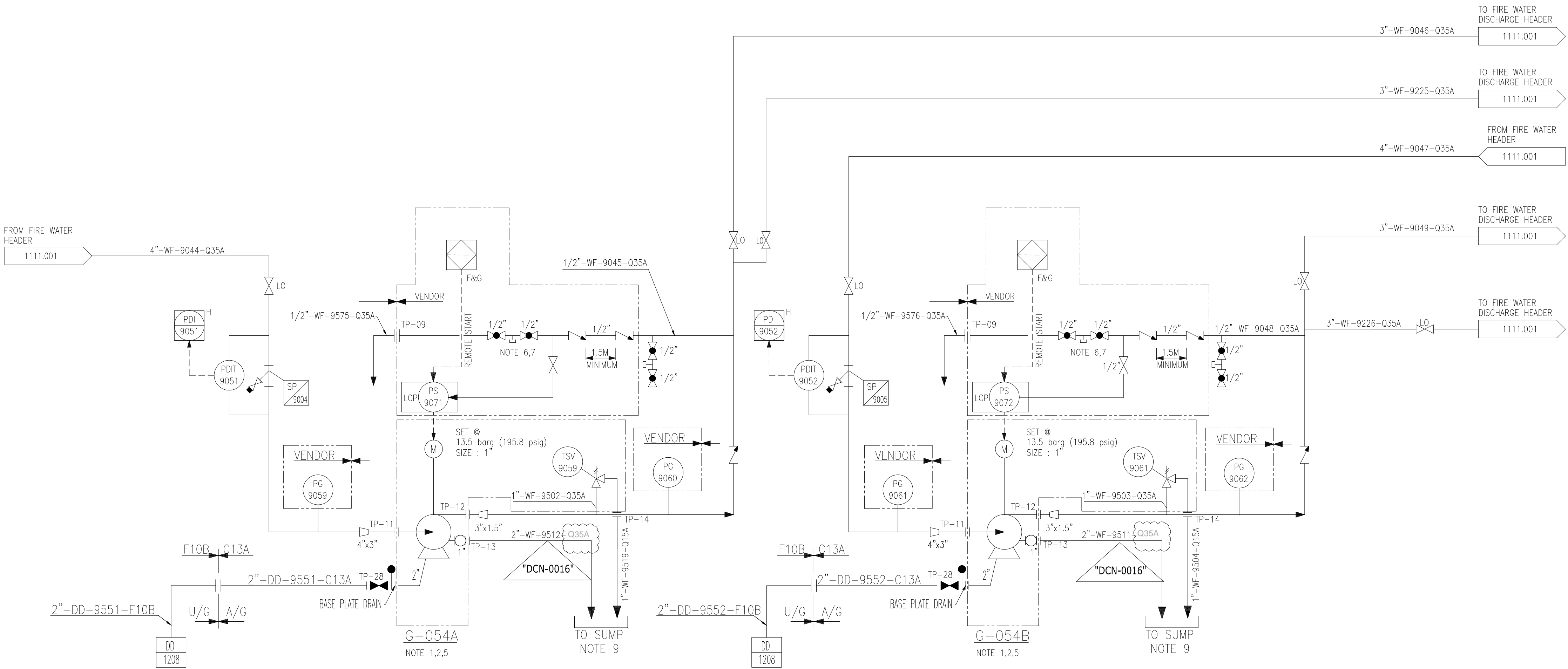


TP#	DESCRIPTION	SIZE
TP11	Jockey Pump Suction	3" 300# RF
TP12	Jockey Pump Discharge	1.5" 300# RF
TP13	Casing Drain With Ball Valve	2" 300# RF
TP14	Casing Relief Valve Connection For Jockey Pump	1" 150# RF
TP28	Base Plate Drain For Jockey Pump	2" 300# RF



**G-054A/B**  
FIRE WATER JOCKEY PUMP

FLOWRATE m3/hr (USGPH)	: 25 (6604.2)
DRIVER POWER KW (HP)	: 48 (64.36)
DIFFERENTIAL PRESS. Δ bar (PSI)	: 12.84 (186.31)
SPECIFIC GRAVITY @ OP AND OT	: 1.02
FLUID VISCOSITY @ PT CP	: 0.7
OPERATING DISCHARGE PRESS./DESIGN PRESS. barg (psig)	: 12.80/17.5(185.6/253.8)
OPERATING TEMP./DESIGN TEMP. °C (°F)	: 34/93/-3 (93/199/27)
UTC NO.	:
TRIM NO.	: GT-G054A/B-Q35A

#### GENERAL NOTES:

- FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & 1104.002.
- ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530-.
- FOR TYPICAL INSTRUMENT CONNECTION SBOV, XV, MOV, & ESDV DETAILS SEE DRAWING NOS. 50489-530-020-PID-1106.001 TO 004, 006 & 007.
- FOR MISCELLANEOUS PIPING DETAILS SEE DRAWING 50489-530-020-PID-1108.001.
- FOR TYPICAL VALVING, DRAINAGE AND GENERAL ARRANGEMENT OF LEVEL INSTRUMENTATION, PUMPS AND CONTROL VALVES SEE DRAWING 50489-530-020-PID-1108.001 TO 010.
- DRAWING NUMBERS SHOWN IN P&ID CONTINUATION BOXES ARE ABBREVIATED SHOWING DRAWING SEQUENTIAL NUMBERS ONLY. THE FULL FORM OF THE DRAWING NUMBER IS 50489-530-020-PID-XXXX.SHT. NO.
- ALL INSTRUMENT TAG NO. SHOWN ON THIS P&ID ARE PRECEDED BY 030-.

#### NOTES:

- JOCKEY PUMPS ARE OF SELF VENTING DESIGN.
- PUMP CONTROL FITTED WITH REMOTE (LOCAL START & STOP, PUMP RUNNING/ STOPPED) SIGNAL TO CCR.
- DELETED
- SET LOW AT 12.07 BARG FOR PUMP START AND SET HIGH AT 12.8 BARG FOR PUMP STOP.
- ELECTRICAL SUPPLY CONDUCTORS FOR PRESSURE MAINTENANCE PUMPS SHALL NOT BE CONNECTED TO THE MAIN FIRE PUMP CONTROLLER.
- PRESSURE SENSING LINE AS PER NFPA 20 SHALL BE PROVIDED BY PUMP VENDOR.
- PUMP START / STOP SEQUENCE SHALL BE PROVIDED AS PER NFPA 20.
- PUMP SHALL BE DESIGNED IN ACCORDANCE WITH KOC-L-009, REV.4 & KOC-ME-008 PART-2 & CRITERIA EF-1902-KOC-ME-008-02-GRT-DE1.
- ROUTED TO STORM WATER SEWER.

#### HOLD:


- DELETED.
- DELETED.
- DELETED.

01	RE- ISSUED FOR CONSTRUCTION	HSH/HSA	NIJ	SRA	RAK	16.07.16
0	ISSUED FOR CONSTRUCTION	HSH/HSA	NIJ	SRA	RAK	15.03.16
F	ISSUED "INCORPORATED CLIENTS COMMENTS"	HSH/HSA	NIJ	SRA	RAK	16.01.16
E	ISSUED FOR VENDOR HAZOP	PAK/HSA	NIJ	SRA	RAK	13.10.15
D	ISSUED "INCORPORATED CLIENTS COMMENTS"	PAK/HSA	NIJ	SRA	RAK	25.08.15
C	ISSUED "INCORPORATED CLIENTS COMMENTS"	PAK/HSA	NIJ	SRA	RAK	05.05.15
B	ISSUED "INCORPORATED CLIENTS COMMENTS"	PAK/HSA	NIJ	SRA	RAK	21.02.15
A	ISSUED FOR APPROVAL	PAK/ASA	NIJ	SRA	RAK	01.01.15
REV.	DESCRIPTION	DRAWN	CHECKED	HOD APPRD	PEM	DATE

#### CONTRACTOR REVISION

**KUWAIT OIL CO.**  
**K. S. C.**

**شركة نفط الكويت**  
**ش.م.ك.**

CONTRACTOR DETAILS:-					
 <b>LARSEN &amp; TOUBRO LIMITED</b> FARIDABAD					
PROJECT TITLE:- NEW GATHERING CENTRE GC-30 IN NORTH KUWAIT					
DOCUMENT TITLE:- PIPING & INSTRUMENTATION DIAGRAM FIRE WATER JOCKEY PUMPS (G-054A/B)					
PROJECT NO. EF1902	CONTRACTOR DRG. NO. 50489-530-000-PID-1113			DRAWING NO.	
	SHEET NO. 1 OF 1			REV. KOC DRG. NO.	
	COMPANY DRG. NO. EF1902-530-DB0-PID-0113.001			SHEET NO.	
	SHEET NO.			REV.	