



**ADDENDUM NO. 2  
TO PLANS AND SPECIFICATIONS FOR THE  
ALPENA WATER PRODUCTION PLANT (WPP) CLEARWELL REPLACEMENT  
& INFRASTRUCTURE IMPROVEMENTS**

**ISSUED:** March 11, 2024

HRC Job No. 20220751

This Addendum is issued prior to receipt of bids to provide for certain changes and clarifications to the Drawings and/or Specifications, as herein specified, and is hereby made a part of the Contract Documents and shall be taken into consideration in preparing the Proposal. All other conditions remain the same.

The Bidder shall acknowledge the receipt of this Addendum in the Proposal form.

**ADDENDUM:**

1. Bidder inquiries received:

- a. Q – Alpena Water production plant that perimeter drain pump station Section 11390: The specification has ABS, Flygt and the plan has Grundfos. I have attached a selection of Barnes pump that will meet the specification for your review. Hoping we still have some time to be added as an approved equal.
  - i. HRC Response: No Substitutions. Bidder shall provide pumps from one of the three manufacturers named in the bidding documents.
- b. Q - Please clarify sequence of operations regarding the new conduit and conductors from existing MCC-2 to new pump control panel.
  - Reference sheet E-1, Addendum 1
  - The most direct route for the conduit is through the center of demolition and construction area.
    - Can the conduit be installed near the end of the project, during final backfill and landscaping?
    - If yes, are temporary jumpers required to power the pump station during construction?
  - i. HRC Response: The pump station is not to be used during construction for dewatering (this is noted in Section 01950, page 5, item 8.) The permanent electrical power conduit and wire for the pump station can be installed near the end of the project, during final backfill and landscaping. Conduit routing and penetration through building wall(s), foundations, floors, etc. as needed, should be planned ahead of time with other trades work.

## **SPECIFICATION CHANGES**

### 1. SECTION 15100 VALVES AND ACTUATORS

- a. Add the following item “B” under 2.3 “Check Valves”

#### B. Type C-8 (Slip-on Duckbill)

1. Duckbill check valves type C-8 shall be of rubber construction with inlet port area equal to inlet pipe area. The port area shall contour down to a duckbill which shall allow flow in one direction. Valve shall open when the internal pressure exceeds external pressure by 3” of water column. The flexible duckbill shall be of one piece rubber construction with inlet end designed to fit over ductile iron piping. Exterior of the duckbill shall be wrapped with minimum 1/8” thick EPDM.
2. Check valves shall be Red Valve Tideflex or Proco.

- b. After Paragraph 2.4, add the following Paragraph 2.5 “Combination Air Valves” and renumber the subsequent sections accordingly.

### 2.5 Combination Air Valves

#### A. Type AV-1 (Water Service)

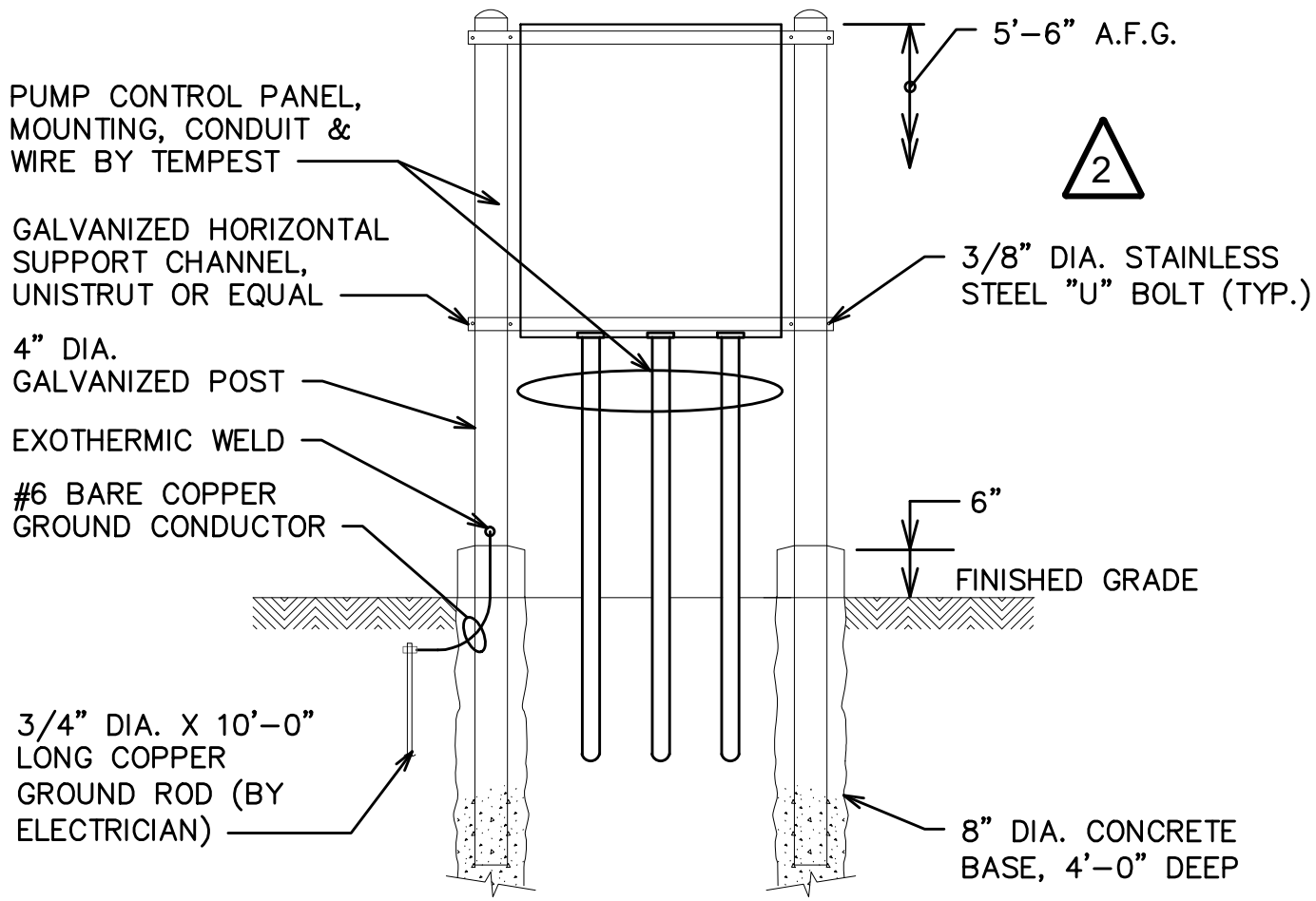
1. Air and vacuum relief valves Type AV-1 shall be furnished and installed as indicated on the Drawings. Valves shall automatically function to release large amounts of air to atmosphere as the pipe line is being filled. Once the air is exhausted the valve shall automatically release small pockets of air from the pipe line while the pipe line is under pressure. The valves shall also function to admit air into the pipe line when it is being drained. The valve body and cover shall be of cast iron construction, the floats of stainless steel and the resilient seats Buna-N. Valve size shall be as indicated on the drawings or in the valve schedule.
2. The valve inlet and outlet shall be the same size and shall be sized for the gpm rating of the pump or pumps. The outlet shall have an adjustable throttling device that can be adjusted for the air to be exhausted from the pump and allow free full flow of air back into the pump at shut down.
3. Air and vacuum relief valves shall be Apco/Valve & Primer Corp. Series 140C, Val-Matic Series 200C, or Crispen series UL.

## **DRAWING CHANGES:**

1. SHEET S-1 (Not Issued) – Delete Structural Steel General Note 25.
2. SHEET S-9 (Not Issued) – Sections 6 and 7 – revise location of waterstop to be on inside of tank of wall (similar to Section 8, this sheet.)
3. SHEET S-10 (Not Issued)
  - a. Section 8, add waterstop to this detail, similar to tank wall sections shown on Sheet S-9.
  - b. Section 5, add note to “ Provide closed cell polyurethane backer rod and sealant around tank vent pipes to seal at concrete topping. Sealant shall be as specified in Section 03300, item 2.4, C.”

4. SHEET S-11 (Not Issued)
  - a. Wall Elevation 1 – Delete linework indicating grounding wire and Key Note 7 pointing to it.
  - b. Key Notes – Upper right corner of Sheet – Delete Key Note 7.
5. SHEET P-4 (Issued) – See updated sheet.
6. SHEET P-5 (Issued) – See updated sheet.
7. SHEET P-9 (Issued) - See updated sheet.
8. SHEET E-2 (Not Issued) – Add the attached sketch, “Pump Control Panel Mounting Rack Supports”, to Sheet E-2.

END OF ADDENDUM



PUMP CONTROL PANEL MOUNTING RACK  
SUPPORTS (BY GENERAL CONTRACTOR)

N.T.S.

GENERAL CONTRACTOR TO PROVIDE THE RACK FRAME AND CONC. FOUNDATION FOR SUPPORTING THE PANEL THAT TEMPEST WILL PROVIDE. ELECTRICIAN TO PROVIDE GROUNDING FOR THE RACK.

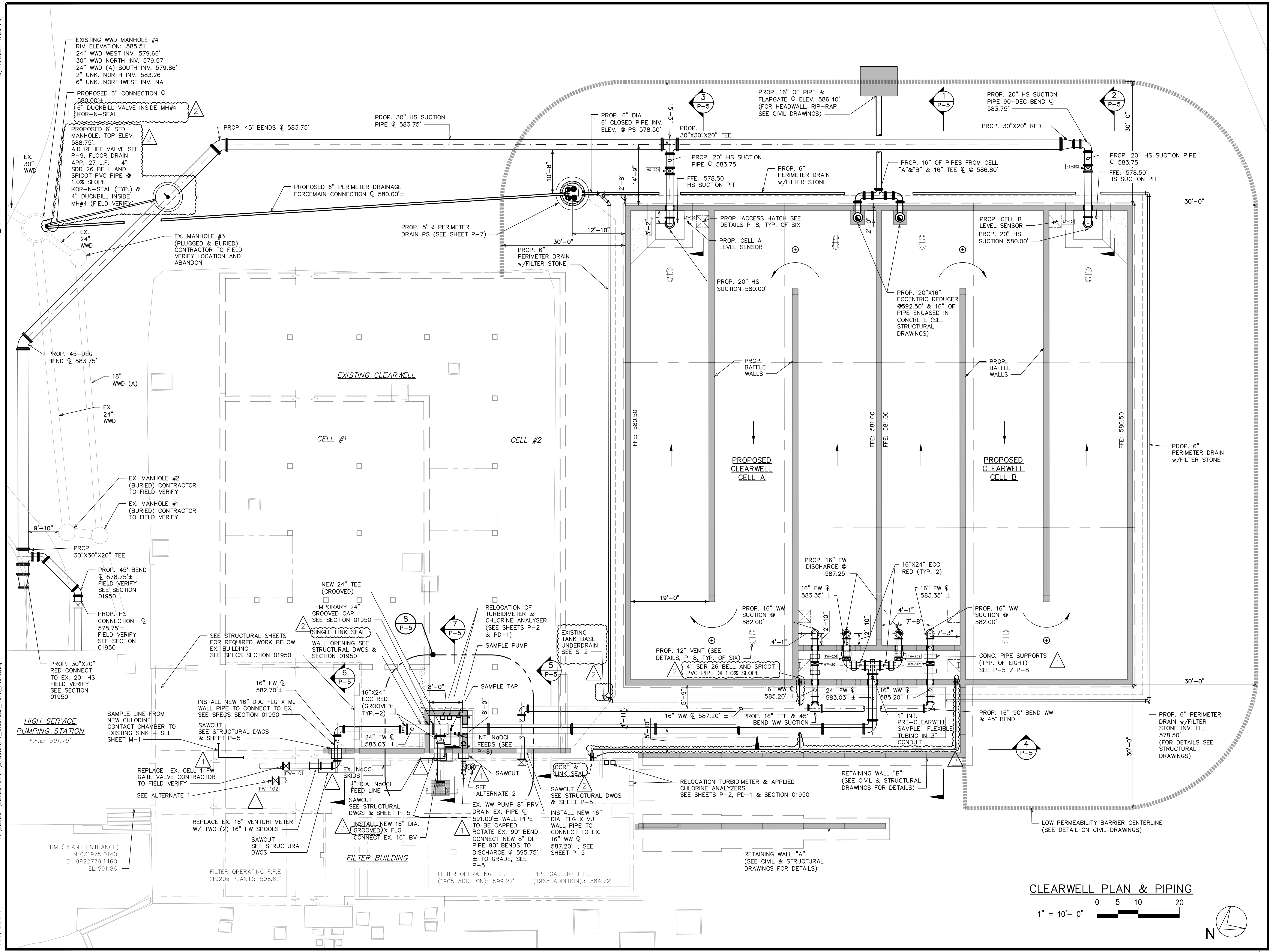


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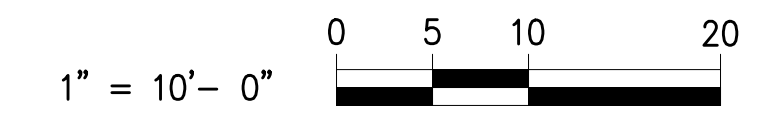
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Uslu, Bulant



CLEARWELL PLAN & PIPING



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03-11-24	ADDENDUM 2
03-01-24	ADDENDUM 1
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APPROVED	T.G.M.

**CITY OF ALPENA**  
**WATER PRODUCTION PLANT**  
**CLEARWELL REPLACEMENT & INFRASTRUCTURE IMPROVEMENTS**

1300 S STATE AVE, ALPENA, MI 49707  
 ALPENA COUNTY MICHIGAN

**PROPOSED CLEARWELL PLAN**

HRC JOB NO. 20220751	SCALE AS NOTED
DATE DECEMBER 2023	SHEET NO. P-4 OF

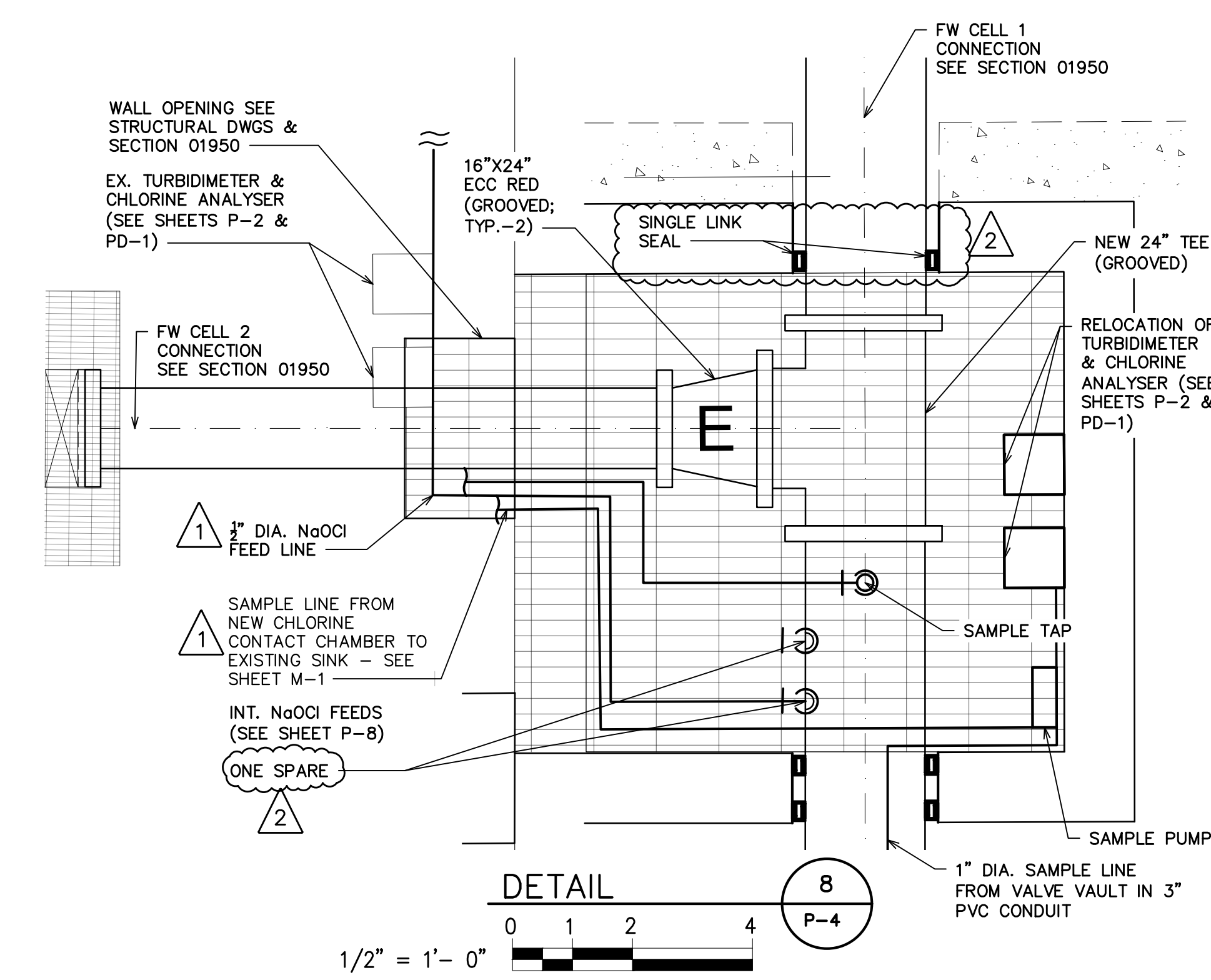
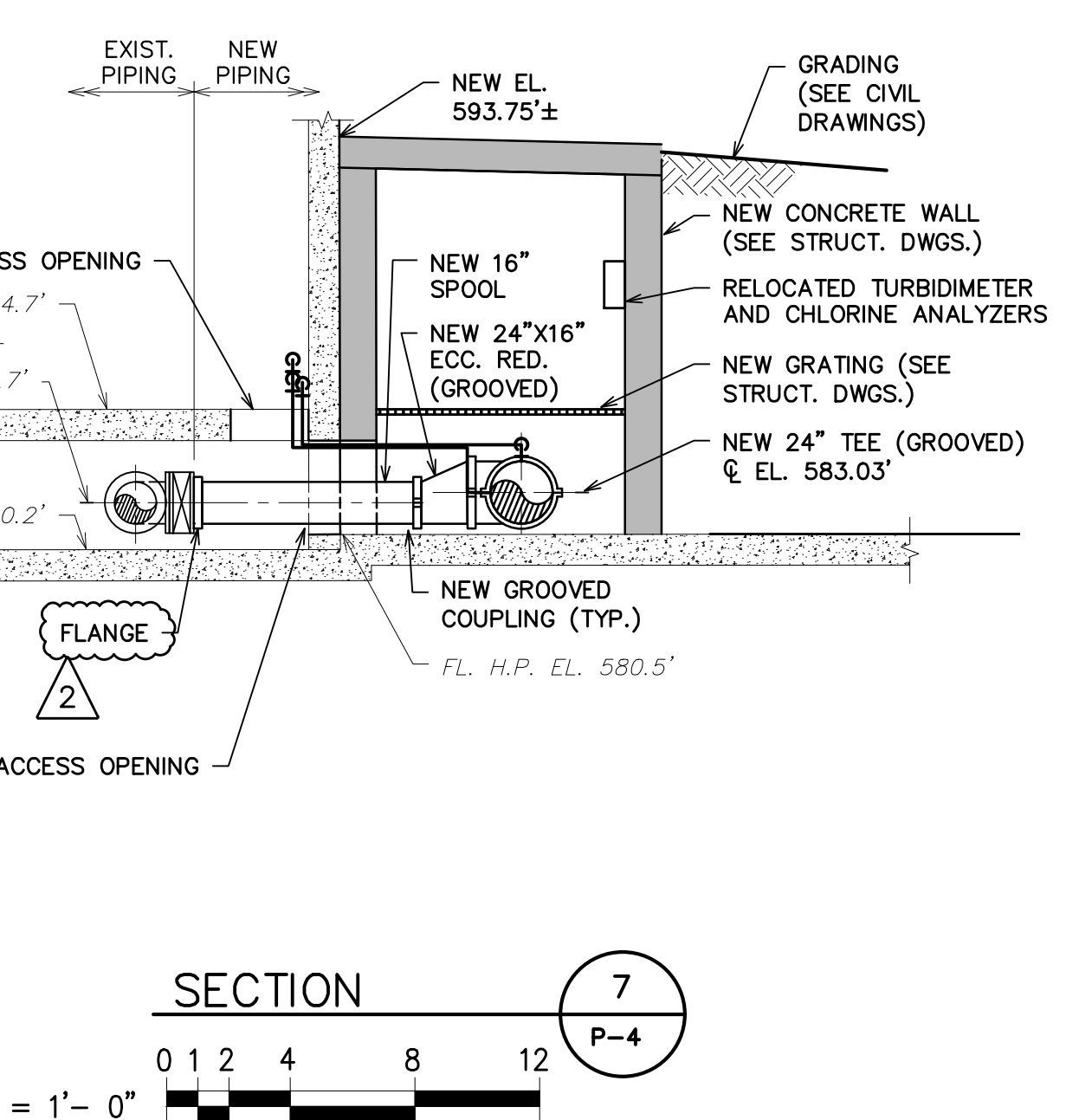
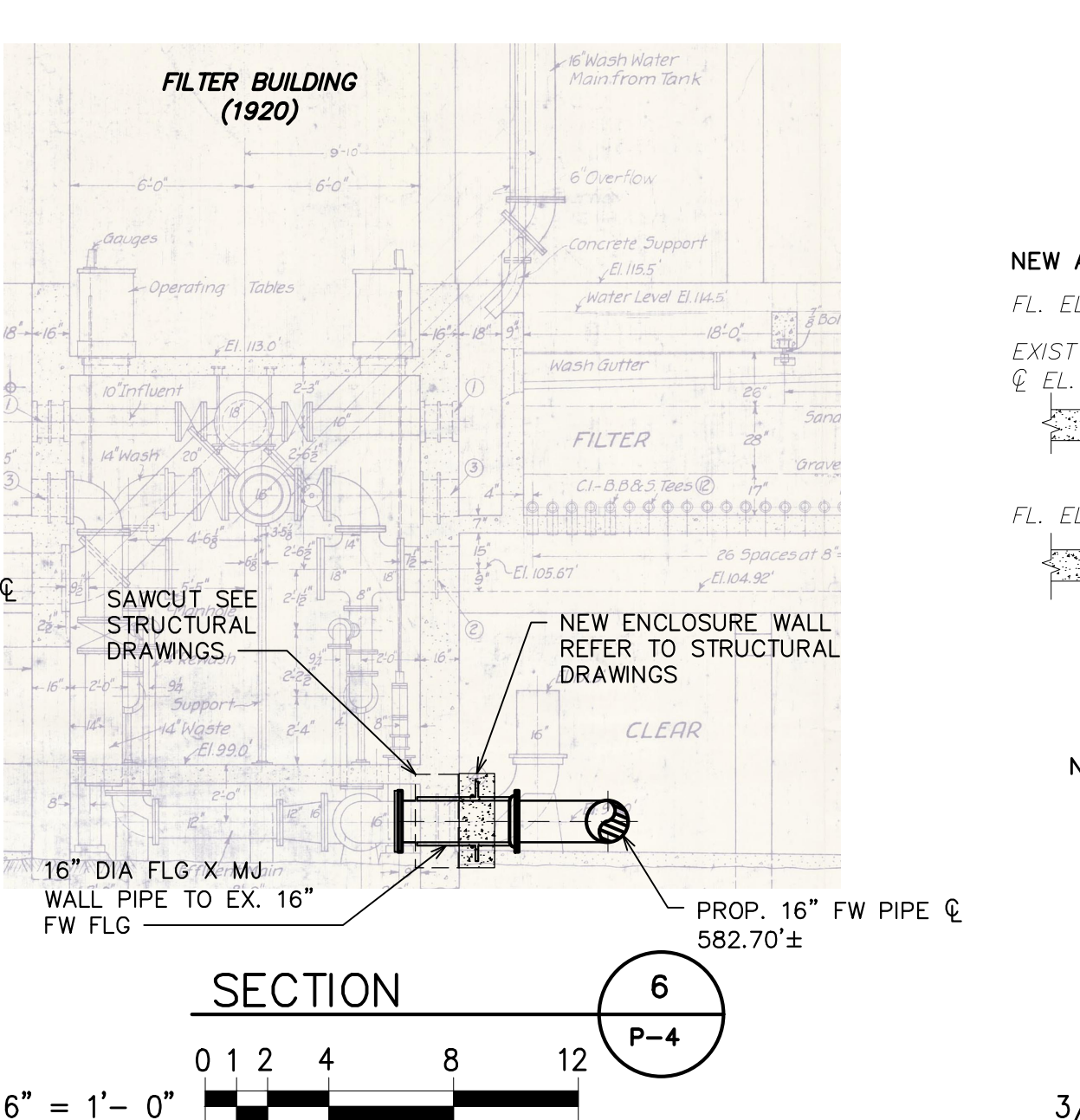
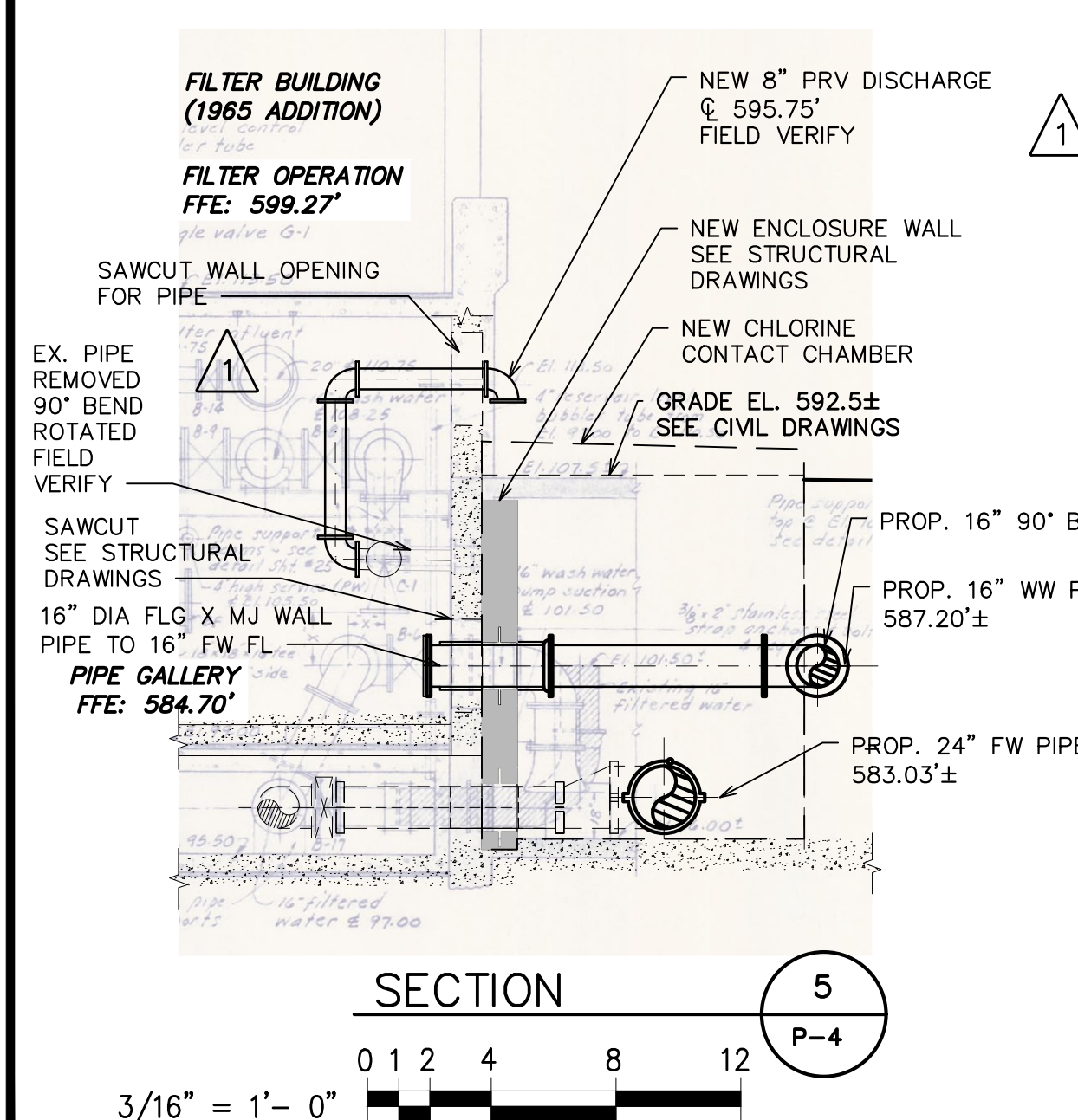
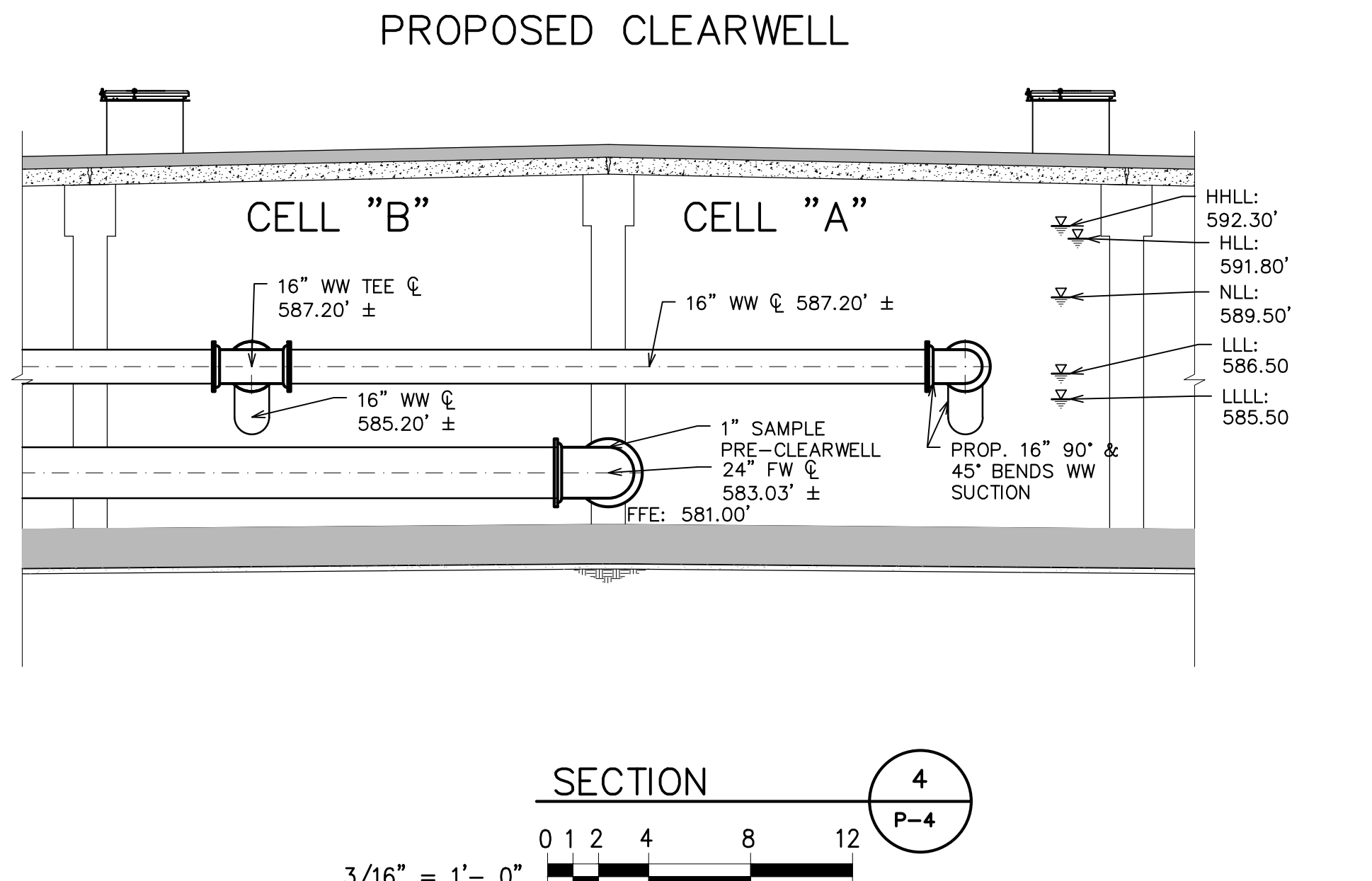
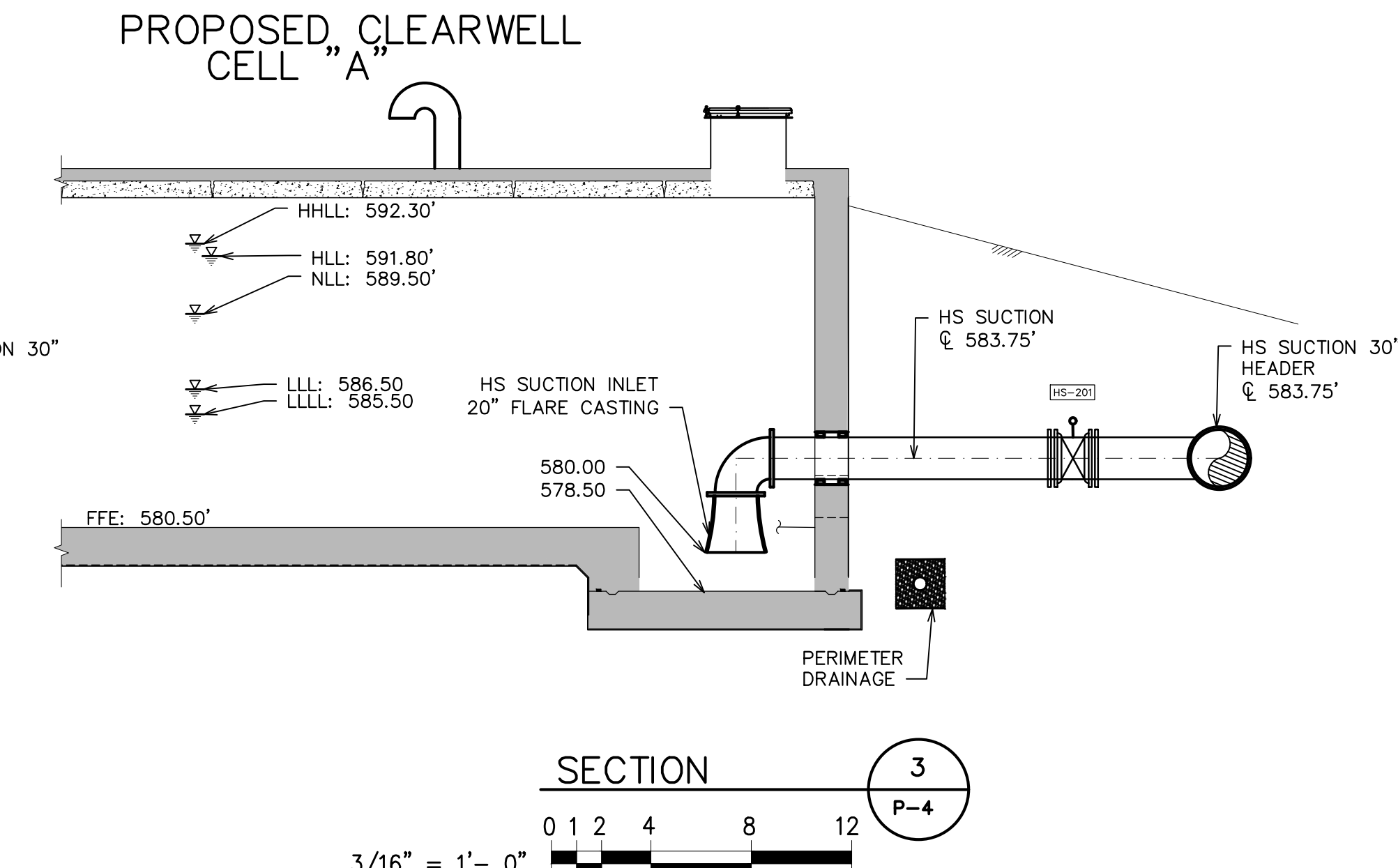
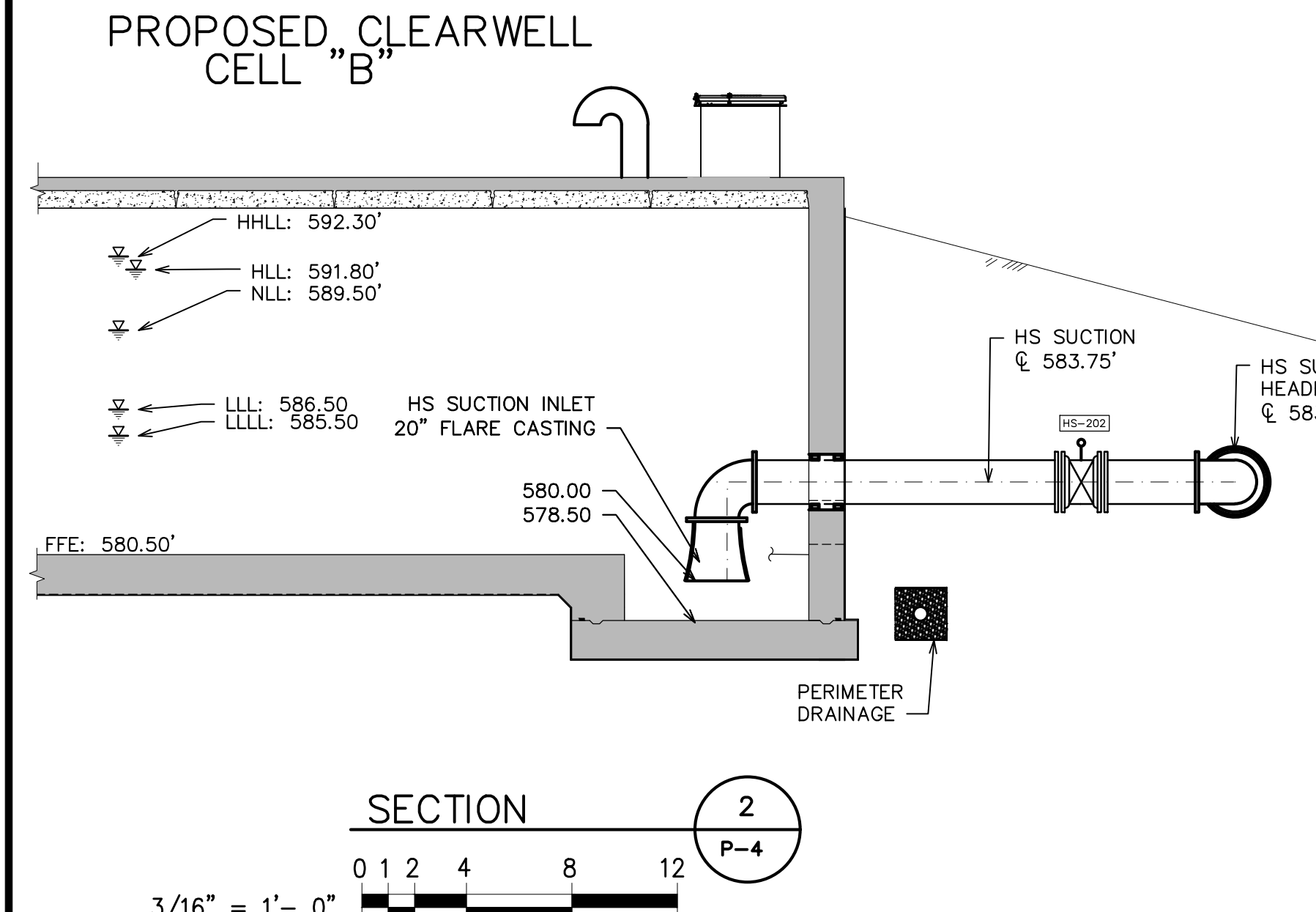
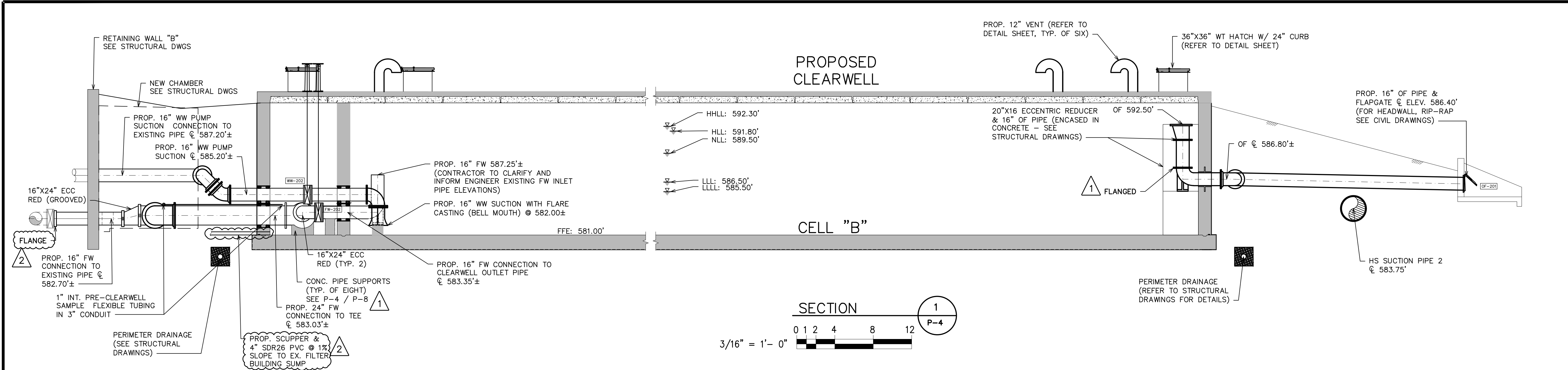


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**PROPOSED CLEARWELL SECTIONS**

HRC JOB NO. 20220751	SCALE AS NOTED
DATE DECEMBER 2023	SHEET NO. P-5 OF

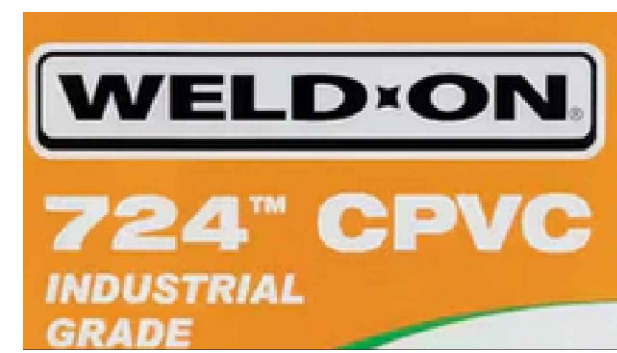


**PIPE SCHEDULE**

SERVICE	DESCRIPTION	LOCATION	MATERIAL	SIZE (IN)	JOINT	TEST PRESSURE	NOTES
FW	FILTERED WATER	YARD, CLEARWELL	CL 54 DI	16, 24	FJ, RJ, GC	150	AWWA C105 POLYETHYLENE ENCASUREMENT
HS	HIGH SERVICE (SUCTION)	YARD	CL 54 DI	20, 30	RJ	150	AWWA C105 POLYETHYLENE ENCASUREMENT
WW	WASHWATER	YARD, CLEARWELL	CL 54 DI	16	FJ, RJ	150	AWWA C105 POLYETHYLENE ENCASUREMENT
PD	PERIMETER DRAIN FORCE MAIN	YARD	C900 DR 17 PVC	4, 6	FJ, RJ	150	
NAOCL/CL	SODIUM HYPOCHLORITE SOLUTION	PIPE GALLERY	PVC SCH 80	SEE PLANS	WJ	150	USE CPVC PIPE CEMENT (SEE NOTES AND SECTION 15060)

**PIPING GENERAL NOTES AND KEY**

- INSTALL ALL PIPING SUPPORTS AND PIPING IN ACCORDANCE WITH THE LATEST EDITION OF THE ASME ANSI POWER PIPING CODE B 31.1.
- WELD ALL STEEL PIPE WITH FLANGES WHERE MAKING CONNECTIONS TO EXISTING STEEL PIPE OR VALVES.
- LOCATE PRESSURE TAPS ON THE TOP OF PROCESS PIPES.
- LOCATE SAMPLE TAPS ON THE SIDE OF PROCESS PIPES.
- LOCATE DRAIN TAPS ON THE BOTTOM OF PROCESS PIPES.
- UNLESS OTHERWISE NOTED PIPE ELEVATIONS SHOWN ON PIPING DRAWINGS REFER TO CENTERLINE OF THE PIPE.
- DISINFECT ALL WATER PIPING PER AWWA C651 AFTER PIPE HAS PASSED PRESSURE AND LEAK TESTING.



USE WELD-ON 724 CPVC PIPE CEMENT FOR ALL SODIUM HYPOCHLORITE AND CHLORINE WATER PVC PIPING (SEE PHOTO)

PROCESS PIPING	PIPE JOINTS
HDPE HIGH DENSITY POLYETHYLENE PIPE	AFC ADAPTER FLANGE COUPLING
SS STAINLESS STEEL	BFC BOLTED FLEXIBLE COUPLING
	BSL BELL AND SPIGOT STEEL
	FJ FLANGED JOINT
	RJ RESTRAINED JOINT
	GC GROOVED COUPLING
	MJ MECHANICAL JOINT
	WJ WELDED JOINT

**VALVE SCHEDULE**

TAG	VALVE TYPE	LOCATION	SERVICE	CLASS	SIZE (IN)	JOINT	OPERATOR	ACCESSORIES/REMARKS	NOTES
FW-101	RGVF	FILTERED WATER ISOLATION TO CLEARWELL CELL 1	FW	150	16	FL	H	AWWA	
WW-201	BVF	WASHWATER ISOLATION TO CLEARWELL CELL A	WW	150	16	FL	G, WN	AWWA	FLOORSTAND, ES (9'-0")
WW-202	BVF	WASHWATER ISOLATION TO CLEARWELL CELL B	WW	150	16	FL	G, WN	AWWA	FLOORSTAND, ES (9'-0")
FW-201	BVF	FILTERED WATER ISOLATION TO CLEARWELL CELL A	FW	150	16	FL	G, WN	AWWA	FLOORSTAND, ES (11'-6")
FW-202	BVF	FILTERED WATER ISOLATION TO CLEARWELL CELL B	FW	150	16	FL	G, WN	AWWA	FLOORSTAND, ES (11'-6")
HS-201	BVM	HIGH SERVICE SUCTION ISOLATION / CLEARWELL CELL A	FW	150	20	MJ	G, WN	AWWA	ES (13'-6"), SC
HS-202	BVM	HIGH SERVICE SUCTION ISOLATION / CLEARWELL CELL B	FW	150	20	MJ	G, WN	AWWA	ES (13'-6"), SC

**VALVE GENERAL NOTES AND KEY**

- THE VALVE AND GATE SCHEDULES GIVES THE DESIGNATION FOR EACH VALVE AND GATE, ITS LOCATION, SERVICE SIZE, QUANTITY AND OTHER PERTINENT DATA.
- IN GENERAL, BURIED VALVES AND VALVES OR GATES SMALLER THAN 4 INCHES MAY NOT BE INCLUDED IN THE SCHEDULE.
- INSTALL NAMEPLATES ON ALL (NEW AND EXISTING) VALVE AND EQUIPMENT AS TAGGED IN THE SCHEDULES PER SECTION 15000
- ALIGN FLOORSTANDS AND EXTENSIONS STEMS WITH VALVE ACTUATOR NUT IN FIELD (CORE CONCRETE IN FIELD AS REQUIRED PER ENGINEER APPROVAL)

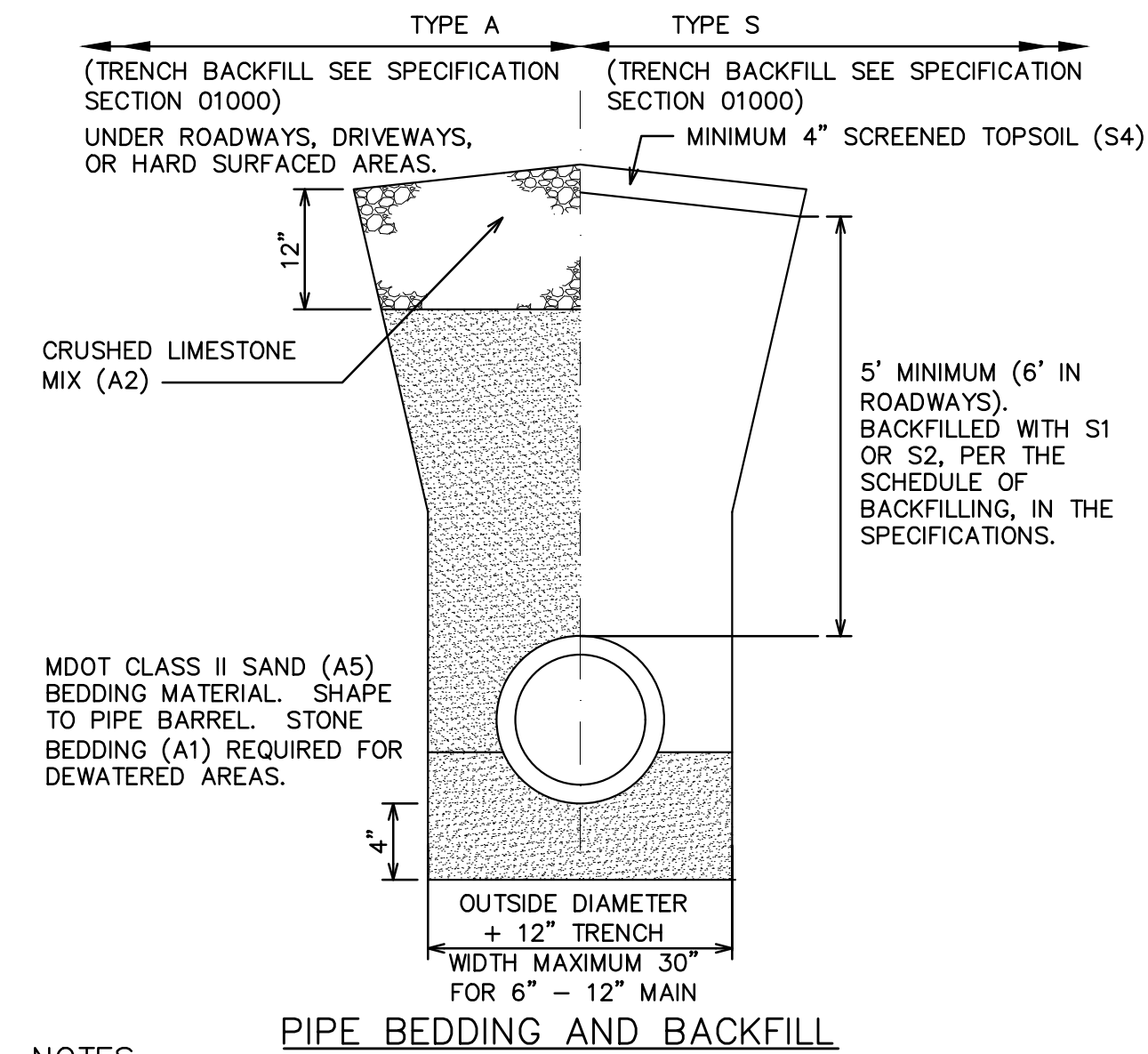
VALVE JOINT	ACCESSORIES	REMARKS	VALVE TYPE
BS BELL AND SPIGOT	BS BENCH STANDS	CL CLASS	BV BUTTERFLY
FL FLANGED JOINT	CP CONTROL PACKAGE	FC FAIL CLOSE	PV PLUG
GC GROOVED COUPLING	EB EXTENSION BONNET	FO FAIL OPEN	CV CHECK VALVE
MJ MECHANICAL JOINT	ES EXTENSION STEM SHAFT (LENGTH)	GB GROUND BURIED	GV GATE VALVE
W WAFER	FB FLOOR BOX (LENGTH)	NRS NON RISING STEM	RGV RESILIENT WEDGE GATE VALVE
	FS FLOOR STAND (LENGTH)	OS OPEN SHUT	
	LS LIMIT SWITCH	RF RUBBER FLAPPER	
	MS MANUAL SCREW	TH THROTTLING	
	PI POSITION INDICATOR		
	PO PORTABLE OPERATOR		
	RPI REMOTE POSITION INDICATOR		
	SC STEM COVER		
	SG STEM GUIDE		
	TW T WRENCH		
	VB VALVE BOX (LENGTH)		
	WB WALL BRACKET		
	WG WORM GEAR		

**GATE SCHEDULE**

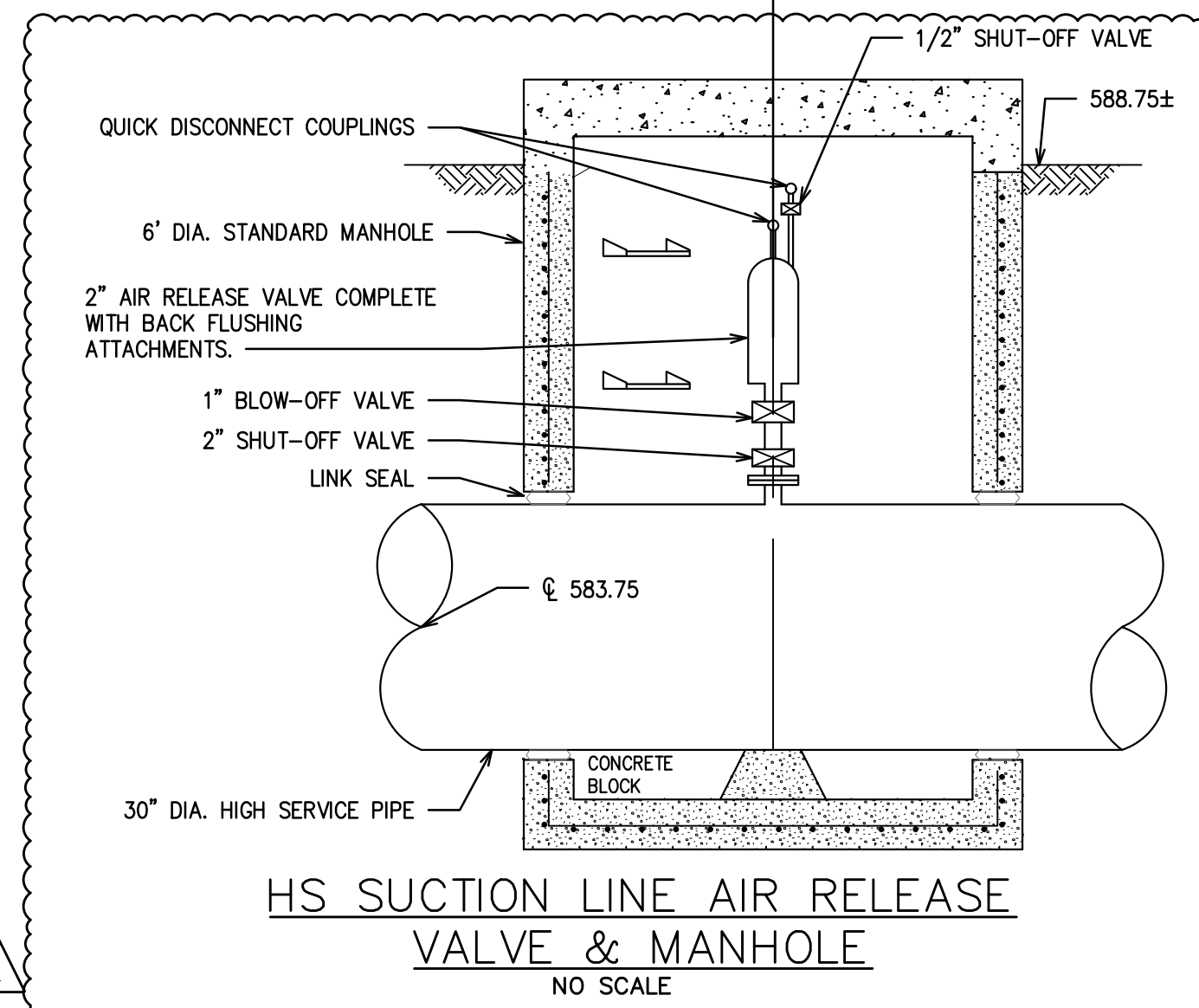
MARK	LOCATION	TYPE	MATERIAL	OPENING SIZE (FT) (WXH)	NOMINAL SIZE (FT) (WXH)	QUANTITY	MAXIMUM SEATING HEAD (FT)	MINIMUM UNSEATING HEAD (FT)	FRAME TYPE	FRAME MOUNT	REMARKS
FG-100	CLEARWELL OVERFLOW FLAP GATE	FG	SS	16"	16"	1	0	0.5	NSC	S	

**GATE SCHEDULE KEY**

- LOCATION: CHAMBER AT WHICH GATES ARE TO BE MOUNTED
- GATE TYPE: SP-STOP PLATE; SG-SLIDE GATE; FG-FLAP GATE
- MATERIAL: SS-STAINLESS STEEL, CI-CAST IRON, R-RUBBER
- FRAME TYPE: NSC-NON SELF-CONTAINED; SC-SELF-CONTAINED
- FRAME MOUNT: WT-WALL THIMBLE; S-SURFACE MOUNTED; P-PIPE MOUNTED
- FLUSH BOTTOM: YES OR NO
- STEM TYPE: NR-NONRISING; R-RISING
- OPERATOR: EM - ELECTRIC MOTOR; MHW - MANUAL HANDWHEEL; MCR-MANUAL GEAR DRIVE; H-MANUAL LIFTED BY HAND; OIL - HYDRAULIC; P - PILOT VALVE
- OPERATOR MOUNTING: SP - STRAIGHT PEDESTAL
- JOINT DESIGNATION: FJ - FLANGED JOINT; SJ - SWEATED JOINT; WJ - WELDED JOINT



- NOTES:**
- PLACE 12" OF CRUSHED LIMESTONE 22A (A2) ON THE COMPACTED SAND BACKFILL (A5) FOR ALL DRIVES, PARKING LOTS OR OTHER HARD SURFACED AREAS.
  - THE CONTRACTOR SHALL COMPACT THE SAND BACKFILL (A5) TO 95% OF THE MATERIAL UNIT WEIGHT BY MODIFIED PROCTOR ACROSS ALL ROADWAYS AND DRIVES PER THE SCHEDULE OF BACKFILLING IN THE SPECIFICATIONS. THIS INCLUDES SERVICE LEADS UNLESS BORED. THE CONTRACTOR SHALL DO THE TESTING WITH THE RESULTS SUBMITTED TO GCDC-WWS PRIOR TO FINAL TESTING.
  - WHERE THE GROUND ELEVATION AT THE TRENCH LINE IS ABOVE THE ELEVATION OF THE CENTERLINE OF THE ROAD, THE CONTRACTOR SHALL INSTALL THE PRESSURE PIPE 6" BELOW THE ELEVATION OF THE ROAD. THE EXTRA DEPTH SHALL BE NOTED ON THE AS-BUILT DRAWINGS.
  - FOR ADDITIONAL CONSIDERATION OF PIPE ZONE EMBEDMENT CONDITIONS, SEE AWWA C600-99.
  - DESIGN ENGINEER SHALL REVIEW AND ADJUST PIPE THICKNESS DESIGN RECOMMENDATIONS IN AWWA C151/A21.51-02 FOR ADDITIONAL DEPTHS OF COVER.



STANDARD DETAILS REMOVED



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**PROCESS MECHANICAL SCHEDULES AND DETAILS**

HRC JOB NO.	SCALE
20220751	NONE
DATE	SHEET NO.
DECEMBER 2023	P-9