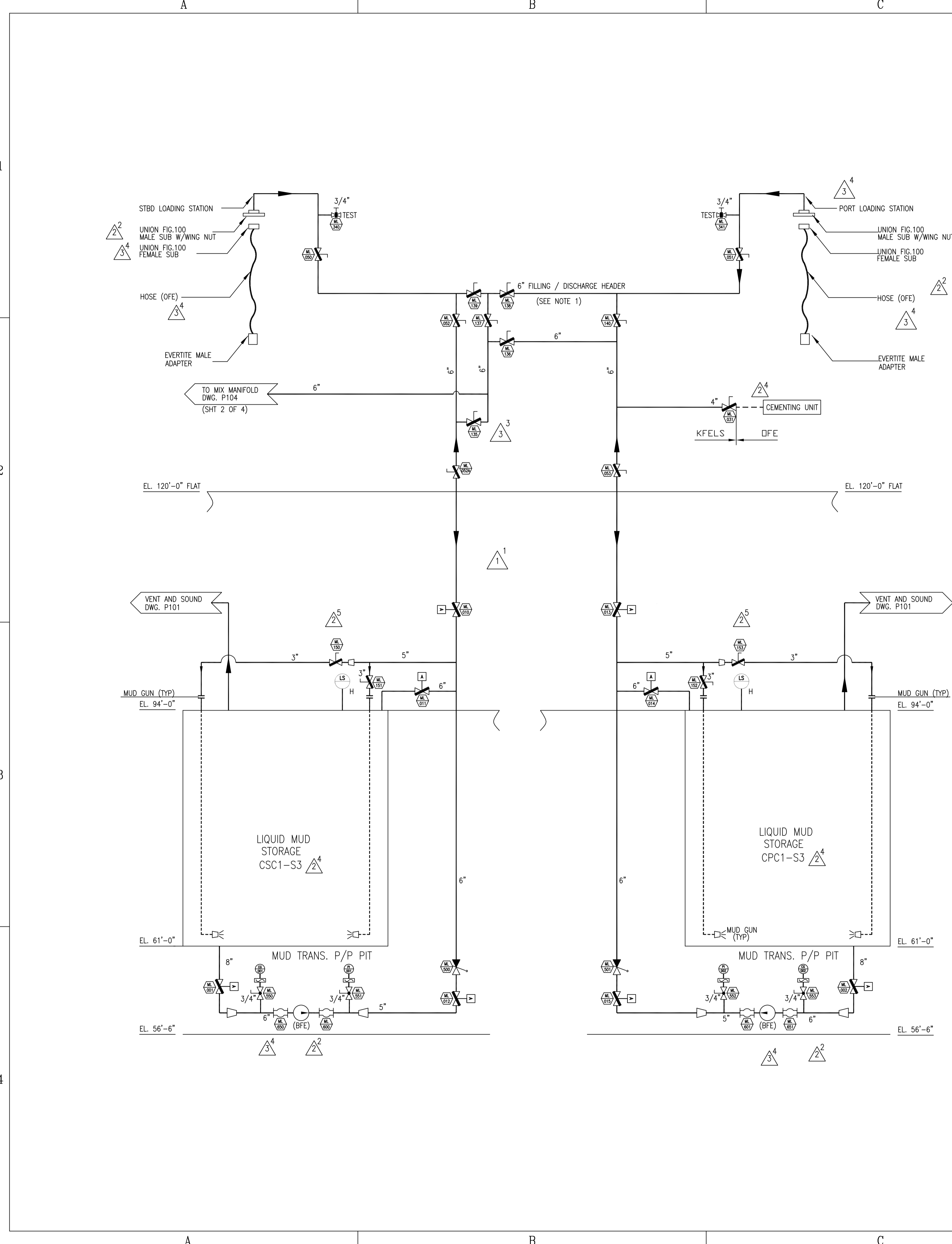


## **Anexo II.3.1-2 - Plantas da Plataforma**





### LEGEND

[Symbol]	GATE VALVE
[Symbol]	KNIFE GATE VALVE
[Symbol]	VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	CHECK VALVE, SCREW DOWN
[Symbol]	BALL VALVE
[Symbol]	PRESSURE RELIEF VALVE
[Symbol]	CHECK VALVE
[Symbol]	AIR ACTUATOR
[Symbol]	EQUALIZING VALVE
[Symbol]	PRESSURE INDICATOR
[Symbol]	PRESSURE ALARM LOW
[Symbol]	PRESSURE SWITCH
[Symbol]	PRESSURE TRANSMITTER
[Symbol]	STRAINER-SIMPLEX
[Symbol]	PUMP
[Symbol]	REDUCER (CONCENTRIC)
[Symbol]	REDUCER (ECCENTRIC)
[Symbol]	PUMP INLET FLAT SIDE UP
[Symbol]	EXPANSION JOINT (RUBBER)
[Symbol]	NEW LINES
[Symbol]	EXISTING LINES
[Symbol]	ELECTRIC CABLE
[Symbol]	CONTROL AIR PIPING
[Symbol]	LEVEL SWITCH
[Symbol]	SUCTION VALVE
[Symbol]	DUMP VALVE

### PIPING MATERIAL SPECIFICATION

ITEM	2" AND ABOVE (SEE REMARK #1)	1 1/2" AND BELOW
PIPE MAT'L	SMLS-XS-BLK-CS-ASTM A106 GR. B ANSI B36.10 (SEE REMARK #1)	SMLS-XS-BLK-CS-ASTM A106 GR. B ANSI B36.10
JOINT	FLANGE-150#-WN/SO-RE/FE-BLK-FS-ASTM A105-ANSI B16.5 OR BUTT WELD JOINTS	UNION/COUPLING-3000#-SE/SWE-BLK-FS-ASTM A105 ANSI B16.11
FITTING	SMLS-XS-BWE-BLK-CS-ASTM A234 GR.WPB-ANSI B16.9	3000#-SE/SWE-BLK-FS-ASTM A105-ANSI B16.11
BOLT & NUT	ASTM A307 GR. B GALVANIZED	
GASKET	COMPRESSED SYNTHETIC FIBRE 1/8 THK.	
REMARKS	1) 10" AND ABOVE STD. WT. PIPE & FITTING SHALL BE USED.	

### VALVE LIST

TAG NO.	SIZE	DESCRIPTION	MAT'L CODE	QTY	REMARKS
ML001-002	8"	VA BF-LUG TYPE-150 PSIG WP DI BODY ASTM A536 NYLON COVERED DI DISC SS 316 STEM BUNA-N SEAT C/W ELECTRO-PNEU. WITH DOUBLE ACTING ACTUATOR AND MANUAL OVERRIDE		02	
ML010-015	6"	-DITTO-		06	
ML050-140	6"	VA BF-LUG TYPE-150 PSIG DI BODY ASTM A536 NYLON COVERED DI DISC SS 316 STEM BUNA-N SEAT C/W TO POSITION HANDLE		91	
ML031-032	4"	-DITTO-		02	
ML150-167	3"	-DITTO-		33	
ML200-208	8"	-DITTO-		19	
ML210,ML212,ML214,ML216,ML222-227	8"	-DITTO-		03	
ML280-283	5"	-DITTO-		09	
ML250-258	12"	VA BF-LUG TYPE-150 PSIG DI BODY ASTM A536 NYLON COVERED DI DISC SS 316 STEM BUNA-N SEAT C/W GEAR OPERATOR		02	
ML300-305	16"	-DITTO-		06	
ML320-325	20"	-DITTO-		06	
ML340-341	3/4"	VA GATE SE 150# BRZ BUNA-N SEAT		02	
ML400-402	20"	KNIFE GATE VALVE DI BODY ASTM A536 LUG TYPE TO MATCH ANSI 150# FLGS. (100 PSI WP)		03	
ML420	12"	-DITTO-		01	
ML440-449	10"	-DITTO-		10	
ML480-481	4"	-DITTO-		02	
ML500-501	6"	VA DUO CHECK WAFER 150# CS BODY ASTM A216 GR. WCE ALUM. BRZ PLATE SS 316 SPRING BUNA-N SEAT		02	
ML510	8"	-DITTO-		01	
ML550-577	3/4"	VA BALL SE ANSI B2.1 600# BRASS BODY & TRM ASTM B283		28	
ML603-614	6"	EXPANSION JOINT FE 150# (FELLED SINGLE ARCH) SUPERFLEX STYLE NITRILE TUBE FIRE RETARDANT WITH STEEL RETAINING RING		15	
ML650-651	8"	-DITTO-		13	
ML652-664	8"	-DITTO-		2	
ML600-601	5"	-DITTO-		04	
ML700-703	3/4"	-DITTO-		13	
P001-013	3/4"	PRESS. CLASSE 4" DIA. DIAL FACE RANGE 0-150 PSI DIAPHRAGM TYPE SE		15	
CG001-015	3/4"	COMPOUND DIAG. 4" DIA. DIAL FACE RANGE 30 HG X 30 PSI DIAPHRAGM TYPE		15	
ML801-804	8"	STD. SUCTION VA. SCREW TYPE		02	
ML851-860	8"	FLOW THRU SUCTION VA. SCREW TYPE		04	
ML901-906	16"	STD. SUCTION VA. SCREW TYPE		06	
ML951-956	16"	FLOW THRU SUCTION VA. SCREW TYPE		06	
ML990-991	1 1/4"	VA SWING CHECK SE 150# BRZ. BODY & TRM BRZ.		02	

### PUMP DATA

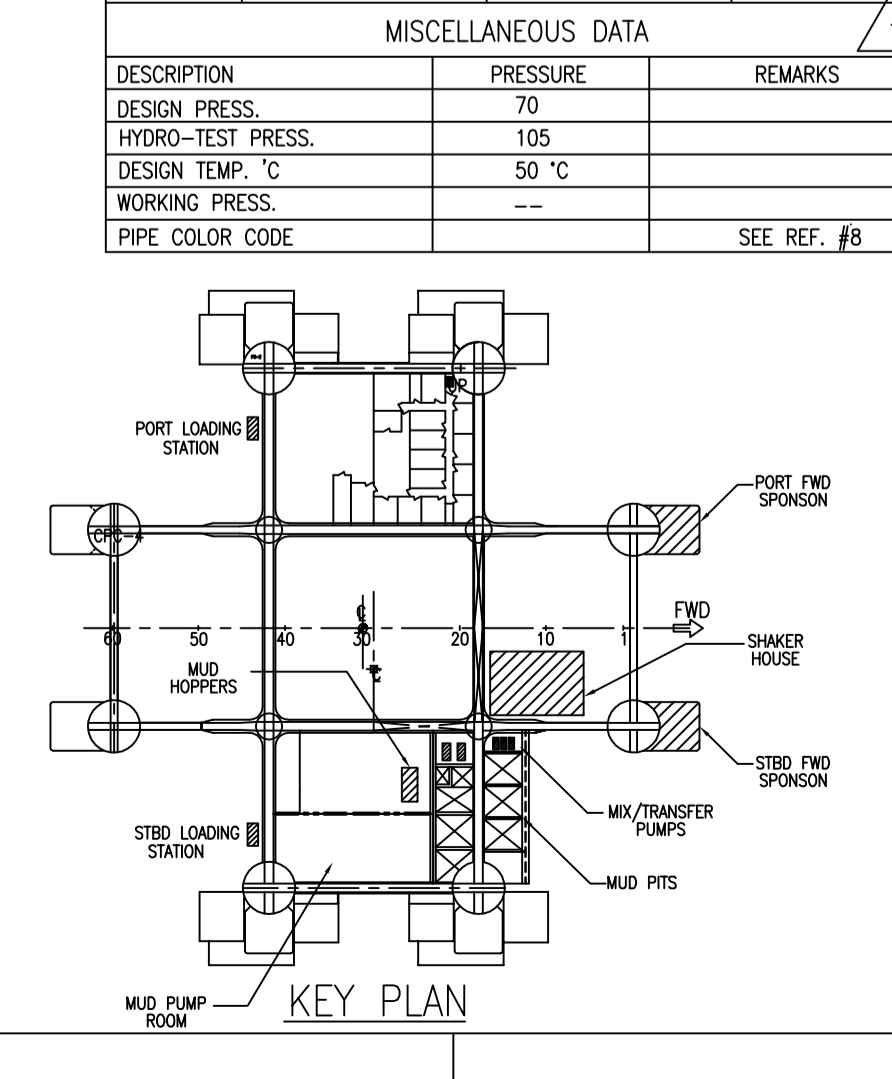
SPECS.	MUD MIXING #1-#4	SUPER CHARGING	MUD TRAN.(SPONSON)
BRAND	MISSION	MISSION	MISSION
MODEL	8x6-14	8x6-14	6x5-14
SIZE	8x6-14	8x6-14	6x5-14
CAPACITY	1000 GPM	1000 GPM	1000 GPM
T.D.H.(FT)	100	88	130
POWER	100	125	125
SPEED	1750 RPM	1150 RPM	1750 RPM

SPECS.	MUD CLEANER FEED	MUD MIXING #5	TRIP TANK
BRAND	MISSION	MISSION	MISSION
MODEL	8x6-14	8x6-14	3x2-13
SIZE	8x6-14	8x6-14	3x2-13
CAPACITY	1500 GPM	1500 GPM	150 GPM
T.D.H.(FT)	110	110	60
POWER	100	150	15
SPEED	1750	1750	1150

### MISCELLANEOUS DATA

DESCRIPTION	70	REMARKS
DESIGN PRESS.	105	
HYDRO-TEST PRESS.	50 °C	
DESIGN TEMP.		
WORKING PRESS.		
PIPE COLOR CODE		SEE REF. #8



### ALTERATIONS

NO.	DESCRIPTION	AUTHORITY	BY	DATE	STATUS
1.1	REVIS AS PER OWNER'S COMMENTS AND ADDED OWNER'S APPROVAL DATE ON ALT. 2	DOCI	KLGS	26/09/06	VE
1.2	ADDED ABS PIPING LINE ON ALT. 2	KLGS	KLGS	21/10/06	VE
1.3	ADDED DATA AS SHOWN	KLGS	KLGS	21/10/06	VE
1.4	REMOVED BALL VALVE BEING FROM 150# TO 300#	KLGS	KLGS	21/10/06	VE
2.1	DELETED 8" X-OVER LINE AS PER OWNER REQUEST ON LETTER REF. NO. 8500-F02-02 ON 8/7/06	DOCI	KLGS	05/10/01	VE
2.2	ADDED NOTE FOR PIPING MAT'L SPEC. ADDED LOADING STN HOSE SET & REMOVED LEAD W/ STORAGE W/REAS SET.	KLGS	KLGS		VE
2.3	REMOVED BY VALVE MATERIAL TO SUIT SYS.	KLGS	KLGS		VE
2.4	REMOVED AS PER PIPING ARRANGEMENT DWG & REMOVED THE TAG AS PER LATEST B.A. DWG.	DOCI	KLGS		VE
2.5	RELOCATED BUTTERFLY V.V. AS PER OWNER'S COMMENTS.	DOCI	KLGS		VE
2.6	REMOVED AS PER MESH DWG.	KLGS	KLGS		VE
2.7	REMOVED AS PER MURPHY CHANGE ORDER.	KLGS	KLGS		VE
2.8	REMOVED MUD TRAN.(SPONSON) SIZE AS PER MESH DWG.	KLGS	KLGS		VE
3.1	ADDED OWNER'S DATE OF APPROVAL ON ALT. 2	DOCI	KLGS	12/11/01	VE
3.2	REMOVED AS PER MURPHY CHANGE ORDER 90-0104.	DOCI	KLGS	12/11/01	VE
3.3	REMOVED AS PER CHANGE ORDER 90-0103.	DOCI	KLGS	12/01/02	VE
3.4	AS-BUILT	DOCI	KLGS	12/01/02	VE
4.1	ADDED LINE FROM BARRIE SEPARATOR TO TRIP TANK (SH-4)	DOCI	KLGS	10.JAN.03	VE
4.2	ADDED 3" LINE FROM DRELLODRILL SPINNS TO GANBO BOX AND ADDED VALVE 1/2" LINE TO FLOW ORDER (SH-4)	DOCI	KLGS	10.JAN.03	VE
4.3	ADDED LINE WITH BUTTY VALVE FROM DEASSER TANK TO CUTTING TECH (SH-4)	DOCI	KLGS	10.JAN.03	VE

### REFERENCE DRAWINGS

NO.	TITLE	PLAN NO.	PLAN BY
1.	PIPING DIAGRAM - VENT AND SOUND SYSTEM	P101	KLGS
2.	PIPING DIAGRAM - SALT WATER SYSTEM	P105	
3.	PIPING DIAGRAM - CHECK & KILL/INVERTER SYSTEM	P118	
4.	PIPING DIAGRAM - DECK DRAIN SYSTEM	P128	
5.	PIPING HYDROTEST PROCEDURE	P303	
6.	PIPING CLEANING PROCEDURE	P304	
7.	PIPING INSULATION SCHEDULE	P305	
8.	PIPING COLOR CODE	P306	

### GENERAL NOTE

1) LOW POINT DRAIN SHALL BE PROVIDED.

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### PRINT RECORD

NO. PRINTED	DATE PRINTED	DATE
301	13/11/2011	22/09/08
1	1/1/2	19/10/01
4	4/4/4	10/10/00
10	2/1	
1	1	
1	1	
11	1	
1	1	
2	2	
3	3	
1	1	

**Keppel FELS**  
 Keppel FELS Limited Tel: (65) 6387020  
 31, Shipped Road Fax: (65) 2817717/2851927  
 Singapore 628126. Singapore 628151

**DIAMOND**  
 P.O. Box 448  
 HOUSTON, TEXAS 77250

DATE: 28 SEPT 00 SCALE: N.T.S.

DESIGNED BY: KLGS HULL/JOB NO.: R239

DRAWN: LYS COST CODE NO.: 56-13-00

CHECKED: KE B.C. APPROVED: SEAH B.S.

JOB: "OCEAN BARONESS"  
 6000 FT WATER DEPTH AND DEEP HOLE DRILLING CONVERSION

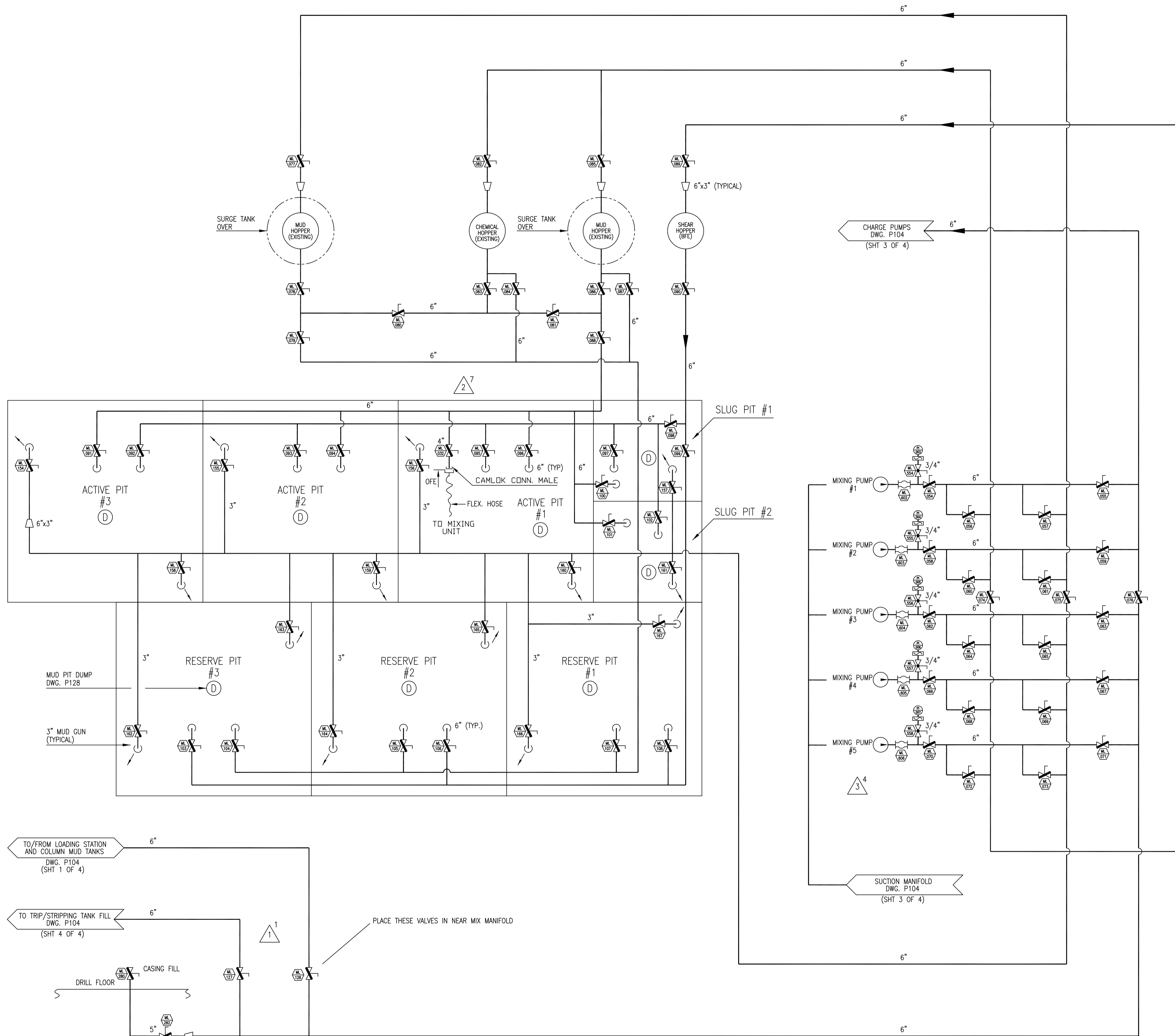
TITLE: PIPING DIAGRAM - LOW PRESSURE MUD SYSTEM

SHEET 1 OF 4 SHEETS

AT (33.20°22.40')

K-FELS DRAWING NO.: P104 (AS-BUILT) ALT. 4

DIAMOND DRAWING NO.: 165-PD-004



ALTERATIONS				
NO.	DESCRIPTION	AUTHORITY	BY	DATE

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY

GENERAL NOTE

SEE SHT 1 OF 4

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PRINT RECORD	
NO. PRINTED	
DATE PRINTED	
ALTERATION	
OWNER	
ABS	
PROJECT MANAGER	
PROJECT ENGINEER	
PRODUCTION DEPT.	
PE & P DEPT.	
G.A. DEPT.	
PURCHASING DEPT.	
ENGINEERING DEPT.	
MOLD LOFT	

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

OWNER: \_\_\_\_\_

ABS: \_\_\_\_\_

**Keppel FELS**

Keppel FELS Limited Tel: (65) 6316700  
31, Selegie Road Fax: (65) 2817718/2851927  
Singapore 428130. Singapore 428130.

**DIAMOND**

P.O. Box 408  
HOUSTON, TEXAS 77202

DATE: 28 SEPT 00	SCALE: N.T.S.
DESIGNED BY: KFELS	HULL/JOB NO.: R239
DRAWN: LYS	COST CODE NO.: 56-13-00
CHECKED: KE B.C.	APPROVED: SEAH B.S.

JOB: "OCEAN BARONESS"  
6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION

TITLE: PIPING DIAGRAM - LOW PRESSURE MUD SYSTEM

SHEET 2 OF 4 SHEETS

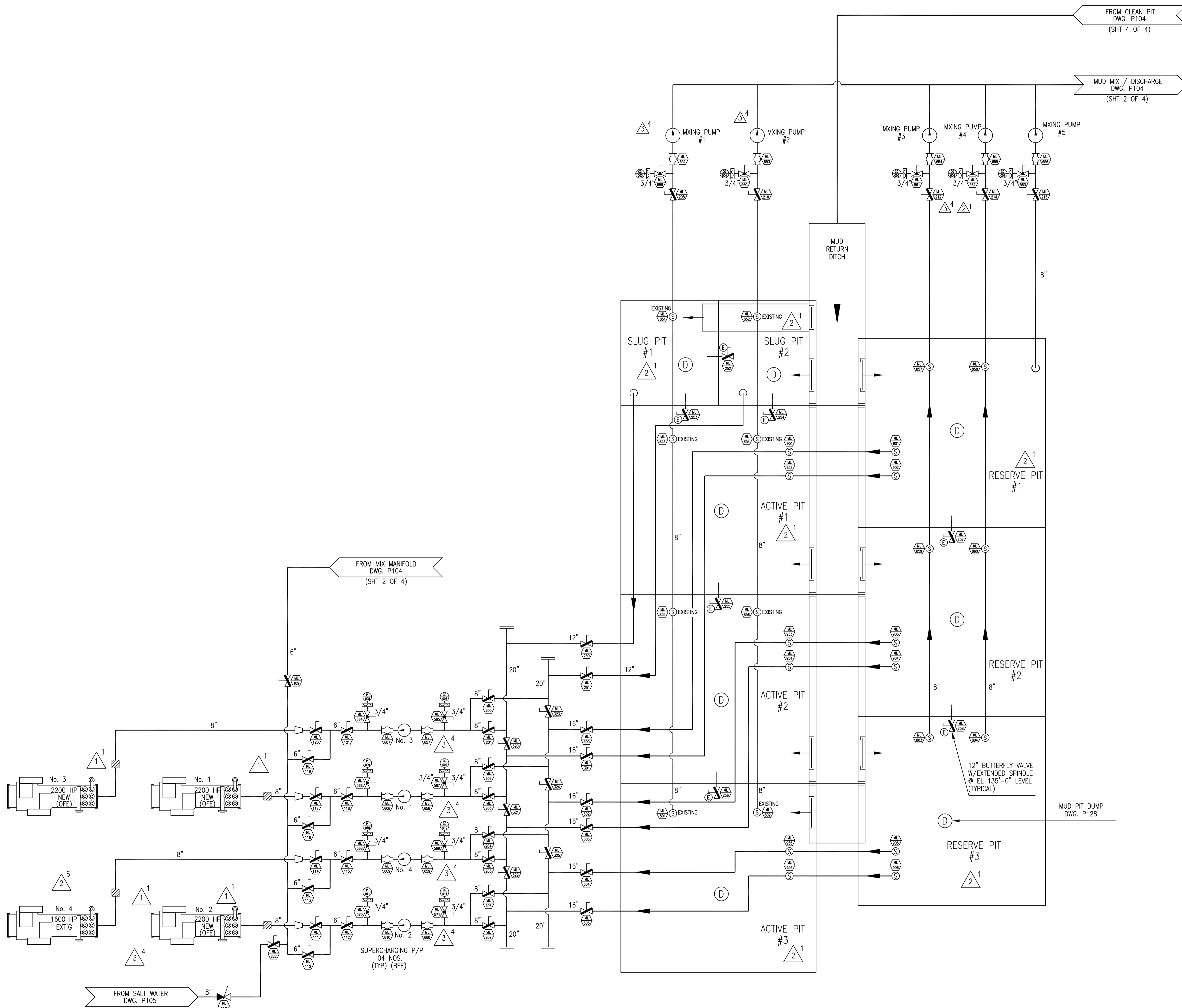
AT (33.207\*22.407)

K-FELS	P104 (AS-BUILT)	ALT.
DRAWING NO.:	165-PD-004	4

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DWG SCALE: 1:1



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ALTERATIONS				
NO.	DESCRIPTION	AUTHORITY	BY	DATE

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY

**GENERAL NOTE**

SEE SHT 1 OF 4

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PRINT RECORD	
NO. PRINTED	
DATE PRINTED	
ALTERATION	
OWNER	
ABS	
PROJECT MANAGER	
PROJECT ENGINEER	
PRODUCTION DEPT.	
PE & P DEPT.	
E & A DEPT.	
G.A. DEPT.	
PURCHASING DEPT.	
ENGINEERING DEPT.	
MOLD LOFT	
SUB-CONTRACTOR	
APPROVED BY:	DATE:
OWNER	
ABS	

<b>Keppel FELS</b> Keppel FELS Limited Tel: (65) 6316700 31, Selegie Road Fax: (65) 2517778/2651927 Singapore 408136. P.O. Box 458 HOUSTON, TEXAS 77260		 DIAMOND P.O. Box 458 HOUSTON, TEXAS 77260	
DATE: 28 SEPT 00	SCALE: N.T.S.	DESIGNED BY: KFELS	HULL/JOB NO.: R239
DRAWN: LYS	COST CODE NO.: 56-13-00	CHECKED: KE B.C.	APPROVED: SEAH B.S.
<b>JOB: "OCEAN BARONESS"</b> 6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION			
<b>TITLE: PIPING DIAGRAM - LOW PRESSURE MUD SYSTEM</b>			
SHEET 3 OF 4 SHEETS			
K-FELS DRAWING NO.: P104 (AS-BUILT)		ALT. 4	
DIAMOND DRAWING NO.: 165-PD-004		A1 (33.20"x22.40")	



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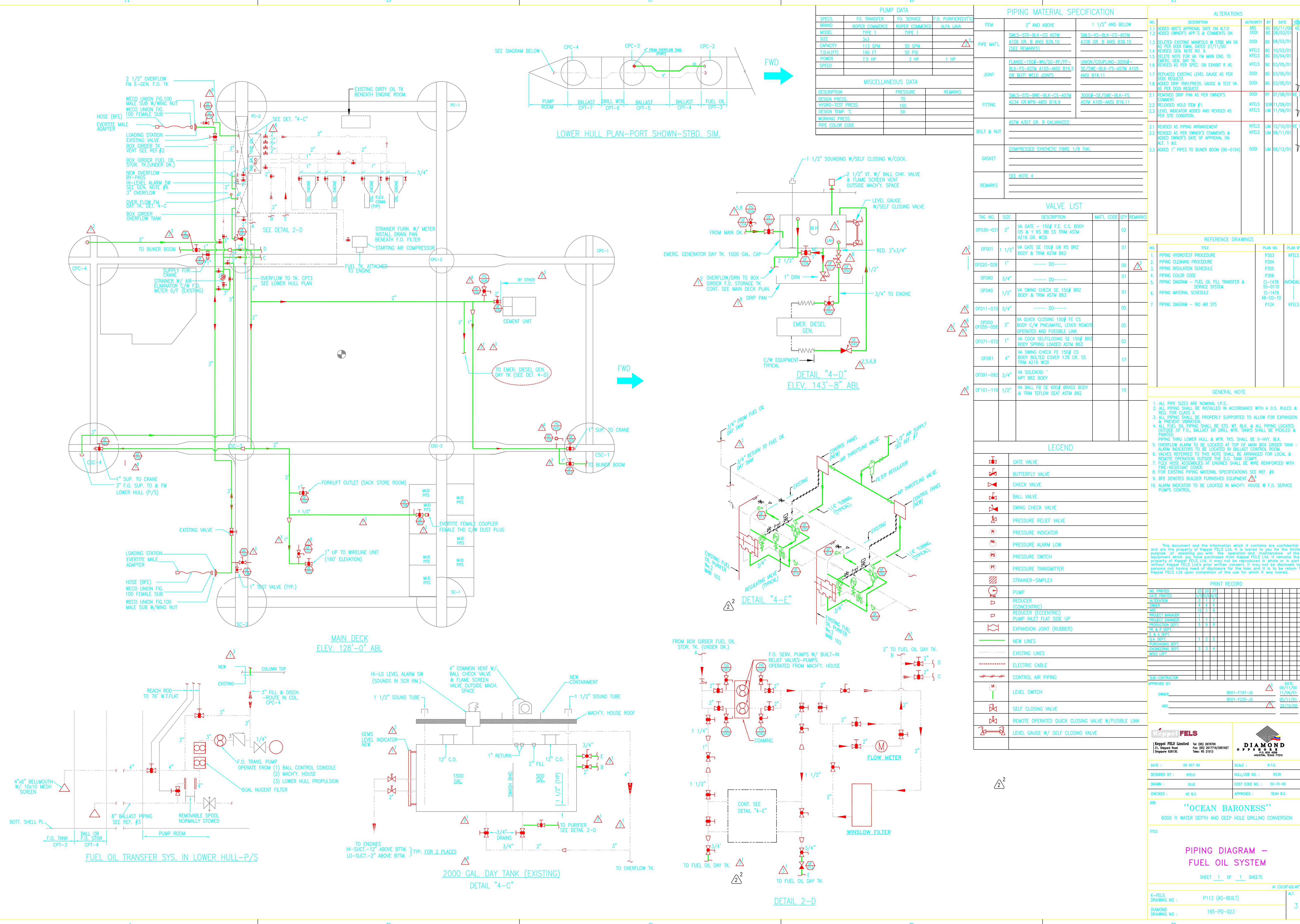
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PUMP DATA			
SPCS.	F.O. TRANSFER	F.O. SERVICE	F.O. PURIFIER(EXT'G)
BRAND	ROPER COMMERC	ROPER COMMERC	ALFA LAVA
MODEL	TYPE 1	TYPE 1	
SIZE	3/4"		
CAPACITY	11.3 GPM	50 GPM	
T.D.H.(FT)	140. FT	50. PSI	
POWER		3 HP	1 HP
SPEED			

MISCELLANEOUS DATA		
DESCRIPTION	PRESSURE	REMARKS
DESIGN PRESS.	70	
HYDRO-TEST PRESS.	105	
DESIGN TEMP. °C	50	
WORKING PRESS.		
PIPE COLOR CODE		

PIPING MATERIAL SPECIFICATION			
ITEM	2" AND ABOVE	1 1/2" AND BELOW	
PIPE MAT'L	SMLS-STD-BLK-CS-ASTM A106 GR. B ANSI B36.10 (SEE REMARKS)	SMLS-KS-BLK-CS-ASTM A106 GR. B ANSI B36.10	
JOINT	FLANGE-150#-RW/SO-RF/RF-BLK-FS-ASTM A105-B16.9 OR BUILT WELD JOINTS	UNION/COUPLING-3000#-SE/SWE-BLK-FS-ASTM A105-B16.11	
FITTING	SMLS-STD-PW-BLK-CS-ASTM A234 GRWPB-ANSI B16.9	3000#-SE/SWE-BLK-FS-ASTM A105-ANSI B16.11	
BOLT & NUT	ASTM A307 GR. B GALVANIZED		
GASKET	COMPRESSED SYNTHETIC FIBRE 1/8" THK.		
REMARKS	SEE NOTE 4		

ALTERATIONS				
NO.	DESCRIPTION	AUTHORITY	BY	DATE
1.1	ADDED ABS'S APPROVAL DATE ON ALTO	ABS	YU	05/11/00
1.2	ADDED OWNER'S APP'S & COMMENTS ON	DOOI	BG	08/03/01
1.3	DELETED EXISTING MANFOLD @ STBD MN DK AS PER DRG MARK DATED 27/11/00.	KEELS	BG	08/03/01
1.4	REVISED GEN. NOTE NO. 8	KEELS	BG	10/03/01
1.5	DELETED NOTE FOR VA FM MAIN ENG. TO EMERG. GEN. DAY TK.	KEELS	BG	20/04/01
1.6	REVISED AS PER SPEC. ON EXHIBIT R AS	KEELS	BG	03/05/01
1.7	REPLACED EXISTING LEVEL GAUGE AS PER DOOI REQUEST	DOOI	BG	03/05/01
1.8	ADDED DRIP TRAP PRESS. GAUGE & TEST VA. AS PER DOOI REQUEST	DOOI	BG	03/05/01
2.1	REMOVED DRIP PAN AS PER OWNER'S COMMENT.	DOOI	BY	07/08/01
2.2	RELEASED HOLD ITEM #1.	KEELS	SOB	11/09/01
2.3	LEVEL INDICATOR ADDED AND REVISED AS PER SITE CONDITION.	KEELS	LM	11/09/01
3.1	REVISED AS PIPING ARRANGEMENT	KEELS	LM	12/10/01
3.2	REVISED AS PER OWNER'S COMMENTS & ADDED OWNER'S DATE OF APPROVAL ON ALT. 1 & 2.	KEELS	LM	06/11/01
3.3	ADDED 1" PIPES TO BUNER BOOM (90-0104)	DOOI	LM	06/12/01

VALVE LIST				
TAG NO.	SIZE	DESCRIPTION	MAT'L CODE	QTY
0FD03-031	2"	VA GATE - 150# F.E. C.S. BODY CS & 1" RS BR SS TRIM ASTM A216 GR. WCB		02
0FD01	1 1/2"	VA GATE SE 150# UB RS BRZ BODY & TRIM ASTM B62		01
0FD02-028	1"	----- DO-----		09
0FD60	3/4"	----- DO-----		01
0FD40	1/2"	VA SWING CHECK SE 150# BRZ BODY & TRIM ASTM B62		01
0FD11-018	3/4"	----- DO-----		05
0FD09	2"	VA QUICK CLOSING 150# FE CS BODY C/W PNEUMATIC LEVER REMOTE OPERATED AND FUSIBLE LINK		05
0FD05-058	1"	VA COCK SELF-CLOSING SE 150# BRZ BODY SPRING LOADED ASTM B62		02
0FD71-072	1"	VA SWING CHECK FE 150# CS BODY BOLTED COVER 13# GR. SS TRIM A216 WCB		01
0FD81	4"	VA SOLENOID " NPT BRZ BODY		01
0FD91-092	3/4"	VA BALL FB SE 600# BRASS BODY & TRIM TEFLON SEAT ASTM B62		10
0FD10-110	1/2"			

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY
1.	PIPING HYDROTEST PROCEDURE	P303	KEELS
2.	PIPING CLEANING PROCEDURE	P304	
3.	PIPING INSULATION SCHEDULE	P305	
4.	PIPING COLOR CODE	P306	
5.	PIPING DIAGRAM - FUEL OIL FILL TRANSFER & SERVICE SYSTEM.	CI-1478 55-0110	AVONDALE
6.	PIPING MATERIAL SCHEDULE	CI-1478 48-00-10	
7.	PIPING DIAGRAM - RIG AIR SYS	P124	KEELS

- GENERAL NOTE**
1. ALL PIPE SIZES ARE NOMINAL I.P.S.
  2. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH A O.S. RULES & REG. FOR CLASS
  3. ALL PIPING SHALL BE PROPERLY SUPPORTED TO ALLOW FOR EXPANSION & PREVENT VIBRATION
  4. ALL FUEL OIL PIPING SHALL BE STD. WT. BLK. & ALL PIPING LOCATED OUTSIDE OF F.O. BALLAST OR DRILL WTR. TANKS SHALL BE PICKLED & PAINTED.
  5. PIPING THRU LOWER HULL & WTR. TKS. SHALL BE X-HY. BLK.
  6. OVERFLOW ALARM TO BE LOCATED AT TOP OF MAIN BOX GIRDER TANK - ALARM INDICATORS TO BE LOCATED IN BALLAST CONTROL ROOM.
  7. VALVES REFERRED TO THIS NOTE SHALL BE ARRANGED FOR LOCAL & REMOTE OPERATION OUTSIDE THE D.O. TANK COMPT.
  8. FLEX HOSE ASSEMBLIES AT ENGINES SHALL BE WIRE REINFORCED WITH FIRE-RESISTANT COVER.
  9. FOR EXISTING PIPING MATERIAL SPECIFICATIONS SEE REF. #6
  10. BPE DENOTES BUILDER FURNISHED EQUIPMENT.  $\Delta$
  11. ALARM INDICATOR TO BE LOCATED IN MACHY. HOUSE @ F.O. SERVICE PUMPS CONTROL

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PRINT RECORD			
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LEGEND	
	GATE VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	BALL VALVE
	SWING CHECK VALVE
	PRESSURE RELIEF VALVE
	PRESSURE INDICATOR
	PRESSURE ALARM LOW
	PRESSURE SWITCH
	PRESSURE TRANSMITTER
	STRAINER-SIMPLEX
	PUMP
	REDUCER (CONCENTRIC)
	REDUCER (ECCENTRIC)
	PUMP INLET FLAT SIDE UP
	EXPANSION JOINT (RUBBER)
	NEW LINES
	EXISTING LINES
	ELECTRIC CABLE
	CONTROL AIR PIPING
	LEVEL SWITCH
	SELF CLOSING VALVE
	REMOTE OPERATED QUICK CLOSING VALVE W/FUSIBLE LINK
	LEVEL GAUGE W/ SELF CLOSING VALVE

**Keppel FELS**  
 Keppel FELS Limited  
 31, Shaper Road  
 Singapore 487115

**DIAMOND**  
 DIAMOND PIPING & FABRICATION  
 10, Shaper Road  
 Singapore 487115

DATE: 09 OCT 00 SCALE: N.T.S.  
 DESIGNED BY: KEELS HULL/JOB NO.: R239  
 DRAWN BY: AUG COST CODE NO.: 52-10-00  
 CHECKED BY: KE B.C. APPROVED BY: SEAH B.S.

JOB: "OCEAN BARONESS"  
 6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION

TITLE: PIPING DIAGRAM - FUEL OIL SYSTEM  
 SHEET 1 OF 1 SHEETS

K-FELS DRAWING NO.: P113 (AS-BUILT) ALT. 3  
 DIAMOND DRAWING NO.: 165-PD-023

LOWER HULL PLAN-PORT SHOWN-STBD. SIM.

DETAIL "4-D"  
ELEV. 143'-8" ABL

DETAIL "4-E"

MAIN DECK  
ELEV. 128'-0" ABL

2000 GAL. DAY TANK (EXISTING)  
DETAIL "4-C"

FUEL OIL TRANSFER SYS. IN LOWER HULL-P/S

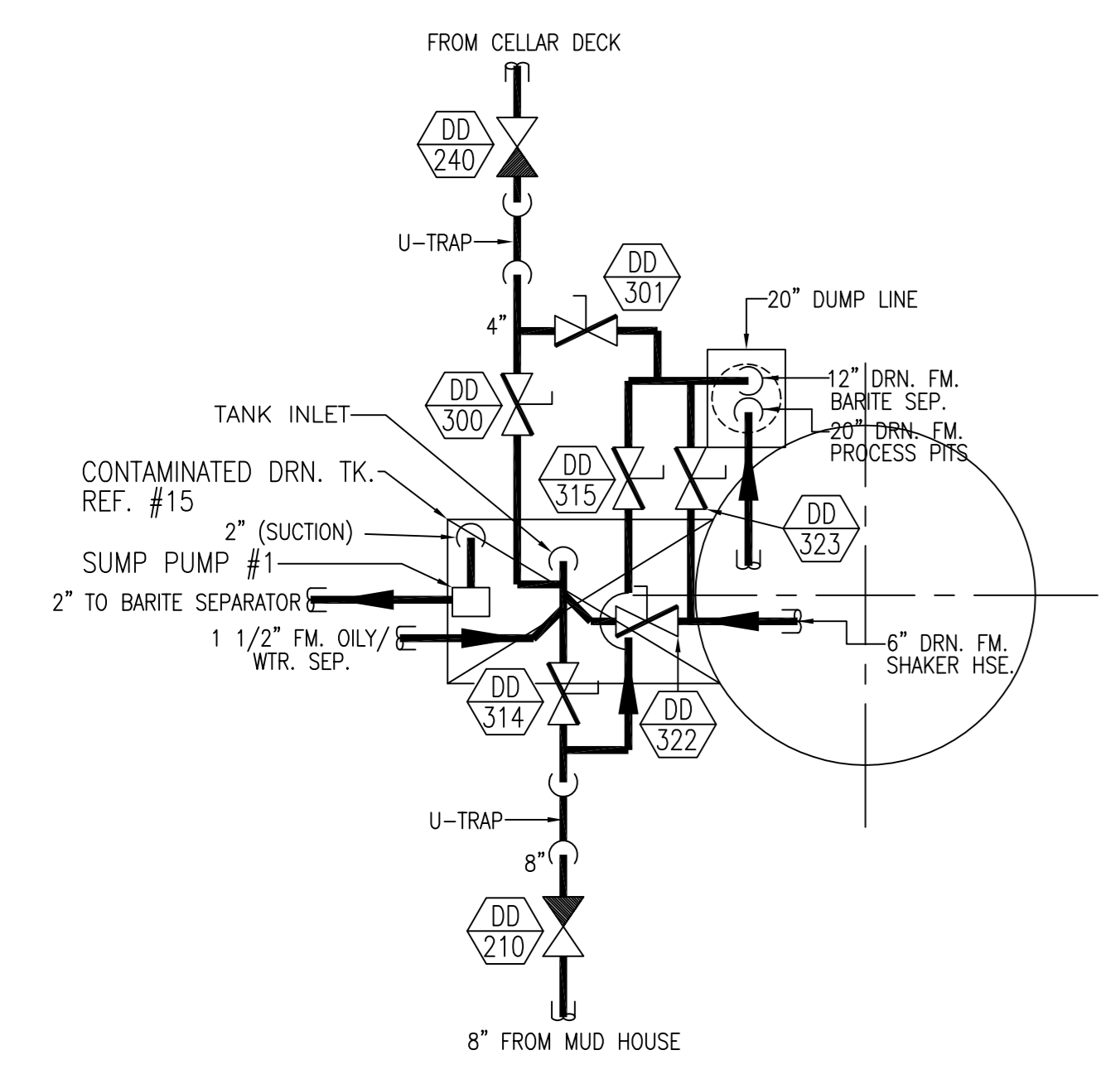
A

B

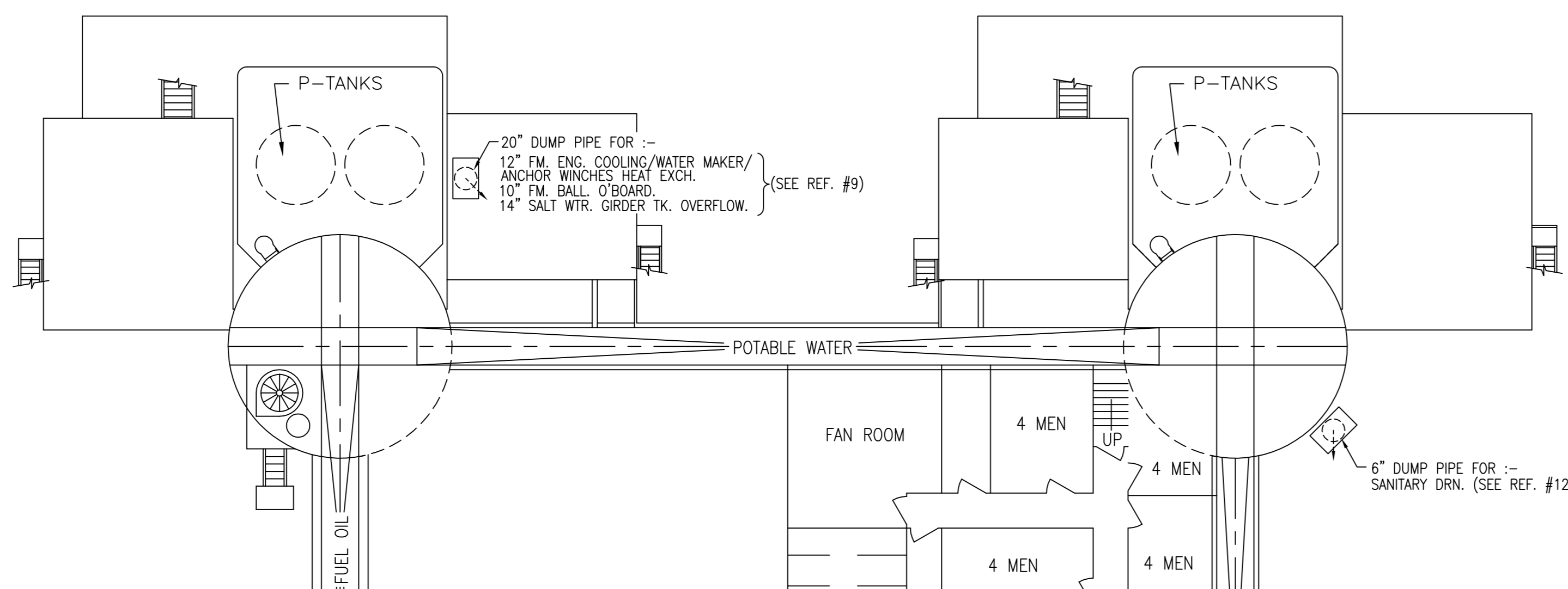
C

D

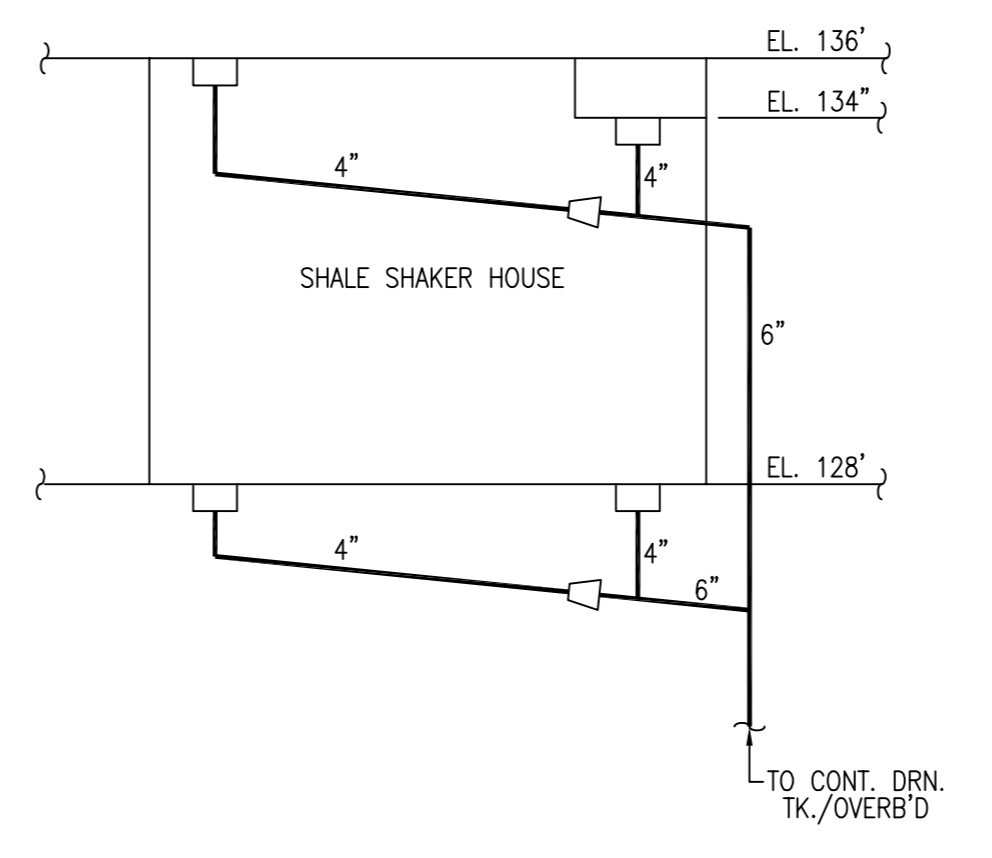
E



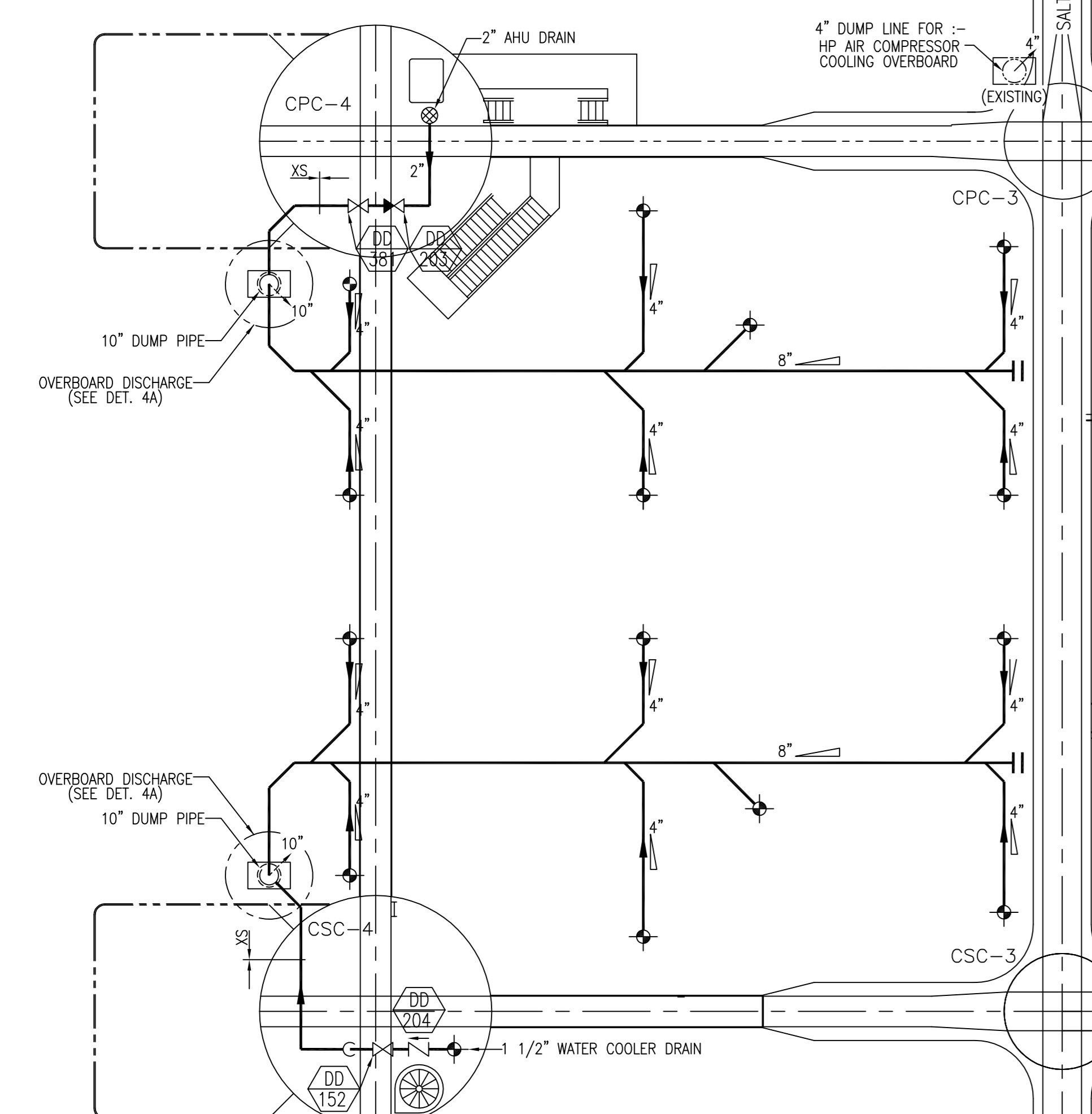
DETAIL 1A



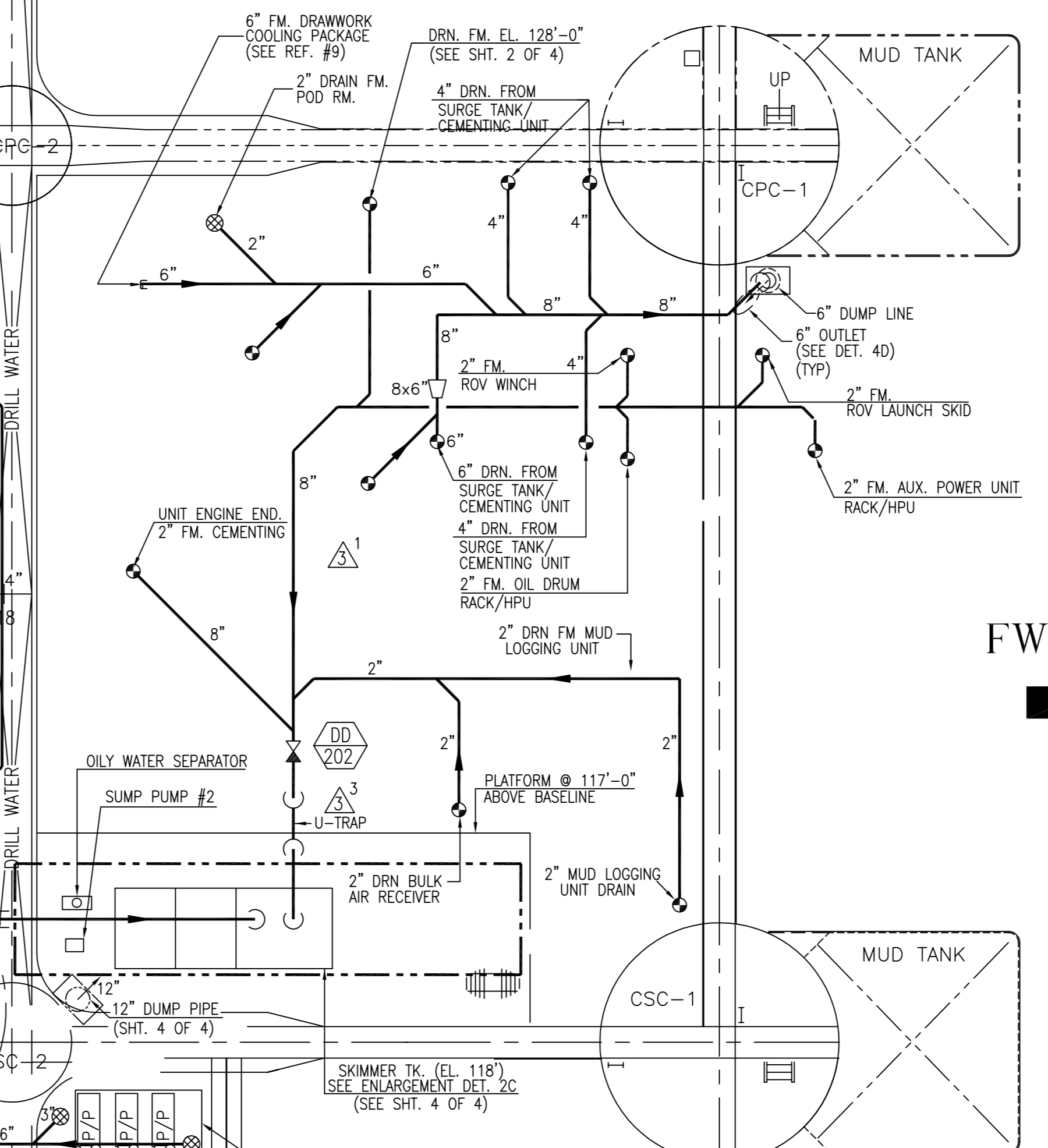
PLAN VIEW AT EL 120'-0" (PIPING SHOWN ARE BELOW DECK UNLESS OTHERWISE)



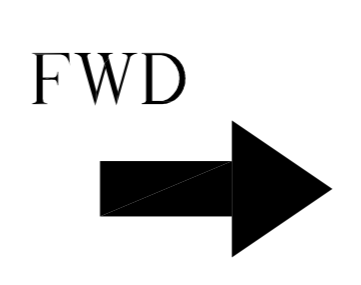
DETAIL 1C DRN. PT. @ SHALE SHAKER HSE.



DETAIL 4A



DETAIL 4C MUD PIT DUMP



DETAIL 4D TYP. DUMP LINE WITH OUTLET

PUMP DATA		
SPECS.		
BRAND		
MODEL		
SIZE		
CAPACITY	45 GPM	
T.D.H.(FT)		
POWER	70	
SPEED		
MISCELLANEOUS DATA		
DESCRIPTION		
DESIGN PRESS.	35 PSI	
HYDRO-TEST PRESS.	53 PSI	SEE NOTE 1
DESIGN TEMP. °C	50	
WORKING PRESS.		
PIPE COLOR CODE		SEE REF. #7

PIPING MATERIAL SPECIFICATION		
ITEM	2" AND ABOVE	1 1/2" AND BELOW
PIPE MATL	SMLS-STD. WT-BLK-CS ASTM A106 GR. B ANSI B36.10	SMLS-XS-BLK-CS-ASTM A106 GR. B ANSI B36.10
JOINT	FLANGE-150#-WN/SO-FF--BLK-FS-ASTM A105-ANSI B16.5 OR BUTT WELD JOINTS	UNION/COUPLING-3000#-SE/SWE-BLK-FS-ASTM ANSI B16.11
FITTING	SMLS-STD. WT-BWE-BLK-CS ASTM A234 GR.WPB-ANSI B16.9	3000#-SE/SWE-BLK-FS-ASTM A105-ANSI B16.11
BOLT & NUT	ASTM A307 GR. B GALVANIZED	
GASKET	COMPRESSED SYNTHETIC FIBRE 1/8" THK.	
REMARKS		

LEGEND		
---	NEW PIPING	
---	EXISTING PIPING	
---	OTHER PIPING SYSTEM	
⊗	HOSE CONNECTION	
⊗	BALL VALVE	
⊗	SCREW DOWN CHECK VALVE	
⊗	ACTUATED BUTTERFLY VALVE (AIR)	
⊗	POSITION ACTUATED BUTTERFLY VALVE (OPEN DEGREE CONTROL)	
⊗	GATE VALVE	
⊗	BUTTERFLY VALVE	
⊗	SWING CHECK VALVE	
⊗	CHECK VALVE	
⊗	TEST COCK VALVE	
⊗	PRESSURE RELIEF VALVE	
⊗	GAUGE MANIFOLD VALVE	
⊗	REDUCER	
⊗	STRAINER OR AIR FILTER	
⊗	PUMP	
⊗	FLEXIBLE PIPING	
⊗	PRESSURE SWITCH	
⊗	PRESSURE INDICATOR	
⊗	LEVEL GAUGE	
⊗	COMPOUND GAUGE	
⊗	SPECTACLE FLANGE	

VALVE LIST			
TAG NO.	SIZE	DESCRIPTION	MATL CODE QTY
DD310-315	8"	VA BF-LUG TYPE-150 PSIG DI BODY A536 ALUM.BRZ DISC SS 316 STEM BUNA-N SEAT C/W 10 POSITION HANDLE	06
DD320-324	6"	---	05
DD300-306	4"	---	07
DD100-109	2"	---	10
DD150-154	1 1/2"	VA GATE FE 150# CS BODY ASTM A216 WCB OS & Y RS BB SS TRIM	05
DD200-201	2"	VA DUO CHECK WAFER 150# CS BODY ASTM A234 GR. WCB ALUM. BRZ PLATE SS 316 SPRING BUNA-N SEAT	03
DD210	8"	---	01
DD230	4"	VA GATE FE 150# CS BODY ASTM A216 WCB OS & Y RS BB SS TRIM	01
DD400	8"	---	01
DD220-223	3/4"	VA BALL FB SE 600# BRASS BODY & TRIM TEFLON SEAT ASTM B283	04
DD250-257	10"	VA DUO CHECK WAFER 150# CS BODY ASTM A234 GR. WCB ALUM. BRZ PLATE SS 316 SPRING BUNA-N SEAT	01
DD381-382	2"	VA GATE FE 150# CS BODY ASTM A216 WCB OS & Y RS BB SS TRIM	02
DD204	1 1/2"	VA SWING CHK. SE 150# BRZ. BODY & TRIM ASTM B62	01
DD240	4"	VA DUO CHECK WAFER 150# CS BODY ASTM A234 GR. WCB ALUM. BRZ PLATE SS 316 SPRING BUNA-N SEAT	01
DD501	12"	VA KNIFE GATE LUGGED 150# FE DI BODY METAL SEAT - SS 316 (MODEL : 300 F952 170 AN HW)	01
DD601-DD602	1/2"	VA GATE SE 150# UB RS BRZ BODY & TRIM ASTM B62	02

ALTERATIONS			
NO.	DESCRIPTION	AUTHORITY	DATE
1.1	ADDED OWNER'S COMMENTS (REF. NO. B500-F012-JS) DATED 1/12/00.	DODI	BC 19/12/00
1.2	ADDED VALVE TAG FOR DUMP VALVES.	KFELS	BC 19/12/00
2.1	ADDED ABS DATE OF APPROVAL ON ALT. 0.	ABS	BC 19/12/00
2.2	REVISED DUMP VALVE SIZE FM. 8" TO 10". (REF. B501-F011-JS)	DODI	LYS 19/03/01
2.3	ADDED OUTLET @ 78" LEVEL AS PER DODI REQUEST. (REF. BS-01-D12-3)	DODI	LYS 24/03/01
2.4	REVISED AS PER DODI COMMENTS ON ALT. 1 AND DESIGN VERIFICATION WITH DODI. GENERAL REVISION.	DODI	LYS 24/03/01
3.1	REVISED AS PER PIPING ARRANGEMENT.	KFELS	VL 07/08/01
3.2	REVISED AS PER OIL WATER SEPARATOR CERTIFIED DWS.	KFELS	VL 07/08/01
3.3	REVISED AS PER ABS COMMENTS.	KFELS	VL 07/08/01
3.4	ADDED DODI'S APPROVAL DATE ON REV. 2	KFELS	VL 07/08/01
4.1	ADDED OWNER'S DATE OF APPROVAL ON ALT. 3.	ABS	VL 17/11/01
4.2	ADDED ABS'S DATE OF APPROVAL ON ALT. 2.	ABS	VL 17/11/01
5.1	ADDED LINE FROM BARITE SEPARATOR DRAIN LINE TO MUD TRIP TANK INCLUDING 1 GATE AND 1 BUTTY VALVE (GR-4)	DODI	sta. 10JUN.03

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY
1.	PIPING DIAGRAM - RIG AIR SYSTEM	P124	KFELS
2.	PIPING DIAGRAM - CHECK & KILL/DIVERTER SYSTEM	P118	
3.	PIPING DIAGRAM - L.P. MUD SYSTEM	P104	
4.	PIPING HYDROTEST PROCEDURE	P303	
5.	PIPING CLEANING PROCEDURE	P304	
6.	PIPING INSULATION SCHEDULE	P305	
7.	PIPING COLOR CODE	P306	
8.	PIPING DIAGRAM - VENT & SOUND SYSTEM	P101	
9.	PIPING DIAGRAM - SALT WATER SYSTEM	P105	
10.	PIPING DIAGRAM - POTABLE WATER SYSTEM	P102	
11.	PIPING DIAGRAM - DRILL WATER SYSTEM	P116	
12.	PIPING DIAGRAM - SANITARY DRAIN SYSTEM	P119	
13.	PIPING DIAGRAM - FRESH WTR. COOLING SYS. (DRAWWORK, WINDOWGLASS & DK. EQ.)	P135	
14.	PIPING DIAGRAM - LUBE OIL PIPING SYSTEM CONTAMINATED DRAIN TK. & PLATFORM	R239-H629-01	

GENERAL NOTE  
1) OPEN DRAIN TO BE FILLED TO MAXIMUM HEAD AVAILABLE.

PRINT RECORD			
NO. PRINTED	DATE PRINTED	ALTERATION	OWNER
311	25/11/08		ABS
241	25/11/08		ABS
251	11/11/08		ABS
252	11/11/08		ABS
253	11/11/08		ABS
254	11/11/08		ABS
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266	11/11/08		ABS
267	11/11/08		ABS
268	11/11/08		ABS
269	11/11/08		ABS
270	11/11/08		ABS

SUB-CONTRACTOR			
APPROVED BY:	DATE:		
OWNER: B504-F160-JS	11/04/01		
ABS: B504-F125JS	15/09/04		
ABS:	20/10/00		
ABS:	20/09/00		

**KeppelFELS**  
Keppel FELS Limited  
11, Shagwell Road  
Singapore 628150

Tel: (65) 6379700  
Fax: (65) 6377719/2851287  
Telex: RS 21515

**DIAMOND**  
DIAMOND OFFSHORE  
100, Telok Ayer St  
Singapore 068970

DATE: 08 FEB 01 SCALE: N.T.S.

DESIGNED BY: KFELS HULL/JOB NO.: R239

DRAWN: XJUG COST CODE NO.: 38-20-00

CHECKED: H.C. BARONNESS APPROVED: SEAH B.S.

JOB: "OCEAN BARONESS"  
6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION

TITLE: PIPING DIAGRAM  
DECK DRAIN  
SYSTEM

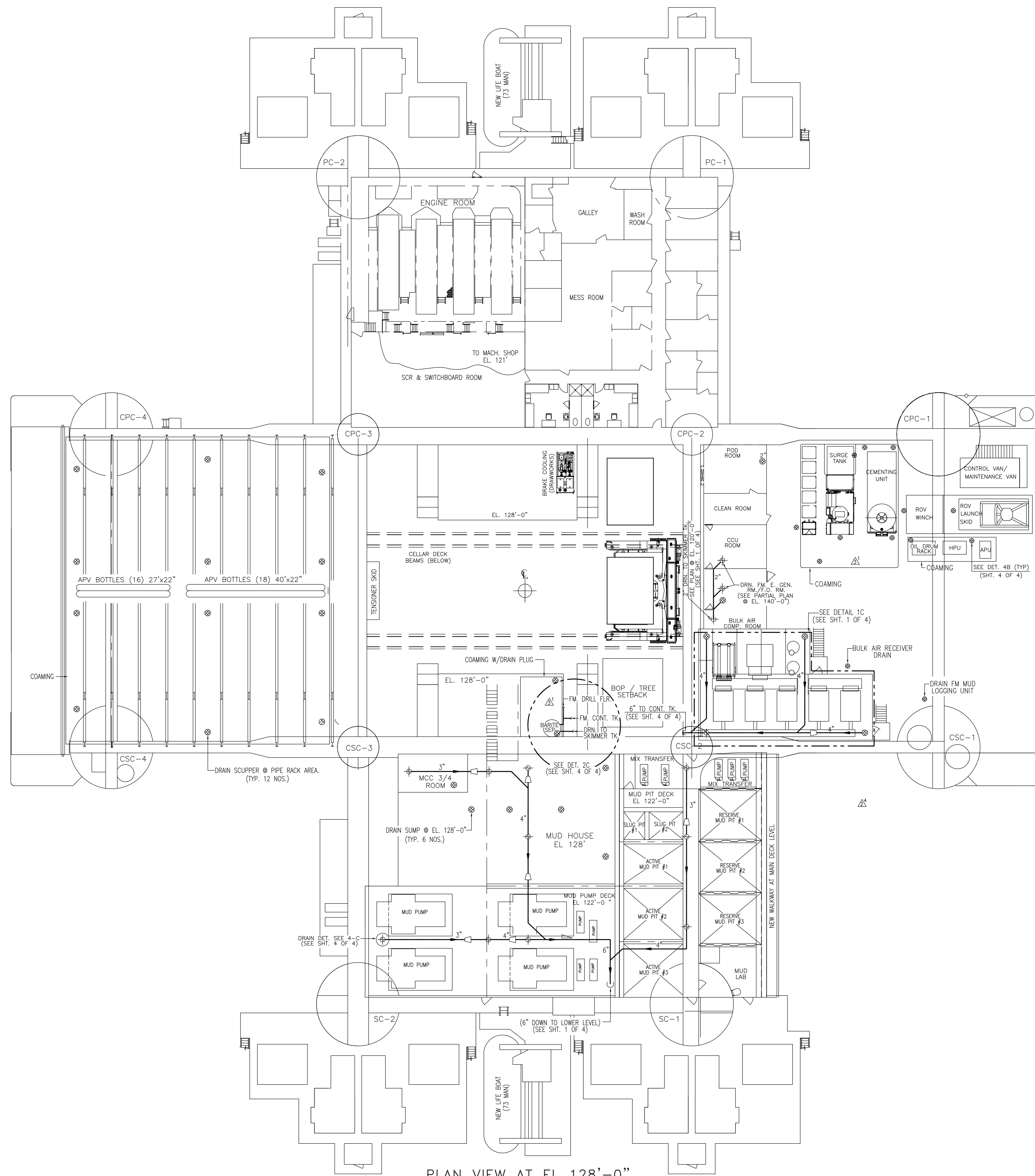
SHEET 1 OF 4 SHEETS

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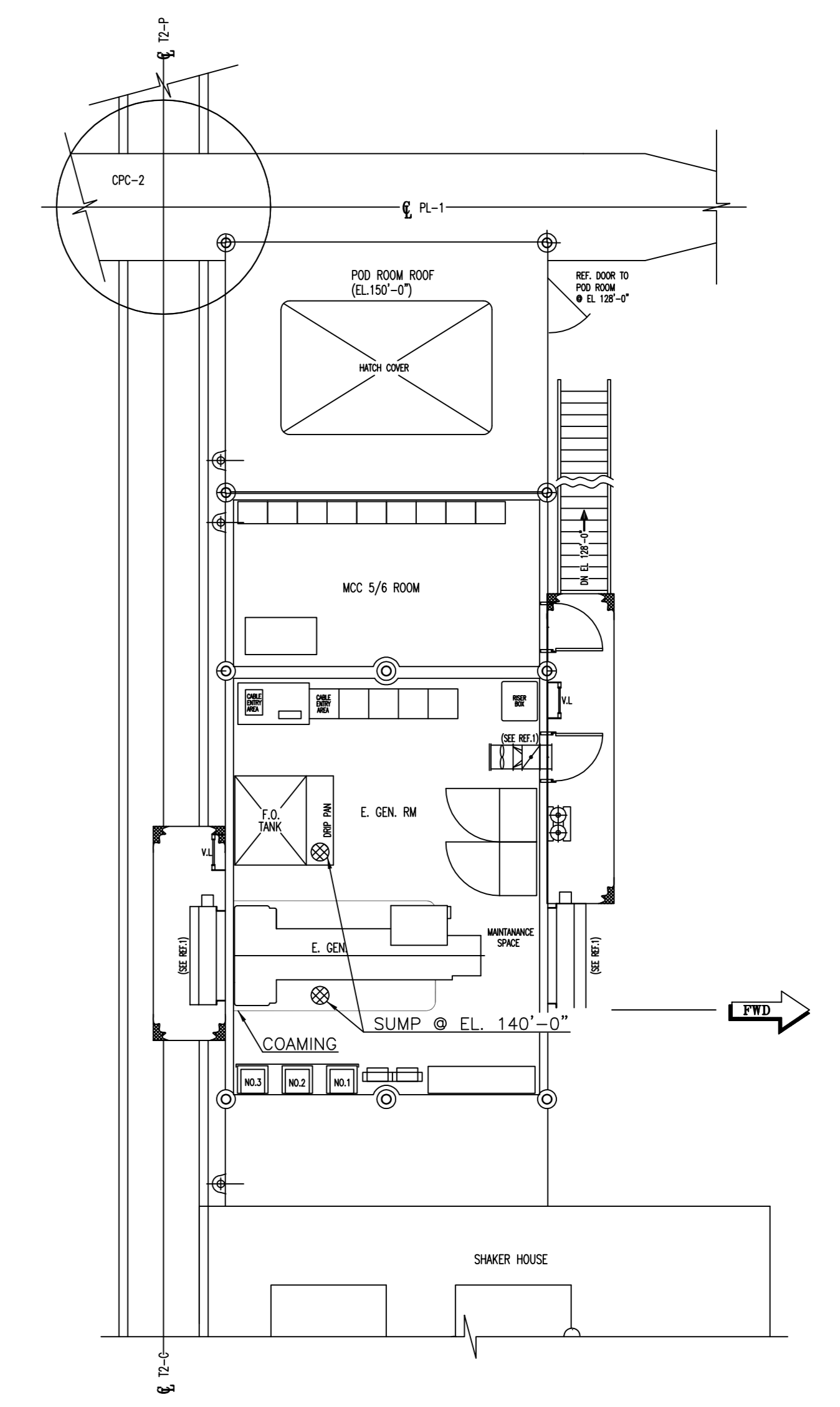
K-FELS DRAWING NO.: P128 (AS-BUILT) ALT. 5

DIAMOND DRAWING NO.: 165-PD-047





PLAN VIEW AT EL 128'-0"  
(PIPING SHOWN ARE BELOW DECK UNLESS OTHERWISE)



PARTIAL PLAN VIEW AT EL 140'-0"  
(PIPING SHOWN ARE BELOW DECK UNLESS OTHERWISE)

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ALTERATIONS				
NO.	DESCRIPTION	AUTHORITY	BY	DATE

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY

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SEE SHT. 1 OF 4

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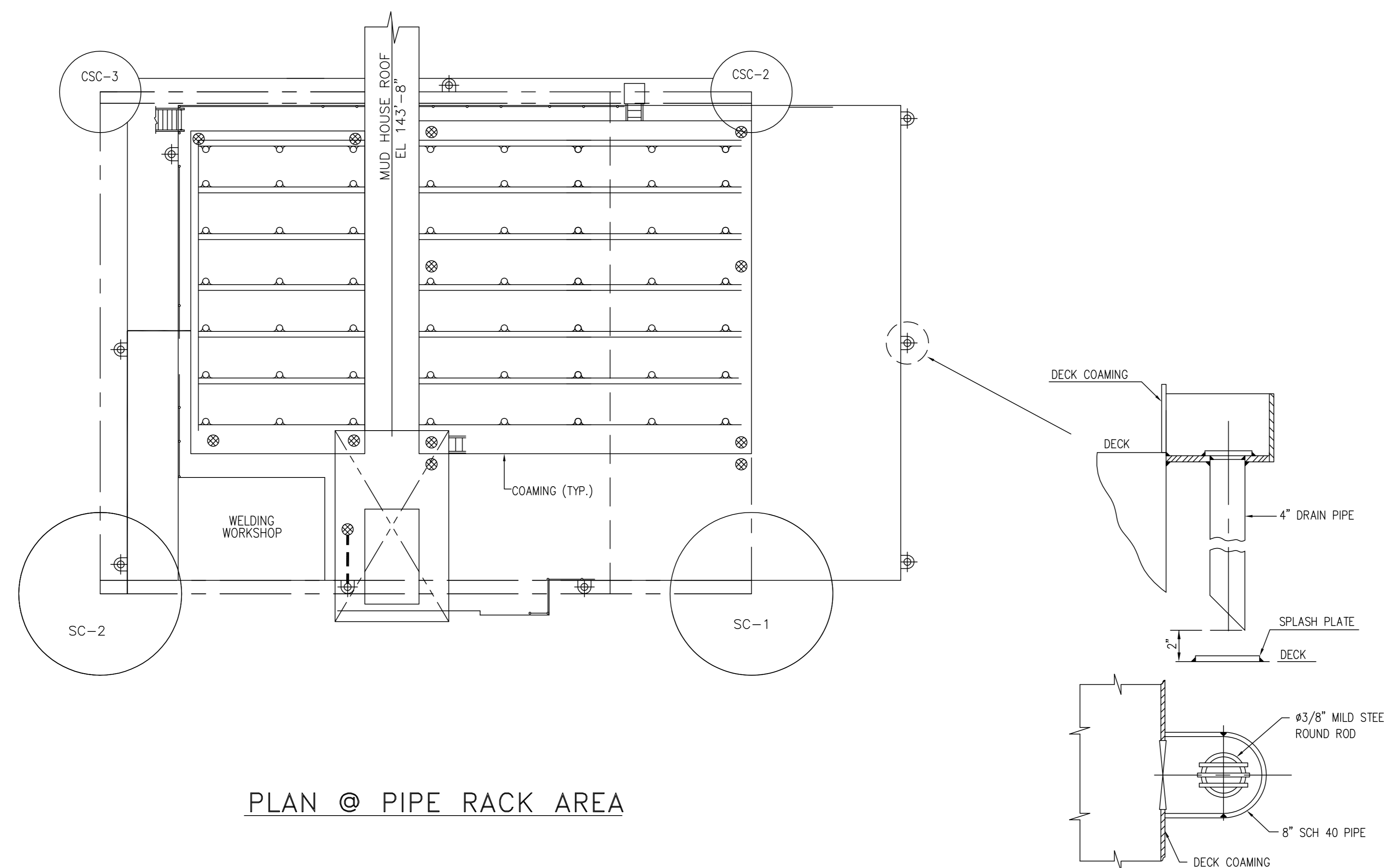
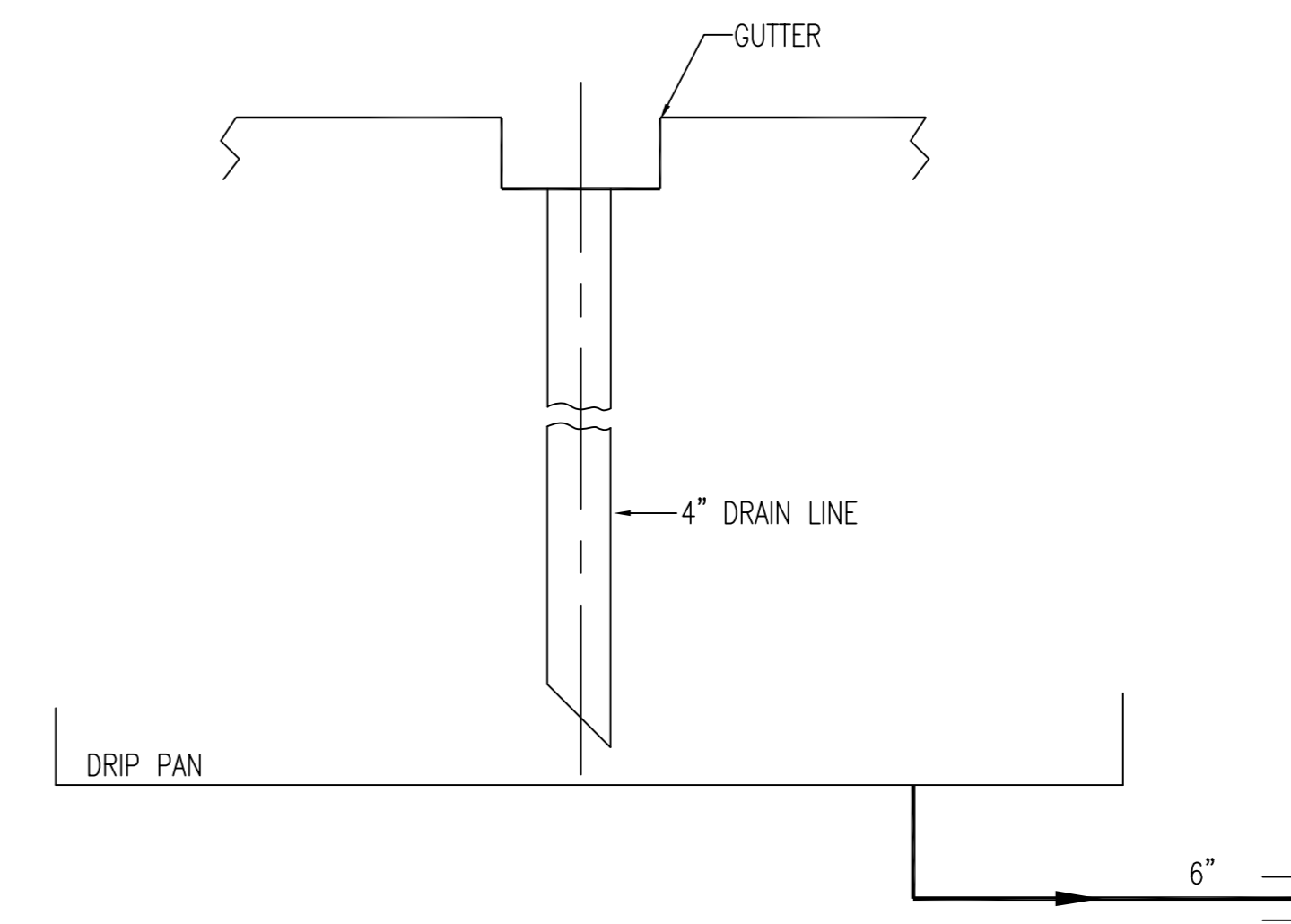
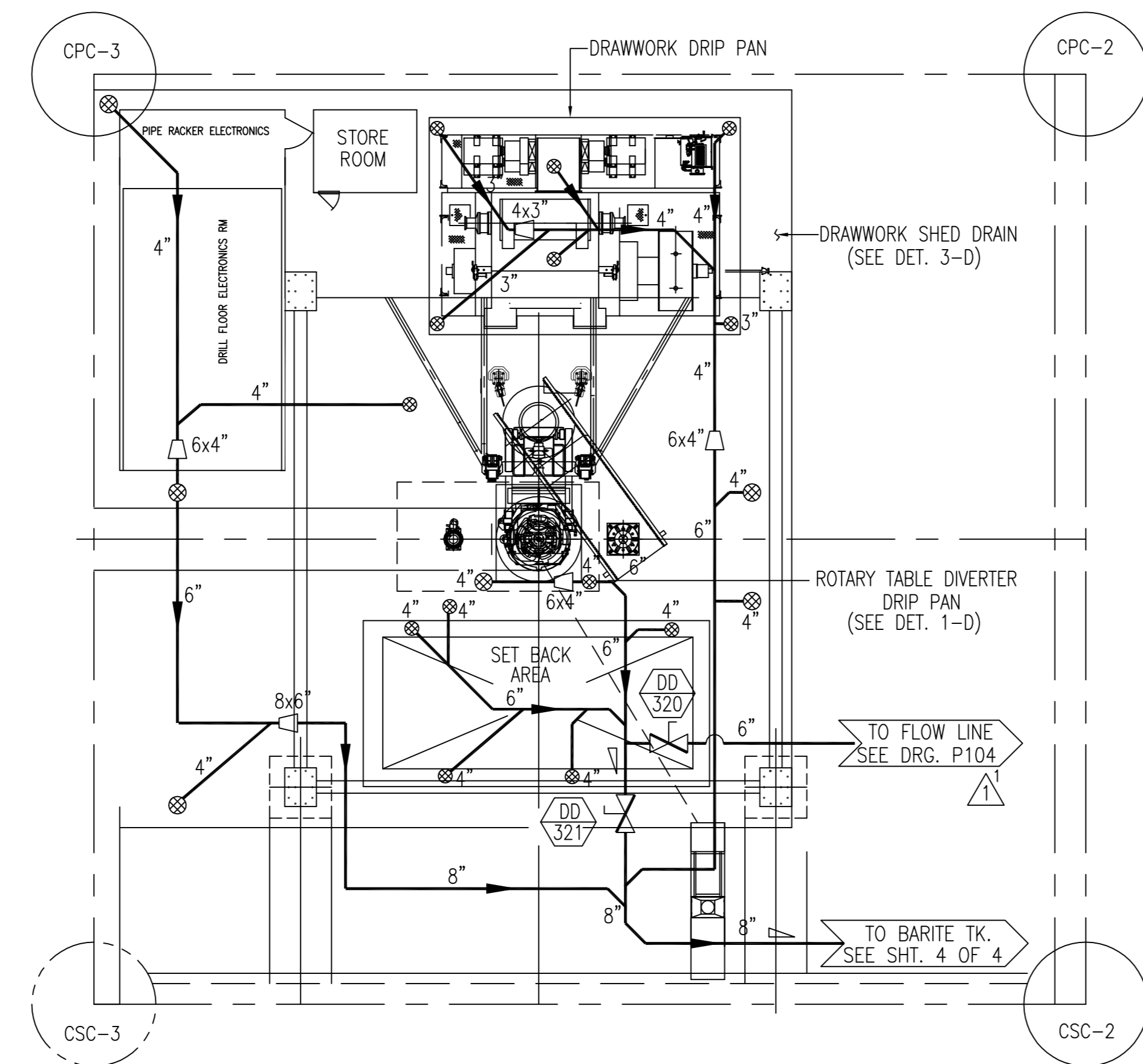
PRINT RECORD	
NO. PRINTED	
DATE PRINTED	
ALTERATION	
OWNER	
ABS	
PROJECT MANAGER	
PROJECT ENGINEER	
PRODUCTION DEPT.	
PE & P. DEPT.	
E. & I. DEPT.	
O.A. DEPT.	
PURCHASING DEPT.	
ENGINEERING DEPT.	
MOLD LOFT	
SUB-CONTRACTOR	
APPROVED BY:	DATE:
OWNER:	
ABS:	

<b>Keppel FELS</b> Keppel FELS Limited 21, Selegie Road Singapore 628150	tel: (65) 3630760 fax: (65) 3617719/2651827 telex: RS 21515	<b>DIAMOND</b> INCORPORATED 100, North Bridge Road Singapore 068770
---	---	--

DATE:	08 FEB 01	SCALE:	N.T.S.
DESIGNED BY:	KFELS	HULL/JOB NO.:	R239
DRAWN:	XJAG	COST CODE NO.:	38-20-00
CHECKED:	KE B.C.	APPROVED:	SEAH B.S.
JOB:	"OCEAN BARONESS" 6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION		

TITLE:	PIPING DIAGRAM DECK DRAIN SYSTEM		
	SHEET 2 OF 4 SHEETS		
		AT (33.207-22.407)	
K-FELS DRAWING NO.:	P128 (AS-BUILT)	ALT.	5
DIAMOND DRAWING NO.:	165-PD-047		

PROF SCALE: 1:1  
DATE FILE NAME: P128



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ALTERATIONS				
NO.	DESCRIPTION	AUTHORITY	BY	DATE
SEE SHT. 1 OF 4				

REFERENCE DRAWINGS			
NO.	TITLE	PLAN NO.	PLAN BY
SEE SHT. 1 OF 4			

**GENERAL NOTE**  
 SEE SHT. 1 OF 4

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PRINT RECORD	
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ABS	
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PROJECT ENGINEER	
PRODUCTION DEPT.	
PE & P. DEPT.	
E. & I. DEPT.	
O.A. DEPT.	
PURCHASING DEPT.	
ENGINEERING DEPT.	
MOLD LOFT	
SUB-CONTRACTOR	
APPROVED BY:	DATE:
OWNER	
ABS	

**Keppel FELS**  
 Keppel FELS Limited  
 21, Selegie Road  
 Singapore 628150

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 Fax: (65) 2617719/2651927  
 Telex: RS 21515

**DIAMOND**  
 P.O. BOX 4008  
 HONGKONG, HONG KONG

DATE :	08 FEB 01	SCALE :	N.T.S.
DESIGNED BY :	KFELS	HULL/JOB NO. :	R239
DRAWN :	XJAG	COST CODE NO. :	38-20-00
CHECKED :	KE B.C.	APPROVED :	SEAH B.S.

JOB: "OCEAN BARONESS"  
 6000 ft WATER DEPTH AND DEEP HOLE DRILLING CONVERSION

TITLE:  
**PIPING DIAGRAM  
 DECK DRAIN  
 SYSTEM**

SHEET 3 OF 4 SHEETS

K-FELS DRAWING NO. :	P128 (AS-BUILT)	ALT.	5
DIAMOND DRAWING NO. :	165-PD-047		

PROF SCALE: 1/16"

