



**ADDENDUM NO. 3  
TO PLANS AND SPECIFICATIONS FOR THE  
ALPENA WATER PRODUCTION PLANT (WPP) CLEARWELL REPLACEMENT  
& INFRASTRUCTURE IMPROVEMENTS**

**ISSUED:** March 13, 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.

**SPECIFICATION MANUAL CHANGES:**

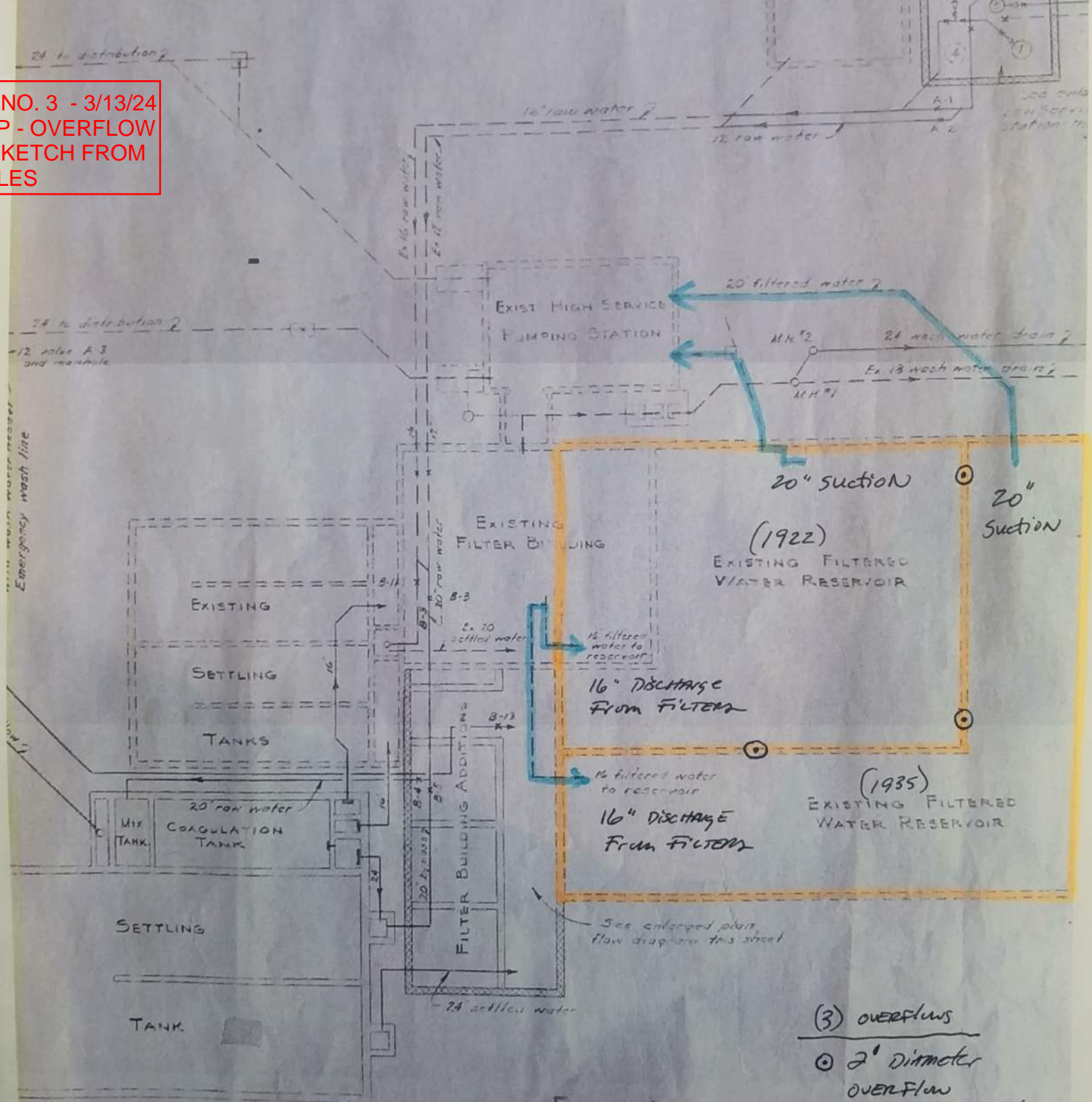
1. Section 01950 – SPECIAL PROJECT REQUIREMENTS
  - a. CLARIFICATIONS:
    - I. Where the project calls for draining the existing clearwells during a temporary bypass, the Plant personnel will drain these structures to the extent possible and the Contractor shall be responsible for removal of the remaining water (estimated 50,000 gallons) to the backwash lagoons (via Manhole 4).
    - II. The only information available regarding the size and location of the (3) overflow holes in the common wall between Cell 1 and Cell 2 is shown on the attached sketch that was provided from the Owner's files. This information has not been field verified but, the holes were described as approximately 2 ft in diameter, 9 ft above the tank floor.
2. Section 01950 – SPECIAL PROJECT REQUIREMENTS
  - a. Add the following item "5.iv" under Section 3.02 in the suggested general sequence:
    - iv. Complete the Clearwell Disinfection as outlined below in Section 3.03 before returning Clearwell Cell 2 into service.

**DRAWING CHANGES:**

1. SHEET P-5 (Issued) – See updated sheet.
2. SHEET P-9 (Issued) – See updated sheet.

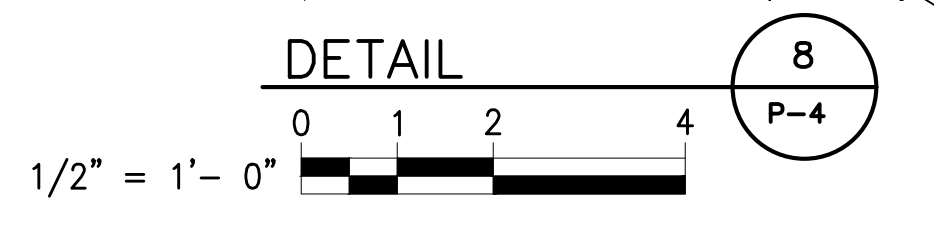
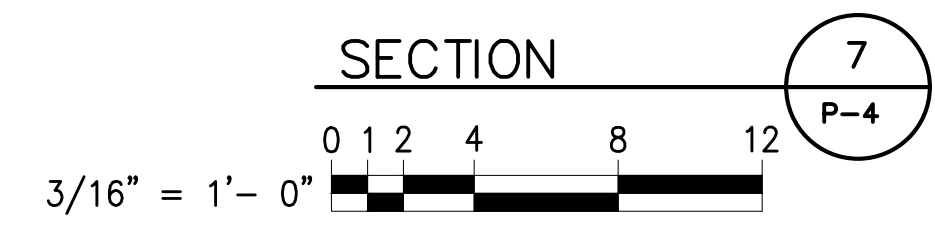
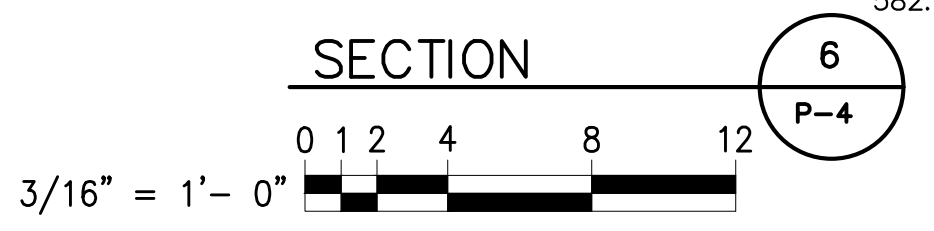
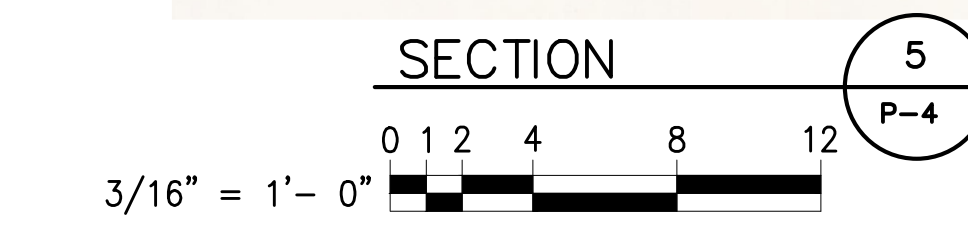
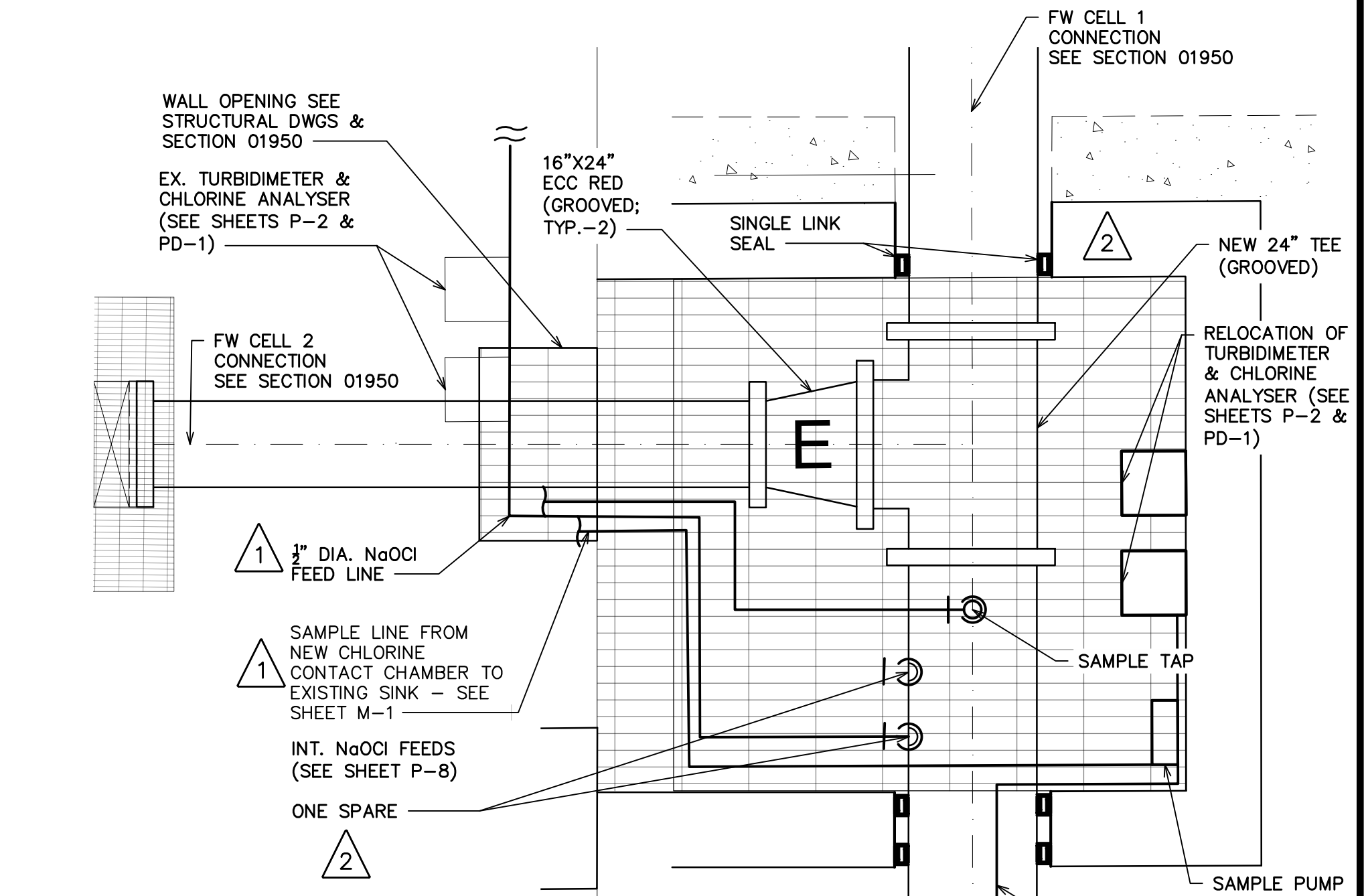
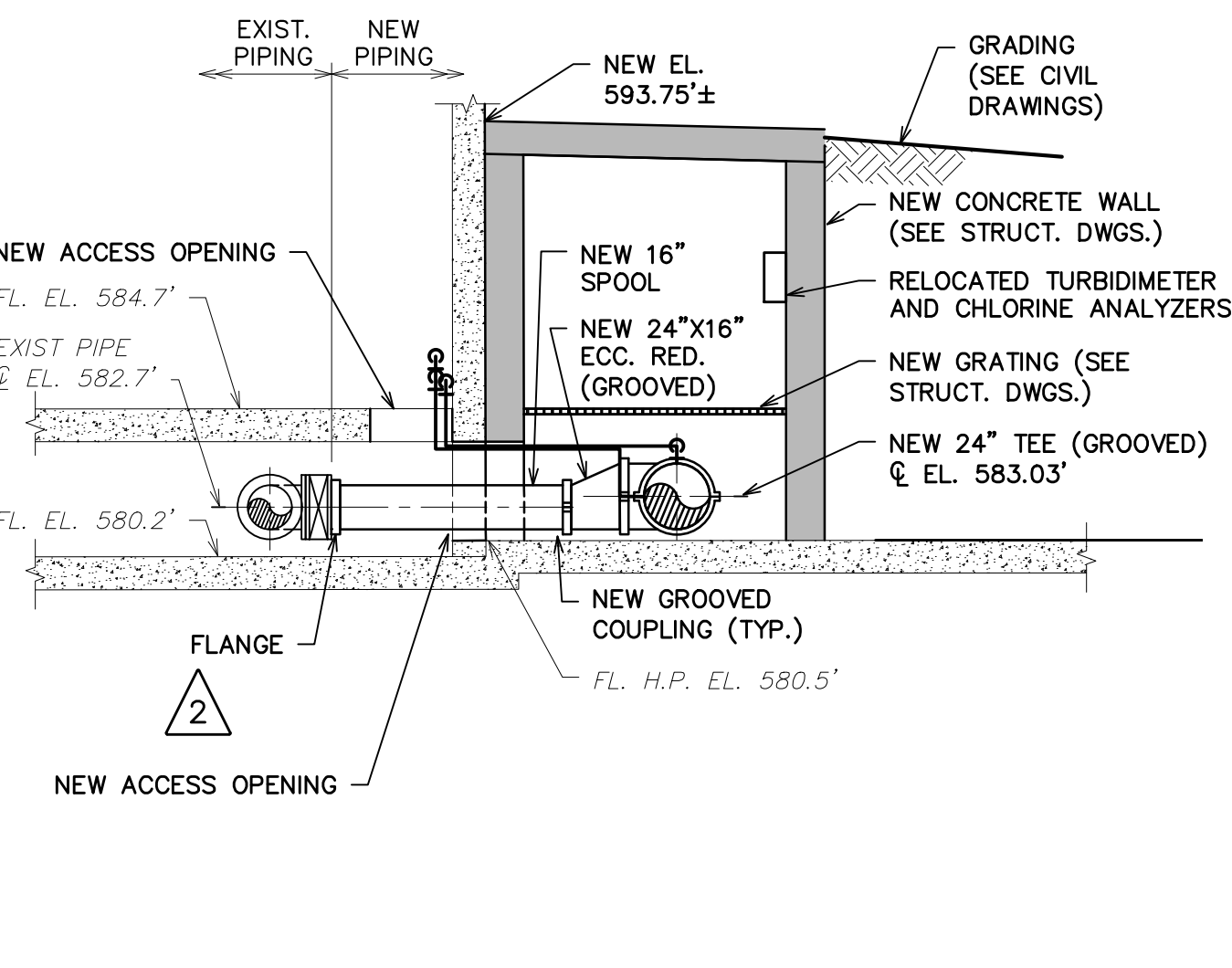
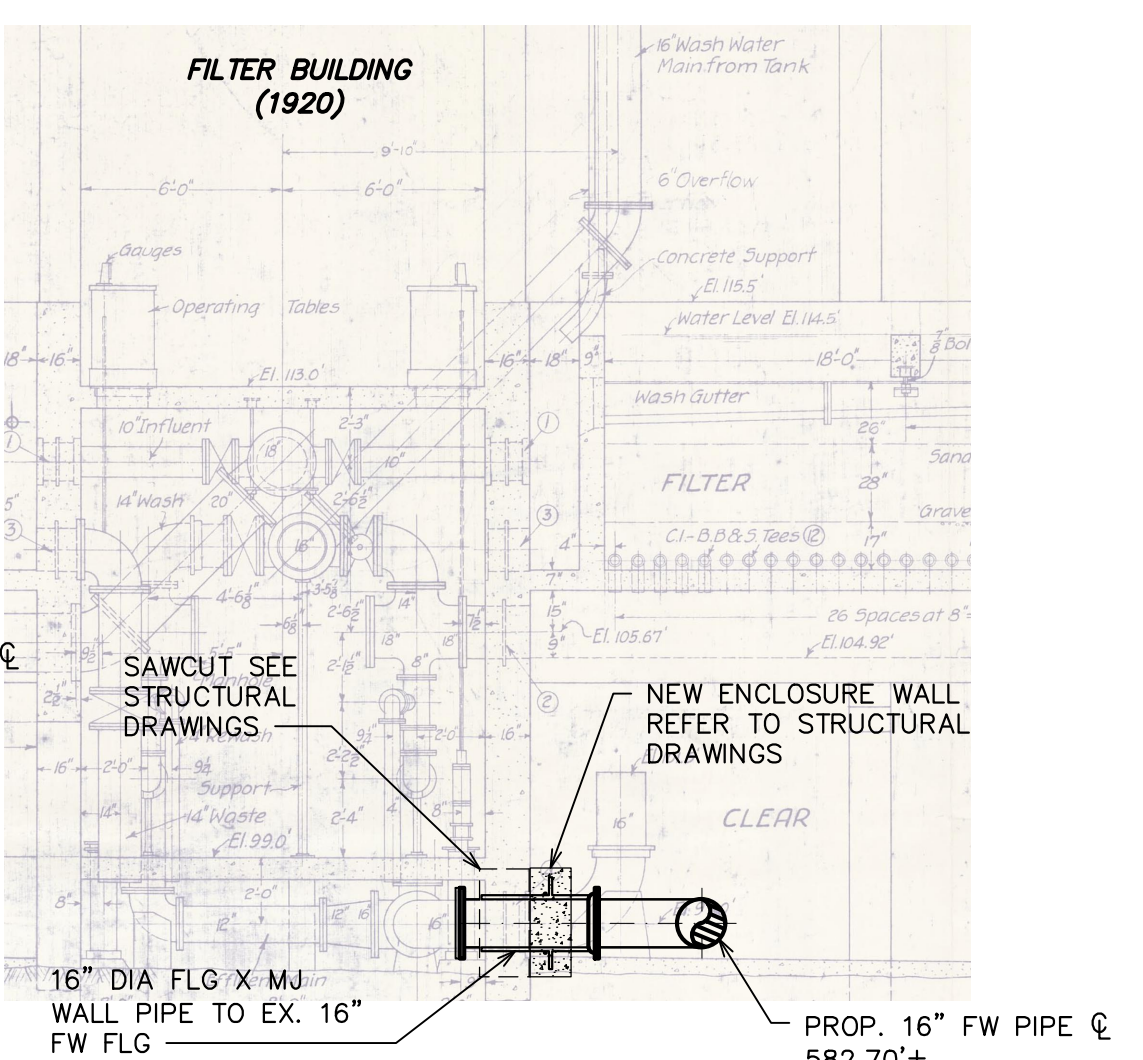
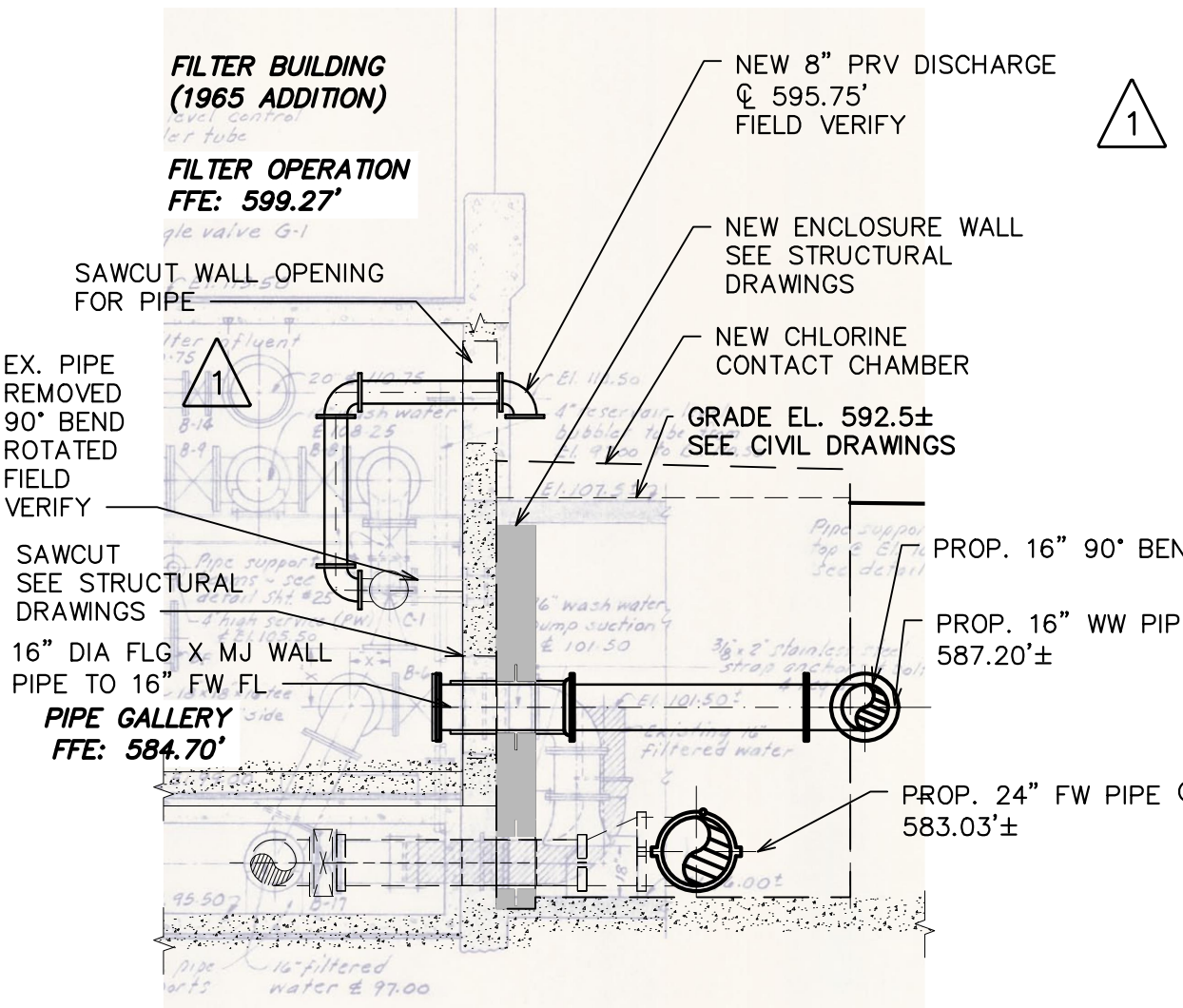
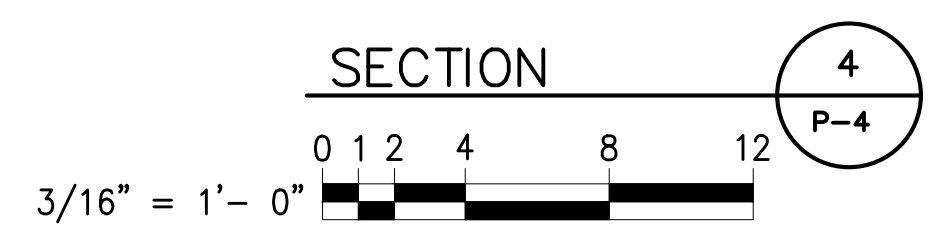
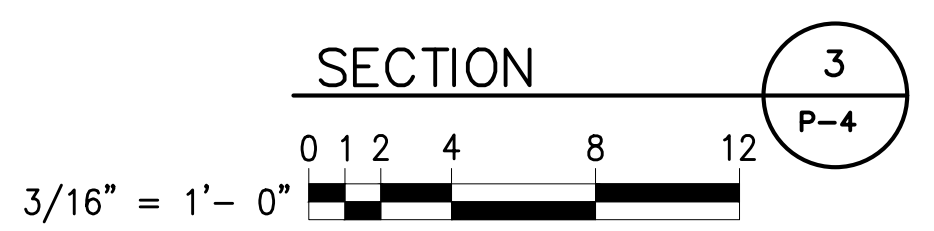
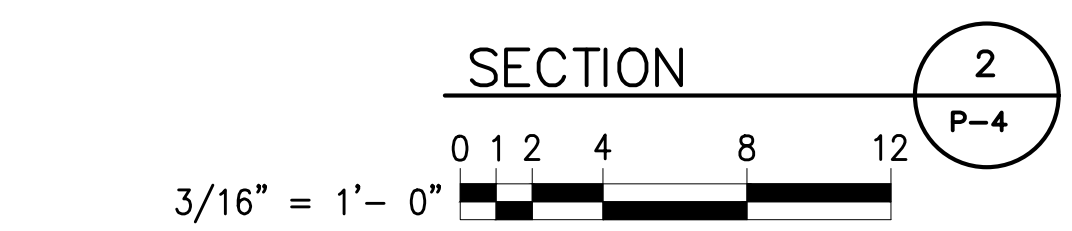
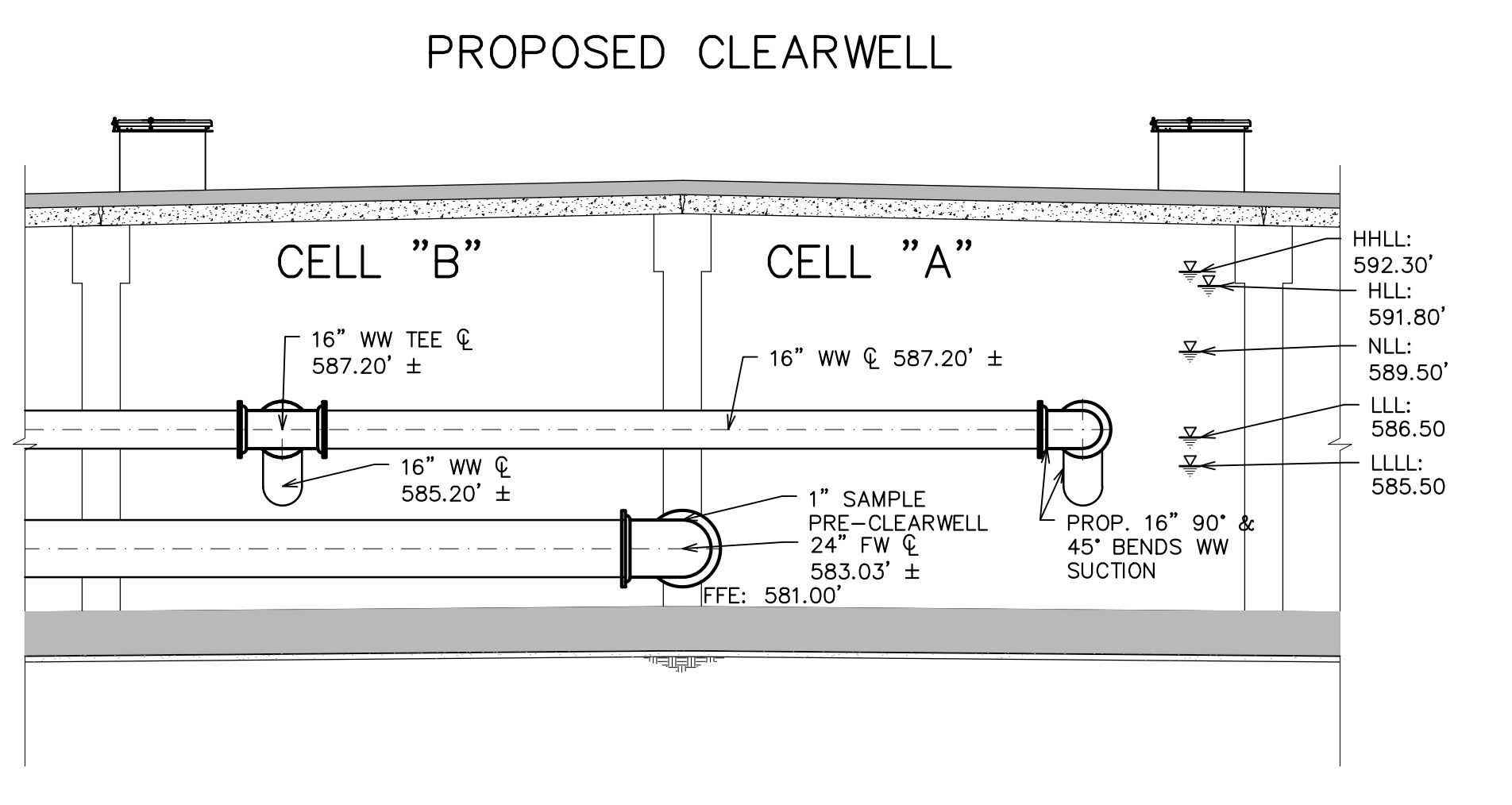
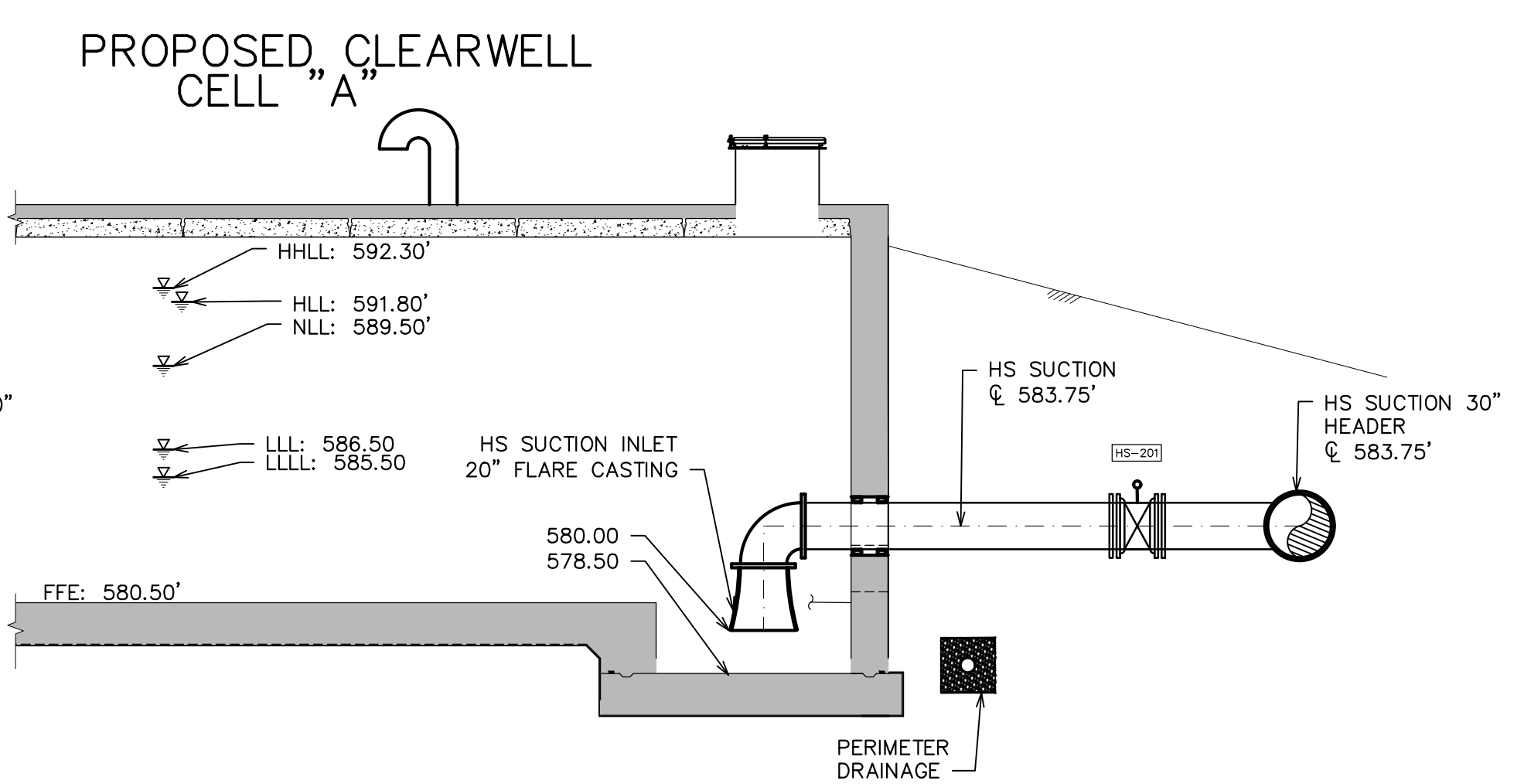
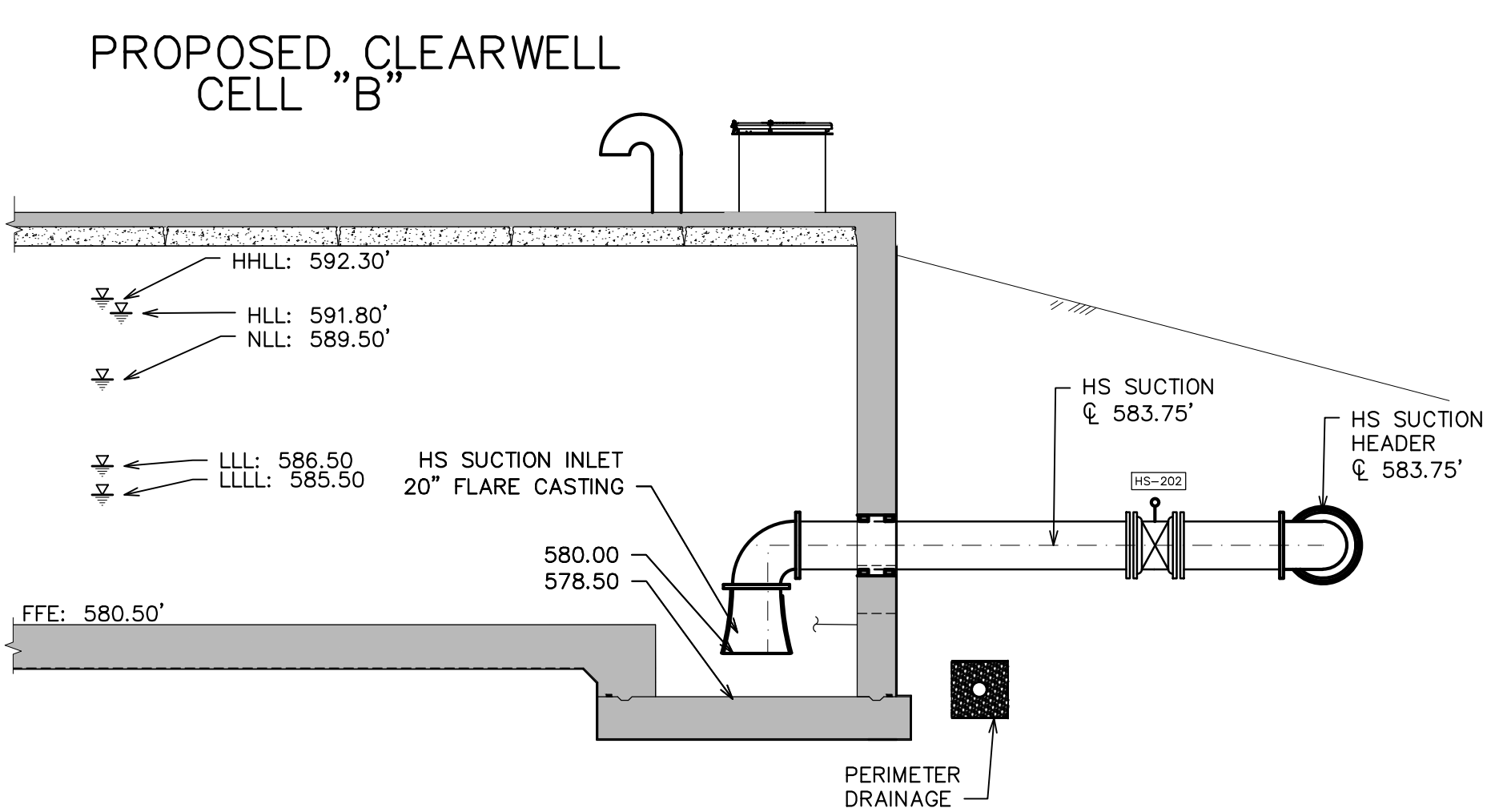
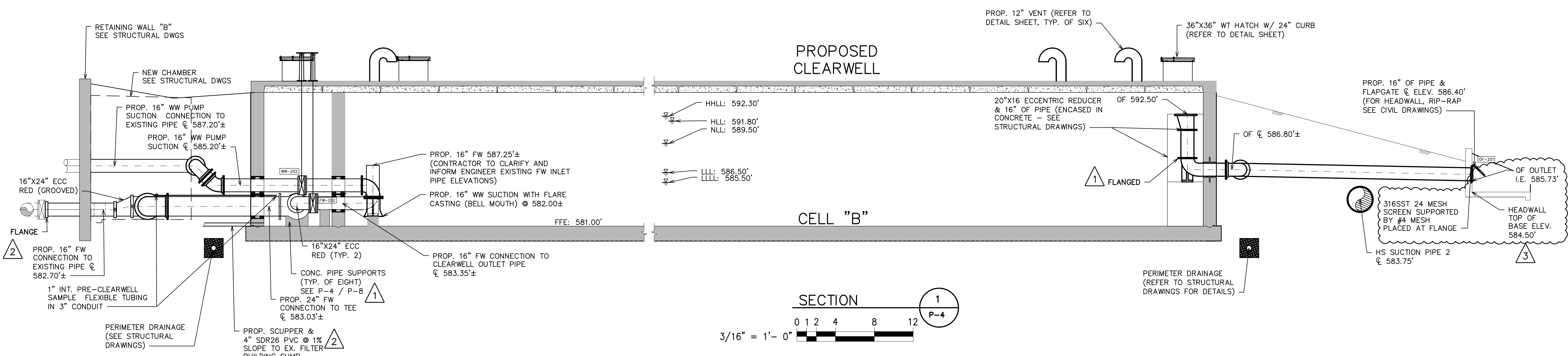
END OF ADDENDUM

ADDENDUM NO. 3 - 3/13/24  
ALPENA WPP - OVERFLOW  
LOCATION SKETCH FROM  
OWNER'S FILES



- (3) OVERFLOWS
- 2" DIAMETER OVERFLOW ABOUT 9' FROM FLOOR

FLOW DIAGRAM



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DATE	ADDITIONS AND/OR REVISIONS
03-13-24	ADDENDUM 3
03-11-24	ADDENDUM 2
03-01-24	ADDENDUM 1
02-19-24	BIDS
12-29-23	EGLE SUBMITTAL
12-14-23	OWNER REVIEW

DESIGNED	D.I.U./B.U.
DRAWN	B.U.
CHECKED	D.I.U.
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 SECTIONS**

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

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## 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 ENCASEMENT
HS	HIGH SERVICE (SUCTION)	YARD	CL 54 DI	20, 30	RJ	150	AWWA C105 POLYETHYLENE ENCASEMENT
WW	WASHWATER	YARD, CLEARWELL	CL 54 DI	16	FJ, RJ	150	AWWA C105 POLYETHYLENE ENCASEMENT
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

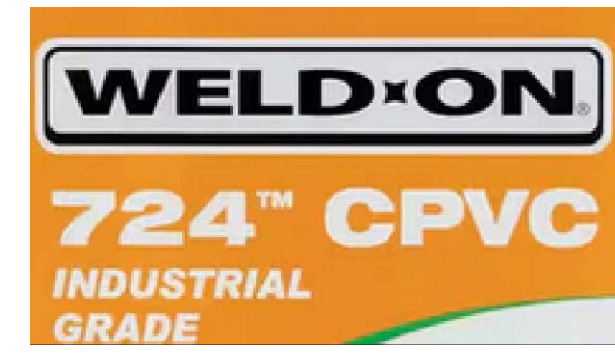
- INSTALL ALL PIPING SUPPORTS AND PIPING IN ACCORDANCE WITH THE LATEST EDITION OF THE ASME ANSI POWER PIPING CODE B 31.1.
- WELD ALL STEEL PIPE WITH FLANGES WHERE MAKING CONNECTIONS TO EXISTING STEEL PIPE OR VALVES.
- LOCATE PRESSURE TAPS ON THE TOP OF PROCESS PIPES.
- LOCATE SAMPLE TAPS ON THE SIDE 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.

### PROCESS PIPING

HDPE	HIGH DENSITY POLYETHYLENE PIPE
SS	STAINLESS STEEL

### PIPE JOINTS

AFC	ADAPTER FLANGE COUPLING
BFC	BOLTED FLEXIBLE COUPLING
BSL	BELL AND SPIGOT STEEL
FJ	FLANGED JOINT
RJ	RESTRAINED JOINT
GC	GROOVED COUPLING
MJ	MECHANICAL JOINT
WJ	WELDED JOINT



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

## VALVE SCHEDULE

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

BS	BELL AND SPIGOT
FL	FLANGED JOINT
GC	GROOVED COUPLING
MJ	MECHANICAL JOINT
W	WAFER

### OPERATOR

BG	BEVEL GEAR
CW	CHAIN WHEEL (LENGTH)
H	HANDWHEEL
EM	ELECTRIC MOTOR
LW	LEVER/WEIGHT
P	POSITIONER
POC	PNEUMATIC CYLINDER
POD	PNEUMATIC DIAPHRAGM
WN	WRENCH NUT

### ACCESSORIES

BS	BENCH STANDS
CP	CONTROL PACKAGE
EB	EXTENSION BONNET
ES	EXTENSION STEM SHAFT (LENGTH)
FB	FLOOR BOX (LENGTH)
FS	FLOOR STAND (LENGTH)
LS	LIMIT SWITCH
MS	MANUAL SCREW
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

### REMARKS

CL	CLASS
FC	FAIL CLOSE
FO	FAIL OPEN
GB	GROUND BURIED
NRS	NON RISING STEM
OS	OPEN SHUT
RF	RUBBER FLAPPER
TH	THROTTLING

### VALVE TYPE

BV	BUTTERFLY
PV	PLUG
CV	CHECK VALVE
GV	GATE VALVE
RGV	RESILIENT WEDGE GATE VALVE

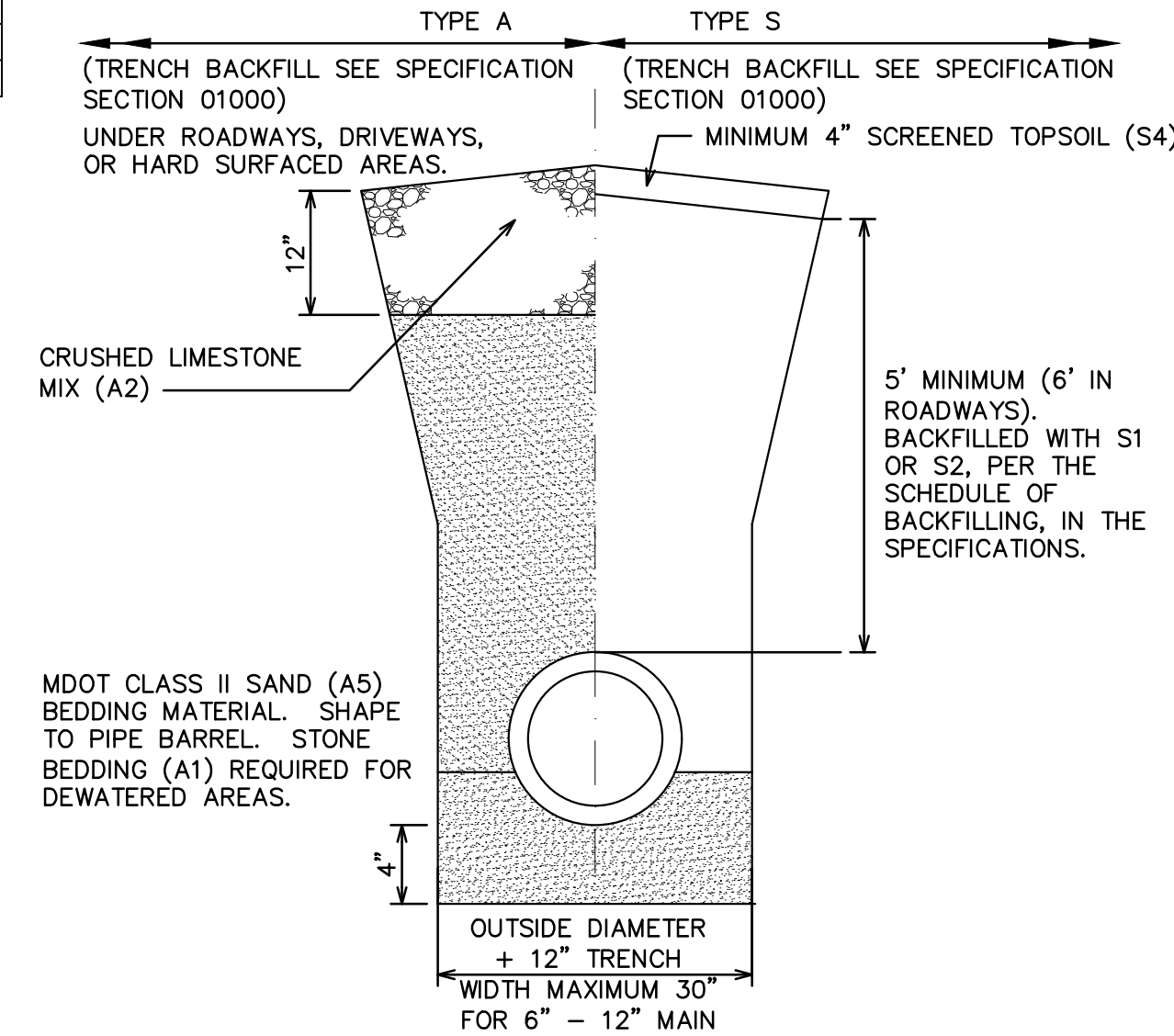
## GATE SCHEDULE

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	

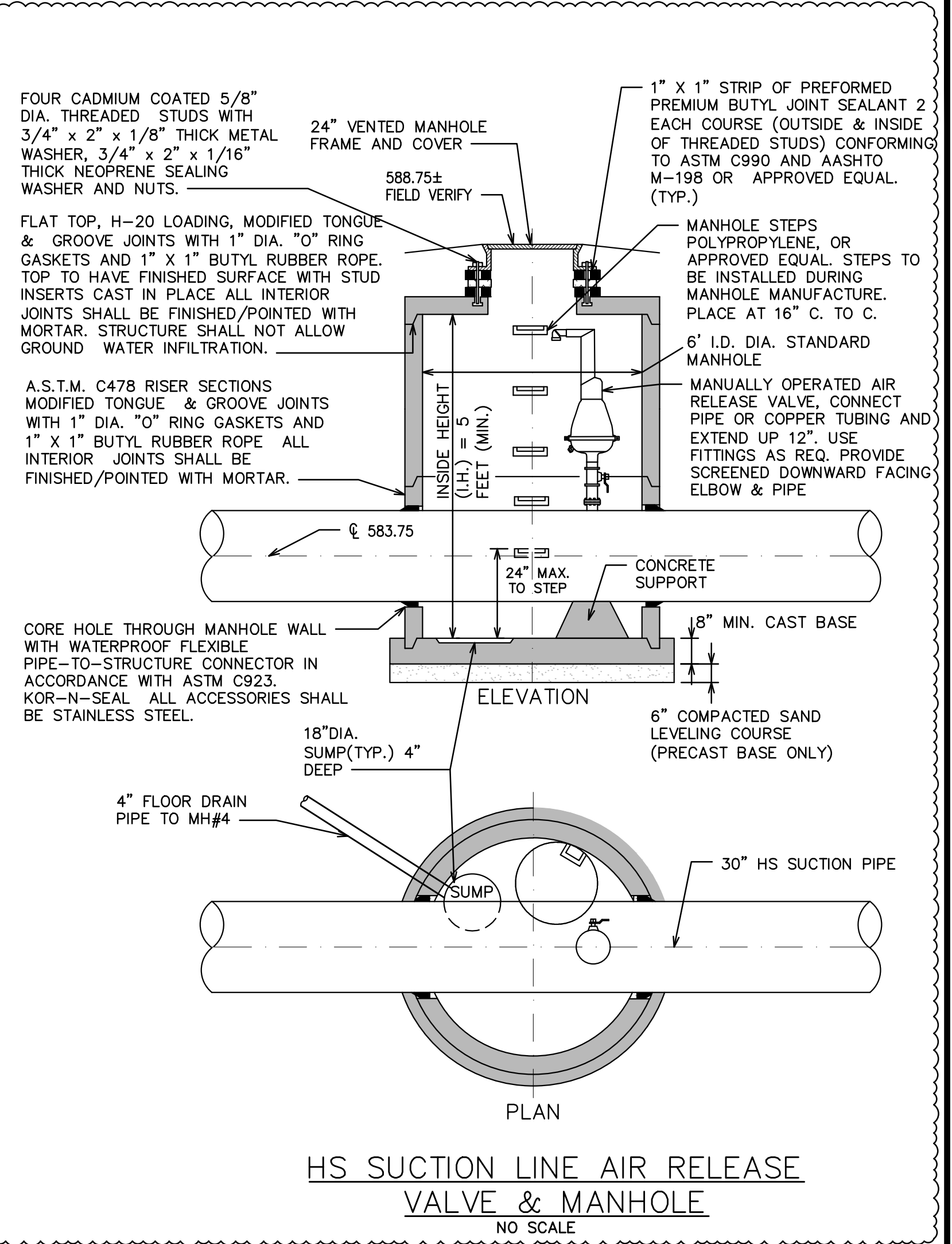
## GATE SCHEDULE KEY

- 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

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- ### NOTES:
- PLACE 12" OF CRUSHED LESTONE 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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 ALPENA COUNTY MICHIGAN

## PROCESS MECHANICAL SCHEDULES AND DETAILS

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