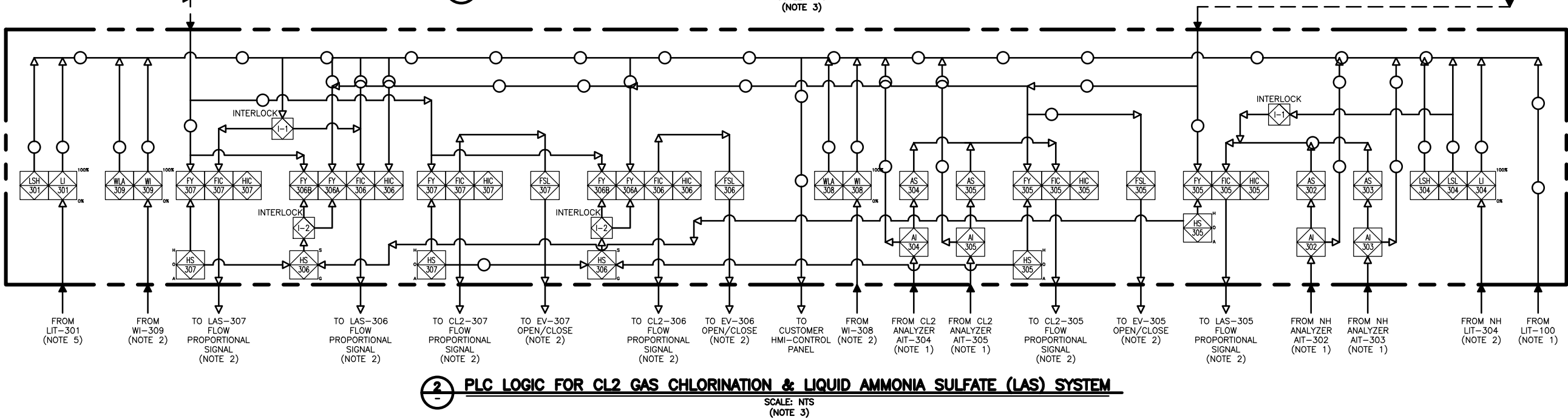
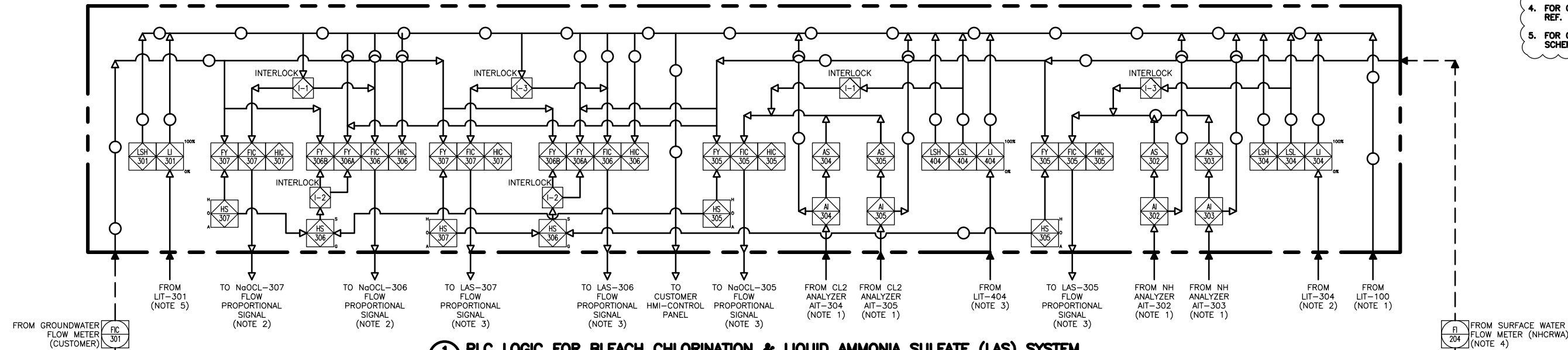


No.	Date	Revisions	App.

CUSTOMER CONTROL PANEL - CONTROL LEVEL							
No.	INPUT DESCRIPTION	WRF Instruments	No.	INPUT DESCRIPTION	WRF Instruments	No.	OUTPUT DESCRIPTION
INPUTS TO WATER RECEIVING FACILITIES (WRF)			INPUTS TO WATER RECEIVING FACILITIES (WRF)			OUTPUTS TO WATER RECEIVING FACILITIES (WRF)	
1	CHLORINE GAS CYLINDER (WEIGHT & LOW WEIGHT ALARM)	WI 308	9	SANITARY LIFT STATION FOR REAGENTS (LEVEL & HIGH LEVEL ALARM)	LIT 301	1	CHLORINATOR (FLOW PROPORTIONAL SIGNAL - SURFACE WATER)
2	CHLORINE GAS CYLINDER (WEIGHT & LOW WEIGHT ALARM)	WI 309	10	SURFACE WATER FLOW METER (INSTANTANEOUS FLOW)	FE 204 & FITQ 204	2	CHLORINATOR (FLOW PROPORTIONAL SIGNAL - GROUND WATER)
3	FREE AMMONIA ANALYZER (LEVELS)	AIT 302 & AE 302	11	TOTAL CHLORINE ANALYZER (LEVELS)	AIT 304 & AE 304	3	CHLORINATOR (SOV - OPEN/CLOSE - SURFACE WATER)
4	FREE AMMONIA ANALYZER (LEVELS)	AIT 303 & AE 303	12	TOTAL CHLORINE ANALYZER (LEVELS)	AIT 305 & AE 305	4	CHLORINATOR (SOV - OPEN/CLOSE - GROUND WATER)
5	LAS SUPPLY TANK (LEVEL & HIGH/LOW LEVEL ALARM)	LIT 304	13	WRF GST (LEVEL & HIGH/LOW LEVEL ALARM)	LIT 100	5	LAS METERING PUMPS (FLOW PROPORTIONAL SIGNAL - SURFACE WATER)
6	LAS SUPPLY TANK (LEVEL & HIGH/LOW LEVEL ALARM)	LIT 305	14	GROUNDWATER FLOW METER (FLOW)		6	LAS METERING PUMPS (FLOW PROPORTIONAL SIGNAL - GROUND WATER)
7	NaOCl SUPPLY TANK (LEVEL & HIGH/LOW LEVEL ALARM)	LIT 404	15	GROUNDWATER WELLS (STATUS)		7	NaOCl METERING PUMPS (FLOW PROPORTIONAL SIGNAL - SURFACE WATER)
8	NaOCl SUPPLY TANK (LEVEL & HIGH/LOW LEVEL ALARM)	LIT 405				8	NaOCl METERING PUMPS (FLOW PROPORTIONAL SIGNAL - GROUND WATER)
							CI 305, EV 305, CI 306 & EV 306
							CI 307, EV 307, CI 308 & EV 308
							CI 305 & CI 306
							CI 307 & CI 308
							LAS 305 & LAS 306
							LAS 307 & LAS 308
							NaOCl 305 & NaOCl 306
							NaOCl 307 & NaOCl 308

- NOTES:**
1. FOR CONTINUATION, SEE PROCESS SCHEMATICS REF. NO. 60 AND 61.
 2. FOR CONTINUATION, SEE PROCESS SCHEMATICS REF. NO. 74 AND 75.
 3. FOR CONTINUATION, SEE PROCESS SCHEMATICS REF. NO. 76 AND 77.
 4. FOR CONTINUATION, SEE INSTRUMENTS REF. NO. 105.
 5. FOR CONTINUATION, SEE PROCESS SCHEMATICS REF. NO. 60



INSTRUMENTATION LEGEND					
AI	ANALYZER INDICATOR	FIC	FLOW INDICATOR CONTROLLER	LSH	LEVEL SWITCH - HIGH
AIT	ANALYZER INDICATOR TRANSMITTER	FSH	FLOW SWITCH - HIGH	LSHH	LEVEL SWITCH - HIGH HIGH
AS	ANALYZER SWITCH	FSL	FLOW SWITCH - LOW	LSL	LEVEL SWITCH - LOW
ESVC	ELECTRIC SOLENOID VALVE - CLOSE	FITQ	FLOW TOTALIZER	LSLL	LEVEL SWITCH - LOW LOW
ESVO	ELECTRIC SOLENOID VALVE - OPEN	HIC	HAND INDICATOR CONTROLLER	PAH	PRESSURE ALARM HIGH
EV	ELECTRIC VALVE	HS	HAND SWITCH	PAL	PRESSURE ALARM LOW
EVNH	ELECTRIC VALVE - AMMONIA	LI	LEVEL INDICATOR	PI	PRESSURE INDICATOR
EVCL	ELECTRIC VALVE - CHLORINE	LIT	LEVEL INDICATOR TRANSMITTER	PIT	PRESSURE INDICATOR TRANSMITTER
FY	FLOW COMPUTE	LS	LEVEL SWITCH	SV	SOLENOID VALVE

- INTERLOCK I-1 DENOTES LOW LEVEL OFF FOR PUMPS (NaOCl)**
- INTERLOCK I-2 DENOTES SIGNAL SWITCH FOR STANDBY PUMP AND CHLORINATOR EV**
- INTERLOCK I-3 DENOTES LOW LEVEL OFF FOR PUMPS (LAS)**



**PLC LOGIC DIAGRAM
CHEMICAL SYSTEMS**

APPROVED BY: *Shanabgini*
DESIGN MANAGER

EFF. DATE: 12/22/2020 REF. NO. 106