

# Appendix 2

*CENTRAL KITSAP  
WASTEWATER TREATMENT PLANT  
DUPLEX PUMP CONTROL PANEL  
PLANT WASTEWATER SUMP PUMP PANEL PNL1090*

ASBUILT

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*ACE CONTROLS LLC  
327 DERRICK DRIVE  
HUMBLE, TX 77339  
713-589-5494*



*PROJECT NO.: P-091203  
PROJECT MANAGER.: AGMED AGUIRRE  
DATE: JUNE 28, 2011*

**BILL OF MATERIALS**

ITEM	QTY	PART DESCRIPTION	PART NUMBER	MANUFACTURER
1	1	NEMA 4X STAINLESS STEEL ENCLOSURE 36 X 30 X 12	S363012NFSS43PT	STEELINE ENCLOSURES
2	1	INTERIOR PANEL	S36P30	STEELINE ENCLOSURES
3	1	3 POLE BREAKER 100 AMP 18KAIC	HDL36100	SQUARE D
4	2	MAG-GARD MCP 14 - 42 AMP 65KAIC	HJL36050M72	SQUARE D
5	2	NEMA SIZE 2 FVNR CONTACTOR	8502SDO2V02S	SQUARE D
6	2	SOLID STATE OVERLOAD RELAY 9-27 AMPS	9065-SS120	SQUARE D
7	2	CONTACTOR AUXILIARY CONTACT	9999-SX6	SQUARE D
8	2	OVERLOAD AUXILIARY CONTACT	9999-AC04	SQUARE D
9	1	EXTERNAL DISCONNECT HANDLE NEMA 4X	9421-LC43	SQUARE D
10	1	DISCONNECT SHAFT	9421-LS8	SQUARE D
11	1	OPERATING MECHANISM	9421-LJ7	SQUARE D
12	1	500VA, 480VAC-120VAC TRANSFORMER	9070TF500D1	SQUARE D
13	1	GROUND BUS BAR	PK23GTA	SQUARE D
14	1	POWER DISTRIBUTION LUGS H-FRAME BREAKER	PDC6HD6	SQUARE D
15	8	30MM PUSH-TO-TEST PILOT LED, WHITE	9001SKT38LW	SQUARE D
16	2	30MM PUSH-TO-TEST PILOT, GREEN LENS	9001G9	SQUARE D
17	6	30MM PUSH-TO-TEST PILOT, RED LENS	9001R9	SQUARE D
18	1	30MM FLUSH HEAD PUSH BUTTON	9001SKR1U	SQUARE D
19	2	30MM THREE POSITION SWITCH (HOA)	9001SKS43B	SQUARE D
20	6	N.O. & N.C. CONTACT	9001KA1	SQUARE D
21	3	N.C. CONTACT	9001KA3	SQUARE D
22	6	4 POLE 120VAC RELAY W/ TEST & INDICATOR	RPM42F7	SQUARE D
23	6	4 POLE RELAY BASE	RPZF4	SQUARE D
24	1	3 POLE 120VAC RELAY W/ TEST & INDICATOR	RPM32F7	SQUARE D
25	1	3 POLE RELAY BASE	RPZF3	SQUARE D
26	5	2 POLE 120VAC RELAY W/ TEST & INDICATOR	RPM22F7	SQUARE D
27	5	2 POLE RELAY BASE	RPZF2	SQUARE D
28	1	TIMER MODULE	RUW101MW	SQUARE D
29	4	UT4 FUSED TERMINAL BLOCK	3046032	PHOENIX CONTACT
30	50	UT4 TERMINAL BLOCK	3044102	PHOENIX CONTACT
31	2	2 AMP FUSE	ATQR-2	FERRAZ SHAWMET
32	1	1 AMP FUSE	ATQ-4	FERRAZ SHAWMET
33	2	ELAPSED TIME METER W/ GASKET	106110C / G-0110	FOURTH DIMENSION
34	2	SEAL FAILURE RELAY	PNR110A	CROUZETS
35	3	8 PIN OCTAL BASE	70-464-1	MAGNECRAFT
36	1	HYDRORANGER 200 PANEL MOUNT	7ML5034-3AA01	MILLTRONICS
37	1	XPS 15 ECHOMAX LEVEL TRANSDUCER	7ML11180CA40	MILLTRONICS
38	2	FLOAT SWITCH	G40NONC	ANCHOR SCIENTIFIC
39	3	6FT - WIRING DUCT	WDSL2x3G4	HELLERMENN TYT
40	3	6FT - WIRING DUCT COVER	WDCV2x3G4	HELLERMENN TYT
41	6	6FT - WIRING DUCT	WDSL1x3G4	HELLERMENN TYT
42	6	6FT - WIRING DUCT COVER	WDCV1x3G4	HELLERMENN TYT
43	1	DUPLEXOR	ARA-120-ACA	DIVERSIFIED ELEC.
44	1	30MM THREE POSITION SWITCH (PUMP1 ALT PUMP2)	9001SKS401B	SQUARE D
45	2	N.O. CONTACT	9001KA2	SQUARE D

**NAMEPLATE SCHEDULE**

ITEM	QTY	DESCRIPTION LINE 1	DESCRIPTION LINE 2	SIZE
A	1	PNL-1090	PLANT WASTEWATER PUMPS	1 X 6
B	1	MAIN DISCONNECT		1 X 3
C	1	SUMP PUMP	P-1091	1 X 3
D	1	SUMP PUMP	P-1092	1 X 3
E	1	PUMP P-1091	RUNNING	2.25 X 2.25
F	1	PUMP P-1091	OVER TEMP ALARM	2.25 X 2.25
G	1	PUMP P-1091	SEAL FAILURE	2.25 X 2.25
H	1	PUMP P-1091	HAND OFF AUTO	2.25 X 2.25
I	1	PUMP P-1091	RUNNING	2.25 X 2.25
J	1	PUMP P-1091	OVER TEMP ALARM	2.25 X 2.25
K	1	PUMP P-1091	SEAL FAILURE	2.25 X 2.25
L	1	PUMP P-1091	HAND OFF AUTO	2.25 X 2.25
M	1	ALARM	RESET	2.25 X 2.25
N	1	LOW LEVEL	ALARM	2.25 X 2.25
O	1	HIGH LEVEL	ALARM	2.25 X 2.25
P	1	LEAD SELECTOR	PUMP 1 ALT PUMP 2	2.25 X 2.25

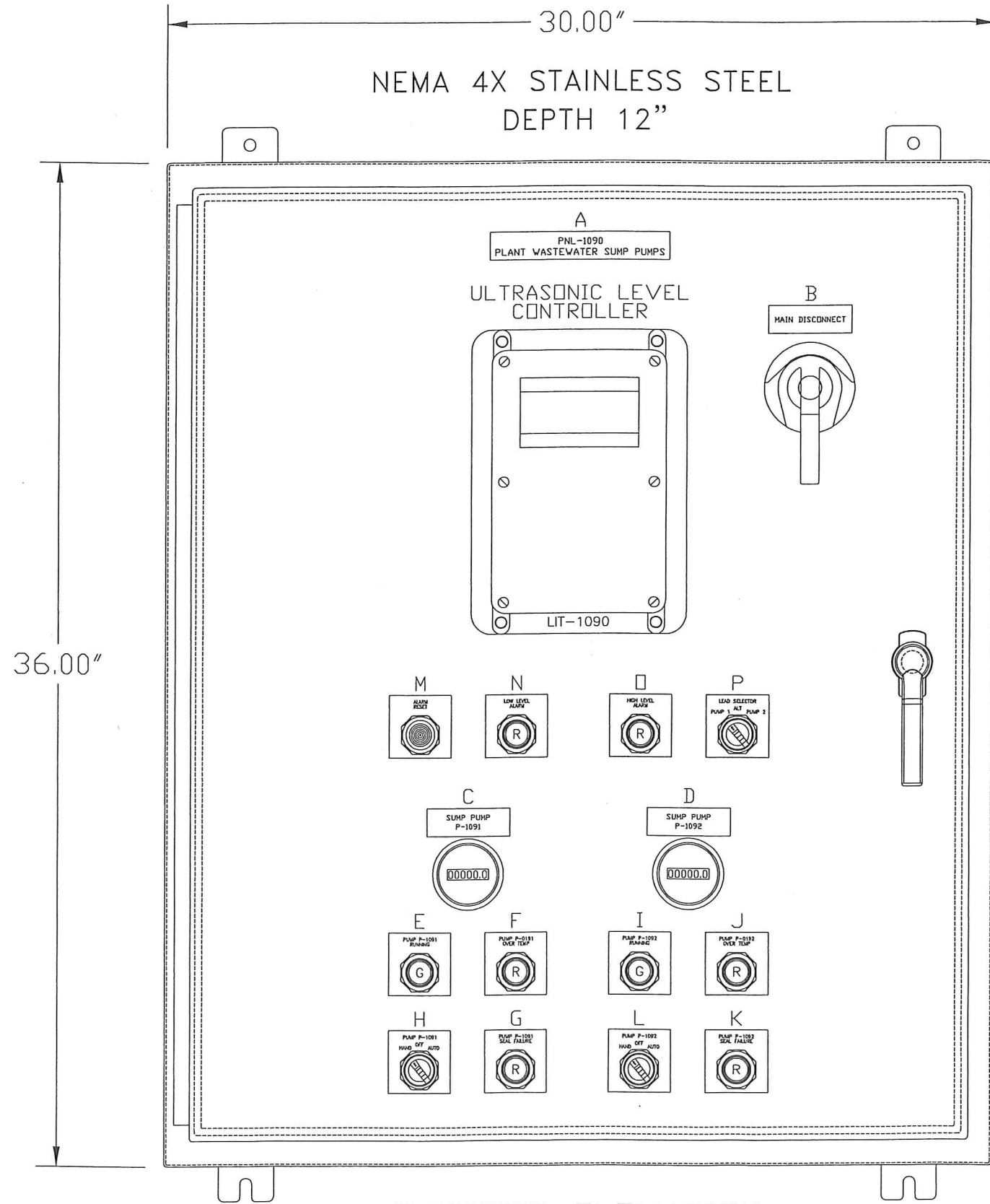
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ASBUILT

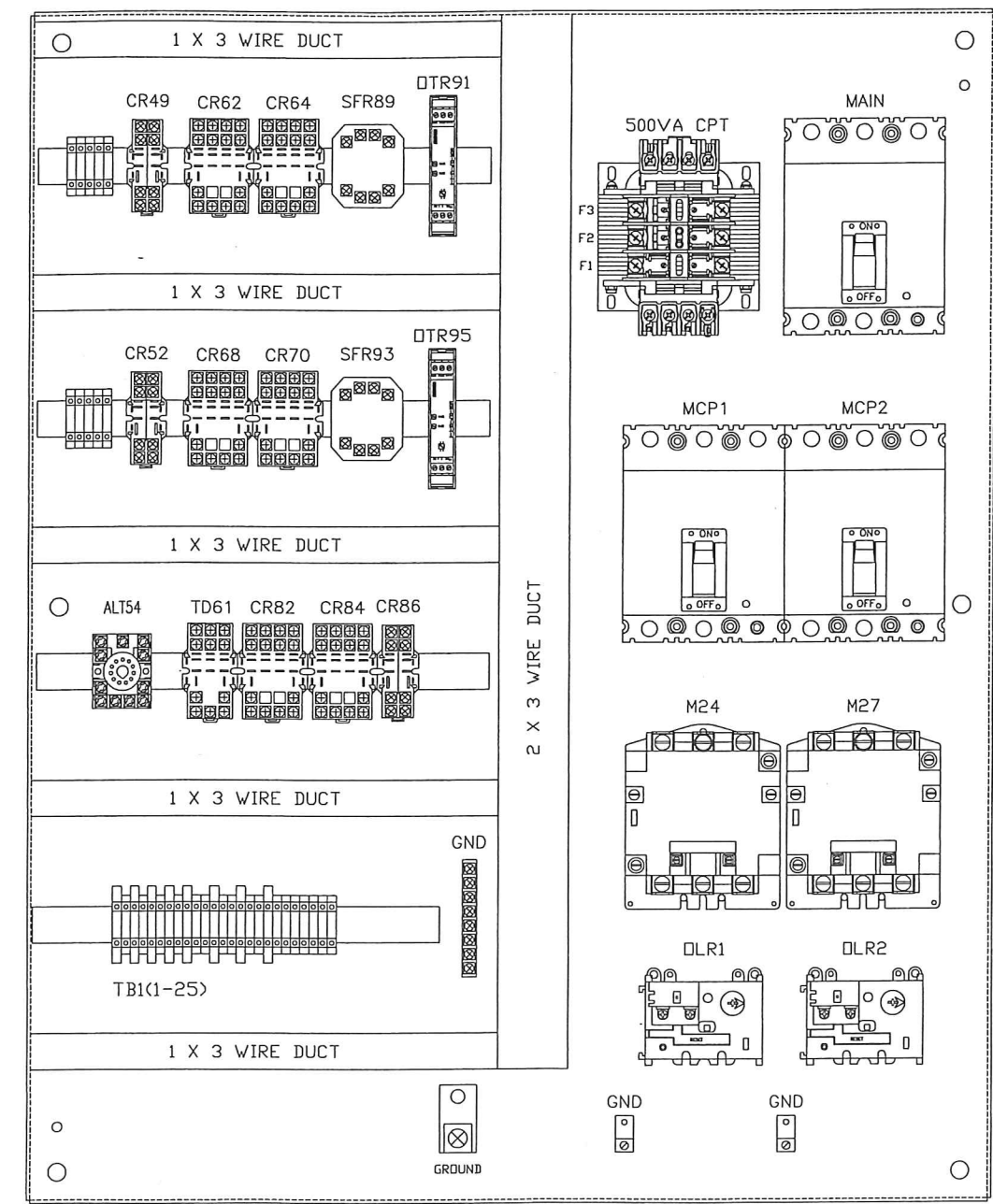
ACE CONTROLS  
327 DERRICK DRIVE  
HUMBLE, TX 77338  
TEL: 713-589-5494  
FAX: 713-589-5559

AB 06/28	ASBUILT	AA
1 06/03	RELEASED	AA
0 05/02	DESIGN	AA
NO.	DATE	REVISION
DWC TITLE		
KITSAP WWTP PLANT SUMP PUMPS PNL-1090 BOM & NAMEPLATES		
ENGINEER AA	CHECKED BY AA	
JOB NO P-091203	DRAWN BY AA	
SCALE NA	DATE 02/01/2010	
DWC NO 100A		
SHEET NO 2 OF 7		





EXTERIOR ELEVATION



INTERIOR ELEVATION

ASBUILT

ACE CONTROLS  
327 DERRICK DRIVE  
HUMBLE, TX 77338  
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NO.	DATE	REVISION	BY
AB	06/28	ASBUILT	AA
T	06/03	RELEASED	AA
O	06/02	DESIGN	AA

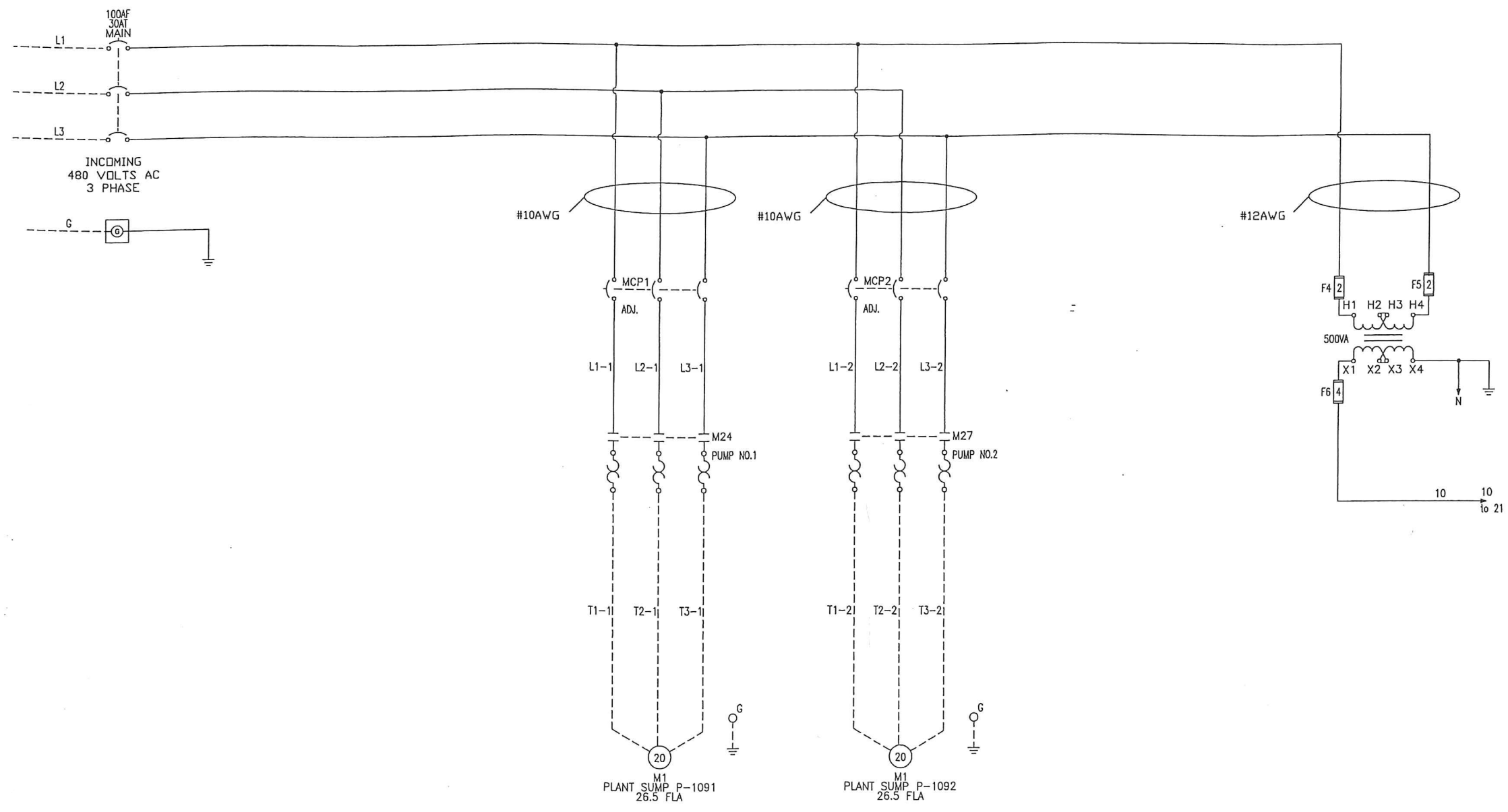
KITSAP WWTP  
PLANT SUMP PUMPS  
PNL-1090  
PANEL ELEVATION

ENGINEER AA	CHECKED BY AA
JOB NO P-091203	DRAWN BY AA
SCALE NA	DATE 02/01/2010

200A

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ASBUILT

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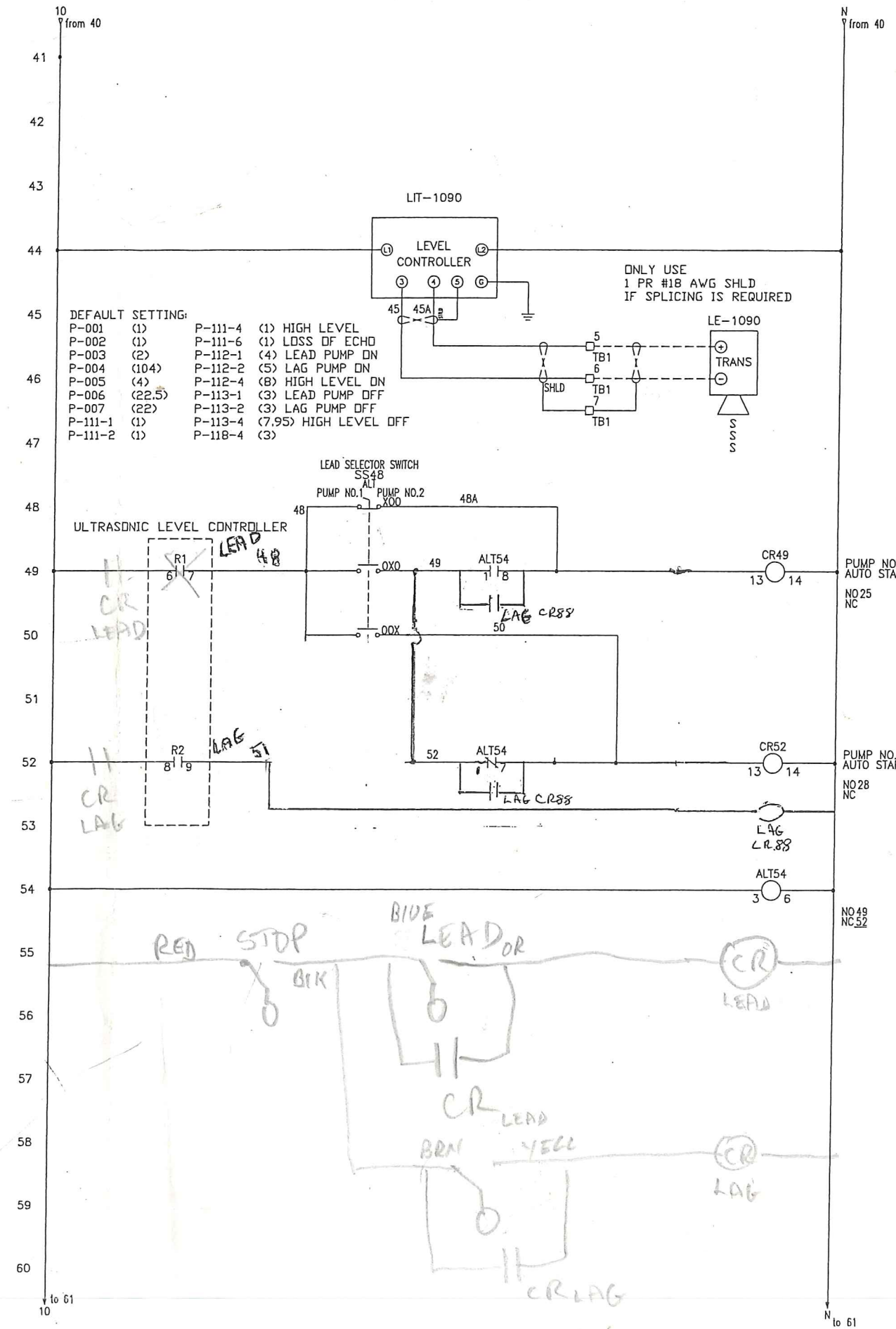
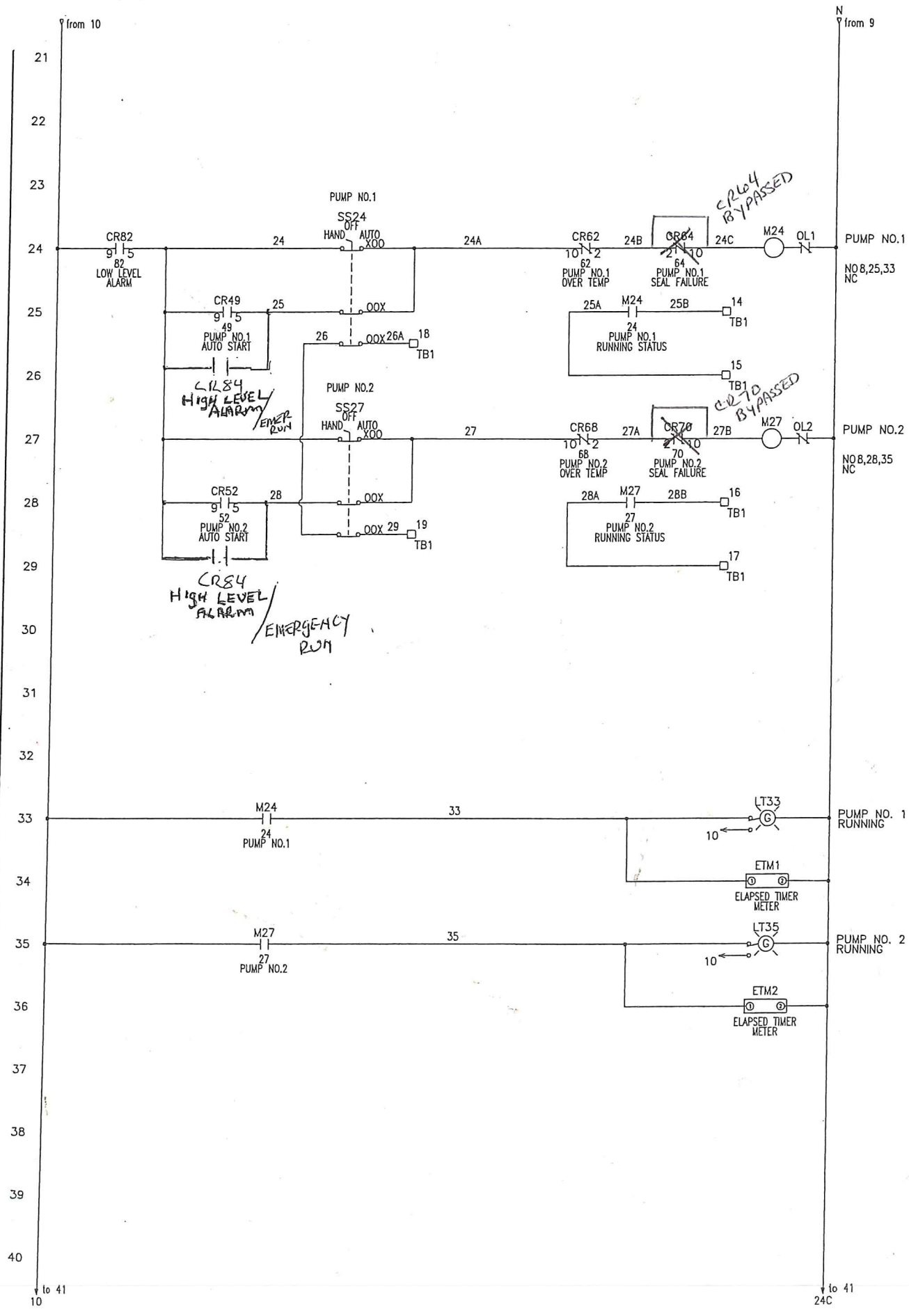
AB	06/28	ASBUILT	AA
1	06/03	RELEASED	AA
0	06/02	DESIGN	AA
NO.	DATE	REVISION	BY

KITSAP WWTP  
PLANT SUMP PUMPS  
PNL-1090  
ONE-LINE DIAGRAM

ENGINEER	AA	CHECKED BY	AA
JOB NO	P-091203	DRAWN BY	AA
SCALE	NA	DATE	02/01/2010

300A

SHEET NO  
4 OF 7



ASBULT

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NO.	DATE	REVISION	BY
AB 06/28		ASBULT	AA
1 06/03		RELEASED	AA
0 06/02		DESIGN	AA

DWG TITLE

KITSAP WWTP  
PLANT SUMP PUMPS  
PNL-1090  
CONTROL DIAGRAM

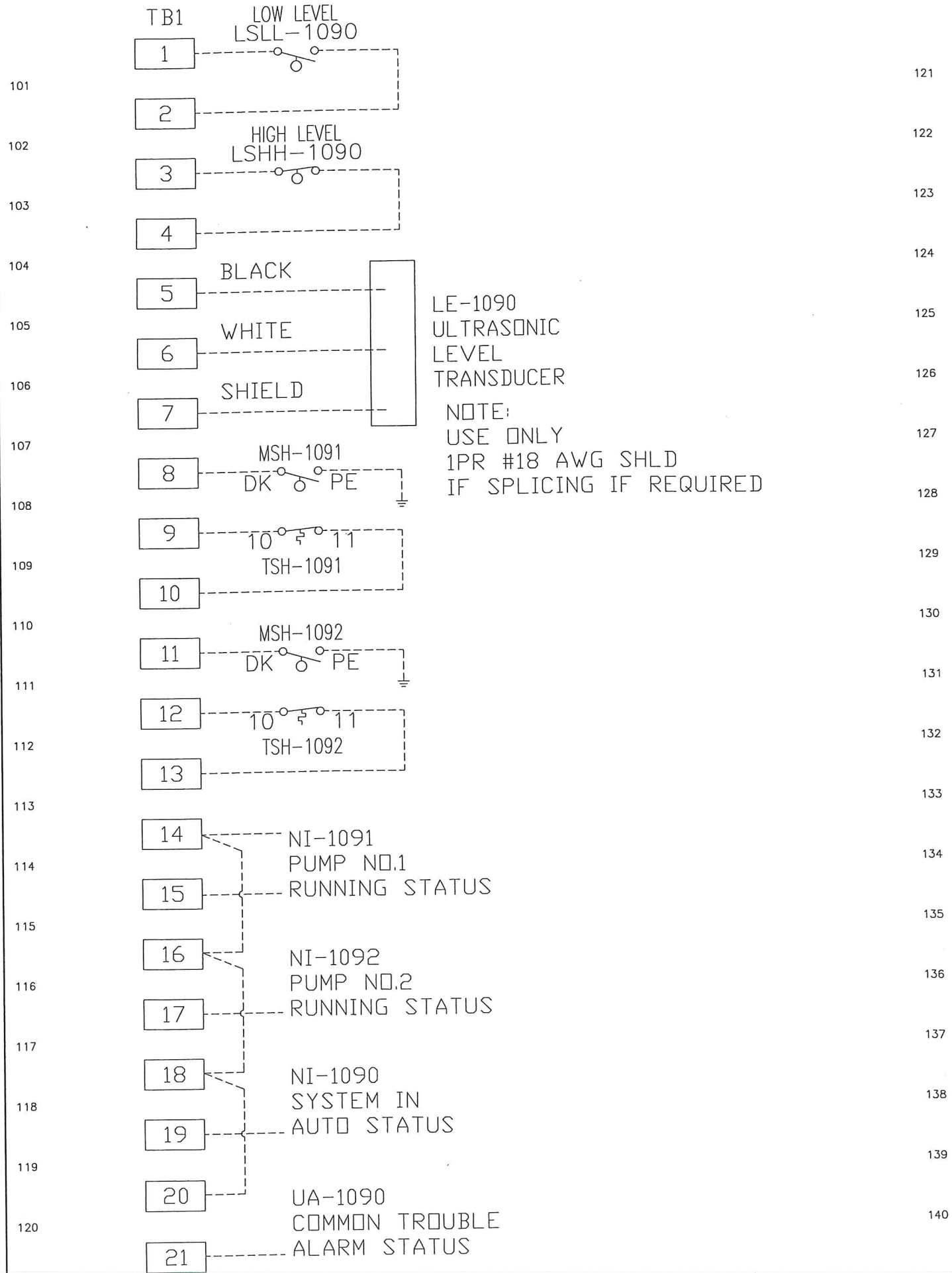
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JOB NO P-091203	DRAWN BY AA
SCALE NA	DATE 02/01/2010
DWG NO	

301A

SHEET NO 5 OF 7







ASBUILT

ACE CONTROLS  
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 HUMBLE, TX 77338  
 TEL: 713-589-5494  
 FAX: 713-589-5559

NO.	DATE	REVISION	BY
AB	06/28	ASBUILT	AA
1	06/03	RELEASED	AA
D	06/02	DESIGN	AA

DWG TITLE

KITSAP WWTP  
 PLANT SUMP PUMPS  
 PNL-1090  
 CONTROL DIAGRAM

ENGINEER AA	CHECKED BY AA
JOB NO P-091203	DRAWN BY AA
SCALE NA	DATE 02/01/2010

DWG NO

303A

SHEET NO

7 OF 7