.



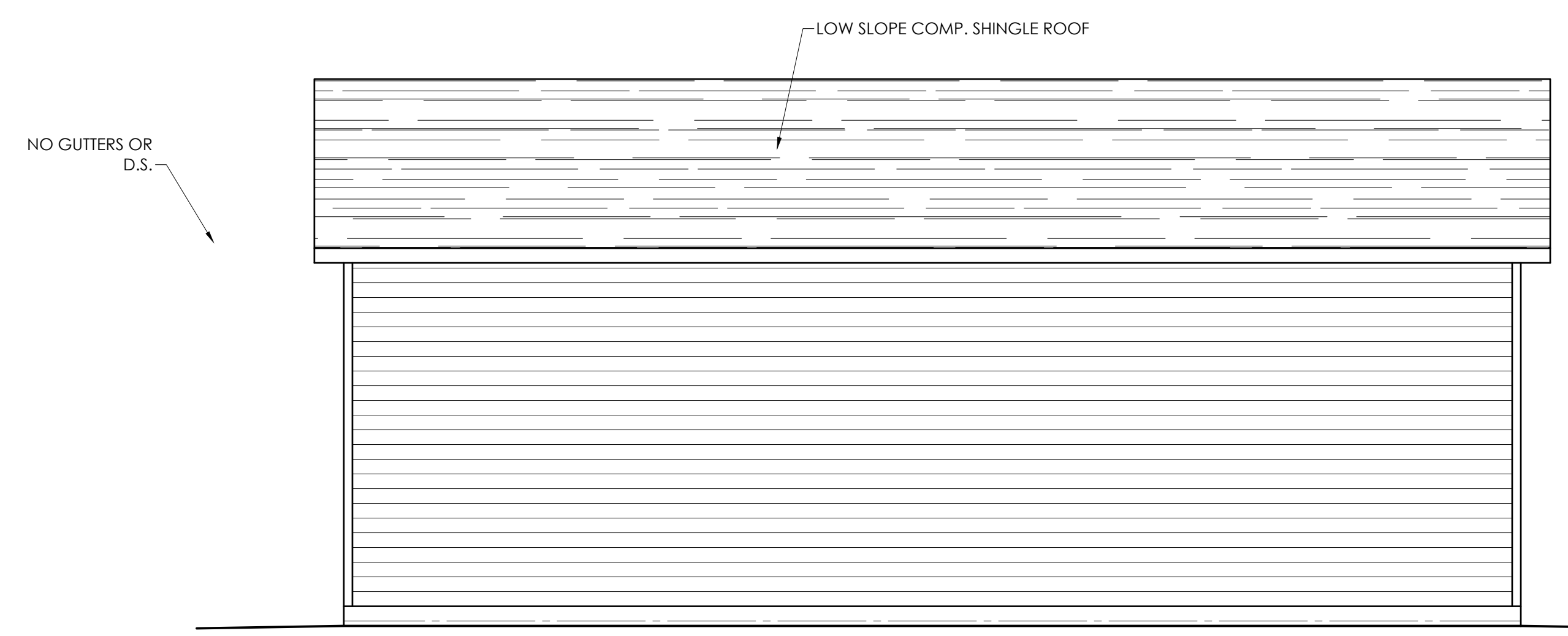
LEFT ELEVATION
SCALE: 1/4" = 1'-0"



FRONT ELEVATION
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

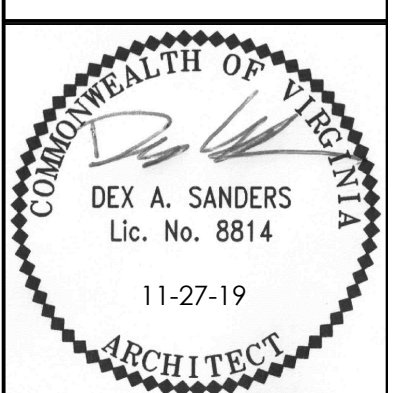


REAR ELEVATION
SCALE: 1/4" = 1'-0"

FOR CONSTRUCTION

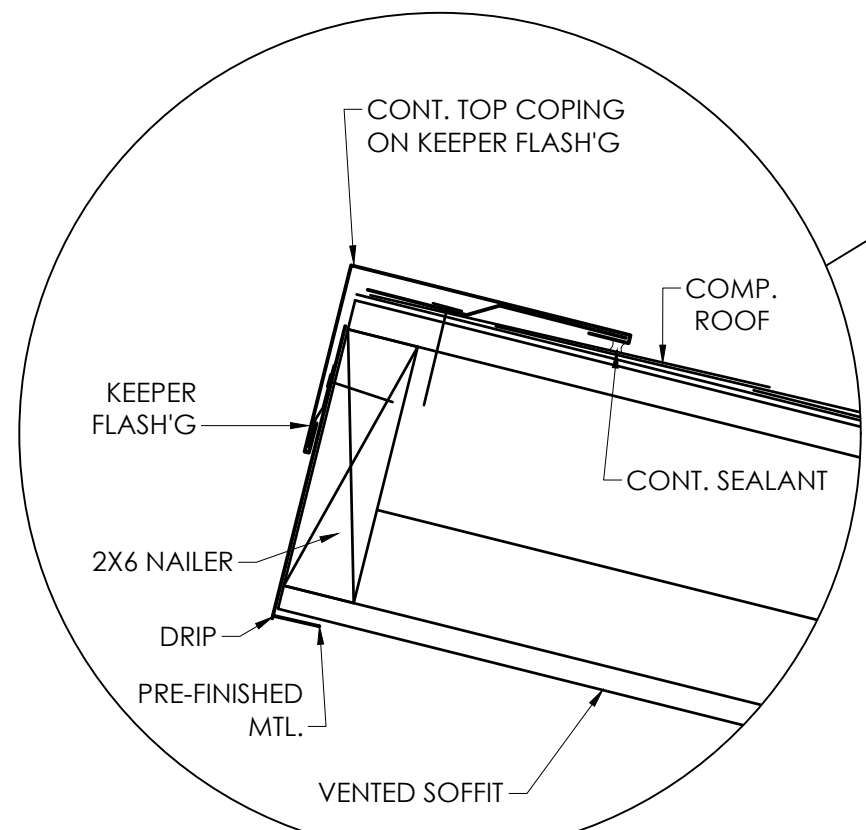
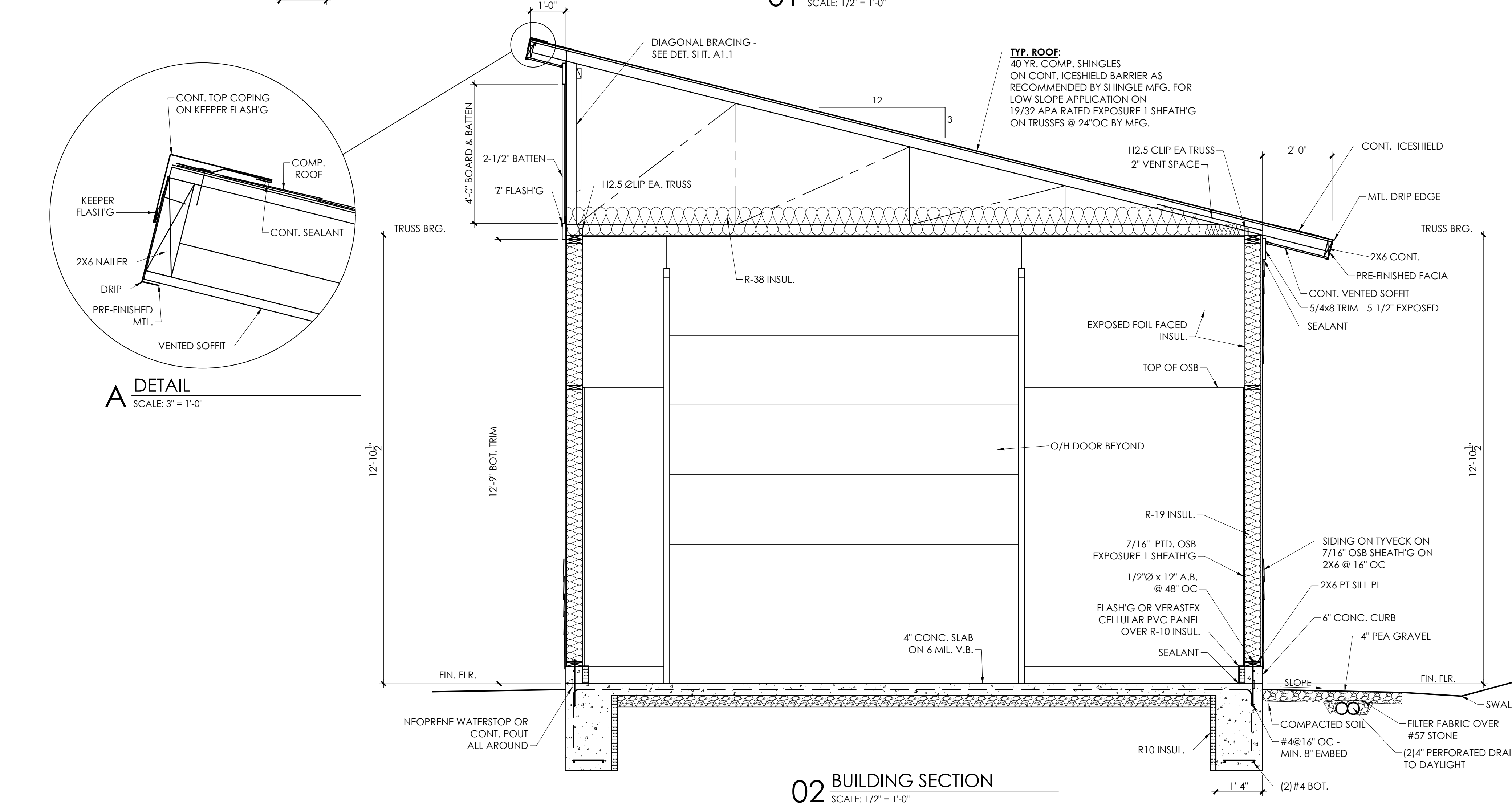
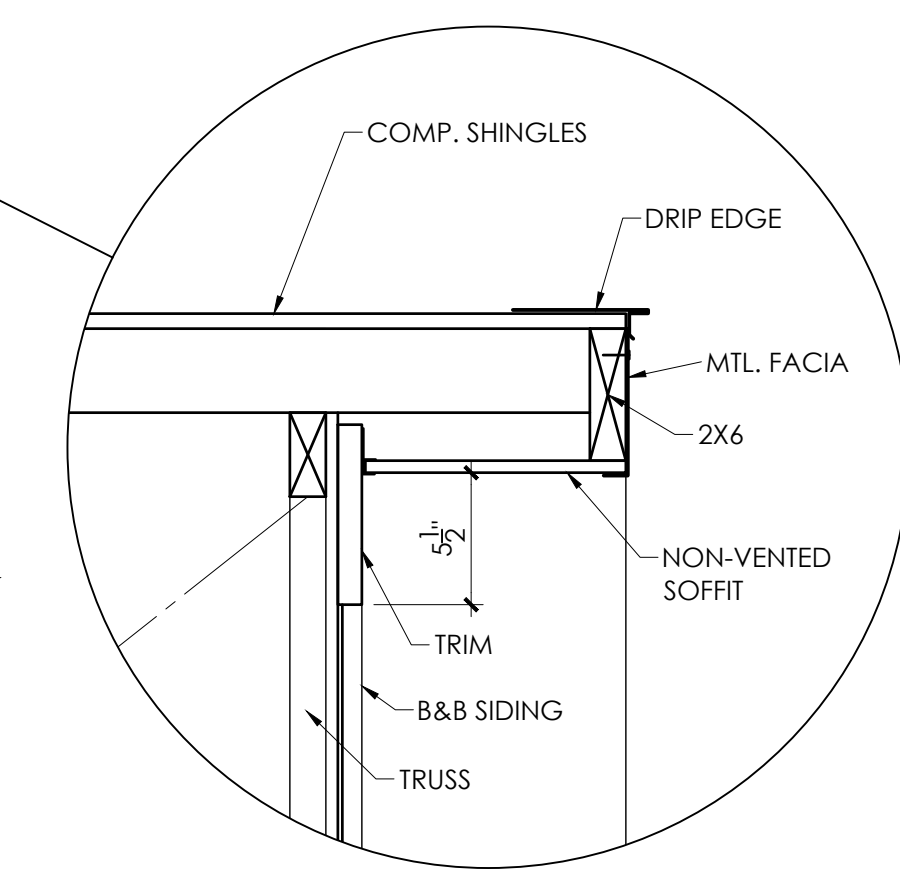
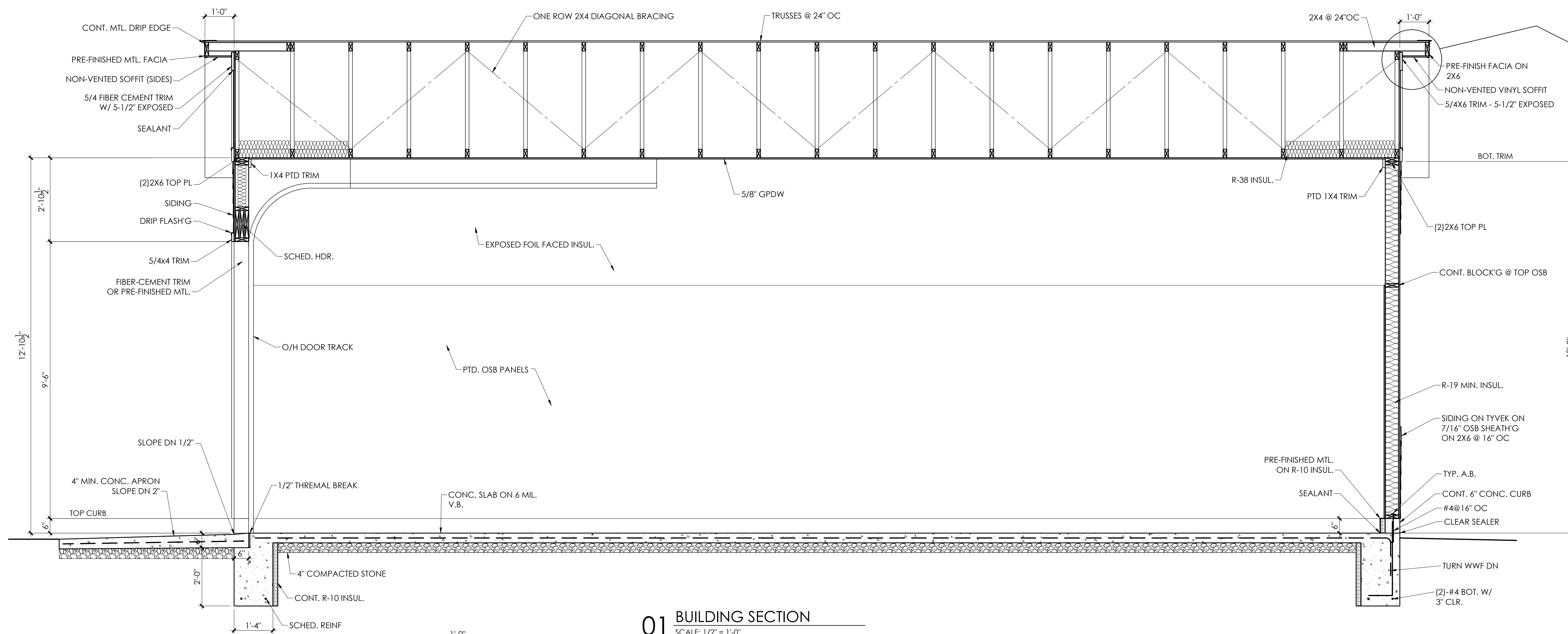


CHERRY HILL
WATER TREATMENT BUILDING
 14017 LAUREL VALLEY PLACE
 CULPEPER, VA 22701



REVISIONS:

DRAWN: DAS
 CHECKED: NOTED
 SCALE: 11-27-19
 DATE: 1808
 PROJECT #:



FOR CONSTRUCTION

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 CULPEPER, VIRGINIA 22701
 (540)829-2590

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 WATER TREATMENT BUILDING
 14017 LAUREL VALLEY PLACE
 CULPEPER, VA 22701

COMMONWEALTH OF VIRGINIA
 DEX A. SANDERS
 Lic. No. 8814
 11-27-19
 ARCHITECT

REVISIONS:	

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SECTIONS & DETAILS