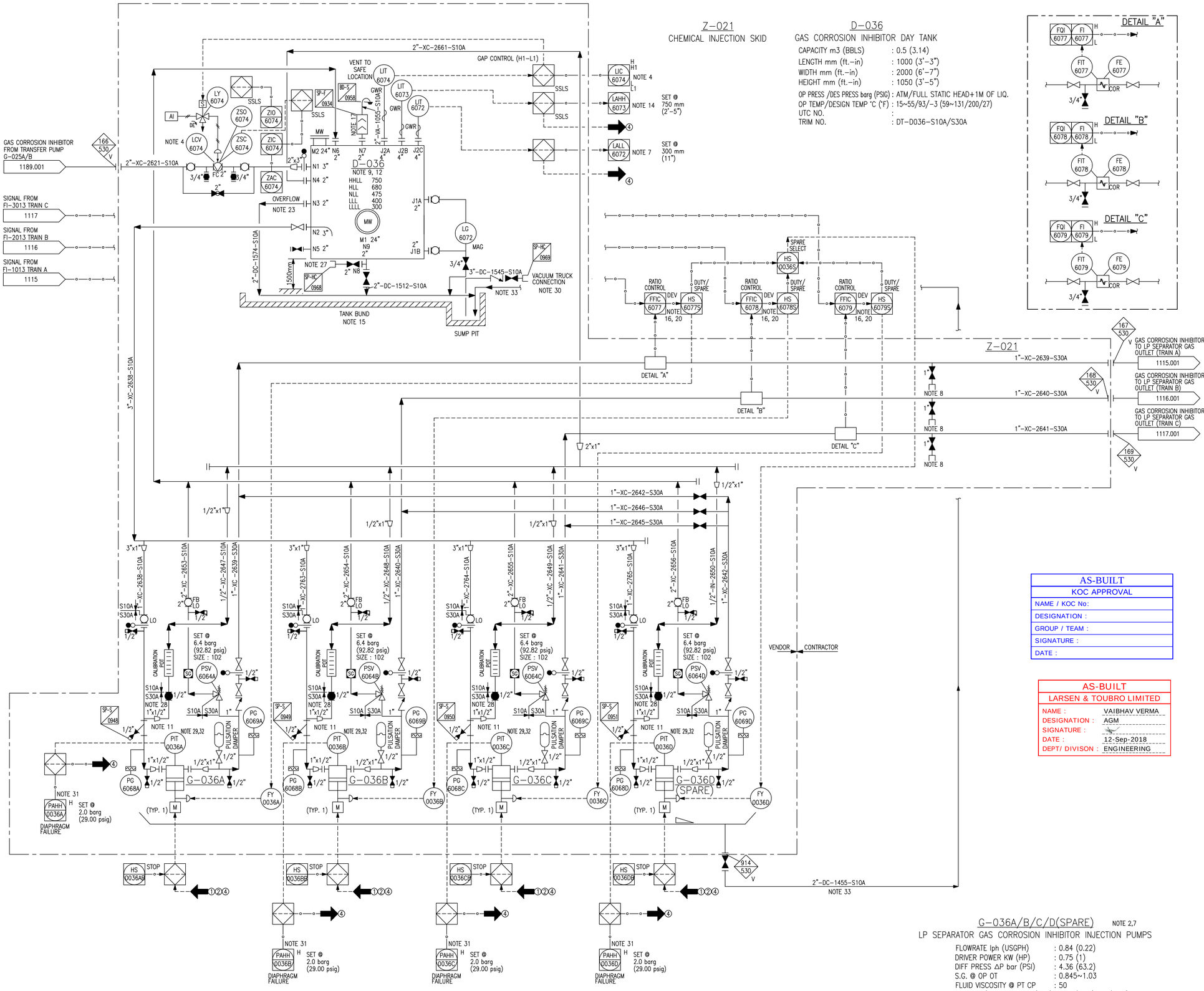

GENERAL NOTES:

A. FOR STANDARD SYMBOLS AND NOMENCLATURE SEE DRAWINGS 50489-530-020-PID-1104.001 & .002.
B. ALL EQUIPMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 530-.
C. ALL INSTRUMENT NUMBERS SHOWN ON THIS P&ID ARE PRECEDED BY 030-.
D. FOR TYPICAL INSTRUMENT CONNECTION SBDV, XV, MOV & ESDV DETAILS SEE DRAWINGS 50489-530-020-PID-1106.001, .002, .003, .004, .005, .006 & .007.
E. FOR MISCELLANEOUS PIPING TYPICAL VALVING, DRAINAGE & GENERAL ARRANGEMENT OF LEVEL INSTRUMENTS, PUMPS, STRAINERS & CONTROL VALVES SEE DRAWINGS 50489-530-020-PID-1108.001 TO 1108.010.
F. 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.
G. FOR MATERIAL SELECTION DIAGRAM SEE DRAWINGS 50489-530-020-MSD-1001.001 TO 1023.
H. DETAIL NUMBERING FOR CI, SC, CC & CP SEE DRAWING 50489-530-020-PID-1108.003.
I. PAINTING & COATING ARE IN ACCORDANCE WITH KOC-P-001.
J. LOW POINT DRAIN & HIGH POINT VENT ARE INDICATED IN P&ID.
K. FOR CAUSE & EFFECT REFER DOC. NO. 50489-530-020-PHL-1009.
L. FOR ALARM VALUES REFER DOC. NO. 50489-530-020-SUM-1006.

NOTES:

1. DELETED.
2. AUTOMATIC VARIABLE PUMP STROKE ADJUSTMENT IS THROUGH DCS.
3. DELETED.
4. VALVE CLOSES AT HIGH LIQUID LEVEL H1 (SET @660mm) VALVE OPENS AT LOW LIQUID LEVEL L1 (SET @410mm). ZSC OF LCV-6074 & ZSC OF LCV-6086 STOPS DUTY & STANDBY TRANSFER PUMP G-025A/B BY SSLS LOGIC.

5-6. DELETED.

7. LOW LOW LIQUID LEVEL STOPS GAS CORROSION INHIBITOR INJECTION PUMPS G-036A/B/C/D.
8. FLUSHING CONNECTIONS.
9. GAS CORROSION INHIBITOR DAY TANK COMES UNDER BUND AREA & GAS CORROSION INHIBITOR INJECTION PUMP IS PART OF PUMP SKID.
10. EYEWASH AND SAFETY SHOWERS ARE PROVIDED IN THE CHEMICAL INJECTION SKID AREA.
11. PROVIDE CORIOLIS FLOW MEASUREMENT AND FACILITY FOR LOCAL CALIBRATION.
12. TANK LEVEL INSTRUMENTS ARE CALIBRATED IN VOLUMETRIC UNITS.
13. DELETED.
14. HIGH HIGH LIQUID LEVEL STOPS GAS CORROSION INHIBITOR TRANSFER PUMP G-022A/B.
15. TANK CONCRETE BUND IS 115% CONTAINMENT OF D-036.
16. DEVIATION ALARMS ARE CONFIGURED IN THE DCS TO ALARM IF ACTUAL FLOW DIFFERS FROM SET BY 10%.
17. FLAME ARRESTOR INSTALLED WITH GOOSE NECK PIPE FOR VENT.
18. DELETED
19. DELETED.
20. CHEMICAL INJECTION RATIO CONTROLLER IS SET IN PPM.
21. DELETED
22. ANTI-RESISTANT CHEMICAL FLOOR IS PROVIDED.
23. OVERFLOW NOZZZLE IS LOCATED ABOVE HHLL.
24. TANK AREA ARE PAVED. FLOOR IS SLOPED TOWARDS SUMP PIT.
25. VENT TO SAFE LOCATION ARE AS PER KOC-G-002 ALONG WITH GOOSE NECK & BIRD SCREEN.
26. (A) LOW POINT DRAIN ARE PROVIDED AS APPROPRIATE.
    (B) DELETED
27. CHEMICAL PUMPOUT CONNECTION.
28. PUMP SUCTION BALL VALVE & CALIBRATION POT BALL VALVE ARE LOCATED ADJACENT TO ONE ANOTHER FOR MEASURING THE FLOW.
29. PUMPS ARE PROVIDED WITH DIAPHRAGM RUPTURE ALARM (PAHH).
30. VACUUM TRUCK CONNECTION (PIPE & VALVE) : L&T SCOPE
31. PAHH STOPS LP SEPARATOR GAS CORROSION INHIBITOR INJECTION PUMP.
32. DIRECT MOUNTING TO THE PUMP HEAD FOR DETECTING RUPTURE OF DIAPHRAGM.
33. CHEMICAL SKID DRAIN LINE TILL INLINE TEE CONNECTION IS IN L&T SCOPE.
34. MINIMUM STROKE OF 10% IS PROVIDED FOR ALL CHEMICAL INJECTION PUMP.

AS-BUILT
KOC APPROVAL
NAME / KOC No:
DESIGNATION :
GROUP / TEAM :
SIGNATURE :
DATE :

AS-BUILT	
LARSEN & TOUBRO LIMITED	
NAME :	VAIBHAV VERMA
DESIGNATION :	AGM
SIGNATURE :	
DATE :	12-Sep-2018
DEPT/ DIVISON :	ENGINEERING

G-036A/B/C/D(SPARE) NOTE 2,7
LP SEPARATOR GAS CORROSION INHIBITOR INJECTION PUMPS

FLOWRATE lph (USGPH) : 0.84 (0.22)
DRIVER POWER KW (HP) : 0.75 (1)
DIFF PRESS ΔP bar (PSI) : 4.36 (63.2)
S.G. @ OP OT : 0.845~1.03
FLUID VISCOSITY @ PT CP : 50
OP PRESS/DES PRESS barg (PSIG) : 4.36/6.4 (63.2/92.8)
OP TEMP/DESIGN TEMP °C (°F) : 15~55/93/-3 (59~131/200/27)
UTC NO. :
TRIM NO. : GT-G036A/B/C/D-S30A

REV.	DESCRIPTION	DRAWN	CHECKED	HOD APPRD.	PEM APPRD.	DATE
Z0	ISSUED FOR AS-BUILT	BAK/CHS	AKG	SRA	DER	12.09.18
01	ISSUED FOR CONSTRUCTION	BAK/CHS	AKG	SRA	DER	19.12.16
0	ISSUED FOR CONSTRUCTION	HSH/CHS	AKG	SRA	RAK	09.06.16
D	ISSUED INCORPORATED CLIENT COMMENTS	PAK/CHS	AKG	SRA	RAK	05.04.16
C	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	29.10.15
OC	ISSUED INCORPORATED CLIENT COMMENTS	BAK/ABY	AKG	SRA	RAK	03.06.15
B	ISSUED INCORPORATED CLIENT COMMENTS	JSI/ABY	AKG	SRA	RAK	23.02.15
A	ISSUED FOR APPROVAL	BAK/ABY	AKG	SRA	RAK	12.12.14

CONTRACTOR REVISION

KUWAIT OIL CO. K. S. C. — شركة نفط الكويت ش.م.ك.
A Subsidiary of Kuwait Petroleum Corporation

CONTRACTOR DETAILS:-
LARSEN & TOUBRO LIMITED
FARIDABAD

PROJECT TITLE:-
NEW GATHERING CENTRE GC-30
IN NORTH KUWAIT

DOCUMENT TITLE:-
PIPING & INSTRUMENTATION DIAGRAM
CHEMICAL INJECTION SKID #1-GAS CORROSION INHIBITOR
(D-036 & G-036A/B/C/D)

PROJECT NO.	DRAWING NO.			
EF1902	CONTRACTOR DRG. NO. 50489-530-020-PID-1194.005	REV. Z0	KOC DRG. NO.	REV.
	SHEET NO. 5 OF 5		SHEET NO.	
	COMPANY DRG. NO. EF1902-530-DCO-PID-0194.005	REV. A2		
	SHEET NO.			

A1