



ENGINEERING DEPARTMENT

ADDENDUM TO THE CONTRACT

for the

Last Chance Basin Well Field Generator Replacement Contract No. E14-112

ADDENDUM NO.: FIVE

CURRENT DEADLINE FOR BIDS:

June 20, 2014

PREVIOUS ADDENDA: FOUR

ISSUED BY: City and Borough of Juneau
ENGINEERING DEPARTMENT
155 South Seward Street
Juneau, Alaska 99801

DATE ADDENDUM ISSUED:

June 16, 2014

The following items of the contract are modified as herein indicated. All other items remain the same. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at: <http://www.juneau.org/engineering ftp/contracts/Contracts.php>

DRAWINGS:

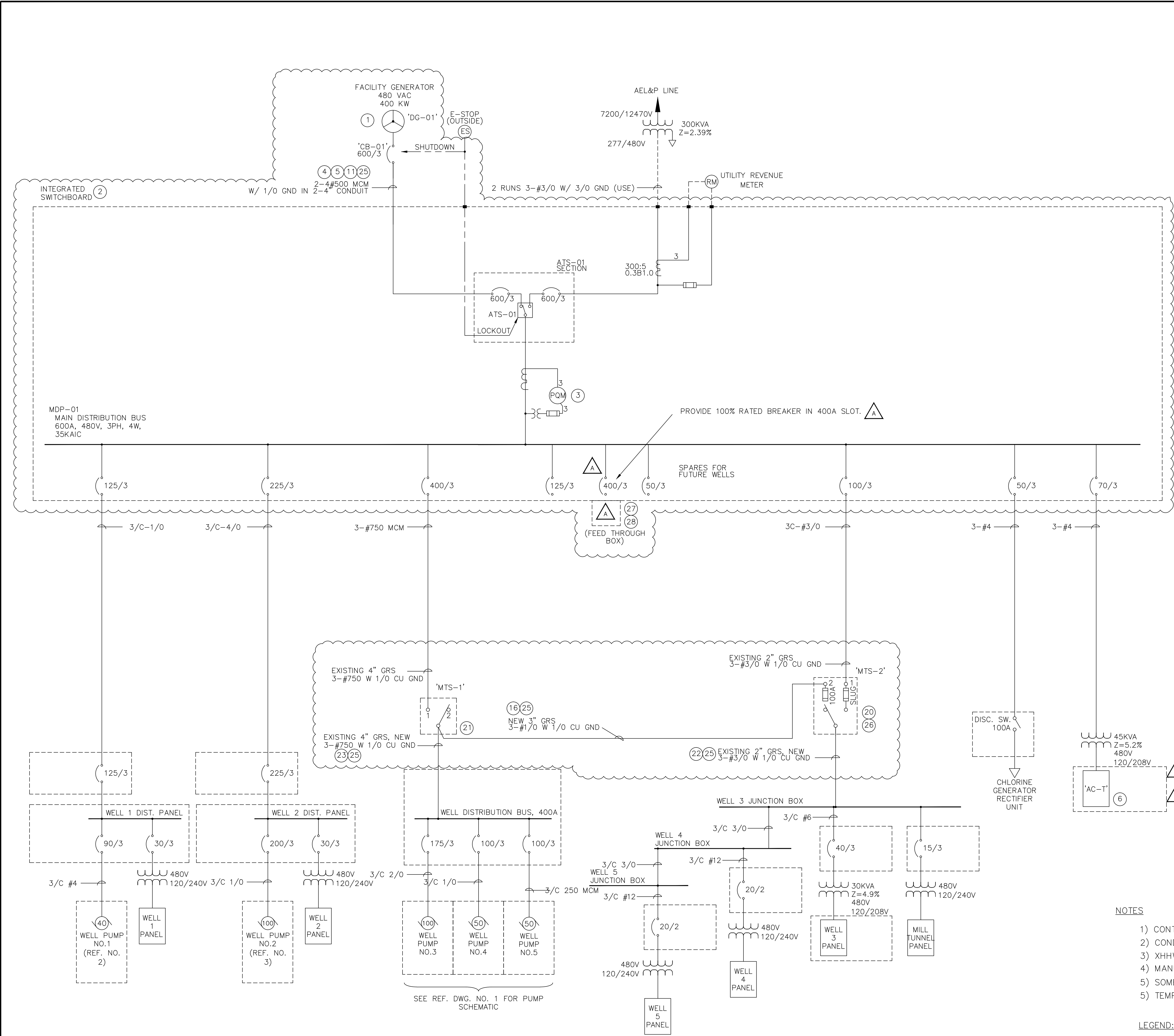
Item No. 1: **Delete and replace** the following drawings, labeled Addendum No. 5 in their entirety:

E2 – ONE-LINE DIAGRAM (DESIGN)
E5 – CONSTRUCTION ONE-LINE (PAHSE 2B)
E6 – CONSTRUCTION ONE-LINE (PHASE 3A)
E7 – CONSTRUCTION ONE-LINE (PHASE 4A)
E15 – GENERATOR ROOM LAYOUT (DEMOLITION)

By: _____

Greg Smith,
Contract Administrator

Total number of pages contained within this Addendum: 6



LAST CHANCE BASIN GENERATOR UPGRADES					
MAJOR ELECTRICAL MATERIALS LIST					
TAG	ID	Manu. / Part No	Est Qty	Description	Notes
1	DG-01	CATERPILLAR	1	400KW 480V 3Phase Diesel Generator Set.	See specification section 263213
2	IFS-ATS	EATON	1	UL Approved Switchboard with 600 amp Service Entrance rated Automation transfer switch (ATS), Utility Section and Main Distribution Panel (MDP)	See specification section 262413 (switchboards), 263600 (ATS), 262413 (MDP) and 262416 (Panelboards)
3	PQM-01	EATON	1	Power Quality meter, Eaton PXM 6000 or owner approved equal	See specification section 16910
4	4" EMT		SEE DWG	Indoor Conduit for permanent generator power leads.	With Couplers, Bushings.
5	4" LFMC		SEE DWG	Indoor Conduit for permanent generator power leads - last section prior to generator terminal box.	With Couplers, Bushings.
6		SQUARE D / QOB360VH	1	120/208V, 3PH, 60A Breaker for Square D Type NQOD Panel.	Verify Breaker Type and Part No before ordering. For installation in Panel T.
7	DG-M1		1	480V, 3PH, 300kW Rated Genset with integrated fuel tank and breaker for temporary use (Rental)	See Specification Section 263213
8	DG-M2		1	480V, 3PH, 200kW Rated Genset with integrated fuel tank and breaker for temporary use (Rental)	See Specification Section 263213
9	DG-M3		1	120/208V, 3PH, 15kW Genset with integrated fuel tank and breaker for temporary use (Rental)	See Specification Section 263213
10	D1, D2, D3		3	Damper Actuators, 24VDC powered from generator batteries and acuated by Generator Run signal. See mechanical for details.	
11	500 MCM XHHW-2		250 FT	Indoor Power Cable	New Power Cable for Generator Extension
12	350 MCM USE		200 FT	Temporary Multiconductor power Cable for connection to Generator 'DG-M1', Outdoor Rated, run in temp conduit or otherwise protected from damage.	For Connection of Temp 300kW Generator
13	#6 USE		100FT	Temporary Multiconductor power Cable for connection to Generator 'DG-M3', Outdoor Rated, run in temp conduit or otherwise protected from damage.	For Connection of Temp 15kW Generator
14	#12 XHHW		200FT	Run signal interconnect to temporary generator	For Connection of Temp 300kW Generator
15				Not Used	
16	3" GRS		15 FT	Outdoor Conduit	For MTS-1 and MTS-2 at Wet Well 3
17	3/0 USE		40 FT	Outdoor Power Cable for Temporary Service	200kW Temp Generator Connection
18	JBOX		1	18X18" NEMA 1 Cabinet for Extension of Control Cables to New Switchgear	See Drawing E15
19	Phenolics		Per Dwg	Phenolic Labels with Qty, Color, Size and Text shown on Drawing JLCB-EL-4500 SH 1.	See Drawing E15
20	MTS-2	EATON, DT363NRK	1	Double Throw Safety Switch. 480VAC, 100A, 3-Pole	See specification section 262816
21	MTS-1	EATON, DT365URK	1	Double Throw Safety Switch. 600 VAC/DC, 400A, 3-Pole	See specification section 262816
22	3/0 XHHW-2		80 FT	Outdoor Rated Power Conductor	
23	750 MCM XHHW-2		60 FT	Outdoor Rated Power Conductor	
24	#1 THWN		60FT	Indoor 600V Cable	Building Generator Cable Extension
25	1/0 Bare Copper		300 FT	Grounding Cable	
26	Cable Reducer	GREAVES / CRK30-10	6	Cable Reducer 3/0 to 1/0	For 100A MTS-2 connections - cable oversized.
27	4" EMT		5FT	Indoor Conduit	Connects to Feed through for Wells 6,7
28	JBOX		1	24X24" NEMA 1 Cabinet for Extension of Power cables to future Wells 6 and 7 (Feed Through Only)	Feed through for Wells 6,7
29	1/2" EMT		TBD	Indoor Conduit	Determined by final fire alarm layout
30	1" EMT		TBD	Indoor Conduit	May re-use existing control routing in Gen room as possible
31	FP-1		1	Fire Alarm System per Specs and Drawings	See specification section 283100

NOTES

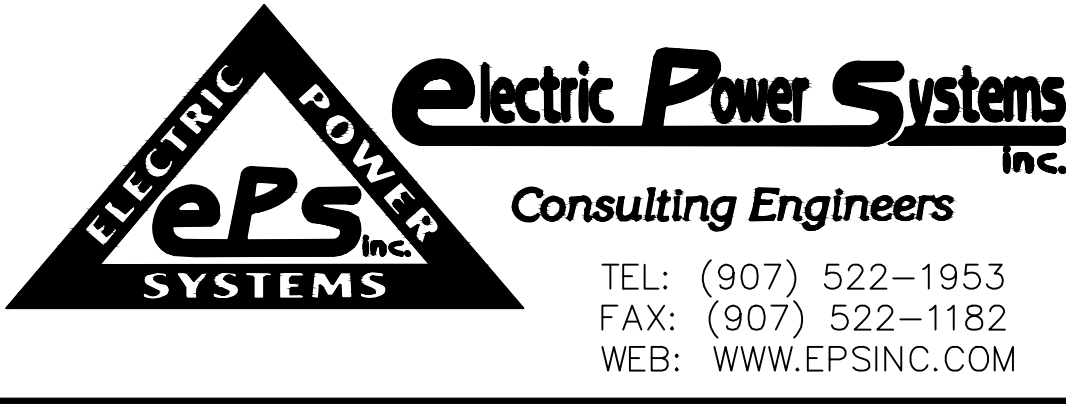
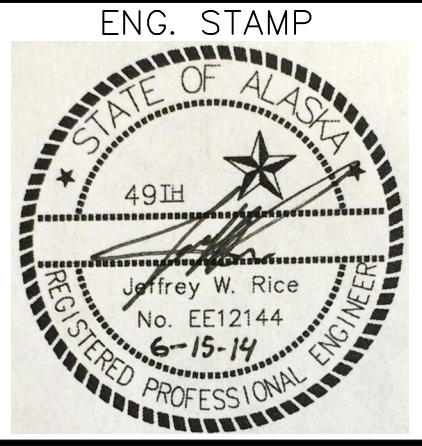
- 1) CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING LENGTHS AND QUANTITIES PRIOR TO ORDERING.
- 2) CONDUIT FITTINGS, BUSHINGS, GROUND STRAPS, LUGS, WIRE AND CABLE LABELS NOT SHOWN.
- 3) XHHW MAY BE USED IN PLACE OF THHN IF DESIRABLE TO CONSOLIDATE WIRING.
- 4) MANUFACTURERS AND PART NUMBERS SHOWN FOR DESIGN BASIS. SUBSTITUTION OF EQUAL COMPONENTS ALLOWED.
- 5) SOME SMALLER OR SHORT LENGTHS OF CABLE OMITTED FOR CLARITY (CONSIDERED MINOR STOCK PARTS)
- 5) TEMPORARY EQUIPMENT SHOWN ON CONSTRUCTION SEQUENCE DRAWINGS 'E3' TO 'E7'

LEGEND:

(X) EQUIPMENT TAG WHERE X IS THE EQUIPMENT NUMBER SHOWN ON THE EQUIPMENT LIST (DWG E2).

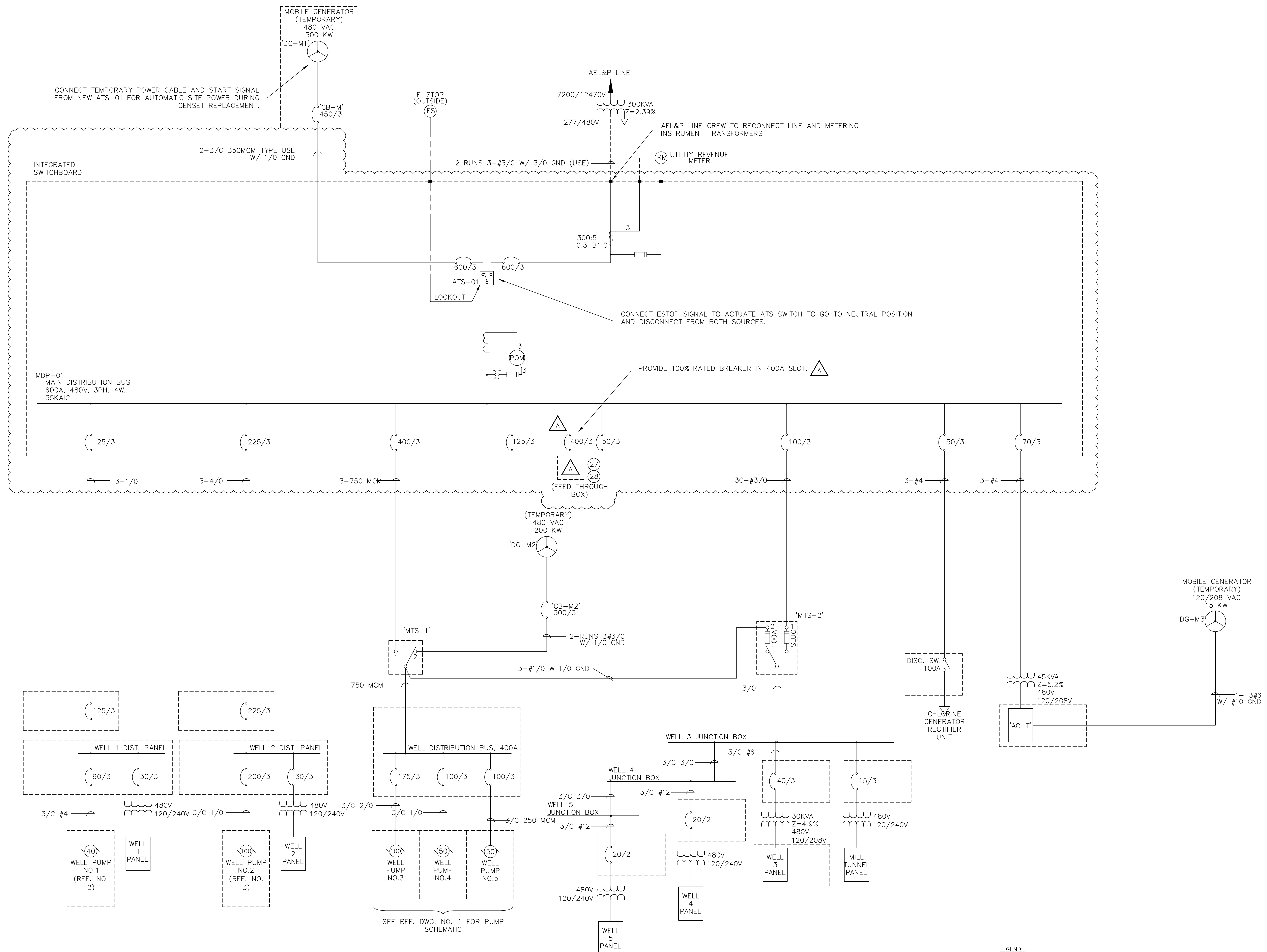
(A) INDICATES ADDENDUM ITEM

PROJECT: LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112			
DESIGNER/PROJECT ENGINEER: NICK YANKEE / JEFF RICE JOB #: 13-0219			
NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE	REVIEWED BY/DATE
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014
	Addendum No. 5		



NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION
1	E-11/24 (HAIGHT)	LAST CHANCE BASIN SOURCE IMPROVEMENT ELECTRICAL POWER SINGLE LINE DIAGRAM
2	E-5/20 (HH)	WELL HOUSE 1 SINGLE LINE DIAGRAM PUMP CONTROL PANEL - SINGLE LINE
3	E-12/27 (HH)	WELL HOUSE 2 SINGLE LINE DIAGRAM PUMP CONTROL PANEL - SINGLE LINE

DRAWING NAME:	CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 ONE-LINE DIAGRAM (DESIGN)	
REF DWG(S):		
DRAWING NO.:	E2	SHEET 7 OF 21



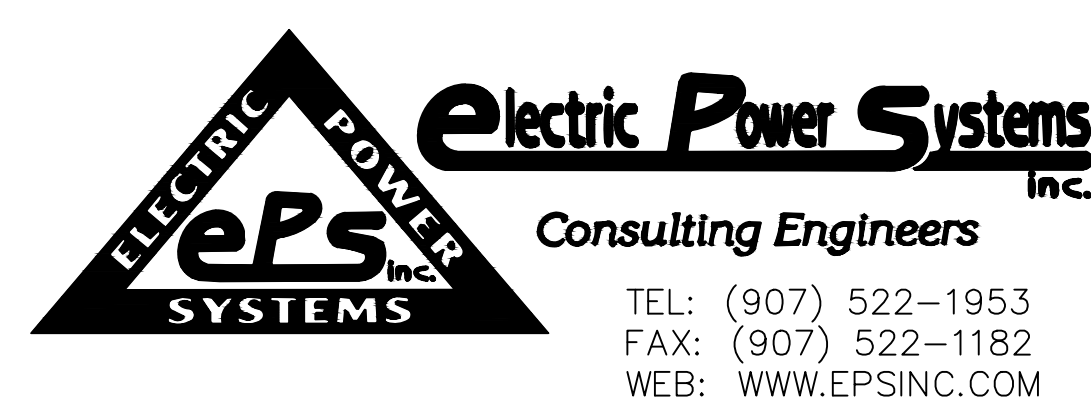
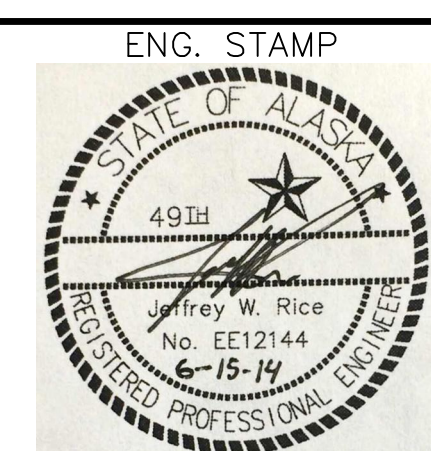
CONSTRUCTION – PHASE 2B

LEGEND:

(X) EQUIPMENT TAG WHERE X IS THE EQUIPMENT NUMBER SHOWN ON THE EQUIPMENT LIST (DWG E2).

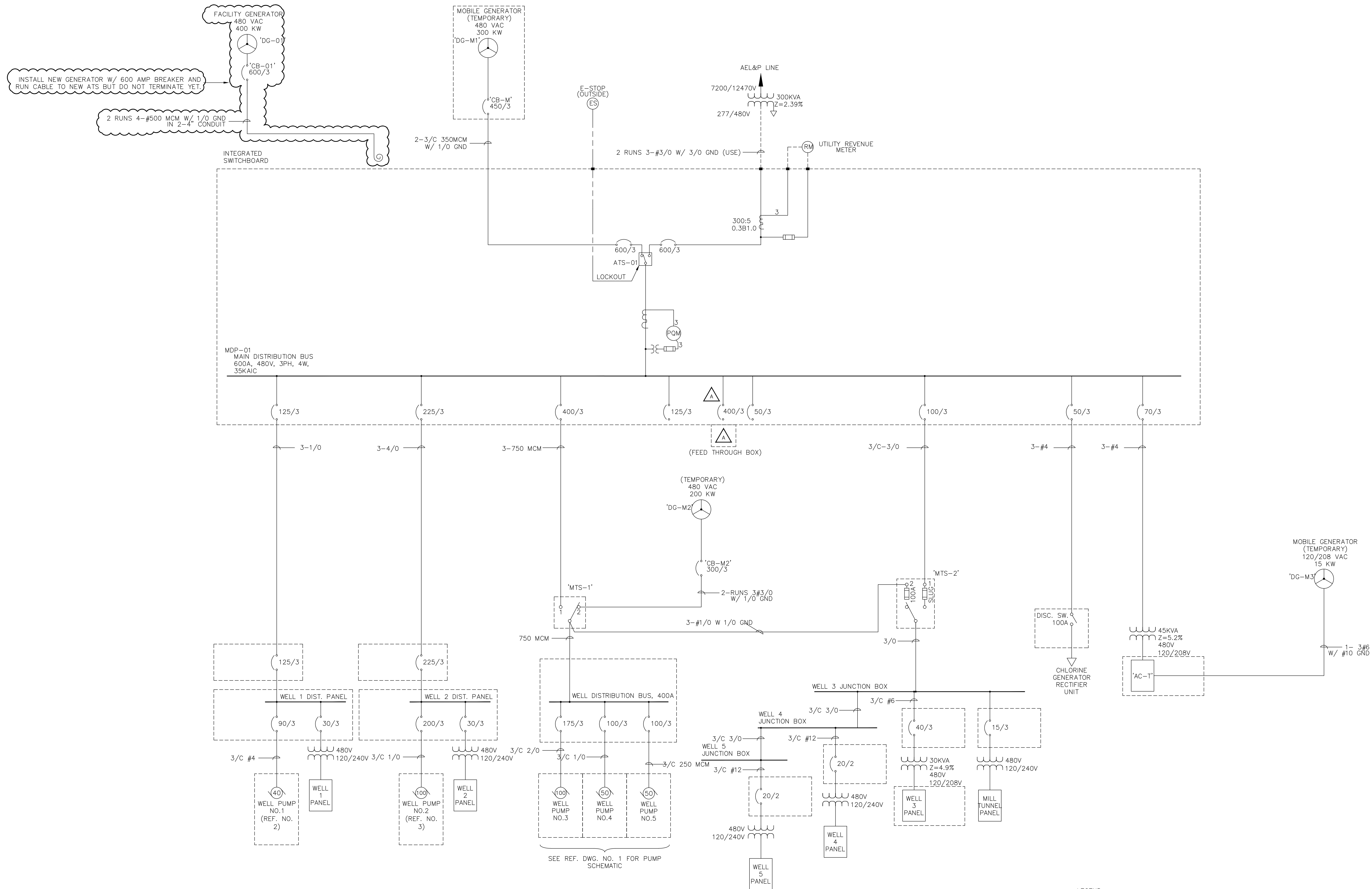
(A) INDICATES ADDENDUM ITEM

PROJECT: LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112			
DESIGNER/PROJECT ENGINEER: NICK YANKEE / JEFF RICE			
JOB #:		13-0219	
NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE	REVIEWED BY/DATE
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014
Addendum No. 5			



NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION

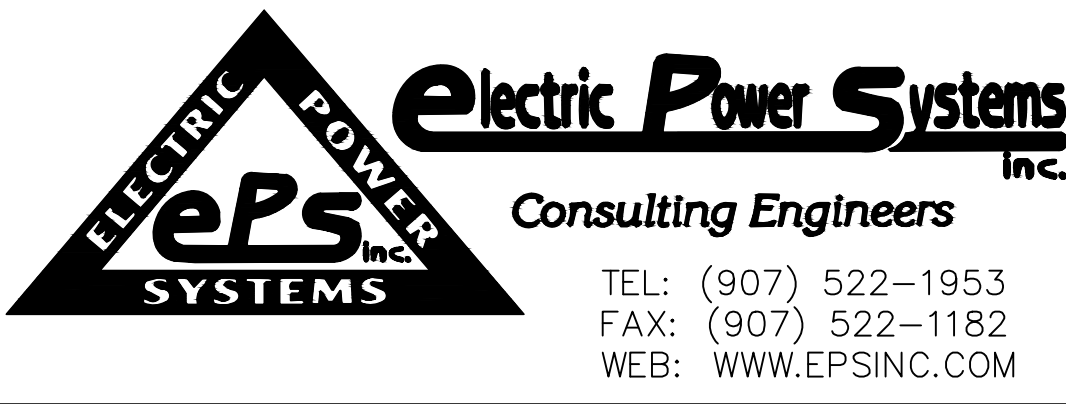
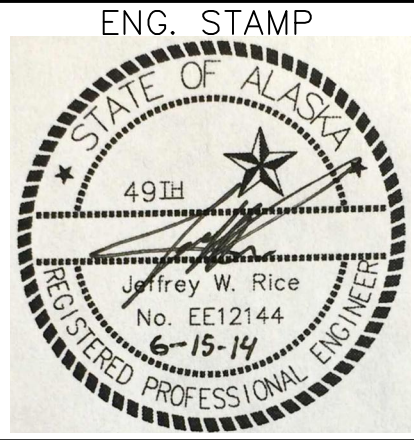
DRAWING NAME:		CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 CONSTRUCTION ONE-LINE (PHASE 2B)	
REF DWG(S):		e5.dwg	
DRAWING NO.:		E5	
SHEET 10 OF 21			



CONSTRUCTION – PHASE 3A

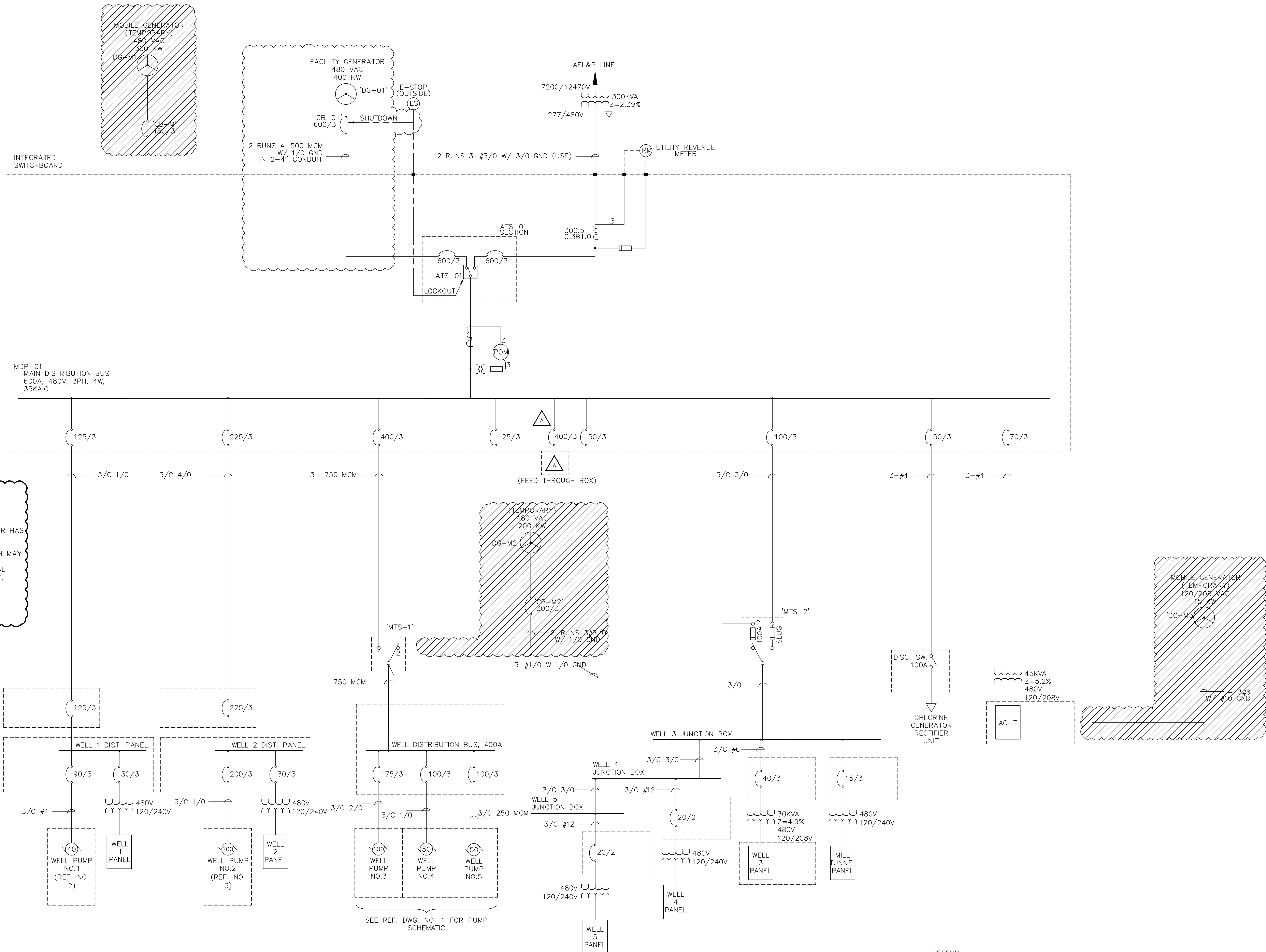
- LEGEND:
- (X) EQUIPMENT TAG WHERE X IS THE EQUIPMENT NUMBER SHOWN ON THE EQUIPMENT LIST (DWG E2).
 - (A) INDICATES ADDENDUM ITEM

PROJECT: LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112			
DESIGNER/PROJECT ENGINEER: NICK YANKEE / JEFF RICE			
JOB #: 13-0219			
NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE	REVIEWED BY/DATE
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014
Addendum No. 5			



NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION

DRAWING NAME:		CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 CONSTRUCTION ONE-LINE (PHASE 3A)
REF DWG(S):		e6.dwg
DRAWING NO.:		E6
SHEET 11 OF 21		

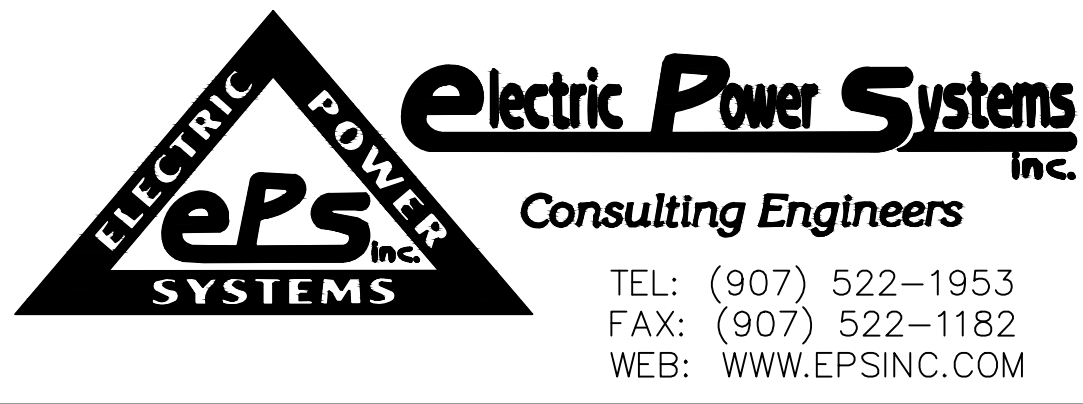
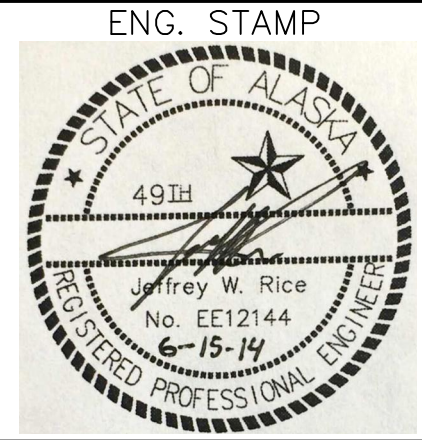


- NOTES:
1. CONNECT PERMANENT GENERATOR AND PERFORM ACCEPTANCE TESTS.
 2. REMOVE TEMPORARY GENERATORS ONCE CUSTOMER HAS ACCEPTED NEW PERMANENT GENERATOR.
 3. ADDITIONAL SIGNAL FROM OUTDOOR ESTOP SWITCH MAY REQUIRE SWITCH TERMINAL BLOCK ADDITION OR REPLACEMENT. FIELD VERIFY SWITCH HAS ADDITIONAL CONTACTS AND REPLACE OR EXPAND AS NECESSARY.

CONSTRUCTION — PHASE 4A

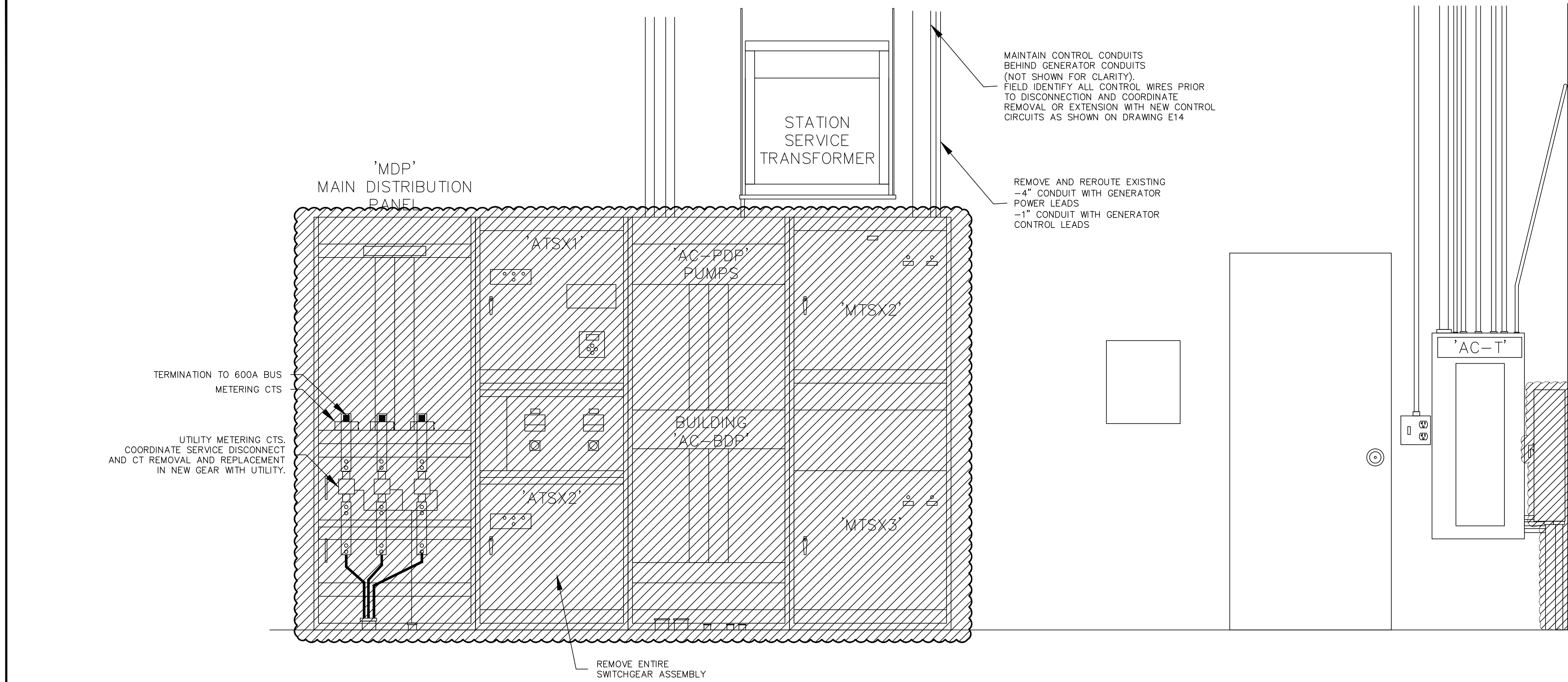
- LEGEND:
- (X) EQUIPMENT TAG WHERE X IS THE EQUIPMENT NUMBER SHOWN ON THE EQUIPMENT LIST (DWG E2).
 - (A) INDICATES ADDENDUM ITEM

PROJECT: LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112			
DESIGNER/PROJECT ENGINEER: NICK YANKEE / JEFF RICE			
JOB #: 13-0219			
NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE	REVIEWED BY/DATE
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014
Addendum No. 5			

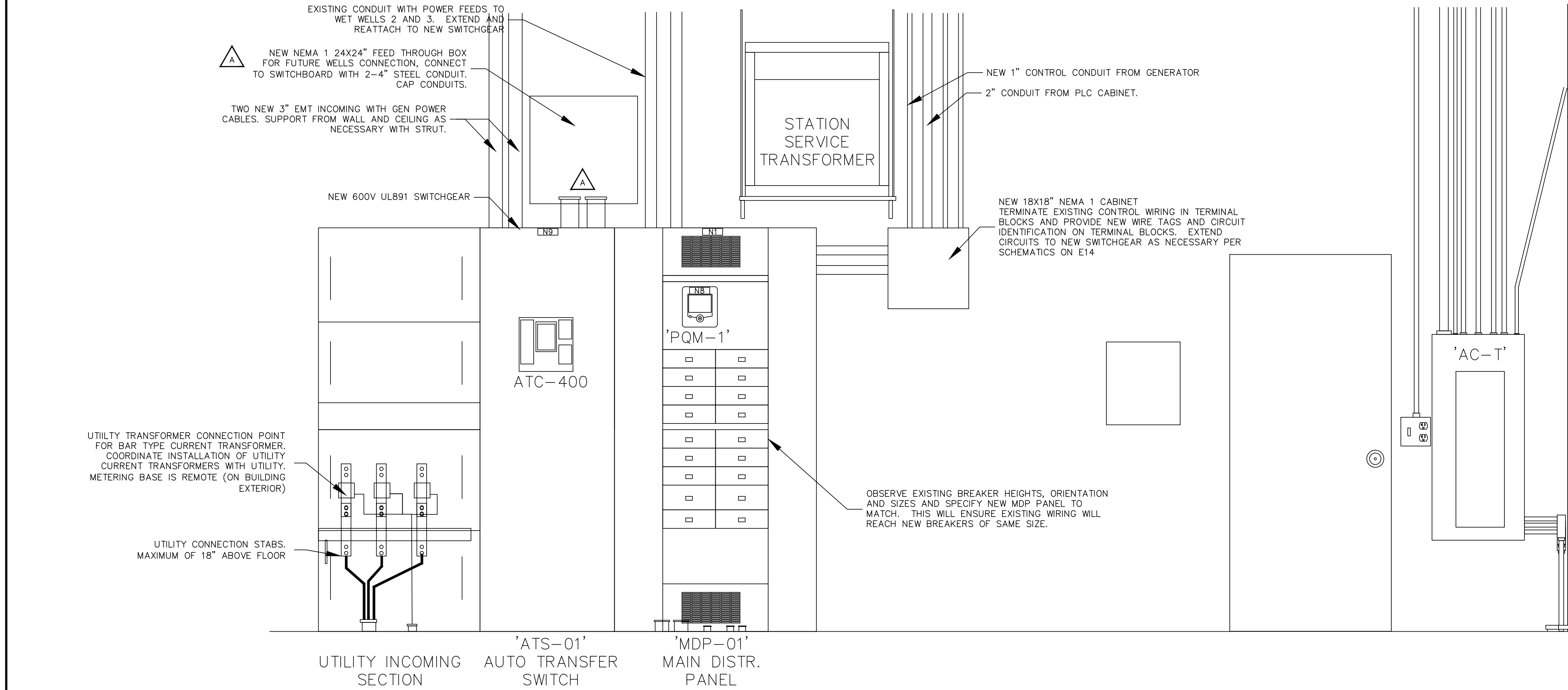


NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION

DRAWING NAME:		CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 CONSTRUCTION ONE-LINE (PHASE 4A)
REF DWG(S):		
DRAWING NO.:	E7	SHEET 12 OF 21



1 INTERNAL ELEVATION (DEMO)
NOT TO SCALE



2 INTERNAL ELEVATION (NEW)
NOT TO SCALE

PHENOLIC NAMEPLATE LIST			
ITEM	LETTERING	NAMEPLATE SIZE	LETTER SIZE
N1	'MDP' MAIN DIST. PANEL 480V PANEL	1" x 3"	$\frac{3}{16}$ "
N2 *	'WELL 1' PUMP & PANEL	1" x 3"	$\frac{3}{16}$ "
N3 *	'WELL 2' PUMP & PANEL	1" x 3"	$\frac{3}{16}$ "
N4 *	'WELLS 3, 4, 5' PUMPS	1" x 3"	$\frac{3}{16}$ "
N5 *	'WELLS 3, 4, 5' PANELS	1" x 3"	$\frac{3}{16}$ "
N6 *	'CHLORINE GENERATOR' RECTIFIER	1" x 3"	$\frac{3}{16}$ "
N7 *	'PANEL 'T' 120/208V	1" x 3"	$\frac{3}{16}$ "
N8	'PQM' POWER QUALITY METER (SITE LOAD)	1" x 3"	$\frac{3}{16}$ "
N9	'ATS-01' AUTOMATIC TRANSFER SWITCH	1" x 3"	$\frac{3}{16}$ "
N10 *	'PANEL 'T' GEN BUILDING 120/208V	1" x 3"	$\frac{3}{16}$ "
N11	(SEE NOTE 1)	AS RQD.	$\frac{3}{16}$ "
N12	(SEE NOTE 2)	AS RQD.	$\frac{3}{16}$ "
N13 *	'WELLS 6,7' PUMPS & PANELS	1" x 3"	$\frac{3}{16}$ "

*PLACE AT APPROPRIATE BREAKER POSITION IN MDP-01

NOTES:

1. SIGN N11 TO BE WHITE TEXT ON RED BACKGROUND, APPLIED TO
ATS-01 AND READ:

WARNING
SHOCK HAZARD EXISTS IF GROUNDING
ELECTRODE CONDUCTOR OR BONDING JUMPER
CONNECTION IN THIS EQUIPMENT IS REMOVED
WHILE ALTERNATE SOURCE IS ENERGIZED.

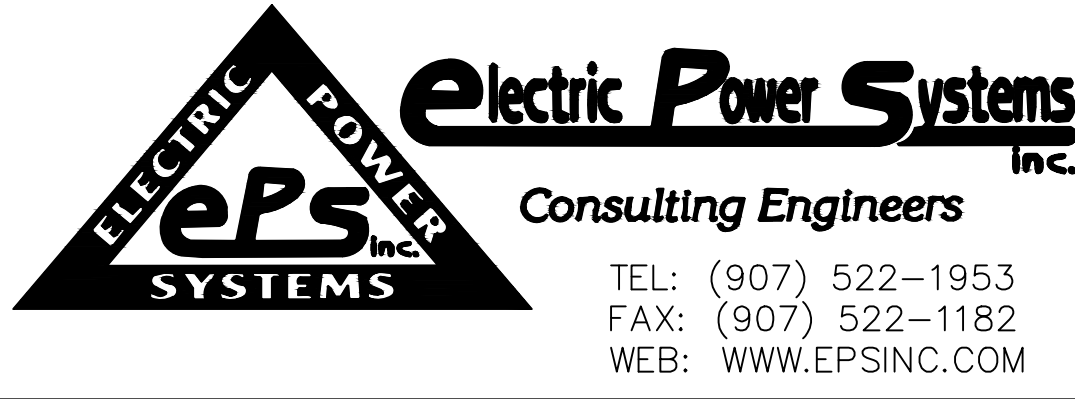
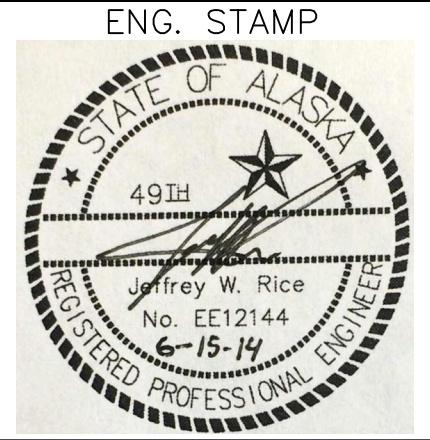
2. SIGN N12 TO BE WHITE TEXT ON RED BACKGROUND, APPLIED TO
MTS-01 AND READ:

WARNING
FOR CONNECTION OF A SEPARATELY DERIVED
(BONDED NEUTRAL) SYSTEM ONLY

3. LABELS WITHOUT SPECIFIC COLOR SHOWN ARE TO BE WHITE TEXT
ON BLACK BACKGROUND.

INDICATES ADDENDUM ITEM

PROJECT: LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112			
DESIGNER/PROJECT ENGINEER: NICK YANKEE / JEFF RICE - EPS		JOB #: 13-0219	
NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE	REVIEWED BY/DATE
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014
	Addendum No. 5		



NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION
1	E14	CONTROL SCHEMATICS

DRAWING NAME:	CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 SWITCHBOARD INTERNAL ELEVATION
REF. DWG(S):	
DRAWING NO.:	E15