# HARRAS CAPITAL CITY DE CONTROL CITY DE CONTROL

## ADDENDUM TO THE CONTRACT

#### for the

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

ADDENDUM NO.: TWO <u>CURRENT DEADLINE FOR BIDS</u>:

June 12, 2014

PREVIOUS ADDENDA: ONE

**ISSUED BY:** City and Borough of Juneau

ENGINEERING DEPARTMENT

155 South Seward Street Juneau, Alaska 99801

#### DATE ADDENDUM ISSUED:

June 6, 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: <a href="http://www.juneau.org/engineering\_ftp/contracts/Contracts.php">http://www.juneau.org/engineering\_ftp/contracts/Contracts.php</a>

# **INFORMATION ITEMS:**

The Eaton Switchgear design details are uploaded to the webpage.

#### **PROJECT MANUAL:**

- Item No. 1: SECTION 00310 BID SCHEDULE. **Delete** in its entirety and **replace** with the attached SECTION 00310 BID SCHEDULE. labeled Addendum No. 2.
- Item No. 2: SECTION 262413 SWITCHBOARDS, PART 2 PRODUCTS, Article 2.1 MANUFACTURED UNITS, Paragraph D. *Change* it to read: "Main Bus Continuous: 600A."
- Item No. 3: SECTION 262816 ENCLOSED SWITCHES AND CIRCUIT BREAKERS, PART 2 PRODUCTS, Article 2.4 ENCLOSURES, Paragraph A., Subparagraph 2. *Add* the following sentence: "Except where otherwise noted in Part 1.2(A)."

# **DRAWINGS**:

- Item No. 4: E1 SHEET 6 of 21 ONE-LINE DIAGRAM (DEMOLITION). **Delete** in its entirety and **replace** with the attached sheet E1 SHEET 6 of 21 ONE-LINE DIAGRAM (DEMOLITION).
- Item No. 5: E12 SHEET 18 of 21 CONSTRUCTION LAYOUT-TEMPORARY POWER. **Delete** in its entirety and **replace** with the attached sheet E12 SHEET 17 of 21 CONSTRUCTION LAYOUT- TEMPORARY POWER.

- Item No. 6: E13 SHEET 19 of 22 AC PANEL 'T' SCHEDULE. **Delete** in its entirety and **replace** with the attached sheet E13 SHEET 18 of 21 AC PANEL 'T' SCHEDULE.
- Item No. 7: E14 – SHEET 20 of 22 – CONTROL SCHEMATIC. Delete in its entirety and replace with the attached sheet E14 - SHEET 19 of 21 - CONTROL SCHEMATIC.

Greg Smith, Contract Administrator

Total number of pages contained within this Addendum: 8

#### SECTION 00310 - BID SCHEDULE

To: <u>City & Borough of Juneau</u> (hereinafter called "CBJ").

The undersigned (hereinafter called the "Bidder" or "Contractor") hereby proposes to furnish all labor, material, machinery, tools, supplies and equipment to faithfully perform all work required for construction of the Project in accordance with the Project drawings and Specifications attached hereto and made a part hereof for the following prices:

Item (Bidder may provide a price for option 1 or option 2 or both*)	Bid Price
Option 1. Generator Replacement with new Engine-Generator as specified in design and meeting New Engine-Generator requirements listed below.	\$
AND/OR	
Option 2. Generator Replacement with Refurbished Engine-Generator as specified in design and meeting Refurbished Engine-Generator requirements listed below.	\$
(* Write "No Bid" for Bid Price if NOT bidding on an item option)	

# NEW ENGINE-GENERATOR REQUIREMENTS

- 1. Meet Requirements shown in SECTION 263213 ENGINE GENERATORS.
- 2. List Supplier Qualifications below (page 2)
- 3. Manufacturer warranty for period no less than 24 months or 1000 hours. This warranty shall provide coverage for the entire list of manufacturer parts that were originally shipped in the provided package.
- 4. Supplier shall maintain parts and service capability within the city of Juneau. Supplier shall stock parts as needed to support the Engine-Generator package for this project. Supplier must carry sufficient inventory to cover no less than 80% parts service within 48 hours and 95% within 72 hours.

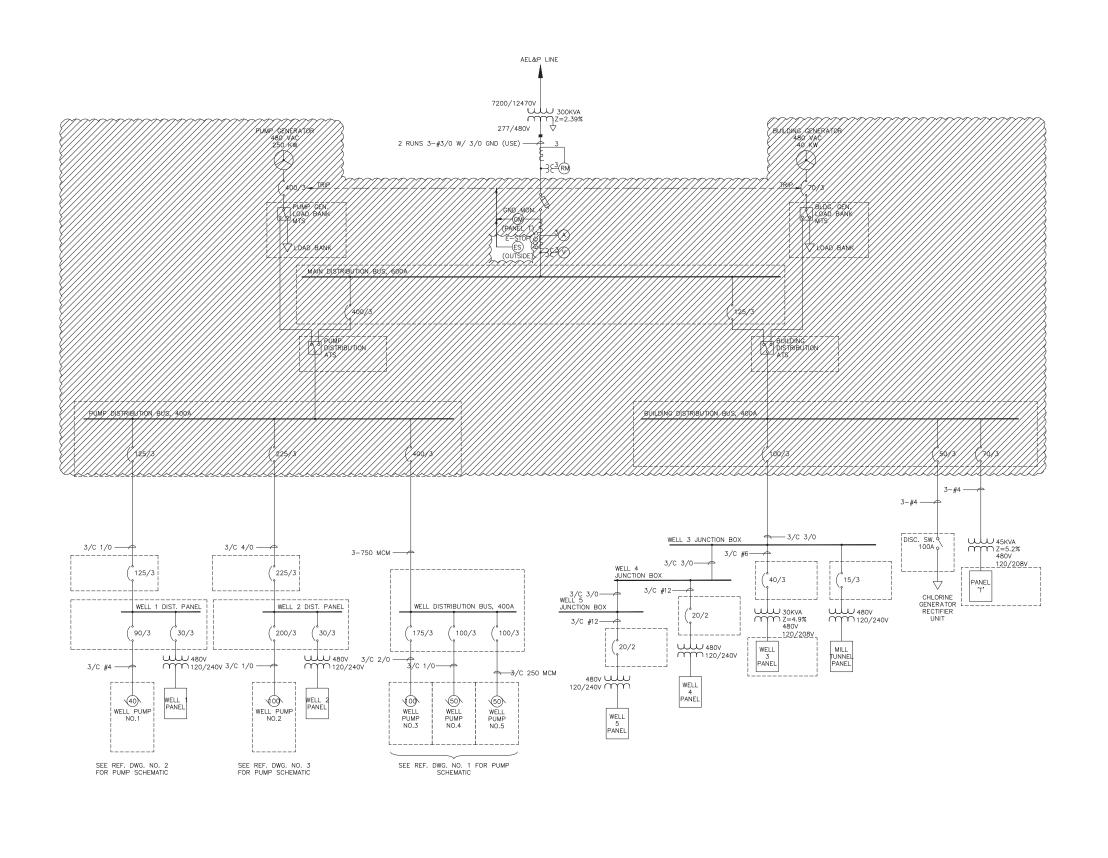
# REFURBISHED ENGINE-GENERATOR REQUIREMENTS

- 1. All requirements for new engine-generators (above) must be met.
- 2. Unit shall be refurbished and certified by the manufacturer by an approved supplier of such services.

## **SECTION 00310 - BID SCHEDULE**

# **SUPPLIER QUALIFICATIONS**

Indicate Qualifications for New Engine-Generator Supplier below. MANUFACTURING DATA: Manufacturer Manufacturing Plant Location Warranty duration (in months) Replacement Parts Distributor **Distributor Location** Indicate Qualifications for Refurbished Engine-Generator Supplier below. MANUFACTURING DATA: Manufacturer Manufacturing Plant Location Warranty duration (in months) Replacement Parts Distributor **Distributor Location** DATA ON REFURBISHMENT **Engine Hours** Prior Use / End User Data Company Performing Refurbishment Bidder: (Name and Address) Authorized Signature: (Printed Name) Date:



PROJ DESIG	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	1							
0	ISSUED FOR BID	NWY/04-15-2014	JWR/04-15-2014	1							
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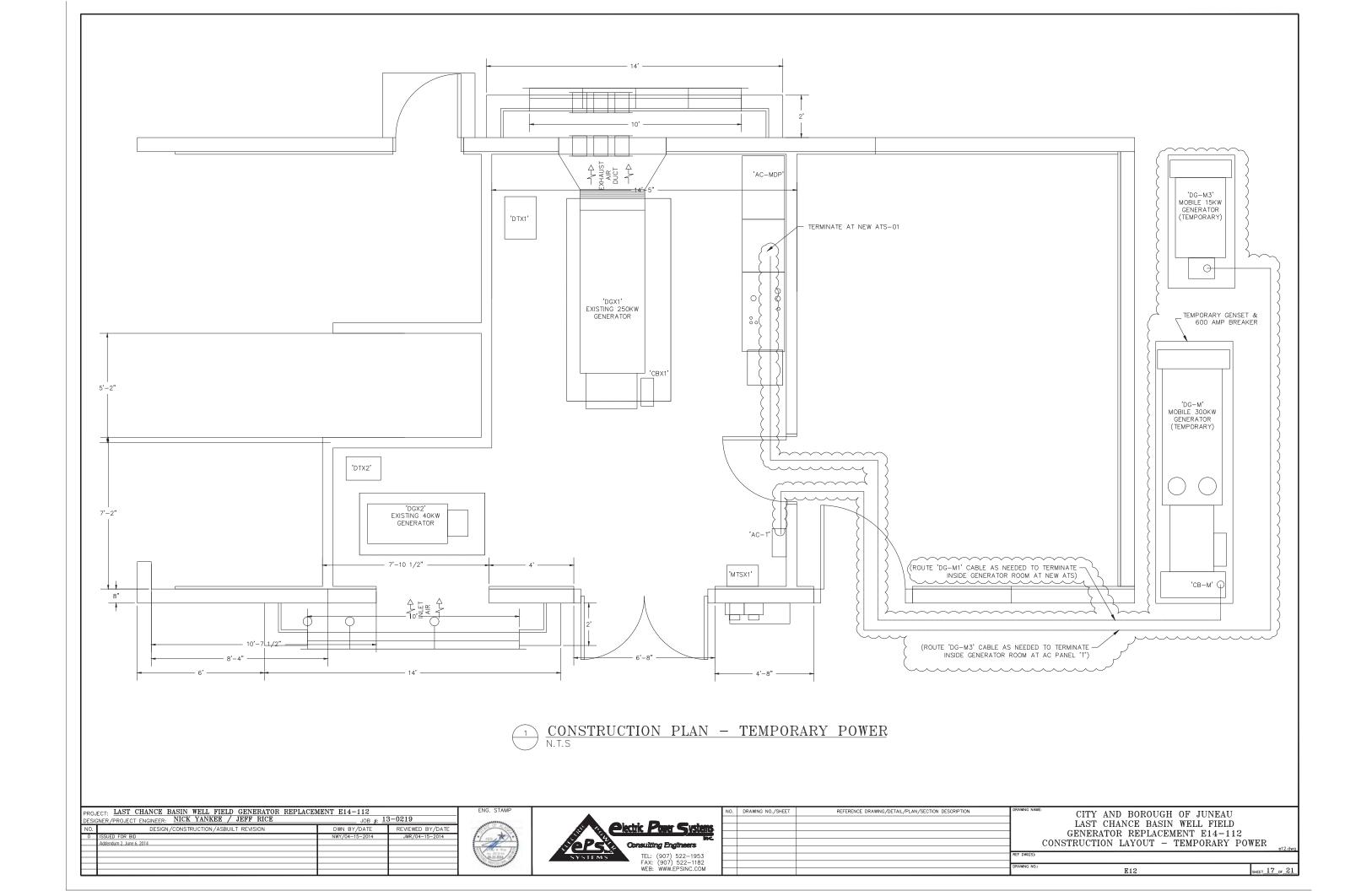




NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION	DRAWING NAI
1	E-11/24 (HAIGHT)	LAST CHANCE BASIN SOURCE IMPROVEMENT ELECTRICAL POWER SINGLE LINE DIAGRAM	
2	E-5/20 (IHH)	WELL HOUSE 1 SINGLE LINE DIAGRAM PUMP CONTROL PANEL - SINGLE LINE	
3	E-12/27 (IHH)	WELL HOUSE 2 SINGLE LINE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

CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD GENERATOR REPLACEMENT E14-112 ONE-LINE DIAGRAM (DEMOLITION)

NO.: E1 SHEET 6 OF 21



Λ('	PANEL 'T'		SIZE	20	8Y/120 V	MAIN	BREAKER		MOUNT/LOCATION S	SHORT	CKT
10	I ANEL I	225	AMPS	3-PH	ASE, 4-WIRE	15	O AMP	MAIN	BUILDING - GENERATOR ROOM 2	22,000	AIC
		BKR						BKR			
CKT		AMP/			KVA			AMP/			CK
#	CIRCUIT DESCRIPTION	POLE	CKT	Αø	Вø	Cø	CKT	POLE	CIRCUIT DESCRIPTION		#
1	LIGHTING - FLUORIDE/EXT.	20/1						20/1	PLUGS FLUORIDE/EXT.		2
3	LIGHTING - GENERATOR/CHLORINE	20/1						20/1	PLUGS GEN/CHLORINE		4
5	SPARE	20/1						15/2	HEAT TRACE		6
7	HEAT FLUORIDE STORAGE ROOM	20/1									8
9	?? CONTROL ??	20/1						20/1	CHLORINE ANALIZER		10
11	FLUORIDE MIX	20/1						20/1	SPARE		12
13	GENERATOR ROOM	20/1						20/1	SPARE		14
15	GENERATOR ROOM	20/1						20/1	SPARE		16
17	GENERATOR ROOM	20/2									18
19	CHLORINATOR ROOM	20/2									20
21	CHLORINE STORAGE ROOM	20/1									22
23	SPARE	20/1						20/1	METERING PUMP		24
25 🕻	BUILDING DEN. BATTERY CHARDER	20/1						20/1	PLC/BRINE SOLENOID		26
27 🛭	BYKDYYG GEN/DAXTAYK/////	20/1						20/1	CEILING FAN		28
29		20/1						30/2	CHLORINE HWH		30
31 (	PUMP/GEW. BATTERY CHARGER	20/1									32
33 <b>(</b>	PUMP SEN DAY TANK	20/1						20/1	PLC CONTROLLER		34
35 (	PUMP/GEN/HEATEB//////	20/1						20/1			36
37	SPARE	20/1						20/1			38
	LOW ELEVATION METER VAULT	30/2						30/2	HIGH ELEVATION FLOW VAULT		40
39											42

PANEL 'T' EXISTING

THESE CIRCUITS BEING RECONNECTED
TO NEW GENERATOR OR ACCESSORIES.
MAINTAIN WIRING AND RECONNECT.

208Y/120 V MAIN BREAKER MOUNT/LOCATION SIZE AC PANEL 'T' 3-PHASE, 4-WIRE 150 AMP 225 AMPS MAIN BUILDING - GENERATOR ROOM 22,000 AIC BKR AMP/ AMP / POLE CKT AØ BØ CØ CKT POLE CIRCUIT DESCRIPTION CIRCUIT DESCRIPTION 1 LIGHTING - FLUORIDE/EXT. 20/1 20/1 PLUGS FLUORIDE/EXT. 3 LIGHTING - GENERATOR/CHLORINE 20/1 20/1 PLUGS GEN/CHLORINE 15/2 HEAT TRACE 7 HEAT FLUORIDE STORAGE ROOM 20/1 9 ?? CONTROL ?? 20/1 CHLORINE ANALIZER 20/1 11 FLUORIDE MIX 12 20/1 SPARE 20/1 13 GENERATOR ROOM 20/1 20/1 SPARE 14 15 GENERATOR ROOM 20/1 20/1 SPARE 17 GENERATOR ROOM 20/2 18 19 CHLORINATOR ROOM 20/2 21 CHLORINE STORAGE ROOM 20/1 22 20/1 20/1 METERING PUMP 20/1 PLC/BRINE SOLENOID 26 20/1 FIRE ALARM PANEL 'FP-1'

GENERATOR BATTERY CHARGER 20/1 CEILING FAN 20/1 30 30/2 CHLORINE HWH 20/1 20/1 32 20/1 PLC CONTROLLER 33 ( GENERATOR DAY TANK 20/1 35 GENERATOR HEATER 38 LOW ELEVATION METER VAULT 30/2 30/2 HIGH ELEVATION FLOW VAULT

PANEL MFGR/MODEL: SQUARE D

MAIN BREAKER

BRANCH CIRCUIT BREAKER MFGR/MODEL: SQUARE D

TOTAL CONNECTED LOAD (kVA): ??

1 PANEL 'T' NEW

ESTIMATED DEMAND LOAD (kVA): ??

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

NWY/04-15-2014

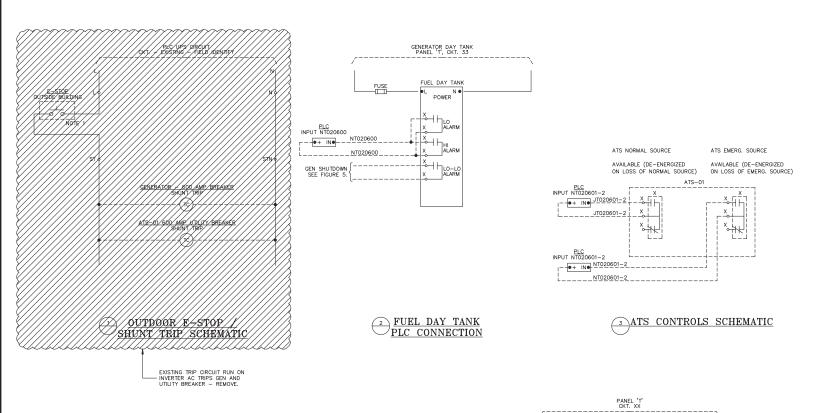
Addendum 2, June 6, 2014

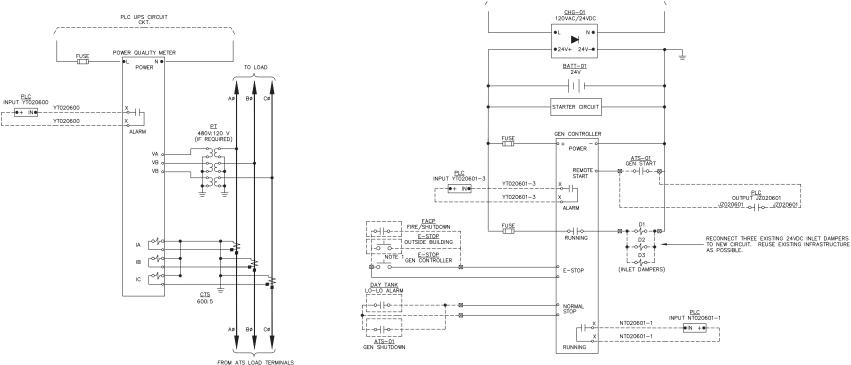
NWY/04-15-2014





NO. DRAWING NO./SHEET REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION DRAWING NAME: CITY AND T	BOROUGH OF JUNEAU
	CE BASIN WELL FIELD
GENERATOR I	REPLACEMENT E14-112
AC PAN	IEL 'T' SCHEDULE
110 1 111	e13.dwg
REF DWG(S):	
DRAWING NO.:	
E	13 SHEET 18 OF 21





© DC SYSTEM & GENSET CONTROLLER SCHEMATIC

POWER QUALITY METER NOTES

 METER CAN BE PURCHASED FACTORY INTEGRATED IN LOW VOLTAGE SWITCHGEAR. ONLY ALARM AND POWER CONNECTIONS REQUIRE FIELD CONNECTION IN THIS CASE AND OTHER WIRING SHOWN HERE FOR REFERENCE ONLY.

POWER QUALITY METER PLC CONNECTION

INERAL NOTES.

- 1. IF EXISTING OUTDOOR  $E-STOP\ DOES\ NOT\ HAVE\ TWO\ POLES,\ ADD\ CONTACT\ BLOCKS\ AS\ NECESSARY.$
- 2. DIAGRAMS SHOWN ARE FUNCTIONAL REPRESENTATIONS AND MUST BE MODIFIED DURING CONSTRUCTION TO COMPLY WITH SPECIFIC EQUIPMENT PURCHASED.
- 3. WHRE FIRE ALARM CONTROL PANEL OUTPUTS SUCH THAT ONE OUTPUT SHUTS DOWN THE GENERATOR, SECOND OUTPUT PROVIDES A DIAL OUT ALARM THROUGH THE EXISTING DTS UNIT, AND THIRD OUTPUT INDICATES FIRE TO TREATMENT PLANT PLC.
- 4. PLC CIRCUITS SHOWN ARE PER DOCUMENTATION PROVIDED BY CBJ. FIELD IDENTIFY AND LABEL ALL CIRCUITS. EXISTING WIRING CAN BE MAINTAINED FOR MOST I/O, WHERE POSSIBLE DO NOT RUN NEW CONDUIT AND/OR CIRCUITS. MAINTAIN CIRCUITS FOR PLC UNTIL END EQUIPMENT REPLACED, KEEP CBJ WATER UTILITY INFORMED OF STATUS OF ALARM POINTS.



3 FACP DIAL OUT CONNECTION

#### EXISTING PLC GENERATION INTERFACE

		TB20			CONTACT	TERMINATION
POINT TYPE	DESCRIPTION	POSITION	WIRE 1	WIRE 2	TYPE	LOCATION
120VAC INPUT (WETTED)	BUILDING POWER "ON"	25	JT020703	JT020703	NC	UNKNOWN
120VAC INPUT (WETTED)	BUILDING GENERATOR "ON"	26	NT020600	NT020600	NO	BLDG GEN ATS
120VAC INPUT (WETTED)	BUILDING GENERATOR "ALARM"	27	YT020600	YT020600	NO	BLDG GEN
120VAC INPUT (WETTED)	PUMP GENERATOR STARTED	28	NT020601-1	NT020601-1	NO	PUMP GEN
120VAC INPUT (WETTED)	PUMP GENERATOR CIRCUIT PWR ON	29	JT020601	JT020601	NO	PUMP GEN ATS
120VAC INPUT (WETTED)	PUMP GENERATOR ON	30	NT020601-2	NT020601-2	NO	PUMP GEN
120VAC INPUT (WETTED)	PUMP GENERATOR ALARM	31	YT020601-3	YT020601-3	NO	PUMP GEN
120VAC OUTPUT	OPERATE PUMP GEN	44	JZ020601	JZ020601	COIL	PUMP GEN

#### PLC POINT LIST (DEMO) NOTES:

- 1. STRIKETHROUGH ITEMS ARE TO BE DEMOLISHED AND RECONNECTED TO NEW POINTS.
- 2. IDENTIFY AND AS BUILT ALL PLC / CONTROL WIRING SHOWN ABOVE PRIOR TO BEGINNING WORK. DISCONNECT EACH POINT AS EQUIPMENT DEMOED AND REROUTE CONTROL WIRING TO NEW DEVICES AS NECESSARY. MAINTAIN ALL I/O POSSIBLE THROUGH PERIOD OF WORK, KEEP CBJ WATER UTILITY PERSONNEL AWARE OF WHICH POINTS ARE DISCONNECTED.

# 6 PLC POINTS LIST - DEMO

	NEW PLC GENERATION INTERFACE										
	TB20 CONTA										
POINT TYPE	DESCRIPTION	POSITION	WIRE 1	WIRE 2	TYPE	LOCATION					
120VAC INPUT (WETTED)	BUILDING POWER "ON"	25	JT020703	JT020703	NC	UNKNOWN					
120VAC INPUT (WETTED)	GENERATOR DAY TANK ALARM	26	NT020600	NT020600	NO	NEW DAY TANK					
120VAC INPUT (WETTED)	FACP ALARM (FIRE INDICATION)	27	YT020600	YT020600	NO	NEW FACP					
120VAC INPUT (WETTED)	PUMP GENERATOR POWER AVAILABLE	28	NT020601-1	NT020601-1	NO	NEW ATS					
120VAC INPUT (WETTED)	UTILITY POWER AVAILABLE	29	JT020601	JT020601	NO	NEW ATS					
120VAC INPUT (WETTED)	GENERATOR ON	30	NT020601-2	NT020601-2	NO	NEW GEN					
120VAC INPUT (WETTED)	GENERATOR ALARM	31	YT020601-3	YT020601-3	NO	NEW GEN					
120VAC OUTPUT	OPERATE PUMP GEN	44	JZ020601	JZ020601	COIL	NEW GEN					

PLC POINT LIST (NEW) NOTES:

- 1. POINTS THAT HAVE BEEN RECONNECTED NOTED IN BOLD. BUILDING POWER ON IS BELIEVED TO BE A 120VAC RELAY INDICATING THE 120VAC CIRCUITS
  HAVE POWER. IT HAS NOT BEEN LOCATED BUT IS BELIEVED TO BE OUTSIDE OF THE AREA OF WORK. INCLUDED HERE FOR REFERENCE.
- 2. EXISTING POINTS LIST TAKEN FROM DRAWING AND SWITCHGEAR NOT ACCESSIBLE DURING DESIGN. COORDINATE VERIFICATION OF I/O SIGNALS WITH CBU CITY WATER UTILITY TECHNICIANS.

PLC POINTS LIST - NEW

PROJECT: LAST CHANCE BADESIGNER/PROJECT ENGINEER:	SIN WELL FIELD GENERATOR REPLACE NICK YANKEE / JEFF RICE	MENT E14-112 JOB #: 1	3-0219	ENG. STAMP	A Circle Pour System	NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION	DRAWING NAME:	CITY AND BOROUGH OF JUNEAU LAST CHANCE BASIN WELL FIELD	
NO.         DESIGN/I           0         ISSUED FOR BID           Addendum 2, June 6, 2014	CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE NWY/04-15-2014	REVIEWED BY/DATE JWR/04-15-2014	4572	PEN Consulting Engineers					GENERATOR REPLACEMENT E14-112 CONTROL SCHEMATIC	
				16. 21. 1014 16. 21. 1014	TEL: (907) 522-1953 FAX: (907) 522-1182				REF DWG(S):		e14.dwg
					WEB: WWW.EPSINC.COM				DRAWING NO.:	E14	HEET 19 OF 21