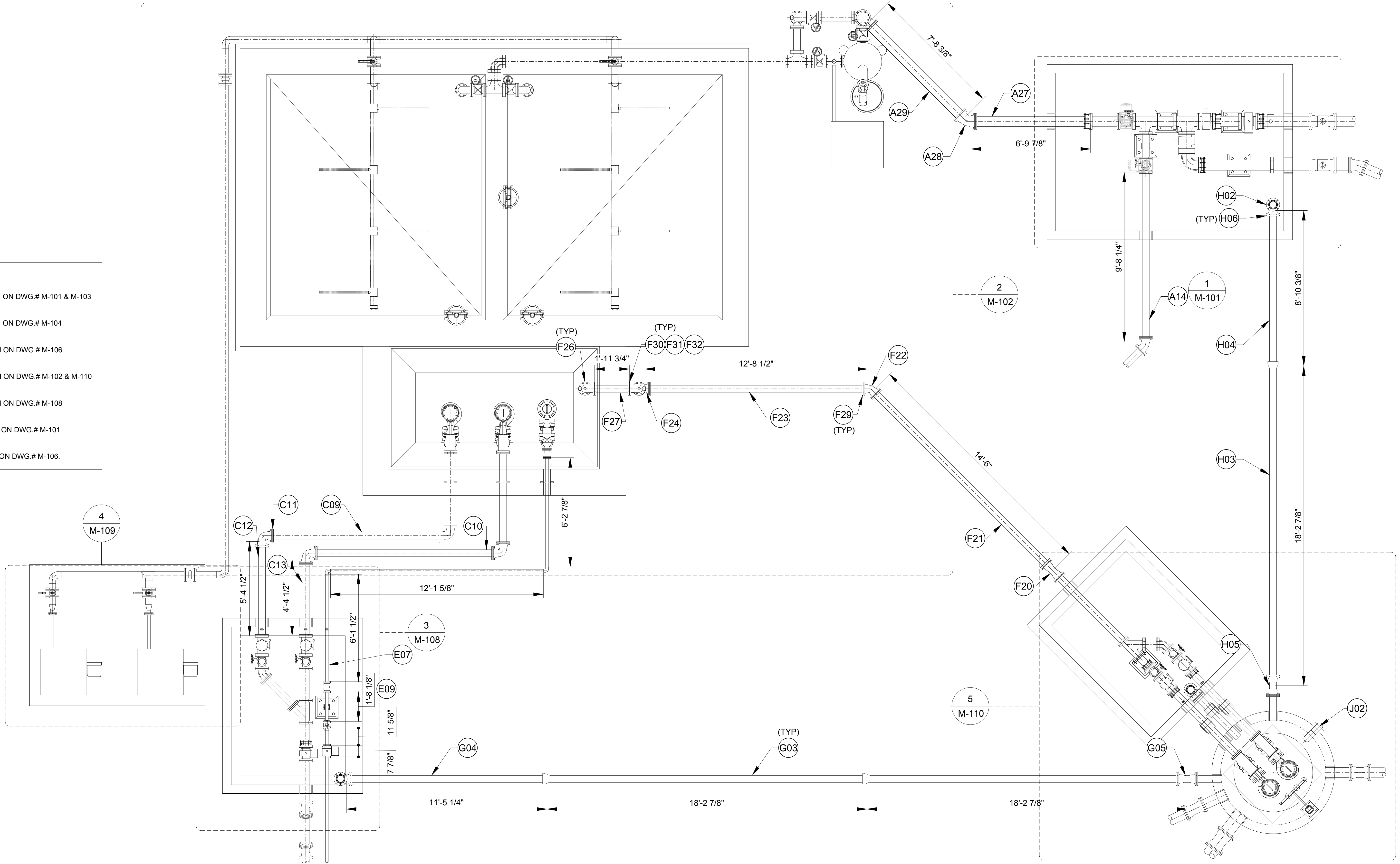


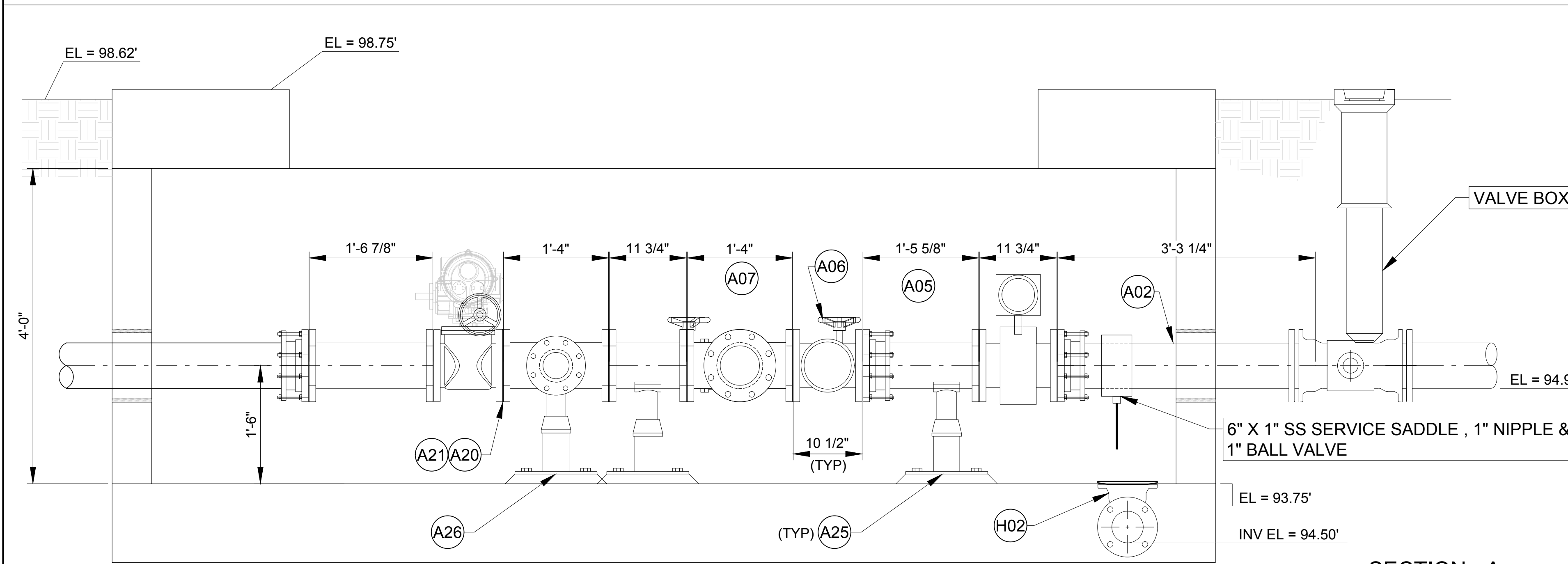
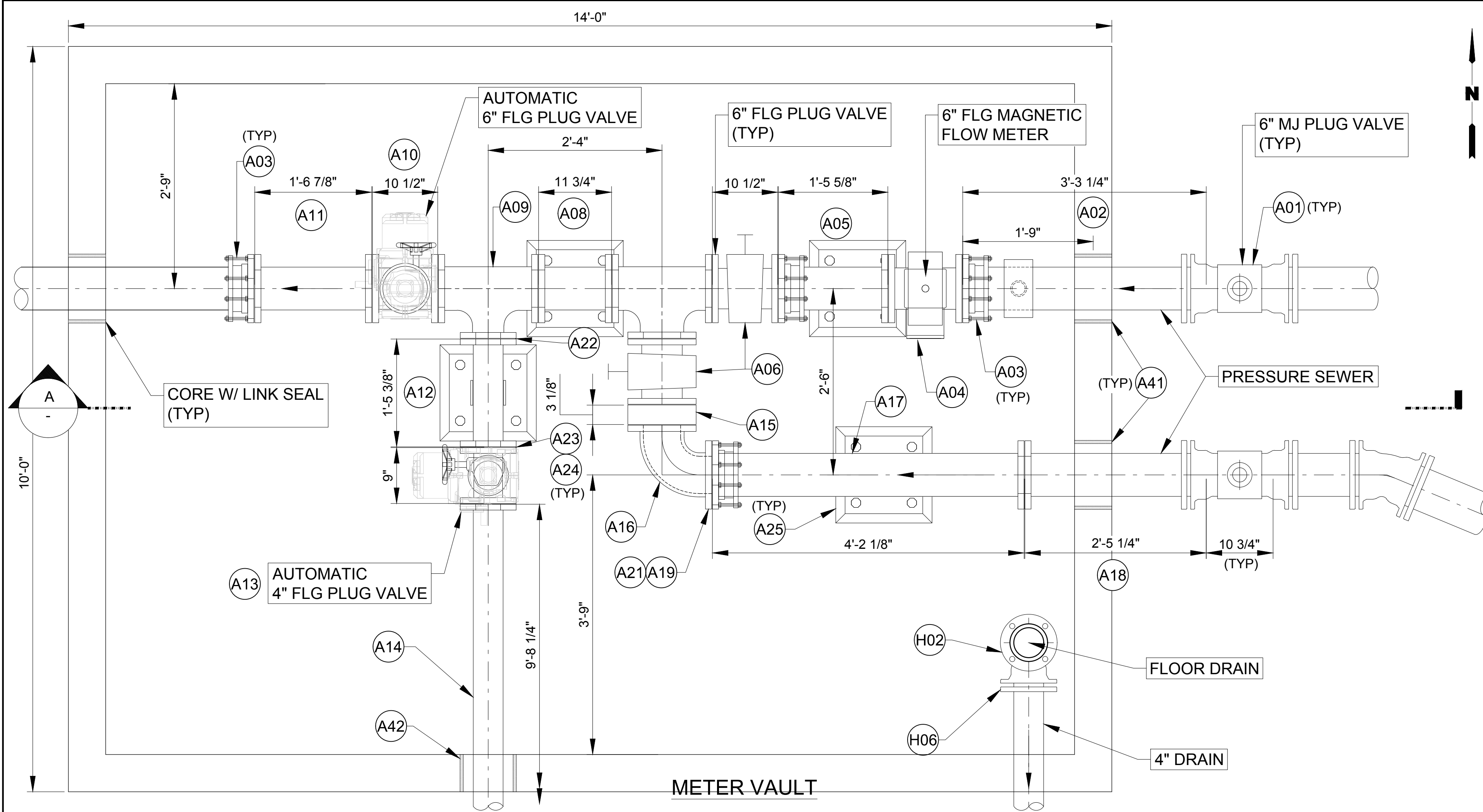


**SPECIAL NOTES:**

- 1. (AXX) - REFER BOM ON DWG.# M-101 & M-103
- 2. (CXX) - REFER BOM ON DWG.# M-104
- 3. (EXX) - REFER BOM ON DWG.# M-106
- 4. (FXX) - REFER BOM ON DWG.# M-102 & M-110
- 5. (GXX) - REFER BOM ON DWG.# M-108
- 6. (HXX) - REFER BOM ON DWG.# M-101
- 7. (JXX) - REFER BOM ON DWG.# M-106.



OWNER:-	ENGINEER:-	<p><b>DISCLAIMER</b>          RJ Barnes and Associates has prepared these layout drawings and material lists in accordance with our interpretation of the project drawings and specifications that were provided. Approval of these drawings and material lists constitute acceptance of our interpretation of material requirements for the subject job. Please check the drawings and material lists carefully to insure they are correct for your project.</p> <p>If corrections need to be made, please mark one set of the drawings in a contrasting color and return them to this office with your comments. No material shown in these drawings should be released for manufacture without written approval from the end customer.</p>		R. J. Barnes & Associates, 1442 S 500 E - STE 300, American Fork, UT 84003																							
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 60%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td style="text-align: center;">B</td> <td>DRAWING REVISED AS PER COMMENTS</td> <td style="text-align: center;">ST</td> <td style="text-align: center;">RJB</td> <td style="text-align: center;">08/24/2024</td> <td></td> </tr> <tr> <td style="text-align: center;">A</td> <td>DRAWING REVISED AS PER COMMENTS</td> <td style="text-align: center;">ST</td> <td style="text-align: center;">RJB</td> <td style="text-align: center;">06/24/2024</td> <td></td> </tr> <tr> <td style="text-align: center;">REV</td> <td style="text-align: center;">PARTICULARS</td> <td style="text-align: center;">BY</td> <td style="text-align: center;">APP'D</td> <td style="text-align: center;">DATE</td> <td></td> </tr> </table>							B	DRAWING REVISED AS PER COMMENTS	ST	RJB	08/24/2024		A	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024		REV	PARTICULARS	BY	APP'D	DATE		
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REV	PARTICULARS	BY	APP'D	DATE																							



SECTION - A

BILL OF MATERIALS					
4" & 6" DIP LINE INFLUENT METER VALVE VAULT (DWG # M-100 & M-101)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
A01	2	6"	MJ PLUG VALVE W/BURIED GEAR OP WITH 2" OP NUT	LL = 10.75"	BID LINE # 425
A02	1	6"	PE X PE PIPE CL 52 W/ 1" SS SERVICE SADDLE, 1" NIPPLE, & 1" BALL VALVE / CL / AC	3'- 3 1/4"	
A03	4	6"	FCA501 FLANGE COUPLING ADAPTER FOR DIP SHOP COAT STD B&N SBR GASKET 6.91 ROMAC		BID LINE # 135 & 123
A04	1	6"	FLG MAG METER (BY-OTHERS)	LL = 11.81"	BID LINE # 136
A05	1	6"	FLG X PE PIPE - TN140 PRIMER	1'-5 5/8"	BID LINE # 134
A06	2	6"	FLG PLUG VALVE W/GO AND HANDWHEEL	LL = 10.50"	BID LINE # 133
A07	1	6" X 6"	FLG TEE - C110 / CL / TN140 PRIMER	CC = 0'-8" X 0'-8"	BID LINE # 132
A08	1	6"	FLG X FLG PIPE - TN140 PRIMER	0'- 11 3/4"	BID LINE # 131
A09	1	6" X 4"	FLG TEE - C110 / CL / TN140 PRIMER	CC = 0'-8" X 0'-8"	BID LINE # 126
A10	1	6"	FLG PLUG VALVE W/ ELECTRIC ACTUATOR	LL = 10.50"	BID LINE # 125
A11	1	6"	FLG X FLG PIPE - TN140 PRIMER	1'- 6 7/8"	BID LINE # 124
A12	1	4"	FLG X FLG PIPE - TN140 PRIMER	1'- 5 3/8"	BID LINE # 127
A13	1	4"	FLG PLUG VALVE W/ ELECTRIC ACTUATOR	LL = 9.00"	BID LINE # 128
A14	1	4"	FLG X PE PIPE TN140 PRIMER	9'- 8 1/4"	BID LINE # 130
A15	1	6"	FLANGE FILLER - 125 # / TN140 PRIMER	0'- 3 1/8"	
A16	1	6"	FLG 90 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-8" X 0'-8"	BID LINE # 138
A17	1	6"	FLG X PE PIPE - TN140 PRIMER	4'- 2 1/8"	
A18	1	6"	FLG X PE PIPE TN140 PRIMER	2'- 5 1/4"	BID LINE # 140
A19	5	6"	SET 6" A325 BOLT AND NUT		BID LINE # 141
A20	5	6"	SET 6" A325 BOLT AND NUT (FOR FLG PLUG VALVE)		BID LINE # 142
A21	14	6"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 143
A22	1	4"	SET 4" A325 BOLT AND NUT		BID LINE # 144
A23	2	4"	SET 4" A325 BOLT AND NUT (FOR FLG PLUG VALVE)		BID LINE # 145
A24	3	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 146
A25	3	6"	ADJUSTABLE FLANGE SUPPORT ZINC PLATED #S89 STANDON		BID LINE # 147
A26	1	4"	ADJUSTABLE FLANGE SUPPORT ZINC PLATED #S89 STANDON		BID LINE # 148
A41	3	6"	6" DI THROUGH 10" CORE (LS-410-S 10 LINKS PER SET) - BY OTHERS		
A42	1	4"	4" DI THROUGH 8" CORE (LS-410-S 7 LINKS PER SET) - BY OTHERS		
4" DIP LINE INFLUENT METER VALVE VAULT CONNECT TO DRAIN PUMP STATION INLET (DWG # M-100, M-101 & M-110)					
H02	1	4"	MJ 90 DEGREE BEND - C153 / CL / AC	CC = 0'-4" X 0'-4"	BID LINE # 319
H03	1	4"	PE X TYTON CL52 CL / AC	18' - 2 7/8"	BID LINE # 318
H04	1	4"	PE X PE PIPE CL 52 / CL / AC	8'-10 3/8"	
H05	1	4"	MJ LONG SOLID SLEEVE - C153 / CL / AC		BID LINE # 320
H06	4	4"	COMPACT BODY MJ ACCESSORIES KIT COMPLETE WITH GLAND, GASKET AND (4) 3/4" X 3-1/2" T-BOLTS		BID LINE # 321

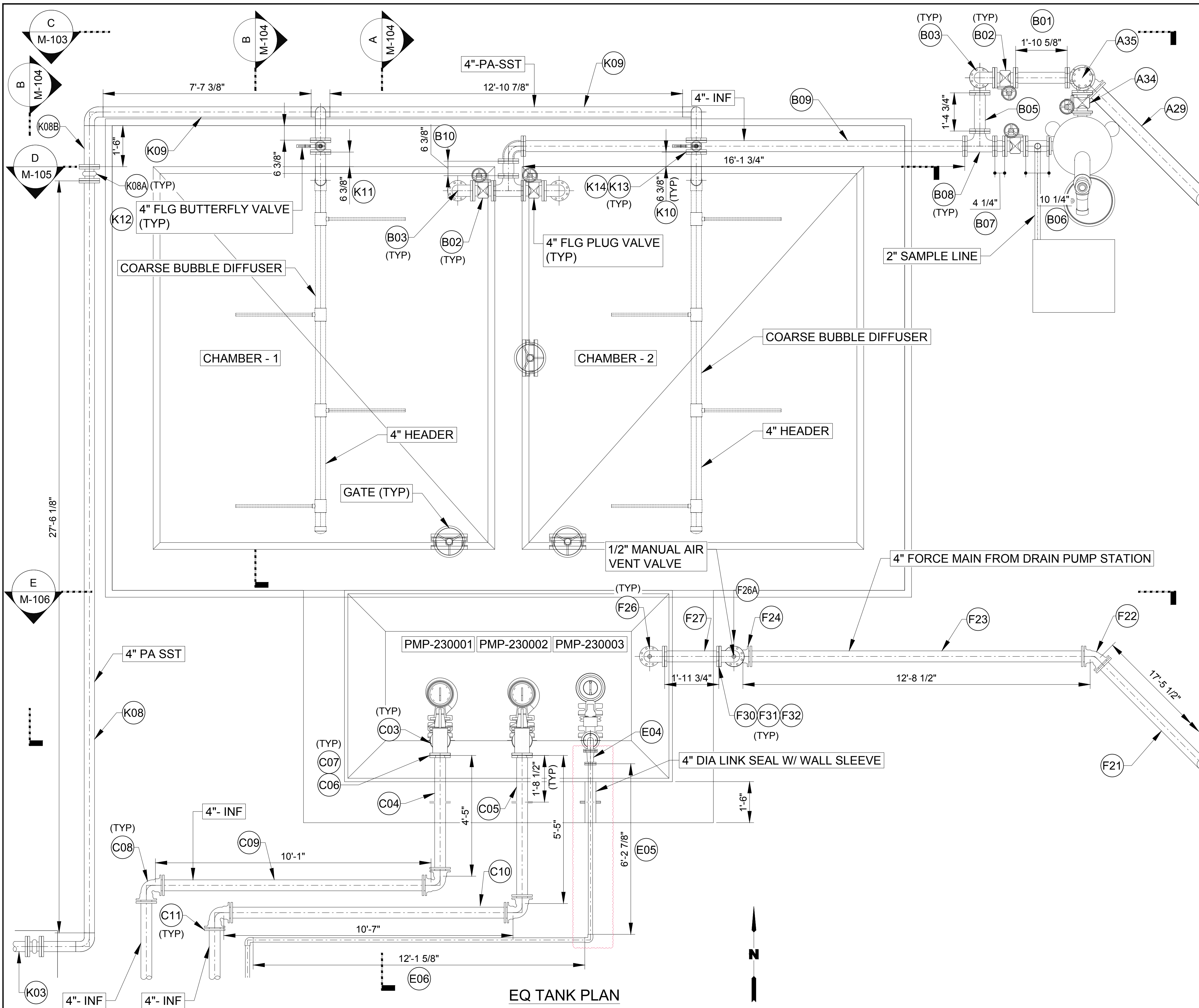
OWNER:-

ENGINEER:-

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△	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024

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BILL OF MATERIALS					
4" DIP LINE FROM DRAIN PUMP STATION TO EQ TANK INLET (DWG #: M-100, M-102, M-104, M-106 & M-110)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
F20	1	4"	MJ LONG SOLID SLEEVE - C153 / CL / AC		BID LINE # 375
F21	1	4"	PE X PE PIPE CL 52 / CL / AC	14'-6"	
F22	1	4"	MJ 45 DEGREE BEND - C153 / CL / SC	CC = 0'-2" X 0'-2"	BID LINE # 374
F23	1	4"	PE X PE PIPE CL 52 / CL / AC	12'-8 1/2"	
F24	1	4"	MJ 90 DEGREE BEND - C153 / CL / SC	CC = 0'-4" X 0'-4"	BID LINE # 373
F25	1	4"	PE X FLG PIPE - BCL / BIT COAT	8'-3 3/4"	BID LINE # 372
F26	1	4"	FLG 90 DEGREE BEND W/ 1/2" TAP FOR MANUAL AIR VENT VALVE - C110 / CL / TN140 PRIMER	CC = 0'-6 1/2" X 0'-6 1/2"	
F26A	1	4"	FLG 90 DEGREE BEND W/ 1" TAP W/ 1" NIPPLE AND BALL VALVE (POSITION - "Y") - C110 / CL / TN140 PRIMER	CC = 0'-6 1/2" X 0'-6 1/2"	
F27	1	4"	FLG X FLG PIPE - TN140 PRIMER	1'-11 3/4"	BID LINE # 32
F28	1	4"	FLG X PE PIPE - TN140 PRIMER	10'-11 3/8"	BID LINE # 33
F29	6	4"	WEDGE ACTION MJ KIT FOR DI PIPE W/BOLTS, WEDGE ACTION GLAND & GASKET		BID LINE # 376
F30	4	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 36
F31	2	4"	SET 4" 316SS F593 BOLT, F594 NUT MARKING F593F & 594F.		BID LINE # 34
F32	2	4"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		BID LINE # 35
F33	7	4"	4" DI THROUGH 8" CORE (WWLS-410 S 7 LINKS PER SET) - BY OTHERS		

**STD ABBREVIATIONS & NOTES LEGEND**

01. COATING AND LINING.
- | LINING      | COATING  |
|-------------|--|
| CEMENT (CL) | ASPHALTIC COATING (AC)<br>SEAL COAT (SC)<br>TNEMEC 140 (TN140) |
02. FLG = FLANGE JOINT  
 03. PE = PLAIN END  
 04. MJ = MECHANICAL JOINT  
 05. CL52 = THICKNESS CLASS 52  
 06. LL = LAYING LENGTH  
 07. CC = CENTER TO CENTER  
 08. OAL = OVERALL LENGTH  
 09. SOC = SOCKET END

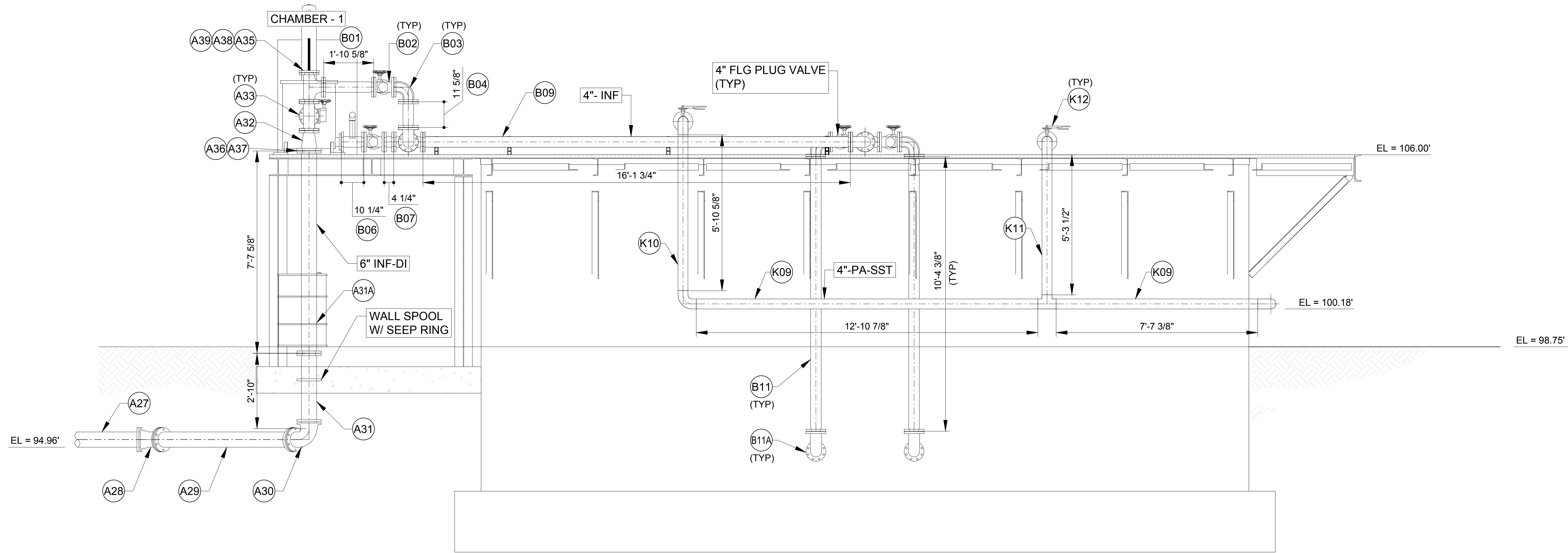
- SPECIAL NOTES:**
- (AXX) - REFER BOM ON DWG.# M-101 & 103
  - (BXX) - REFER BOM ON DWG.# M-107
  - (CXX) - REFER BOM ON DWG.# M-104
  - (FXX) - REFER BOM ON DWG.# M-102 & M-110
  - (KXX) - REFER BOM ON DWG.# M-109

OWNER:- ENGINEER:-

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SECTION - C

BILL OF MATERIALS

4" & 6" DIP LINE FROM INFLUENT METER & VALVE VAULT TO SCREEN BUILDING INLET  
(DWG #: M-100, M-102 & M-103)

TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
A27	1	6"	PE X PE PIPE CL 52 / CL / AC	6'- 9 7/8"	
A28	1	6"	MJ 45 DEGREE BEND - C153 / CL / SC	CC = 0'-3" X 0'-3"	BID LINE # 422
A29	1	6"	PE X PE PIPE CL 52 / CL / AC	7'- 8 3/8"	
A30	1	6"	MJ 90 DEGREE BEND - C153 / CL / SC	CC = 0'-5" X 0'-5"	BID LINE # 421
A31	1	6"	PE X FLG WALL SPOOL W/ 1'-0" FROM FLG SEEP RING BC	2'- 10"	
A31A	1	6"	FLG X FLG PIPE - TN140 PRIMER	7'- 7 5/8"	
A32	1	6" X 4"	FLG CONCENTRIC REDUCER - C110 / CL / TNEMEC SERIES TN140 PRIME	LL = 9.00"	BID LINE # 6
A33	2	4" X 4"	FLG TEE - C110 / CL / TN140 PRIMER	CC = 0'-6.50" X 0'-6.50"	BID LINE # 7

A34	1	4"	FLG PLUG VALVE W/ HANDWHEEL (NICKLE SEATS INLIEU OF SST, STEM IS DI INLIEU OF SS)	LL = 9.00"	BID LINE # 8
A35	1	4"	BLIND FLANGE W/ 2" FLUSH CONNECTION C-110 / CL / TN140 PRIMER		
A36	2	6"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 18
A37	2	6"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 3/4" X 3-1/4" BOLT WITH NUT)		BID LINE # 17
A38	5	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 21
A39	3	4"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		BID LINE # 19
A40	2	4"	SET 4" ZP BOLT AND NUT FOR FLG PLUG VALVE		BID LINE # 20

SPECIAL NOTES:

1. (AXX) - REFER BOM ON DWG.# M-101
2. (BXX) - REFER BOM ON DWG.# M-107
3. (KXX) - REFER BOM ON DWG.# M-109

OWNER:-

ENGINEER:-

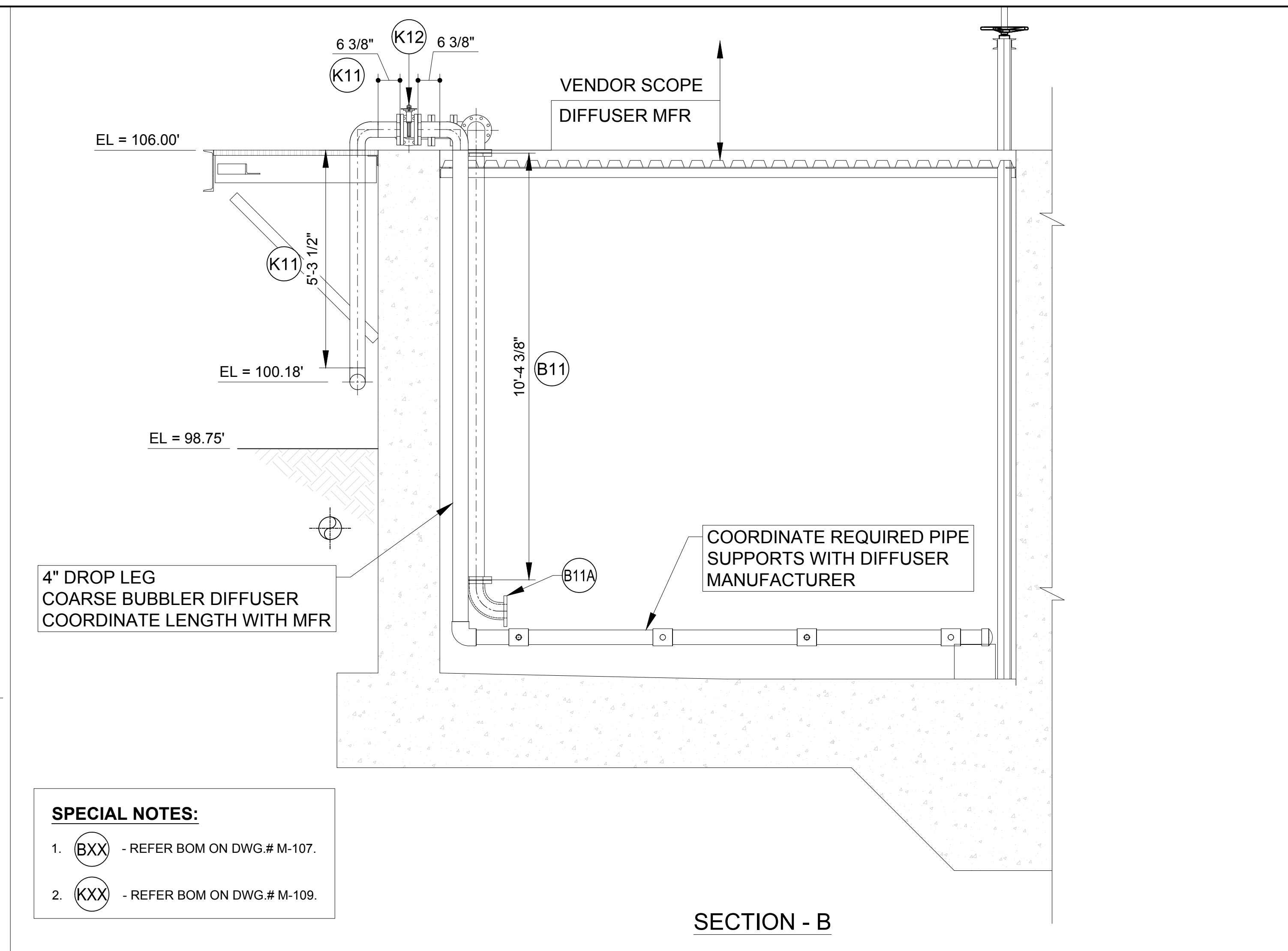
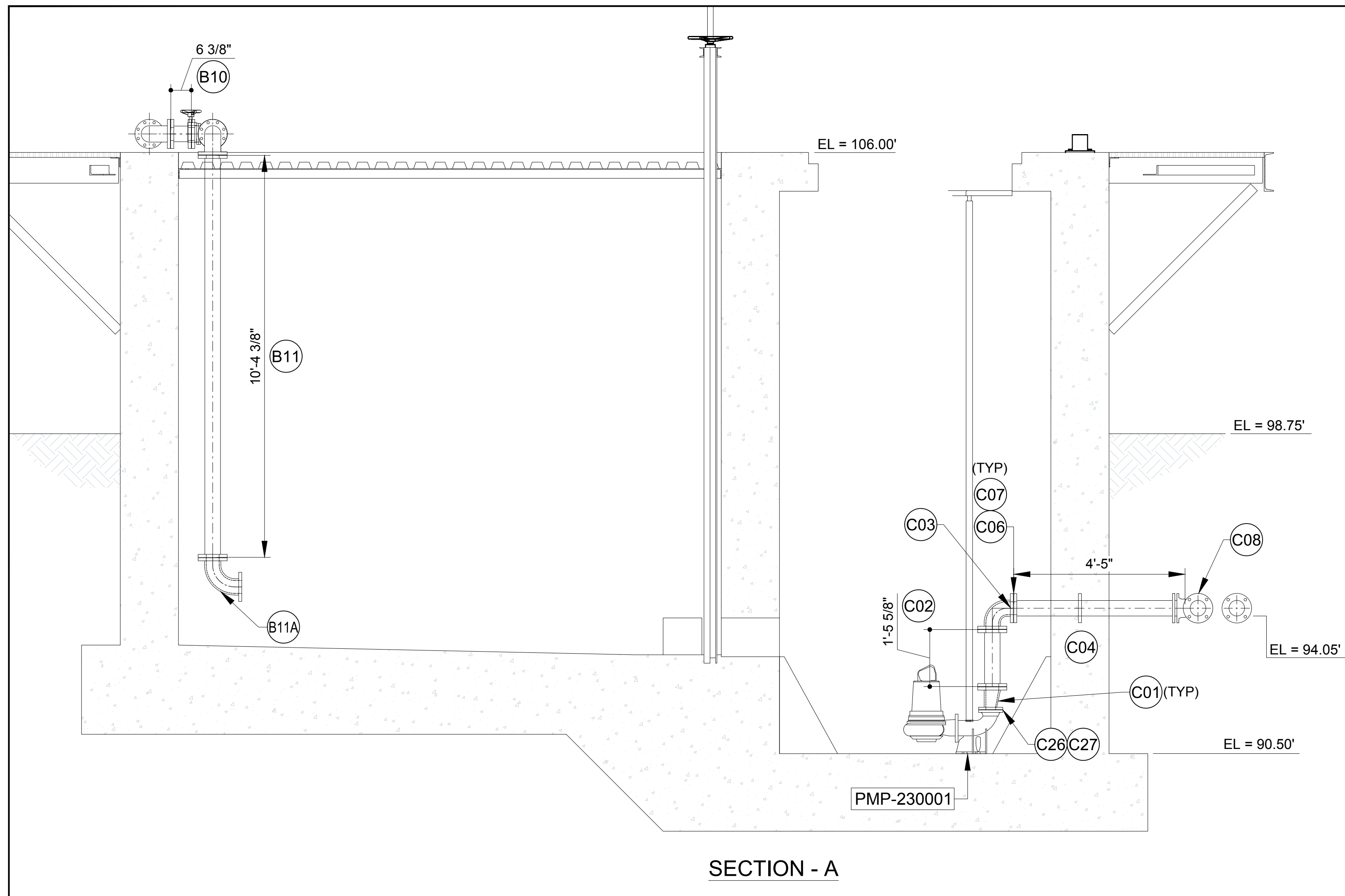
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	△	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024
		PARTICULARS	BY	APP'D	DATE



**SPECIAL NOTES:**  
 1. (BXX) - REFER BOM ON DWG.# M-107.  
 2. (KXX) - REFER BOM ON DWG.# M-109.

BILL OF MATERIALS					
4" DIP LINE FROM EQ. TANK PUMPS DISCHARGE CONNECT TO MBR BUILDING INLET (DWG #: M-100, M-102 & M-104)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
C01	2	4" X 3"	FLG ECCENTRIC REDUCER - C110 / CL / TN140 PRIMER	LL = 7.00"	
C02	2	4"	FLG X FLG PIPE - TN140 PRIMER	1'- 5 5/8"	BID LINE # 42
C03	2	4"	FLG 90 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-6 1/2" X 0'-6 1/2"	BID LINE # 41
C04	1	4"	FLG X PE PIPE W/ 3" SEEP RING, 20.50" FROM FACE OF FLG TN140 PRIMER	4'- 5"	BID LINE # 43
C05	1	4"	FLG X PE PIPE W/ 3" SEEP RING, 20.50" FROM FACE OF FLG TN140 PRIMER	5'- 5"	BID LINE # 43
C06	6	4"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		
C07	6	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 45
C08	4	4"	MJ 90 DEGREE BEND - C153 / CL / SC	CC = 0'-4" X 0'-4"	BID LINE # 380
C09	1	4"	PE X PE PIPE CL 52 / CL / AC	10'-1"	BID LINE # 378

C10	1	4"	PE X PE PIPE CL 52 / CL / AC	10'-7"	BID LINE # 378
C11	8	4"	WEDGE ACTION MJ KIT FOR DI PIPE W/BOLTS, WEDGE ACTION GLAND & GASKET		BID LINE # 382
C12	1	4"	PE X FLG PIPE W/ 1/4" NPT TAP FOR PRESSURE GAUGE, TN140 PRIMER	5'- 4 1/2"	BID LINE # 57 & 58
C13	1	4"	PE X FLG PIPE W/ 1/4" NPT TAP FOR PRESSURE GAUGE, TN140 PRIMER	4'- 4 1/2"	BID LINE # 57 & 58
C14	2	4"	FLG CHECK VALVE W/ LEVER AND WEIGHT	LL = 13.00"	BID LINE # 56
C15	2	4"	FLG PLUG VALVE W/GO AND HANDWHEEL	LL = 9.00"	
C16	1	4"	FLG 45 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-4" X 0'-4"	BID LINE # 55
C17	1	4"	FLG X FLG PIPE - TN140 PRIMER	2'- 2 1/8"	BID LINE # 54
C18	1	4"	FLG X FLG PIPE - TN140 PRIMER	1'- 10"	BID LINE # 53
C19	1	4"	FLG WYE - C110 / CL / TN140 PRIMER	CC = 1'-0" X 0'-3"	BID LINE # 52
C20	1	4"	FLG X PE PIPE - TN140 PRIMER	1'- 3 7/8"	
C20A	1	4"	FCA501 FLANGE COUPLING ADAPTER SHOPCOAT STD B&N SBR GASKET 4.81 ROMAC		

C21	1	4"	FLG MAG METER (BY-OTHERS)	LL = 9.84"	BID LINE # 50
C22	1	4"	FLG X PE PIPE - TN140 PRIMER	2'- 7 1/2"	BID LINE # 49
C23	6	4"	SET 4" ZP BOLT AND NUT (FOR FLG PLUG AND CHECK VALVE)		BID LINE # 60
C24	6	4"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		BID LINE # 59
C25	12	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		
C26	2	3"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		
C27	2	3"	1/16" FULL FACE RED RUBBER GASKET, 150#		
C28	3	4"	4" DI THROUGH 8" CORE (WWLS-410-S 7 LINKS PER SET) - BY OTHERS		

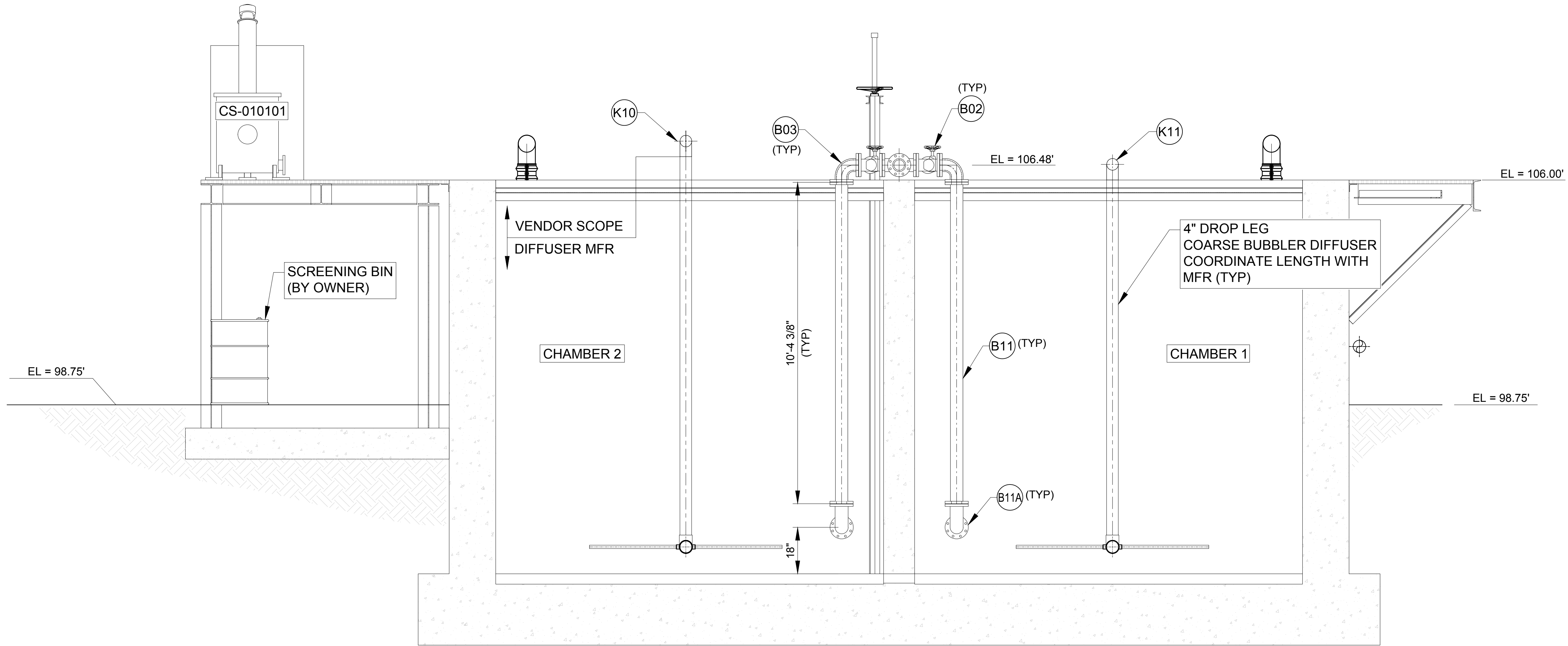
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ENGINEER:-

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**SECTION - D**

**SPECIAL NOTES:**

1. **(BXX)** - REFER BOM ON DWG.# M-107.
2. **(KXX)** - REFER BOM ON DWG.# M-109.

OWNER:-

ENGINEER:-

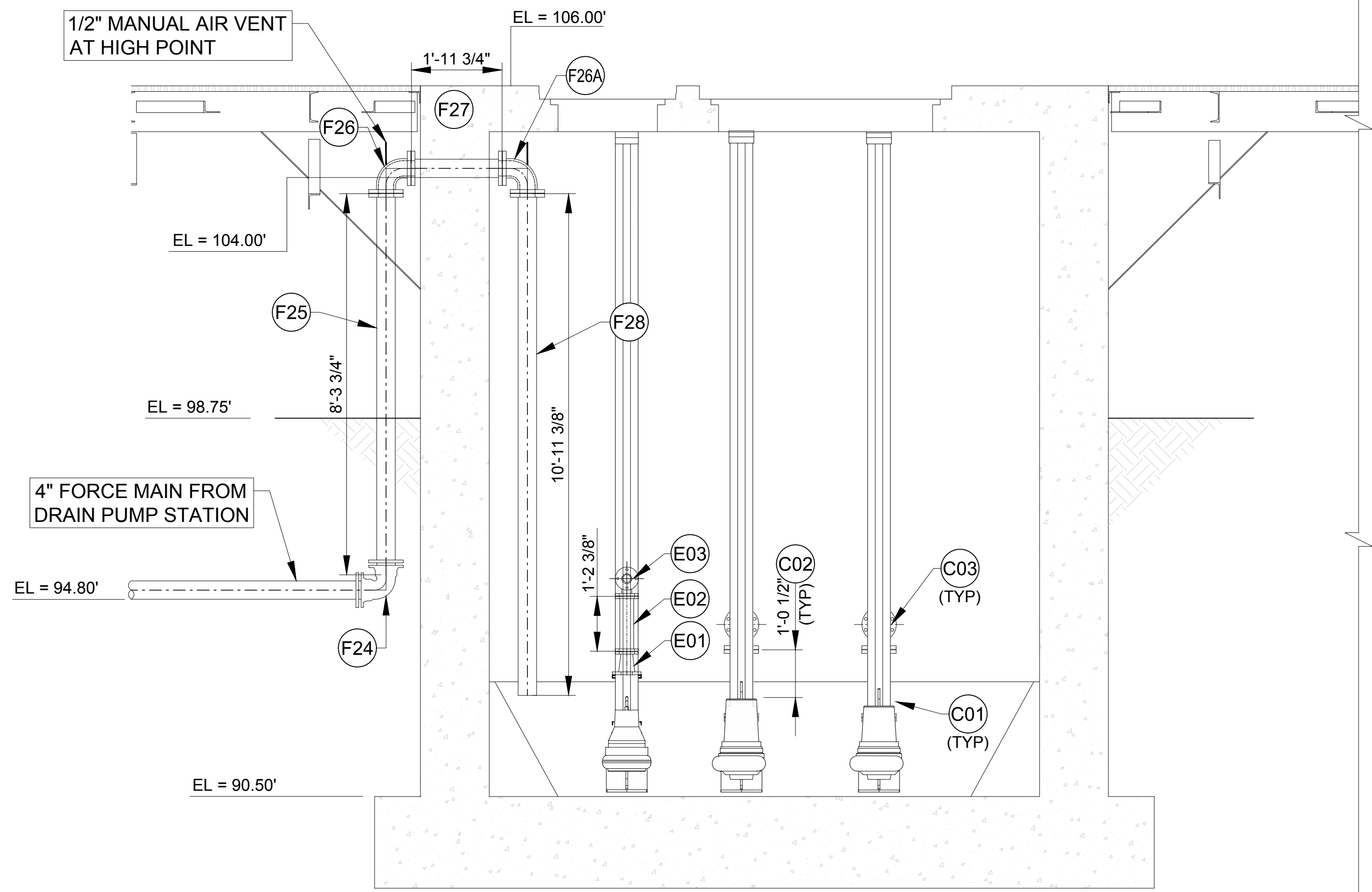
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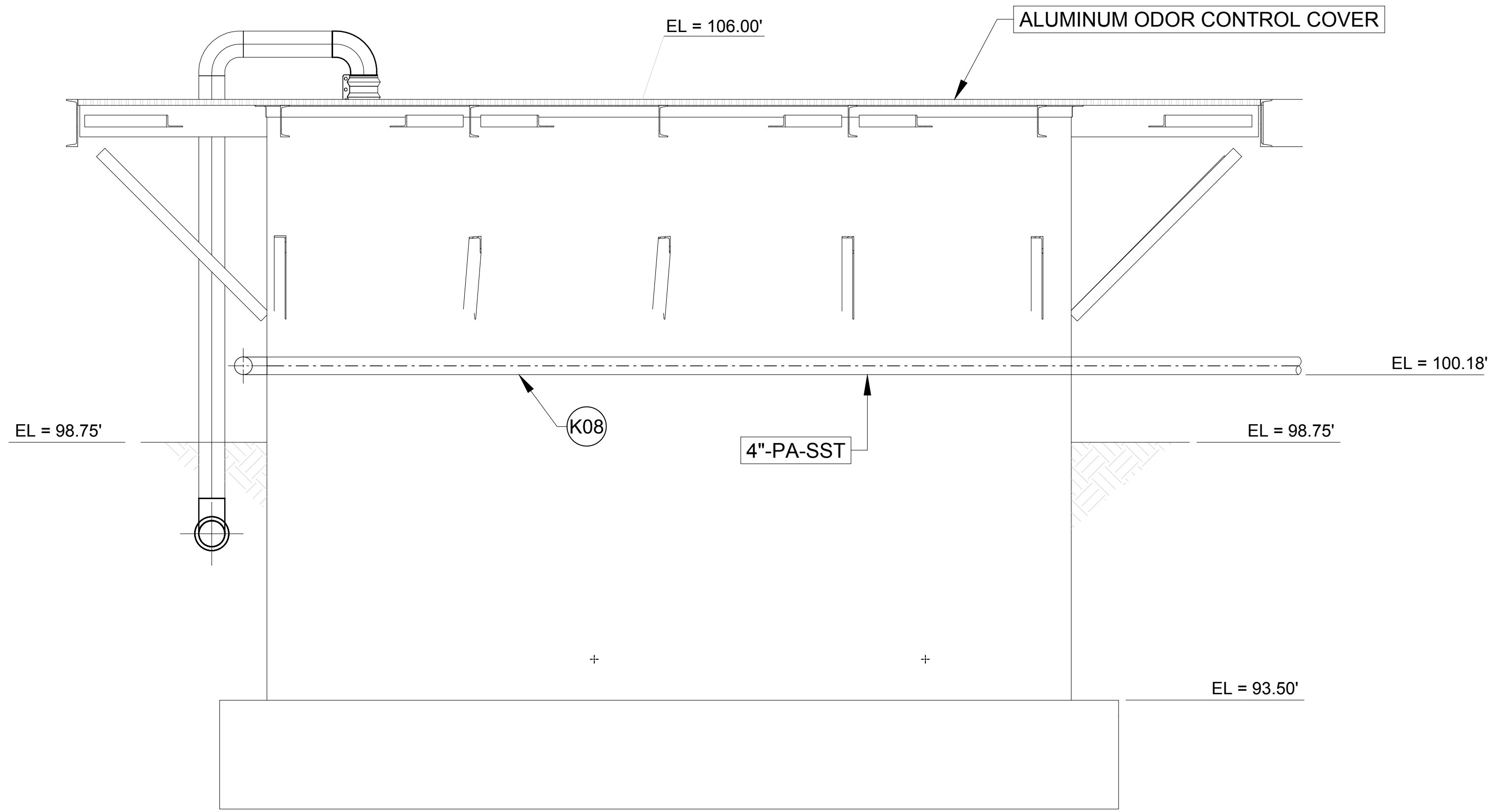
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Δ	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024

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SECTION - E



SECTION - F

BILL OF MATERIALS

4" VENT LINE FROM DRAIN PUMP STATION  
(DWG #: M-100 & M-110)

TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
J01	1	4"	PE X FLG PIPE - TN140 PRIMER	1'- 4 1/2"	
J02	1	4"	PE X PE 304L SCH10S A778 PIPE, 2- 4" 90 DEGREE BEND, 1 -150# FF SO FLG	1'-6"	
J03	1	4"	1/8" FULL FACE GASKET, NEOPRENE, 150#		
J04	1	4"	SET 4" 304SS BOLT AND NUT		
1- 1/2", 2" & 6" INF LINE FROM EQ. TANK OUTLET CONNECT TO MBR TREATMENT PLANT INLET (DWG #: M-100, M-102, M-106 & M-108)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
E01	1	3" X 2"	FLG CONCENTRIC REDUCER - C110 / CL / TNAMEC SERIES TN140 PRIME	LL = 6.00"	
E02	1	2"	FLG X FLG PIPE - TN140 PRIMER	1'- 2 3/8"	
E03	1	2"	FLG 90 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'- 4 1/2" X 0'- 4 1/2"	

E04	1	2" X 1-1/2"	FLG CONCENTRIC REDUCER - C110 / CL / TNAMEC SERIES TN140 PRIME	LL = 5.50"	
E05	1	<del>1-1/2"</del>	<del>SCH 80 IPS PVC PIPE W/SEEP RING, 90 DEGREE SOC</del>	<del>6'- 2 7/8"</del>	
		4"	4" DIA WALL SLEEVE W/ LINK SEAL & SEEP RING CENTERED	1'-6"	
E06	1	1-1/2"	SCH 80 IPS PVC PIPE, 90 DEGREE SOC	12'- 1 5/8"	
E07	1	1-1/2"	SCH 80 IPS PVC SOC X FLG PIPE W/ PRESSURE GAUGE	6'- 1 1/2"	
E08	1	1-1/2"	SPEARS GRAY PVC TRUE UNION BALL CHECK VALVE 2000 INDUSTRIAL SOCKET OR FIPT EPDM 235PSI #4529-015	LL = 6.75"	BID LINE # 64
E09	1	1-1/2"	SCH 80 IPS FLG X PVC SOC PIPE	1'- 8 1/8"	
E10	1	1-1/2"	PVC GREY UTILITY BALL VALVE SOC X SOC EPDM 150PSI BLUE HANLDE #2622-015G SPEARS	LL = 4.75"	BID LINE # 66
E11	1	1-1/2"	SCH 80 IPS PVC SOC X FLG PIPE	0'- 11 5/8"	
E12	1	1-1/2"	MAG METER	LL = 7.87"	BID LINE # 62

SPECIAL NOTES:

1. (CXX) - REFER BOM ON DWG.# M-104
2. (FXX) - REFER BOM ON DWG.# M-102 & 110
3. (KXX) - REFER BOM ON DWG.# M-109

OWNER:- ENGINEER:-

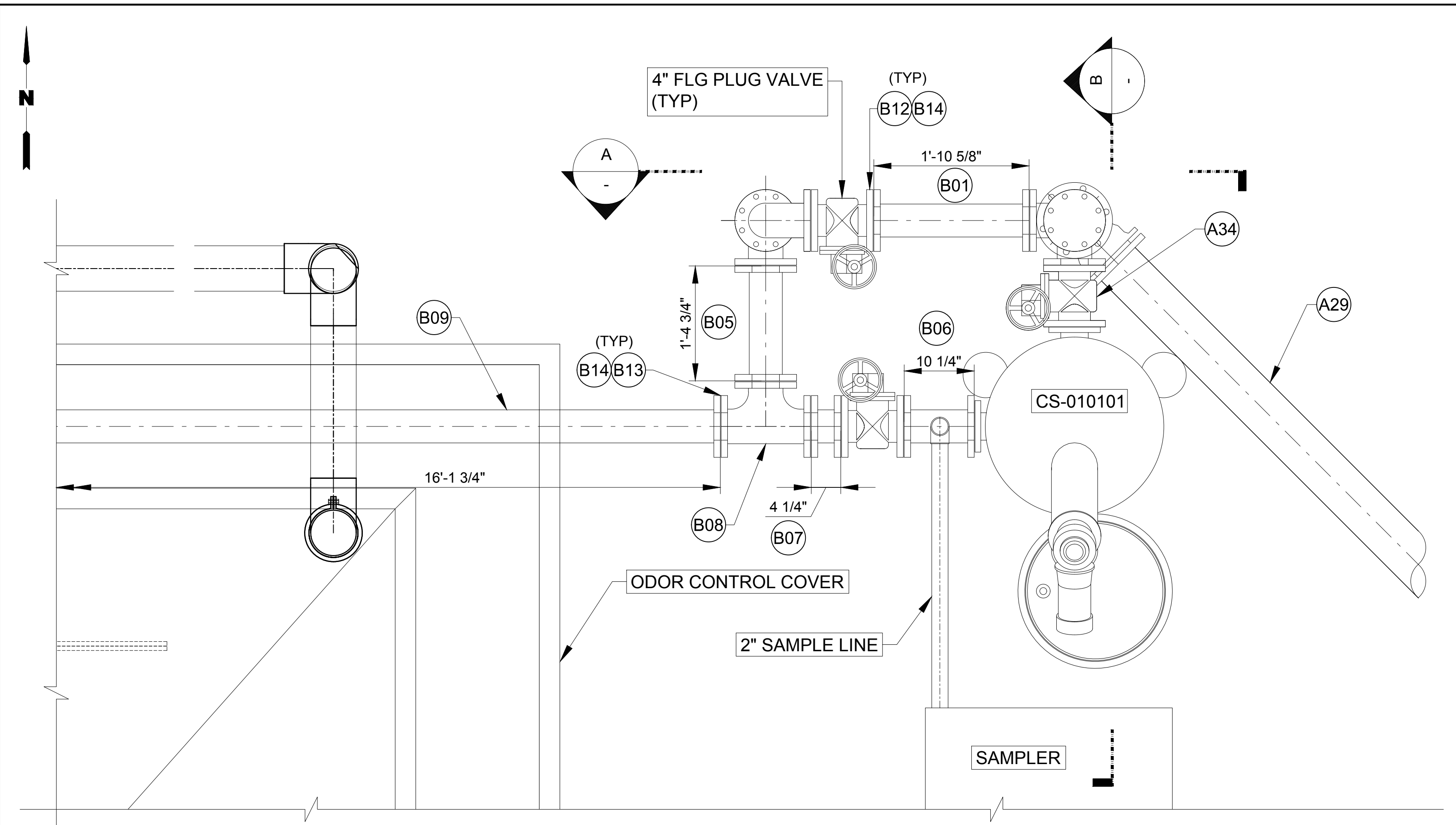
DISCLAIMER

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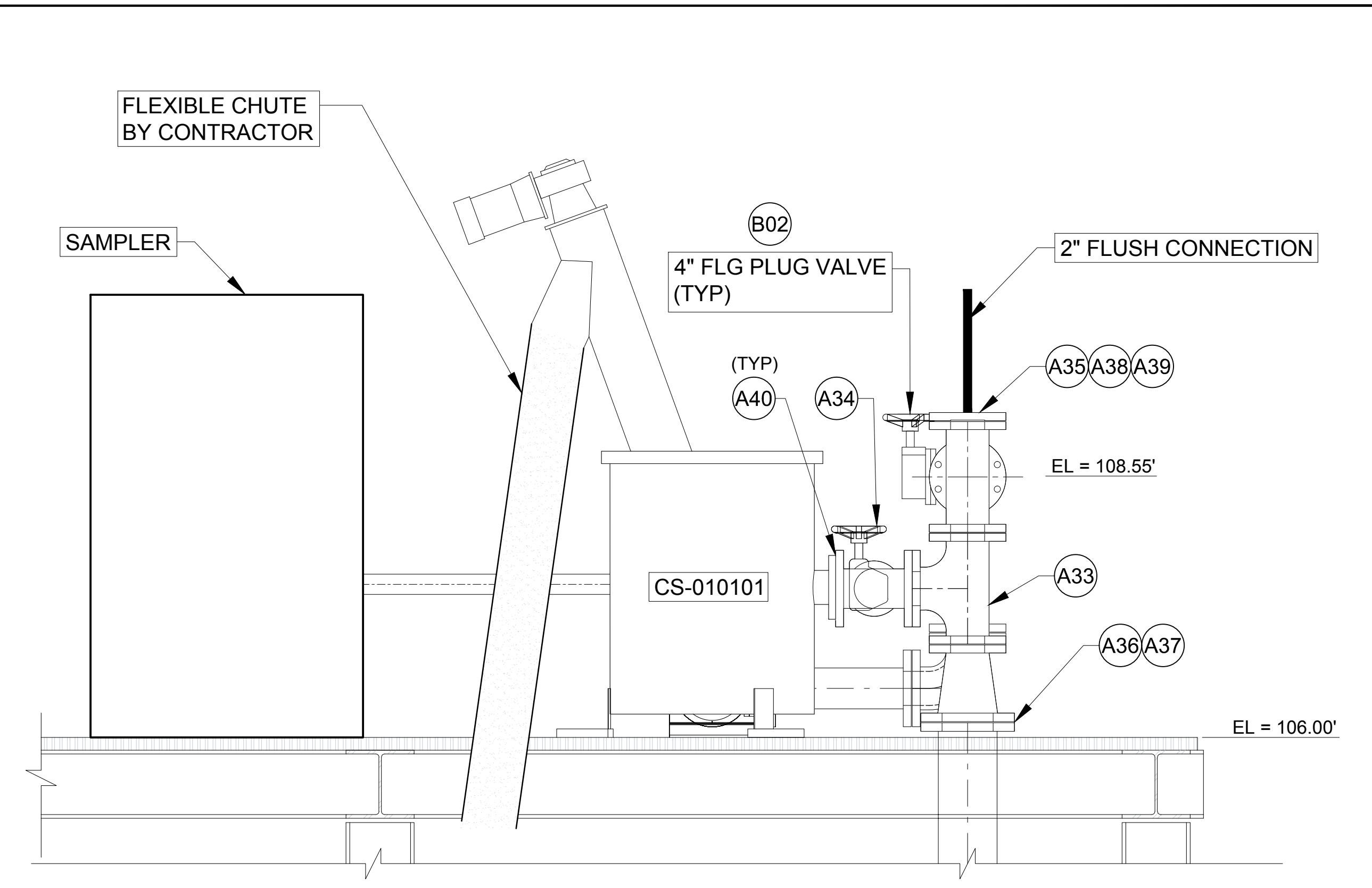
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REV	PARTICULARS	BY	APP'D	DATE
△	DRAWING REVISED AS PER COMMENTS	ST	RJB	08/24/2024
△	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024

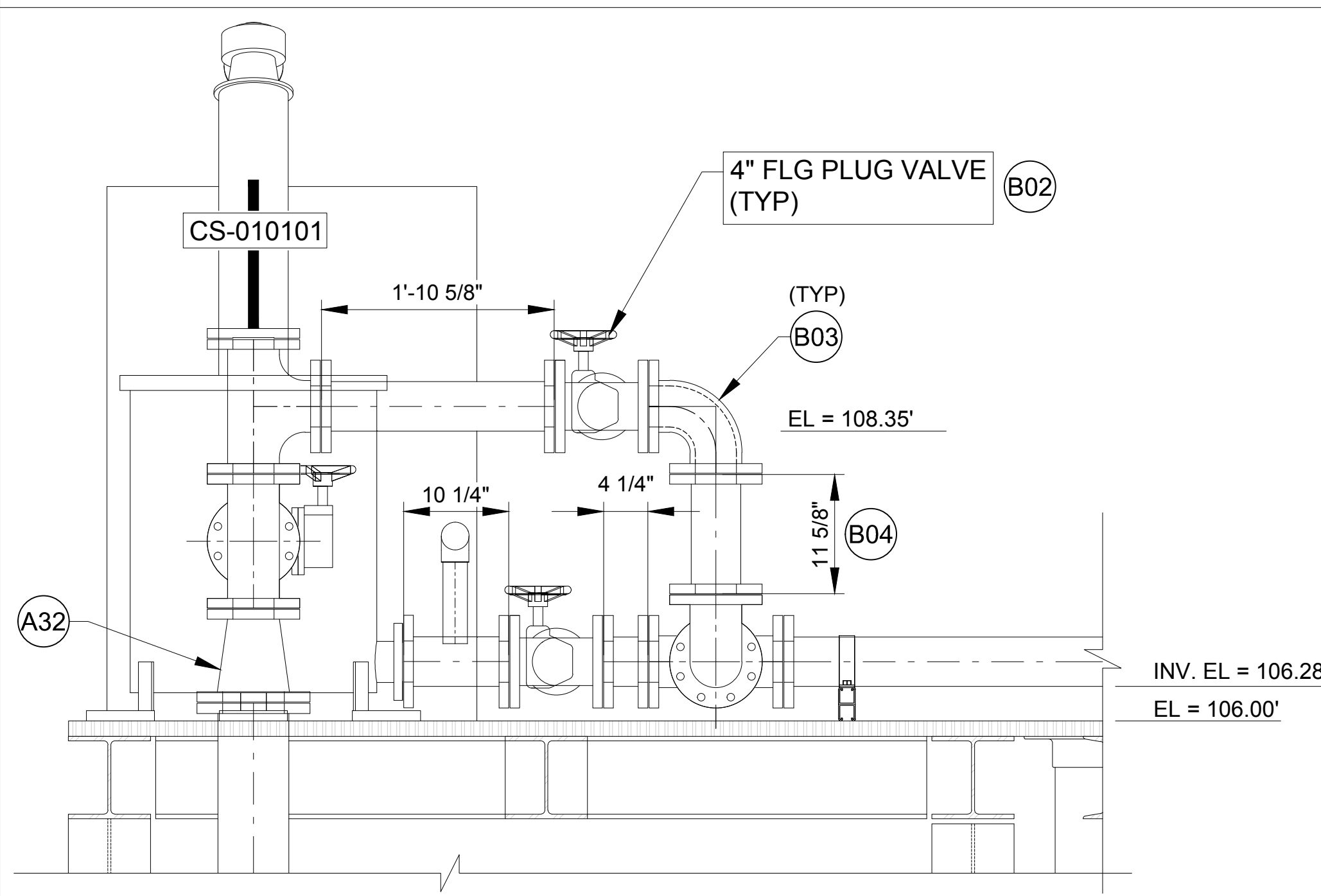
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SCREEN PLAN



SECTION-B



SECTION-A

BILL OF MATERIALS					
4" & 6" DIP LINE FROM SCREEN BUILDING OUTLET CONNECT TO CHAMBER 1 & 2 INLET (DWG #: M-100, M-102, M-103 & M-107)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
B01	1	4"	FLG X FLG PIPE - TN140 PRIMER	1'- 10 5/8"	BID LINE # 10
B02	4	4"	FLG PLUG VALVE W/ HANDWHEEL (NICKLE SEATS INLIEU OF SST, STEM IS DI INLIEU OF SS )	LL = 9.00"	BID LINE # 8
B03	5	4"	FLG 90 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-8" X 0'-8"	BID LINE # 11
B04	1	4"	FLG X FLG PIPE - TN140 PRIMER	0'- 11 5/8"	BID LINE # 14
B05	1	4"	FLG X FLG PIPE - TN140 PRIMER	1'- 4 3/4"	BID LINE # 12
B06	1	4"	4.80 X 2" IP 202S SADDLE WITH STAINLESS STRAPS 4.50 - 4.80 ROMAC	0'- 10 1/4"	BID LINE # 15
B07	1	4"	FLG X FLG PIPE - TN140 PRIMER	0'- 4 1/4"	BID LINE # 13
B08	2	4" X 4"	FLG TEE - C110 / CL / TN140 PRIMER	CC = 0'-6.50" X 0'-6.50"	BID LINE # 7
B09	1	4"	FLG X FLG PIPE - TN140 PRIMER	16'- 1 3/4"	

B10	1	4"	FLG X FLG PIPE - TN140 PRIMER	0'- 6 3/8"	
B11	2	4"	FLG X PE PIPE - TN140 PRIMER	10'- 4 3/8"	
B11A	2	4"	FLG 90 DEGREE L.R BEND - C110 / CL / TN140 PRIMER	CC = 0'-9" X 0'-9"	
B12	8	4"	SET 4" ZP BOLT AND NUT FOR FLG PLUG VALVE		BID LINE # 20
B13	13	4"	PLATED BOLT & NUT KIT, A307 GRADE A, (8EA 5/8" X 3" BOLT WITH NUT)		BID LINE # 19
B14	21	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 21

**SPECIAL NOTE:**  
1. (AXX) - REFER BOM ON DWG.# M-101 & 103

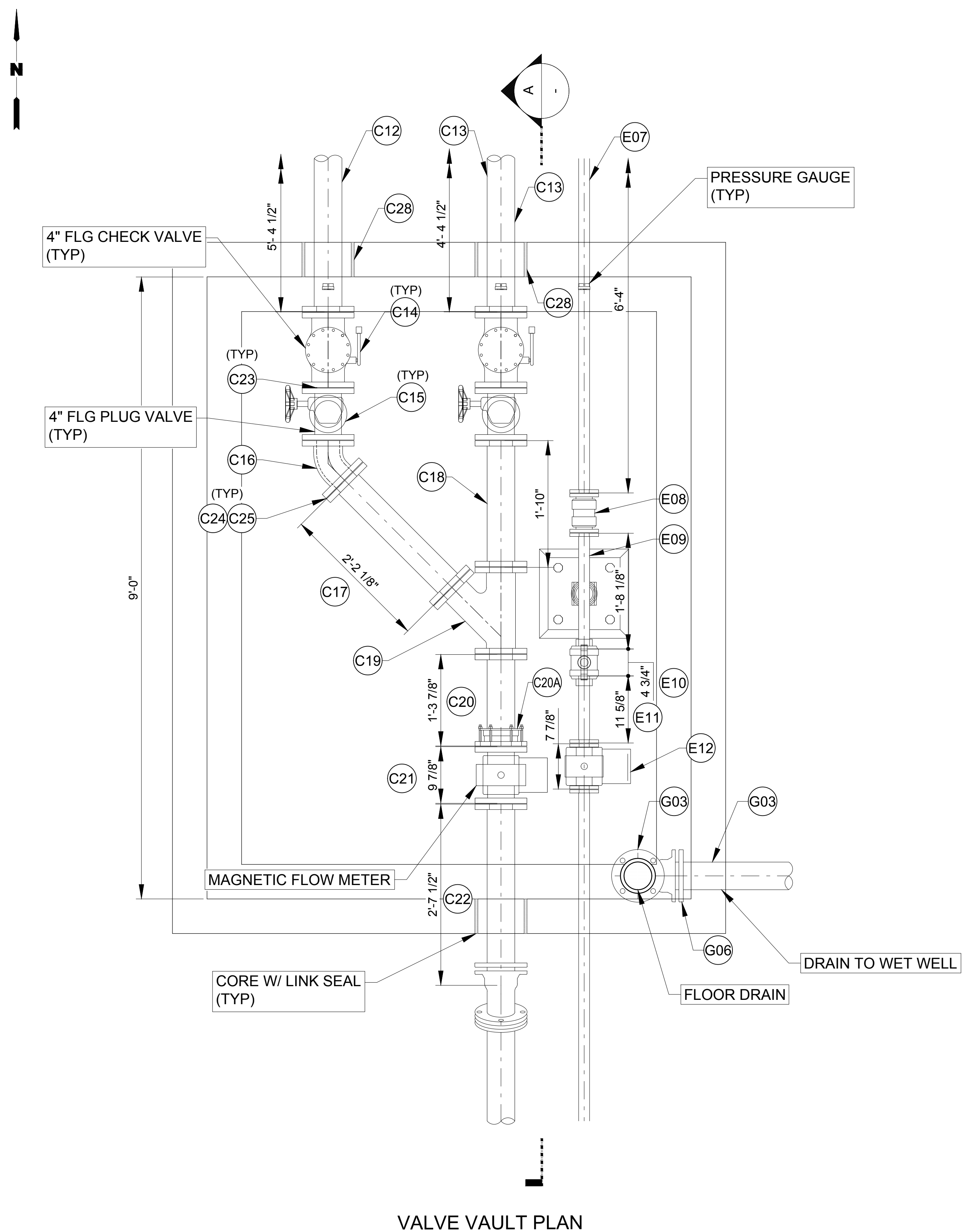
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ENGINEER:-

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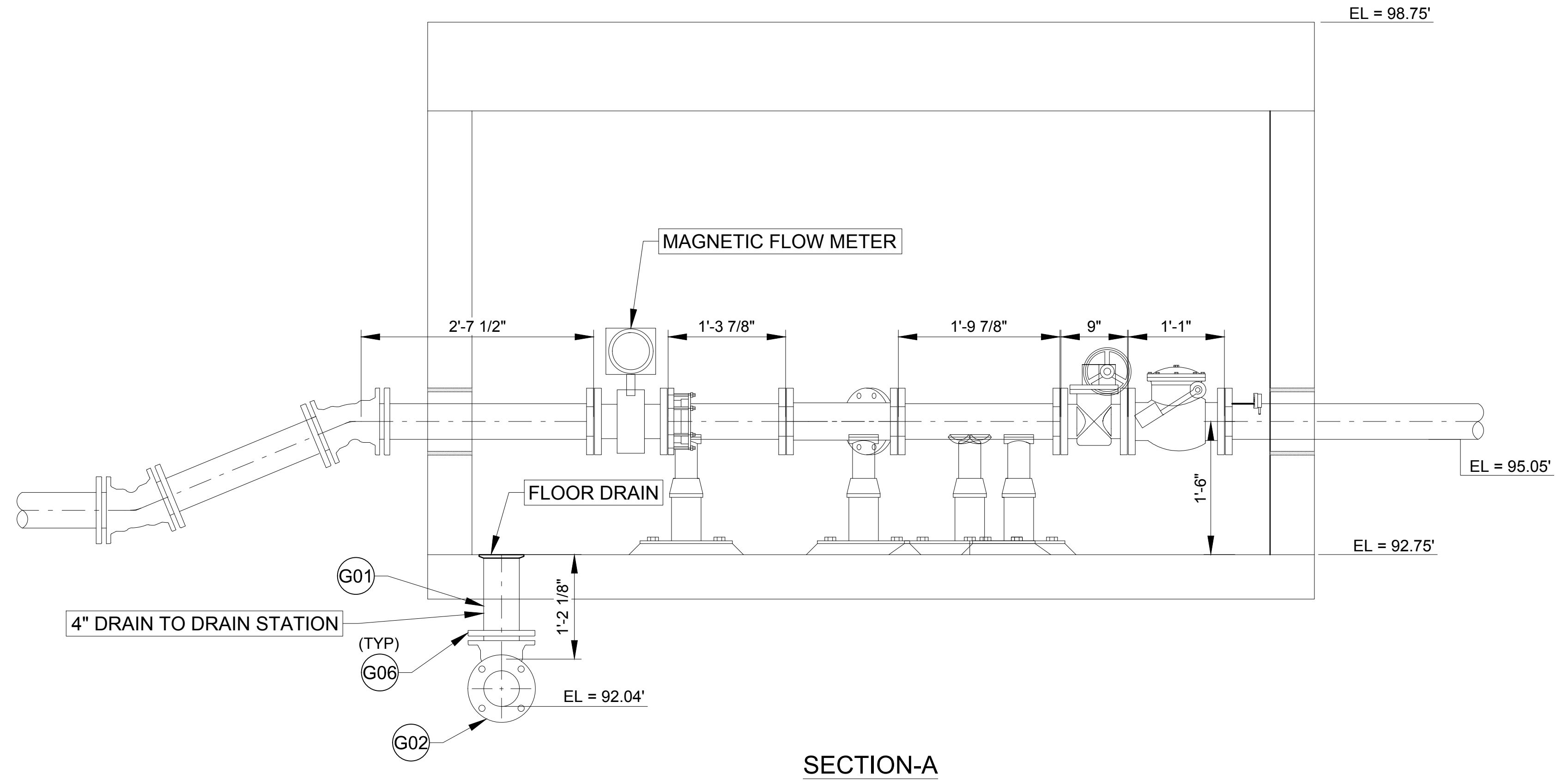
REV	PARTICULARS	BY	APP'D	DATE
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	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024

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VALVE VAULT PLAN



SECTION-A

BILL OF MATERIALS					
4" DIP LINE FROM EQ TRANSFER VALVE VAULT CONNECT TO DRAIN PUMP STATION INLET (DWG #: M-100, M-108 & M-109)					
G01	1	4"	PE X PE PIPE CL 52 / CL / AC	1'-2 1/8"	
G02	1	4"	MJ 90 DEGREE BEND - C153 / CL / AC	CC = 0'-4" X 0'-4"	BID LINE # 314
G03	2	4"	PE X TYTON CL52 CL / AC	18' - 2 7/8"	BID LINE # 313
G04	1	4"	PE X PE PIPE CL 52 / CL / AC	11'-5 1/4"	
G05	1	4"	MJ LONG SOLID SLEEVE - C153 / CL / AC		BID LINE # 315
G06	4	4"	COMPACT BODY MJ ACCESSORIES KIT COMPLETE WITH GLAND, GASKET AND (4) 3/4" X 3-1/2" T-BOLTS		BID LINE # 316

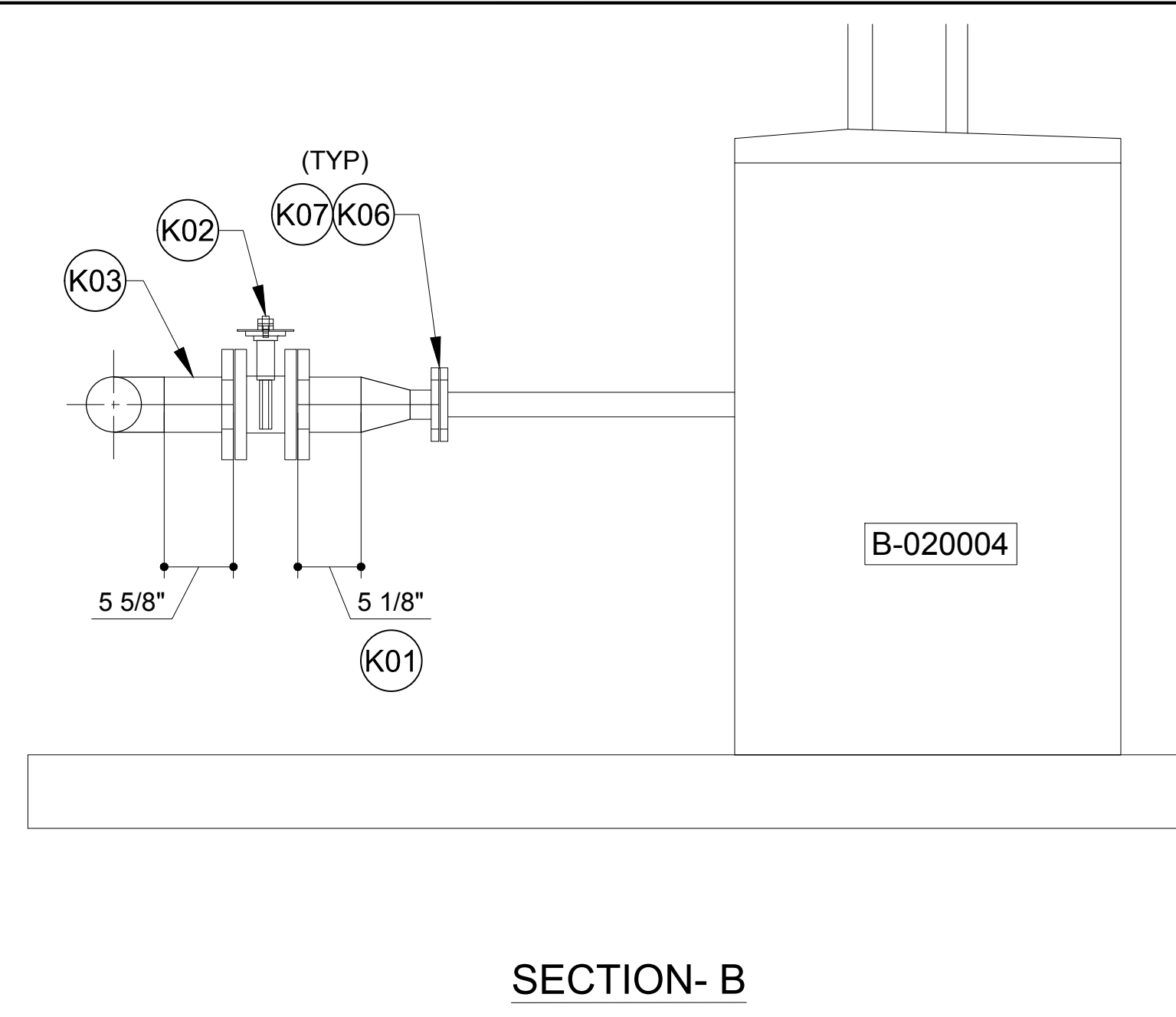
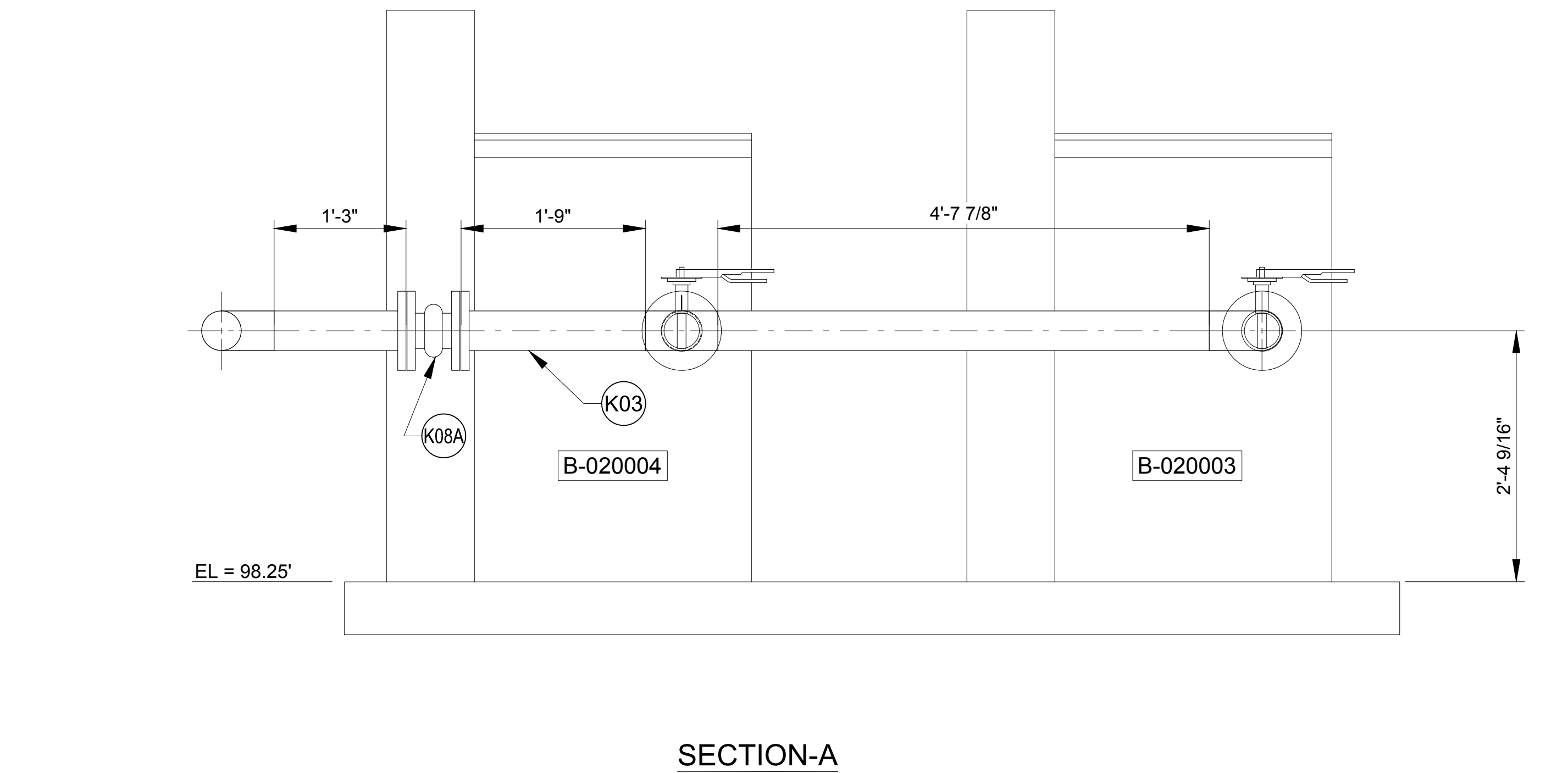
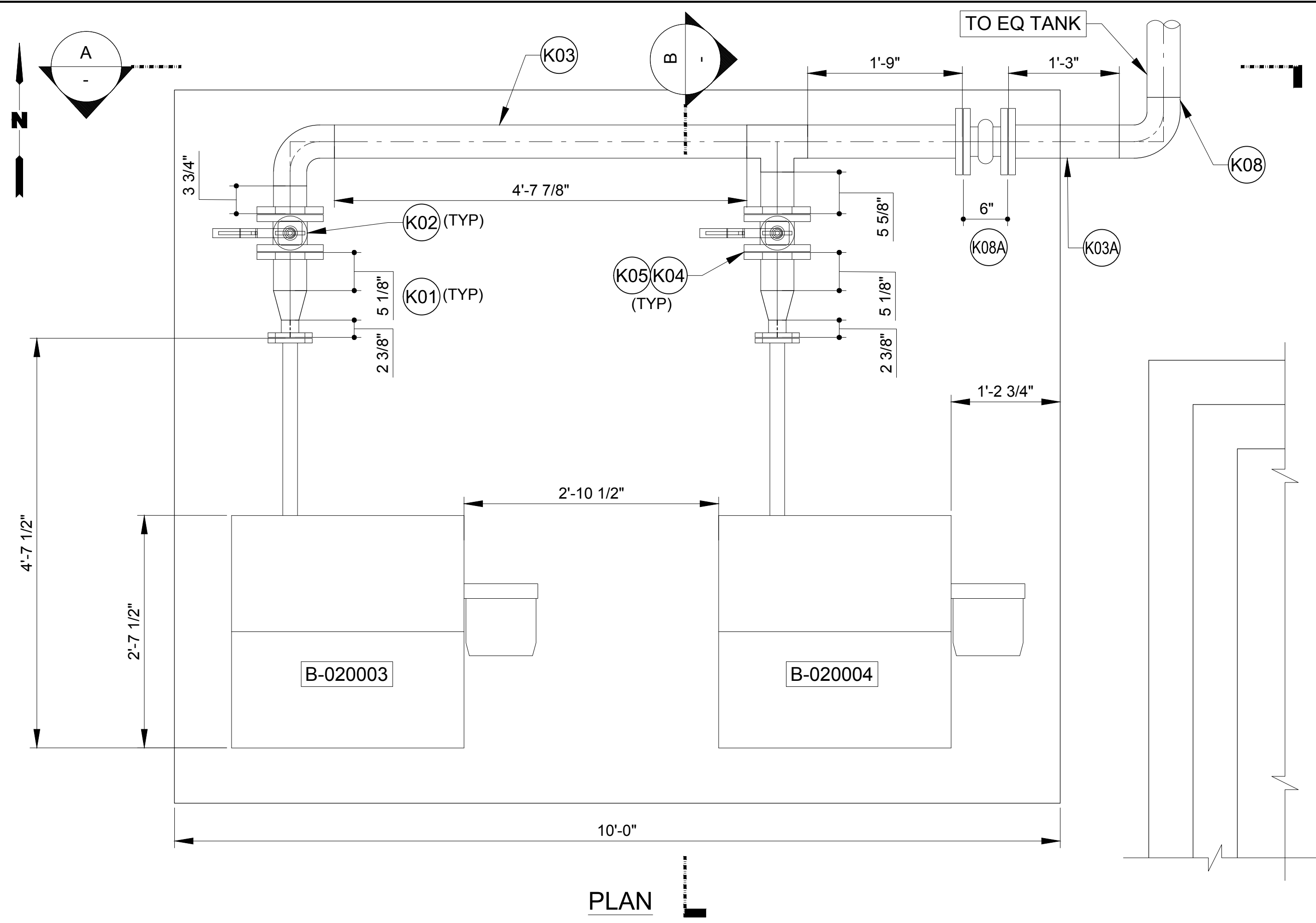
- SPECIAL NOTES:**
1. (CXX) - REFER BOM ON DWG.# M-104.
  2. (EXX) - REFER BOM ON DWG.# M-106.

OWNER:-  
ENGINEER:-

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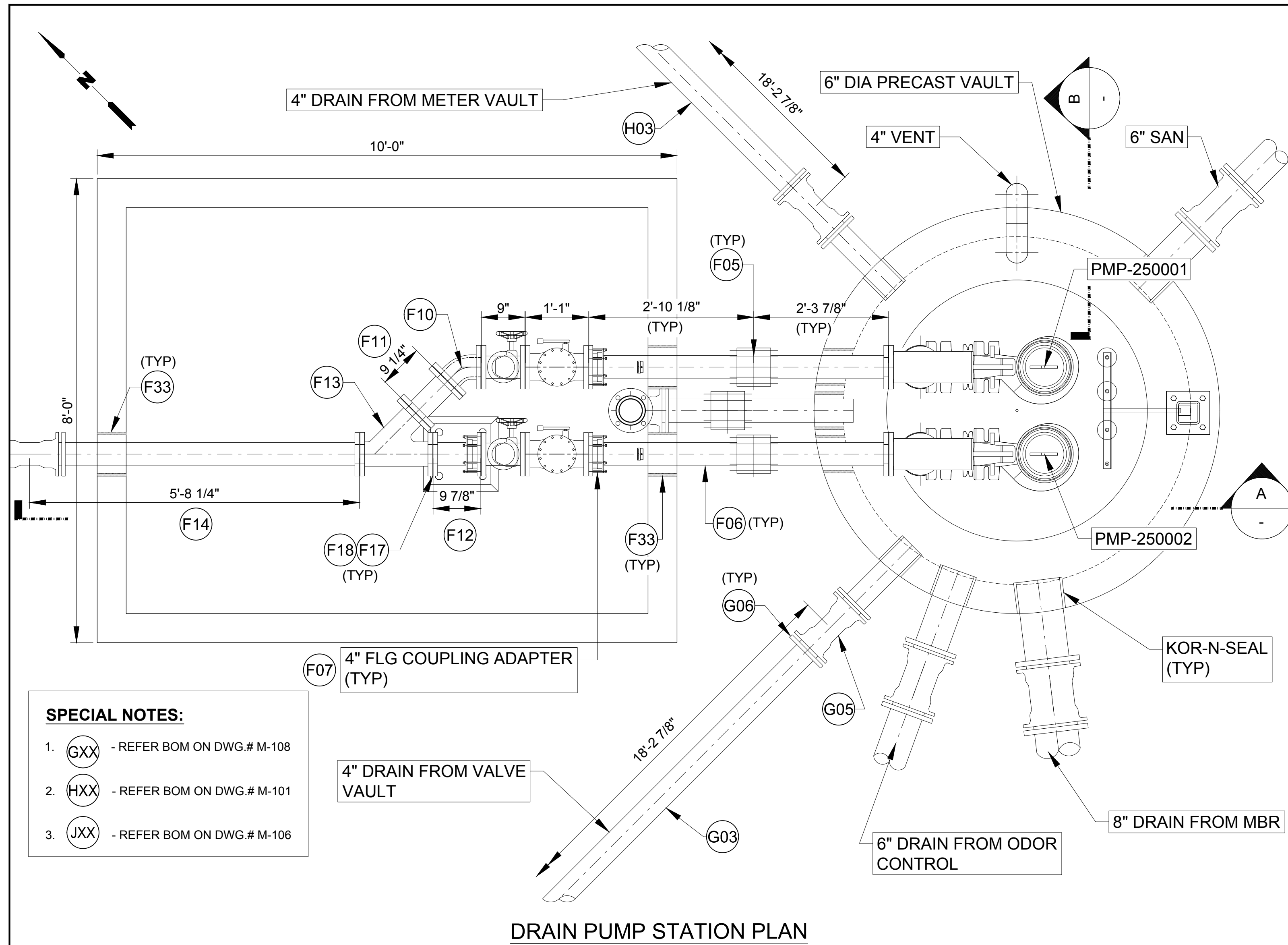
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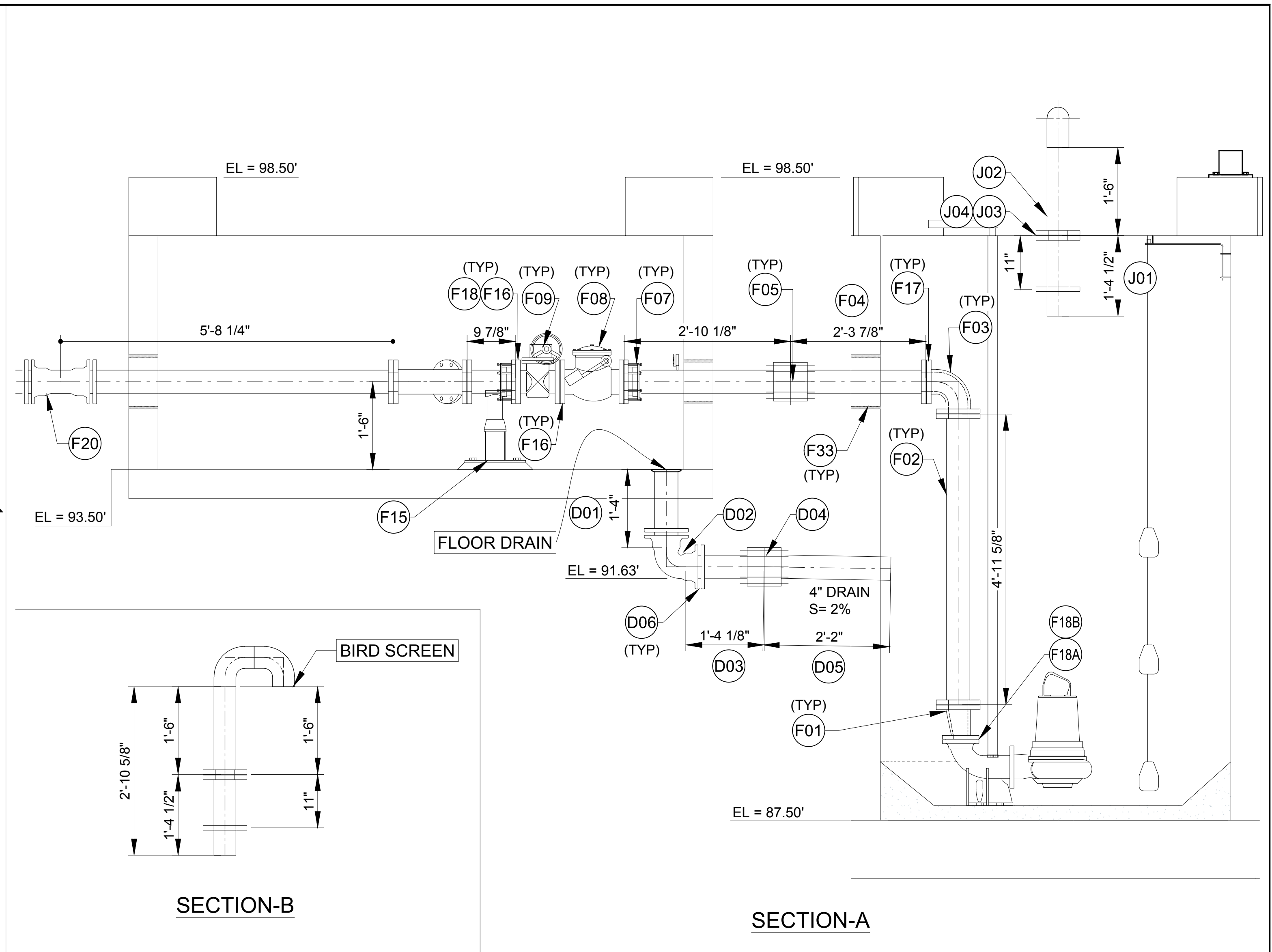


BILL OF MATERIALS					
2" & 4" SST LINE FROM BLOWER DISCHARGE CONNECT TO EQ. TANK INLET (DWG #: M-100, M-102, M-103 & M-109)					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
K01	2	2" / 4"	304L SCH10S A778 CONCENTRIC REDUCER, 1- 4" 150# FF SO FLG, 1 -2" 150# FF SO FLG, 0'- 5 1/8" 4" PIPE, 0'- 2 3/8" 2" PIPE		BID LINE # 80
K02	2	4"	FLG BUTTERFLY VALVE W/ LEVER. AWWA C504. CLASS 250B , 125LB FLANGE.	LL = 5.00"	BID LINE # 81
K03	1	4"	304L SCH10S ASTM A778 AS WELDED GRADE MANIFOLD. 1 -90 DEG ELL, 1 -4" TEE, 3 -150# FF SO FLG.	6'- 8 5/8"	
K03A	1	4"	304L SCH10S ASTM A778 AS WELDED GRADE MANIFOLD. 1 -90 DEG ELL, 1 -150# FF SO FLG.	1'- 3"	
K04	4	4"	SET 4" 304SS A320/320M GRADE B8M BOLTS AND A194 GRADE 8M NUTS (FOR FLG AWWA C504 BFV)		BID LINE # 83
K04A	4	4"	SET 4" 304SS A320/320M GRADE B8M BOLTS AND A194 GRADE 8M NUTS		
K05	8	4"	1/8" FULL FACE GASKET, EPDM, 150#		
K06	2	2"	SET 2" 304SS A320/320M GRD B8M BOLTS & A194 GRD 8M HEX NUTS		BID LINE # 85
K07	2	2"	1/8" FF EPDM FLANGE GASKET		BID LINE # 86
K08	1	4"	PE X FLG 304L SCH10S A778 PIPE, 1 -150# FF SO FLG.	27'- 6 1/8"	
K08A	2	4"	FLG EXPANSION JOINT	LL = 6.00"	
K08B	1	4"	FLG X PE 304L SCH10S A778 PIPE, 1 -150# FF SO FLG.	1'- 6"	
K09	1	4"	304L SCH10S ASTM A778 AS WELDED GRADE MANIFOLD. 2 -90 DEG ELL, 1 -4" TEE.	20'- 6 1/4"	
K10	1	4"	304L SCH10S ASTM A778 AS WELDED GRADE MANIFOLD. 2 -90 DEG ELL, 2 -150# FF SO FLG	6'- 11 3/4"	
K11	1	4"	304L SCH10S ASTM A778 AS WELDED GRADE MANIFOLD. 2 -90 DEG ELL, 2 -150# FF SO FLG	6'- 4 1/4"	
K12	2	4"	FLG BUTTERFLY VALVE W/ LEVER. AWWA C504. CLASS 250B , 125LB FLANGE.	LL = 5.00"	
K13	4	4"	SET 4" 304SS BOLT AND NUT FOR FLG BUTTERFLY VALVE		BID LINE # 28
K14	4	4"	1/8" FULL FACE GASKET, NEOPRENE, 150#		BID LINE # 29

OWNER:-	ENGINEER:-	<p><b>DISCLAIMER</b>          RJ Barnes and Associates has prepared these layout drawings and material lists in accordance with our interpretation of the project drawings and specifications that were provided. Approval of these drawings and material lists constitute acceptance of our interpretation of material requirements for the subject job. Please check the drawings and material lists carefully to insure they are correct for your project.</p> <p>If corrections need to be made, please mark one set of the drawings in a contrasting color and return them to this office with your comments. No material shown in these drawings should be released for manufacture without written approval from the end customer.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td> <td style="width: 55%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> <td style="width: 5%;"></td> </tr> <tr> <td style="text-align: center;">A</td> <td>DRAWING REVISED AS PER COMMENTS</td> <td style="text-align: center;">ST</td> <td style="text-align: center;">RJB</td> <td style="text-align: center;">08/24/2024</td> <td></td> </tr> <tr> <td style="text-align: center;">A</td> <td>DRAWING REVISED AS PER COMMENTS</td> <td style="text-align: center;">ST</td> <td style="text-align: center;">RJB</td> <td style="text-align: center;">06/24/2024</td> <td></td> </tr> <tr> <td style="text-align: center;">REV</td> <td style="text-align: center;">PARTICULARS</td> <td style="text-align: center;">BY</td> <td style="text-align: center;">APP'D</td> <td style="text-align: center;">DATE</td> <td></td> </tr> </table>							A	DRAWING REVISED AS PER COMMENTS	ST	RJB	08/24/2024		A	DRAWING REVISED AS PER COMMENTS	ST	RJB	06/24/2024		REV	PARTICULARS	BY	APP'D	DATE		R. J. Barnes & Associates, 1442 S 500 E – STE 300, American Fork, UT 84003
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- SPECIAL NOTES:**
1. (GXX) - REFER BOM ON DWG.# M-108
  2. (HXX) - REFER BOM ON DWG.# M-101
  3. (JXX) - REFER BOM ON DWG.# M-106



BILL OF MATERIALS					
4\"/>					
TAG #	QTY	SIZE	DESCRIPTION	ACTUAL LENGTH	NOTES
D01	1	4"	PE X PE PIPE CL 52 / CL / AC	1'- 4"	BID LINE # 108
D02	1	4"	MJ 90 DEGREE BEND - C153 / CL / AC	CC = 0'-4" X 0'-4"	BID LINE # 109
D03	1	4"	PE X PE PIPE CL 52 / CL / AC	1'- 4 1/8"	BID LINE # 108
D04	1	4"	FLEXIBLE COUPLING		
D05	1	4"	PE X PE PIPE CL 52 / CL / AC	2'- 2"	BID LINE # 108
D06	4	4"	COMPACT BODY MJ ACCESSORIES KIT COMPLETE WITH GLAND, GASKET AND (4) 3/4" X 3-1/2" T-BOLTS		BID LINE # 111
4\"/>					

F01	2	4" X 3"	FLG ECCENTRIC REDUCER - C110 / CL / TN140 PRIMER	LL = 7.00"	
F02	2	4"	FLG X FLG PIPE - TN140 PRIMER	4'- 11 5/8"	BID LINE # 93
F03	2	4"	FLG 90 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-6 1/2" X 0'-6 1/2"	BID LINE # 94
F04	2	4"	FLG X PE PIPE - TN140 PRIMER	2'- 3 7/8"	BID LINE # 95
F05	2	4"	FLEXIBLE COUPLING		
F06	2	4"	PE X PE PIPE W/ 1/2" IPT TAP FOR PRESSURE GAUGE TN140 PRIMER	2'- 10 1/8"	BID LINE # 97 & 98
F07	3	4"	FCA501 FLANGE COUPLING ADAPTER SHOPCOAT STD B&N SBR GASKET 4.81 ROMAC		BID LINE # 99
F08	2	4"	FLG CHECK VALVE W/ LEVER AND WEIGHT	LL = 13.00"	BID LINE # 100
F09	2	4"	FLG PLUG VALVE W/ HANDWHEEL	LL = 9.00"	BID LINE # 101
F10	1	4"	FLG 45 DEGREE BEND - C110 / CL / TN140 PRIMER	CC = 0'-4" X 0'-4"	BID LINE # 102
F11	1	4"	FLG X FLG PIPE - TN140 PRIMER	0'- 9 1/4"	BID LINE # 103

F12	1	4"	FLG X PE PIPE - TN140 PRIMER	0'- 9 7/8"	
F13	1	4"	FLG WYE - C110 / CL / TN140 PRIMER	CC = 1'-0" X 0'-3"	BID LINE # 104
F14	1	4"	FLG X PE PIPE TN140 PRIMER	5'- 8 1/4"	BID LINE # 105
F15	1	4"	ADJ FLANGE SUPPORT ZINC PLATED #S89 STANDON		BID LINE # 106
F16	6	4"	A325 BOLT AND NUT (FOR FLG PLUG AND CHECK VALVE)		BID LINE # 120 & 121
F17	10	4"	SET 4" 316SS F593 BOLT, F594 NUT MARKING F593F & 594F.		BID LINE # 118
F18	16	4"	1/16" FULL FACE RED RUBBER GASKET, 150#		BID LINE # 119
F18A	2	3"	SET 3" 316SS F593 BOLT, F594 NUT MARKING F593F & 594F.		
F18B	2	3"	1/16" FULL FACE RED RUBBER GASKET, 150#		

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ENGINEER:-

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