

PANEL TAG NAME: E1 (EXISTING)		208/120V, 3PH., 4W MAINS: 600A, Cu MAIN BKR: 600A-3P		MOUNTING: SURFACE/RECESSED LOCATION: ELECTRICAL ROOM	
LOAD-W	CIRCUIT DESCRIPTION	PROT.	CIRCUITS	PROT.	CIRCUIT DESCRIPTION
	EXISTING GENERATOR ROOM PANEL	60A	1 A 2 100A 3 B 4 3P 5 C 6	3P	FEEDER FOR PANEL PP-E2
	OVER HEAD UNIT HEATER HUH-10	15A	7 A 8 60A		
	OVER HEAD UNIT HEATER HUH-12	15A	9 B 10		EXISTING AUGER PANEL
	FUEL OIL PUMP FP-1	15A	11 C 12 3P 13 A 14 15A	15A	EXISTING PANEL PLUG
	GLYCOL FEEDER GF-1	3P	15 B 16 15A		EXISTING GENERATOR ALARM PANEL
	AUGER CONTROL PANEL 2	15A	17 C 18 15A 19 A 20 21 B 22 3P		CIRCULATION PUMP CP-1
	FEEDER FOR PANEL E3	200A	23 C 24 15A 25 A 26 3P		CIRCULATION PUMP CP-2
	SPD	30A	27 B 28 3P 29 C 30 15A 31 A 32 15A 33 B 34 3P		HOT WATER BURNER BRN-1
	CIRCULATION PUMP CP-5a AND CP-5b	15A	35 C 36 3P 37 A 38 15A 39 B 40 3P 41 C 42 3P		HOT WATER BURNER BRN-2

PANEL PP-E1 SCHEDULE

-NTS
-BREAKER SIZES LISTED ABOVE ARE PROVIDED AS A GENERAL GUIDE. PRIOR TO INSTALLATION, CONTRACTOR TO CONFIRM ALL BREAKER SIZES WITH FINAL EQUIPMENT LOADS. CONTRACTOR TO SIZE ALL FEEDER WIRING AND CONDUIT BASED ON CANADIAN ELECTRICAL SAFETY CODE - LATEST EDITION. INCLUDE INSULATED GROUND CONDUCTOR IN ALL CONDUIT RACEWAYS.
- CONTRACTOR TO PROVIDE A TYPE WRITTEN UPDATED DIRECTORY OF CIRCUITS

PANEL TAG NAME: E3 (EXISTING)		208/120V, 3PH., 4W MAINS: 225A, Cu MAIN BKR: 200A-3P		MOUNTING: SURFACE/RECESSED LOCATION: ELECTRICAL ROOM - 2nd FLOOR	
LOAD-W	CIRCUIT DESCRIPTION	PROT.	CIRCUITS	PROT.	CIRCUIT DESCRIPTION
	PROCESS ROOM LIGHTING	15A	1 A 31 30A		
	SECOND FLOOR LIGHTING	15A	2 B 32		FAN COIL HEATER FC-1 (VFD)
	FIRST FLOOR AND TRUCK BAY LIGHTING	15A	3 C 33 3P		
	OUTDOOR LIGHTING	15A	4 A 34 15A		FAN COIL HEATER FC-2
	SPARE	15A	5 B 35		
	SPARE	15A	6 C 36 3P		
	SPARE	15A	7 A 37 20A		FAN COIL HEATER FC-5
	CP-7 TEKMAR 361 CONTROLLER	15A	8 B 38		
	OVER HEAD UNIT HEATER CONTROL PANEL HCP-1	15A	9 C 39 3P		
	OVER HEAD UNIT HEATER CONTROL PANEL HCP-2	15A	10 A 40 50A		
	OVER HEAD UNIT HEATER HUH-11	15A	11 B 41		CABINET CEILING FAN FN-1
	SUMP PUMP CONTROL PANEL	15A	12 C 42 3P		
	INCOMING DOMESTIC WATER CIRCULATION PUMP	15A	13 A 43 30A		CABINET CEILING FAN FN-2
	TEKMAR 274 CONTROLLER	15A	14 B 44		
	TEKMAR 150 CONTROLLER	15A	15 C 45 3P		
	CP-10 TEKMAR 361 CONTROLLER	15A	16 A 46 15A		UPSTAIRS MEZZANINE/HALLWAY GENERAL PURPOSE REC.(X5)
	TRUCK BAY REC.(X3)	15A	17 B 47 15A		UPSTAIRS WASHROOM REC.(X1)
	TRUCK BAY REC.(X3)	15A	18 C 48 15A		UPSTAIRS ELECTRICAL ROOM REC.(X3)
	TRUCK BAY REC.(X3)	15A	19 A 49 15A		CP-6 TEKMAR 361 CONTROLLER
	TRUCK BAY REC.(X3)	15A	20 B 50 15A		SPARE
	VESTIBULE EXPLOSION PROOF REC.(X1)	15A	21 C 51 15A		SPARE
	PROCESSING ROOM EXPLOSION PROOF REC.(X3)	15A	22 A 52 15A		CABINET CEILING FAN FN-6
	PROCESSING ROOM EXPLOSION PROOF REC.(X3)	15A	23 B 53 15A		CABINET CEILING FAN FN-8
	PROCESSING ROOM EXPLOSION PROOF REC.(X3)	15A	24 C 54 15A		CABINET CEILING FAN FN-9
		15A	25 A 55 15A		CABINET CEILING FAN FN-11
560	CABINET CEILING FAN FN-13 (VFD)	3P	26 B 56 15A 27 C 57 15A		CABINET CEILING FAN FN-12
	SPD	30A	28 A 58 15A 29 B 59 3P 30 C 60 3P		SPARE

PANEL PP-E3 SCHEDULE

-NTS
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- CONTRACTOR TO PROVIDE A TYPE WRITTEN UPDATED DIRECTORY OF CIRCUITS

PANEL TAG NAME: E2 (NEW)		208/120V, 3PH., 4W MAINS: 100A, Cu MAIN BKR: LUGS		MOUNTING: SURFACE/RECESSED LOCATION: ELECTRICAL ROOM	
LOAD-W	CIRCUIT DESCRIPTION	PROT.	CIRCUITS	PROT.	CIRCUIT DESCRIPTION
	FC-3/4 CONTROL PANEL POWER SUPPLY	15A	1 A 2 15A		CIRCULATION PUMP CP-3
	FC-3, FN-3 AND CP-8 TEKMAR 361 CONTROLLER	15A	3 B 4 15A		SPARE
	FC-4, FN-4 AND CP-9 TEKMAR 361 CONTROLLER	15A	5 C 6 15A		SPARE
	SPARE	15A	7 A 8 15A		SPARE
	CABINET CEILING FAN FN-5	15A	9 B 10 15A		CIRCULATION PUMP CP-11
	CABINET CEILING FAN FN-7	15A	11 C 12 15A		HOT WATER BOILER B-1 CONTROL POWER
	SPARE	15A	13 A 14 15A		HOT WATER BOILER B-2 CONTROL POWER
	ELECTRICAL ROOM REC.(X2)	15A	15 B 16 15A		UTILITY ROOM REC.(X2)
	ELECTRICAL ROOM REC.(X1)	15A	17 C 18 15A		MECHANICAL ROOM REC.(X2)
	OUTDOOR RECEPTACLE (X3)	15A	19 A 20 15A		SPARE
	TEKMAR 150 CONTROLLER	15A	21 B 22 15A		SPARE
	SPARE	15A	23 C 24 15A		SPARE
	SPARE	15A	25 A 26 15A		SPARE
	SPARE	15A	27 B 28 15A		SPARE
	SPARE	15A	29 C 30 15A		SPARE
	SPD	30A	31 A 32 15A 33 B 34 3P		SPACE
	SPACE		35 C 36		SPACE
	SPACE		37 A 38		SPACE
	SPACE		39 B 40		SPACE
	SPACE		41 C 42		SPACE

PANEL PP-E2 SCHEDULE

-NTS
-BREAKER SIZES LISTED ABOVE ARE PROVIDED AS A GENERAL GUIDE. PRIOR TO INSTALLATION, CONTRACTOR TO CONFIRM ALL BREAKER SIZES WITH FINAL EQUIPMENT LOADS AND AS PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SIZE ALL FEEDER WIRING AND CONDUIT BASED ON CANADIAN ELECTRICAL SAFETY CODE LATEST EDITION. INCLUDE INSULATED GROUND CONDUCTOR IN ALL CONDUIT RACEWAYS.
- CONTRACTOR TO PROVIDE A TYPE WRITTEN UPDATED DIRECTORY OF CIRCUITS

LUMINAIRE SCHEDULE

FIXTURE LETTER	FIXTURE DESCRIPTION	CEILING MOUNTED			WALL MOUNTED		LAMP DATA						VOLTAGE		BASIC OPTIONS			ACCEPTABLE MANUFACTURER WITH CAT. SERIES AND OPTIONS		
		SURFACE	RECESSED	SUSPENDED	SURFACE	RECESSED	NUMBER	WATTAGE	LAMP TYPE	DRIVER CURRENT (mA)	DISTRIBUTION TYPE	COLOR TEMP. DEG. KELVIN	MINIMUM CRI	24VDC	120VAC	PHOTOCELL	WET/DAMP LOC'N		BALLAST (B)	COLOR (C)
L1	RIG-A-LITE SXPJ LED SERIES	●					8	98	LED						●					SXPJ-10-L-U-GG-C-SC CEILING MOUNT, GLOBE & GUARD, CLASS 1 ZONE 1 GROUPS IIa & IIb
L2	CREE X-SE SERIES			●			6	37	LED	525	IV	4000	75		●	●				XS-SE-0-4-02-U-B-C-7-P-CL c/w WALL BRACKET, PHOTOCELL & MULTI-LEVEL SENSOR
L3	RIG-A-LITE MHDS LED SERIES				●		23	80	LED						●					MHDS-10-L-4-U-P CEILING MOUNT, GLOBE & GUARD, CLASS 1 ZONE 2 GROUPS IIa & IIb
R1	LUMACELL RS10-XP SERIES				●		5	20	QH					●						RS10XP-24V-20W-W WALL MOUNT, CLASS 1 ZONE 1 GROUPS IIa & IIb
R2	LUMACELL MQM-NX SERIES				●		9	5	LED					●			●			MQM2NX-LD13-BK WALL MOUNT, NEMA4X CERTIFIED
X1	LUMACELL LX SERIES				●		2	4	LED					●						EXIT SIGN LX1S2W24 TRANSFER PANEL RSTP120-24-25XP WALL MOUNT, CLASS 1 ZONE 1 GROUPS IIa
X2	LUMACELL LN SERIES				●		5	<1.5	LED					●			●			EXIT SIGN LN1WU WALL MOUNT, NEMA 4X CERTIFIED
BU	RGS-DT SERIES				●									●	●		●			BU#1 - RGS24S-288-DTFC-A-AT BU#2 - RGS24S-288-DTFC-A-AT BU#3 - RGS24S-288-DTFC-A-AT WALL MOUNT, NEMA 4X CERTIFIED
NOTES:																				
A. LAMP TYPE LEGEND: TB=TB FLUORESCENT, HPS=HIGH PRESSURE SODIUM, MH=METAL HALIDE, CF=COMPACT FLUORESCENT, INC=INCANDESCENT QH=QUARTZ HALOGEN LED=LED TECHNOLOGY																				
B. BALLAST LEGEND: HPF=RAPID START, THERMALLY PROTECTED, HIGH POWER FACTOR BALLAST																				
C. LENS LEGEND: ST=STANDARD, VA=0.125" PRISMATIC LENS, CTG=CLEAR TEMPERED GLASS,																				
D. COLOR LEGEND: ST=STANDARD, W=WHITE, B=BLACK, G=GRAY, R=RED																				
E. WHEN MOUNTING IS INDICATED AS "RECESSED", DIVISION 16 CONTRACTOR IS TO DETERMINE CEILING TYPE FROM THE LATEST ARCHITECTURAL REFLECTED CEILING PLAN DRAWINGS AND PROVIDE THE APPROPRIATE CEILING INSTALLATION KIT.																				
F. EMERGENCY BATTERY UNITS: PROVIDE SEALED LONG LIFE BATTERIES, MINIMUM 10 YEAR DESIGN LIFE:																				
G. ALTERNATE MANUFACTURERS WILL BE ACCEPTED ONLY WITH PRIOR APPROVAL BY THE ENGINEER. PRODUCT MUST MEET ALL QUALITY, EFFICIENCY AND DESIGN ASPECTS OF BASE BID MANUFACTURER. CONTRACTOR MUST SUBMIT RECALCULATED PHOTOMETRIC DRAWINGS OF EXTERIOR AND INTERIOR ROOMS WITH SHOP DRAWING SUBMITTAL.																				

LIGHTING LUMINAIRE SCHEDULE

NOTES

- CONTRACTOR TO RE-ARRANGE AND WHERE POSSIBLE, REUSE EXISTING BREAKERS AS INDICATED. CONTRACTOR TO PROVIDE NEW BREAKERS OF SIMILAR TYPE, SIZED AS INDICATED.
- CONTRACTOR TO PROVIDE NEW POWER PANELS INDICATED.
- PERFORM COMPLETE INSTALLATION OF EQUIPMENT IN STRICT ACCORDANCE WITH THE MOST STRINGENT REQUIREMENTS OF:
A) CSA C22.1-12 - 22ND EDITION OF THE CANADIAN ELECTRICAL CODE 2012
OR
B) GN/CGS- PROTECTION SERVICES DIVISION-ELECTRICAL / MECHANICAL SAFETY SECTION -ELECTRICAL BULLETINS

1. This drawing is the exclusive property of Runge & Associates Inc. and the reproduction of any part without prior written consent of this office is strictly prohibited.
2. The contractor shall verify all dimensions, levels, and datums on site and report any discrepancies or omissions to this office prior to construction.
3. This drawing is to be read and understood in conjunction with all other plans and documents applicable to this project.
4. Drawing revision must be note "Issued For Construction" before any work commences

Issue / Revision	Date dd/mm/yyyy
1 ISSUED FOR 66% SUBMISSION	06/09/2012
2 ISSUED FOR 99% SUBMISSION	JANUARY 2013
3 ISSUED FOR TENDER	FEBRUARY 2013
4 REVISED AS PER ADDENDUM 1 TO 4 AND ISSUED FOR CONSTRUCTION	APRIL 2013

PERMIT TO PRACTICE
Runge & Associates Inc.
Signature: *[Signature]*
Date: APRIL 22, 2013
PERMIT NUMBER: P617
The Association of Professional Engineers,
Geologists and Geophysicists of NWT/NL



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Client
GOVERNMENT OF NUNAVUT
COMMUNITY & GOVERNMENT
SERVICES
RANKIN INLET
SEWAGE TREATMENT PLANT

Drawing Title
PANEL AND LUMINAIRE
SCHEDULES

Drawn By T.T.	Checked By S.R.T.	Drawing No. E2
Scale AS SHOWN	Project No. 300031281	