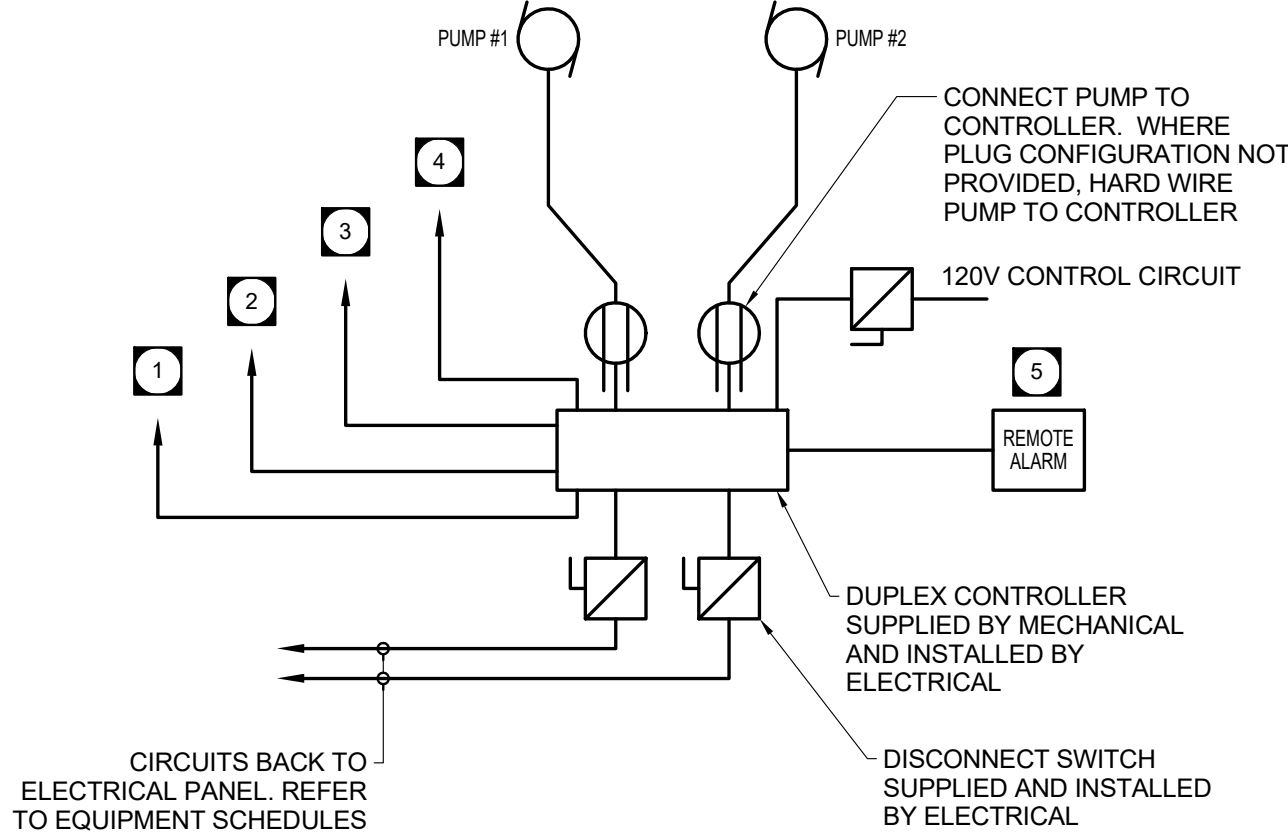


PANELBOARD: CR														
LOCATION:					VOLTAGE: 120/208 V. 3 ø 4 W.									
MOUNTING: SURFACE NEMA1					A.I.C. RATING: 10,000 AMPS SYMMETRICAL									
MAIN DEVICE: 200 A MLO					SPECIAL:									
BUS AMPS: 225 AMPS														
LOAD DESCRIPTION	BKR	P	CCT#	A		B		C		CCT#	P	BKR	LOAD DESCRIPTION	
EXIT SIGN	15 A	1	CR-1	0.0	1.2					CR-2	1	25 A	SUMP PUMP 1	
SUMP PUMP 3	25 A	1	CR-3			1.2	1.2			CR-4	1	25 A	SUMP PUMP 2	
SUMP PUMP 5	25 A	1	CR-5					1.2	1.2	CR-6	1	25 A	SUMP PUMP 6	
SUMP PUMP 4	25 A	1	CR-7	1.2	0.0					CR-8	1	15 A	MOTORISED DAMPER	
MOTORISED DAMPERS	15 A	1	CR-9			0.0	0.2			CR-10	1	15 A	BU-CR	
DEHUMIDIFICATION UNIT	70 A	3	CR-11					5.7	1.2	CR-12	1	15 A	LITES CRAWLSPACE 1	
			CR-13	5.7	0.1					CR-14	2	15 A	EXHAUST FAN	
			CR-15			5.7	0.1			CR-16				
CIRCULATION FAN 1	15 A	3	CR-17					0.4	3.1	CR-18	2	40 A	CONDENSING UNIT 1	
			CR-19	0.4	3.1					CR-20				
			CR-21			0.4	0.4			CR-22				
SUMP PUMP 7	25 A	1	CR-23					1.2	0.4	CR-24	3	15 A	CIRCULATION FAN 2	
SUMP PUMP 8	25 A	1	CR-25	1.2	0.4				CR-26					
SUMP PUMP 9	25 A	1	CR-27			1.2	1.2		CR-28	1				
			CR-29							CR-30				
			CR-31							CR-32				
			CR-33							CR-34				
Spare	15 A	1	CR-35					0.0	0.0	CR-36	1	20 A	Spare	
Spare	15 A	1	CR-37	0.0	0.0					CR-38	1	20 A	Spare	
Spare	15 A	1	CR-39			0.0	0.0			CR-40	1	20 A	Spare	
Spare	15 A	1	CR-41					0.0	0.0	CR-42	1	20 A	Spare	
TOTAL LOAD:				13 kVA		12 kVA		14 kVA						
TOTAL AMPS:				113 A		96 A		121 A						
LOAD CLASSIFICATION		CONNECTED		DEMAND		ESTIMATED		PANEL TOTALS						
LITES		1433 VA		100.00%		1433 VA		CONNECTED LOAD: 39174 VA						
SPEC		37881 VA		100.00%		37881 VA		ESTIMATED DEMAND: 39174 VA						
								CONNECTED CURRENT: 109 A						
								EST. DEMAND CURRENT: 109 A						
NOTES:														



GENERAL NOTES

- FLOATS AND ALARM SUPPLIED BY MECHANICAL AND INSTALLED BY ELECTRICAL.
- REMOTE ALARM(S) SUPPLIED BY MECHANICAL AND INSTALLED BY ELECTRICAL.
- REFER TO MECHANICAL FOR CONTROL WITH DDC SYSTEM.
- COORDINATE SIZE AND QUANTITY OF ELECTRICAL CONNECTIONS WITH MECHANICAL CONTRACTOR PRIOR TO TENDER CLOSE. ADJUST QUANTITY AND SIZE OF BREAKERS AND WIRING TO ACCOMMODATE SUPPLIED CONTROLLER AT NO ADDITIONAL COST TO OWNER.

KEY NOTES

- HIGH WATER ALARM.
- START ALTERNATE PUMP #2 FLOAT CONTROL.
- START PUMP #1 FLOAT CONTROL.
- STOP PUMP FLOAT CONTROL.
- REMOTE ALARM PANEL. REFER TO MECHANICAL CONSTRUCTION DOCUMENTS FOR LOCATIONS.

TYPICAL DUPLEX SUMP PUMP WIRING DETAIL

MECHANICAL EQUIPMENT CONNECTION SCHEDULE															
NO.	DESCRIPTION	LOAD			VOLT	PH	CIRCUIT BREAKER	CONDUIT & WIRE	STARTER		CONTROL DEVICE		DISCONNECT		Notes
		HP	A	W					COMPONENT	FURN. INST. WIRED	COMPONENT	FURN. INST. WIRED	COMPONENT	FURN. INST. WIRED	
CU-1	EXTERNAL CONDENSING UNIT		30 A		208 V	1	40A/2P	21(3/4")C-2#8, #10 BOND	---	---	DDC	DIV. 23 DIV. 23 DIV. 23	NFS	DIV. 26 DIV. 26 DIV. 26	
DDH-1	DEHUMIDIFICATION UNIT		47.7 A		208 V	3	70A/3P	27(1")C-3#4, #8 BOND	---	---	DDC	DIV. 23 DIV. 23 DIV. 23	NFS	DIV. 26 DIV. 26 DIV. 26	
EF-1	EXHAUST FAN		0.8 A		208 V	1	15A/2P	21(3/4")C-2#12, #12 BOND	MAG	DIV. 26 DIV. 26 DIV. 26	DDC	DIV. 23 DIV. 23 DIV. 23	NFS	DIV. 26 DIV. 26 DIV. 26	
F-1	CIRCULATION FAN		3.5 A		208 V	3	15A/3P	21(3/4")C-3#12, #12 BOND	MAG	DIV. 26 DIV. 26 DIV. 26	DDC	DIV. 23 DIV. 23 DIV. 23	NFS	DIV. 26 DIV. 26 DIV. 26	
F-2	CIRCULATION FAN		3.5 A		208 V	3	15A/3P	21(3/4")C-3#12, #12 BOND	MAG	DIV. 26 DIV. 26 DIV. 26	DDC	DIV. 23 DIV. 23 DIV. 23	NFS	DIV. 26 DIV. 26 DIV. 26	
P-1	SUMP PUMP		9.8 A		120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1
P-2	SUMP PUMP		9.8 A		120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1
P-3	SUMP PUMP		9.8 A		120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1
P-4	SUMP PUMP		9.8 A		120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1
P-5	SUMP PUMP		9.8 A		120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1
P-6	SUMP PUMP		9.8 A	120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1	
P-7	SUMP PUMP		9.8 A	120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1	
P-8	SUMP PUMP		9.8 A	120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1	
P-9	SUMP PUMP		9.8 A	120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1	
P-10	SUMP PUMP		9.8 A	120 V	1	25A/1P	21(3/4")C-2#12, #12 BOND	PKG	DIV. 23 DIV. 23 DIV. 26	---	---	NFS	DIV. 26 DIV. 26 DIV. 26	1	
<b>STARTER TYPE:</b> MAG MAGNETIC MAN MANUAL PKG PACKAGED UNIT VFD VARIABLE FREQUENCY DRIVE															
<b>COMBINATION DISCONNECT TYPES:</b> FS FUSED SWITCH NFS NON-FUSED SWITCH MCP MOTOR CIRCUIT PROTECTOR CB CIRCUIT BREAKER															
<b>ABBREVIATIONS:</b> EC ELECTRICAL CONTRACTOR GC GENERAL CONTRACTOR MC MECHANICAL CONTRACTOR OWN OWNER SC SPEED CONTROL TC TIME CLOCK TS THERMOSTAT															
<b>GENERAL NOTES:</b> A. CIRCUITING IS REPRESENTATIONAL ONLY. CONFIRM CIRCUITING ARRANGEMENTS ON SITE WITH EXISTING CONDITIONS. B. DESIGN FOR ELECTRICAL CONNECTION OF MECHANICAL EQUIPMENT IDENTIFIED ABOVE IS IDENTIFIED FOR MECHANICAL BASIS OF DESIGN EQUIPMENT. COORDINATE EQUIPMENT SUPPLIED WITH MECHANICAL CONTRACTOR PRIOR TO TENDER CLOSE AND MAKE ALL ADJUSTMENTS INCLUDING BUT NOT LIMITED TO QUANTITIES AND RATINGS OF CIRCUITS, BREAKERS AND WIRING AT NO ADDITIONAL COST TO OWNER. C. REFER TO MECHANICAL SPECIFICATION SECTION 25 90 00 SEQUENCE OF OPERATIONS. COORDINATE WIRING AND INTERCONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR.															
<b>NOTES:</b> 1. WIRE AND CONNECT SUMP PUMPS TO SUMP PUMP CONTROLLER C/W ALL ASSOCIATED CONTROLS AND REMOTE ALARM PANEL. REFER TO TYPICAL SUMP PUMP DETAIL.															

LIGHTING FIXTURE SCHEDULE									
TYPE	Description	LENS-LOUVER	MOUNTING	LAMP	BALLAST / DRIVER	VOLT	WATT	MFR	CATALOG SERIES
ELA26	DOUBLE HEAD EMERGENCY LIGHTING DECORATIVE REMOTE. DIE CAST ALUMINUM CONSTRUCTION. WHITE	---	WALL	2 x 6W LED 50000HR 540 LUMENS	LED	12 V	12 W	LUMACELL	DR
EX1	LED UNIVERSAL MOUNT, UNIVERSAL SINGLE/DOUBLE FACE PICTOGRAM STYLE EXIT SIGN WITH WHITE ALUMINUM HOUSING AND CHEVRON ARROWS AS SHOWN ON PLANS.	---	UNIVERSAL	< 3W LED MIN 50000 HR	---	120 V	3 W	LUMACELL	LA-3-W-U
SL1	8' LINEAR LED STRIP C/W WIREGUARD	OPAL POLYCARBONATE	SURFACE	LED 6380LM 80+CRI 3500K 60000HR	0-10V DIMMING LED DRIVER	120 V	48 W	LITHONIA	CSS-L96-AL04-MVOLT-SWW3-80 CRI
<b>GENERAL NOTES:</b> A. EMERGENCY LIGHTING MODEL NUMBERS ARE BASED ON LUMACELL PRODUCT LINE. EMERGILITE, BEGHELLI, AND AMLITE MEETING PERFORMANCE SPECIFICATIONS ARE APPROVED SUBSTITUTIONS. B. WHERE "APPROVED EQUAL" IS LISTED IN THE MANUFACTURER COLUMN, FIXTURES MUST BE SUBMITTED AS A SUBSTITUTION FOR APPROVAL PRIOR TO BID SUBMISSION.									

EMERGENCY BATTERY BANK SCHEDULE														
ID	DESCRIPTION	BATTERY SIZE	HEADS	NUMBER OF HEADS	WATTS PER HEAD	YSR	AC VOLT	DC VOLT	SUPPLIED FROM	TOTAL DC LOAD	TOTAL DC LOAD WITH SAFETY FACTOR	MAX WATT 30 MIN	MFR	MODEL
BU-CR	BATTERY BANK, STEEL CABINET COMPLETE WITH AC/DC TERMINAL BLOCKS.	360 W	YES	2	6	YES	120 V	12 V	CR	254 W	318 W	360 W	LUMACELL	RG12S360
<b>GENERAL NOTES:</b> A. EMERGENCY LIGHTING MODEL NUMBERS ARE BASED ON LUMACELL PRODUCT LINE. EMERGILITE, BEGHELLIE, AND AMLITE MEETING PERFORMANCE SPECIFICATIONS ARE APPROVED EQUAL. B. BATTERY BANK SHALL BE C/W CORD AND 5-15P PLUG. PROVIDE 5-15R5-20R RECEPTACLE TO MATCH CIRCUIT RATING.														

KEY PLAN

The General Contractor shall check & verify all dimensions and report any errors or omissions to the designers.

0	2020-10-30	ISSUED FOR CONSTRUCTION
---	------------	-------------------------

**APEGM**  
Certificate of Authorization  
Epp Siepman Engineering Inc.  
No. 4035

Consultant

400 - 136 Market Avenue  
Winnipeg, MB R3B 0P4  
T 204.943.1080

300-275 Carlton Street  
Winnipeg, Manitoba R3C 5R6  
T 204.943.7501  
F 204.943.7507

CONSULTING STRUCTURAL ENGINEERS

Project  
**SJCC RINK CRAWLSPACE**  
ARENA CRAWLSPACE RESTORATION  
2055 NESS AVENUE  
WINNIPEG, MANITOBA

Sheet Title  
**ELECTRICAL SCHEDULES**

File	20057	Date	2020-09-17
Design	AS	Drawn	AS
Revision		Sheet No.	<b>E6.1</b>