

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE 1	QUANTITY
1		(1) LED-3500K	VISCOR - LCOMN Square - Intellect-LED Linear Type N - Architectural Lighting	CEILING	LCOM-N-24-LED8-35K-020L-UV-P95-V99(LV02) C/W INTEGRAL OCCUPANCY SENSOR	18	120V 1P 2W	C/W Remote Controller, ELCO0368, ONE UNIT FOR SITE-SET OCCUPANCY TIMEOUT TO 10MIN.	4
3		(1) LED-3000K	AERALUX LIGHTING-LED LINEAR	SURFACE	AE-SF-ER-ECO-UV-4-32-N-30	32	120V 1P 2W		3
4		(4) LED-3500K	VISIONEERING 8' LED INDOOR STRIP LUMINAIRE WITH WHITE INTERIOR AND NO LENS	CEILING	LCOM96-LED835K140LUV	103.62	120V 1P 2W	C/W STEM KIT PART#KIT00050	4
5		(1) LED-3000K	AERALUX LIGHTING-LED LINEAR	WALL	AE-SF-ER-ECO-UV-4-32-N-30	32	120V 1P 2W	INSTALL AT 7' AFFL.	3
6		(1) LED-4000K	ORACLE LIGHTING LED Die-Cast Aluminum Slim Full Cut-Off Wall	WALL	OWP-FC-116-LED-3500L-MVOLT-30K-**-WPPHC	27	120V 1P 2W	C/W INTEGRAL PHOTOCELL-INSTALL AT 7.5' AFL- CONFIRM FINISH PRIOR TO ORDER	2
8		(1) LED-4000K	ORACLE LIGHTING - LED Mini Slimline Floodlight Series	SURFACE	ELITE, OFL-SL-202-LED-3000L-MVOLT-40K-BZ	30	120V 1P 2W	INSTALL ON 2.0' EMT STEM BELOW CEILING SURFACE	4
EM		(2) LED	EMERGI LITE-REMOTE HEAD	WALL/CEILING	EMERGI LITE EF90MLG	8	12V 1P 2W		2
EM-1		(2) LED	EMERGENCY LIGHTING C/W BATTERY & TWO HEADS	WALL	EMERGI-LITE 12ESL-144-/ZLG	100	120V 1P 2W		1
EM-B		(2) LED	EMERGI LITE-REMOTE HEAD	WALL/CEILING	EMERGI LITE EF90MLG	8	12V 1P 2W	BLACK COLOR	2
EXIT		(1) LED	EMERGENCY EXIT LIGHT	WALL/CEILING	EMERGI-LITE EA1W	2.5	120V 1P 2W	GREEN PICTOGRAM/W CAGE	3
WG-1		(1) -	WIRE GUARD-CUSTOM PART	CEILING	STAINLESS STEEL MESH, 1" X 1" OPENINGS & 8 SECURITY SCREWS - TO SUIT		120V 1P 2W	C/W HARDWARE INSTALLED IN WALLS AS SPECIFIED TO COVER FIXTURE TYPE 1	4
WG-2		(1) -	WIRE GUARD-CUSTOM PART	CEILING	STAINLESS STEEL MESH, 1" X 1" OPENINGS & 4 SECURITY SCREWS		120V 1P 2W	C/W HARDWARE INSTALLED IN WALLS AS SPECIFIED TO COVER FIXTURE TYPE 6	2
WG-3		(1) -	WIRE GUARD-CUSTOM PART	CEILING	STAINLESS STEEL MESH, 1" X 1" OPENINGS & 4 SECURITY SCREWS		120V 1P 2W	C/W HARDWARE INSTALLED IN WALLS AS SPECIFIED TO COVER FIXTURE EXIT SIGN	2

EQUIPMENT & MOTORS EQUIPMENT SCHEDULE

CALLOUT	DESCRIPTION	SYMBOL	VOLTS	AMPS	KW	CIRCUIT	NOTE 1
DHWT-1	DOMESTIC HOT WATER TANK-ELECTRIC		240/120V 2P 3W	18.75	4.5	C-7,9	SUPPLIED BY OTHERS
GMP-1	IN-FLOOR HEATING MAKE-UP PACKAGE		120V 1P 2W	0.83	0.1	C-11	SUPPLIED BY OTHERS
HD-1	HAND DRYER		120V 1P 2W	13.33	1.6	C-13	SUPPLIED BY OTHERS
HD-2	HAND DRYER		120V 1P 2W	13.33	1.6	C-24	SUPPLIED BY OTHERS
HRV-1	HEAT RECOVERY VENTILATOR		120V 1P 2W	2.5	0.3	C-15	SUPPLIED BY OTHERS
P-1	IN-FLOOR HEATING RE-CIRCULATING PUMP		120V 1P 2W	0.83	0.1	C-17	SUPPLIED BY OTHERS
PDO-1	POWER DOOR OPERATOR		120V 1P 2W	2.5	0.3	C-19	SUPPLIED BY OTHERS
PDO-2	POWER DOOR OPERATOR		120V 1P 2W	2.5	0.3	C-19	SUPPLIED BY OTHERS

ELECTRIC HEATERS EQUIPMENT SCHEDULE

CALLOUT	DESCRIPTION	SYMBOL	VOLTS	AMPS	KW	CIRCUIT	ORDERING INFORMATION
B-1	IN-FLOOR HEATING BOILER-ELECTRIC		240V 2P 2W	41.67	10	C-12,14	SUPPLIED BY OTHERS
DH-1	DUCT HEATER		240/120V 2P 3W	12.5	3	C-16,18	SUPPLIED BY OTHERS
FF-1	FORCE FLOW HEATER-BACKUP ONLY		240V 2P 2W	8.33	2	C-21,23	QUELLET, PART#QAC02000 WITH TAMPERPROOF THERMOSTAT SET TO 5 DEG. C. NO ACCESS SHALL BE AVAILABLE TO USER TO ADJUST TEMPERATURE
FF-2	FORCE FLOW HEATER-BACKUP ONLY		240V 2P 2W	8.33	2	C-25,27	QUELLET, PART#QAC02000 WITH TAMPERPROOF THERMOSTAT SET TO 5 DEG. C. NO ACCESS SHALL BE AVAILABLE TO USER TO ADJUST TEMPERATURE
FU-1	ELECTRIC FURNACE		240/120V 2P 3W	62.5	15	C-20,22	SUPPLIED BY OTHERS

1 EQUIPMENT SCHEDULES

C

ROOM MOUNTING SURFACE
FED FROM HYDRO
NOTE EATON-P1AB4A2-42ED-C/W 200AMP MAIN BREAKER

VOLTS 240/120V 2P 3W
BUS AMPS 200
NEUTRAL 100%

AIC 22,000
MAIN BKR 200
LUGS STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	15/1	USB OUTLET CHARGER	0.54		2	15/1	RECEPTACLE	0.18	
3	15/1	RECEPTACLE	0.36		4	15/1	RECEPTACLE		0.18
5	15/1	RECEPTACLE			6	15/1	LIGHTING	0.826	
7	30/2	DHWT-1	2.25	2.25	8	15/1	LIGHTING		0.126
9					10	15/1	LIGHTING	0.008	
11	15/1	GMP-1			12	60/2	B-1		5
13	15/1	HD-1	1.6		14			5	
15	15/1	HRV-1		0.3	16	20/2	DH-1		1.5
17	15/1	P-1	0.1		18			1.5	
19	15/1	PDO-1, PDO-2		0.6	20	80/2	FU-1		7.5
21	15/2	FF-1	1		22			7.5	
23					24	15/1	HD-2		1.6
25	15/2	FF-2	1		26	15/1	SPACE	0	
27					28	15/1	SPACE	0	
29	15/1	SPACE	0		30	15/1	SPACE	0	
31	15/1	SPACE	0		32	15/1	SPACE	0	
33	15/1	SPACE	0		34	15/1	SPACE	0	
35	15/1	SPACE	0		36	15/1	SPACE	0	
37	15/1	SPACE	0		38	15/1	SPACE	0	
39	15/1	SPACE	0		40	15/1	SPACE	0	
41	15/1	SPACE	0		42	15/1	SPACE	0	

TOTAL CONNECTED KVA BY PHASE 21.7 21.5

	CONN KVA	CALC KVA		CONN KVA	CALC KVA
LIGHTING	0.96	1.2	(125%)	CONTINUOUS	4.5
LARGEST MOTOR	0.3	0.075	(25%)	HEATING	28.3
OTHER MOTORS	0.8	0.8	(100%)	COOLING	0.3
RECEPTACLES	1.44	1.44	(50%>10)	NONCONTINUOUS	0
KITCHEN EQUIP	0	0	(N/A)	DIVERSE	7.2
				METERED DEMAND	0
				TOTAL KVA	43.2
				BALANCED AMPS	39.1
					163

3 PANEL SCHEDULES

NOTES

- CIRCUIT BREAKER PROTECTION:
 - FULLY RATED OR USING SERIES RATED COMBINATIONS
 - INTEGRATED EQUIPMENT RATED (IER) WHEN USING SERIES-RATED SYSTEMS, THEY SHALL BE TESTED/LABELED AS A SERIES-RATED COMBINATION
 - LABEL/NAMEPLATE TO BE INSTALLED IN A CONSPICUOUS AND LEGIBLE MANNER TO INDICATE THAT THEY SHOULD ONLY BE REPLACED WITH COMPONENTS OF THE SAME TYPE AND RATING REFER TO CEC 14-014
- DOWNSTREAM OVERCURRENT DEVICES MUST BE SERIES RATED COMBINATIONS WITH THE UPSTREAM PROTECTIVE DEVICE. FOR SERIES RATED COMBINATIONS, EACH DEVICE MUST BE LABELED TO INDICATE:
 - THAT REPLACEMENT COMPONENTS MUST BE OF THE SAME TYPE AND RATING ONLY
 - TESTED IER KA RATING
 - SPECIFIC UPSTREAM PROTECTIVE DEVICE
 - PERMISSIBLE BRANCH DEVICES
 - PANELBOARD DESIGNATION
 - VOLTAGE
- ELECTRICAL SERVICE EQUIPMENT SHALL MEET UTILITY REQUIREMENTS.
- ELECTRICAL SERVICE EQUIPMENT INSTALLED OUTDOOR SHALL BE RATED NEMA/CSA 3R.

FEEDER SCHEDULE

ID	FEEDER AMPS	CONDUIT AND FEEDER
200/21.5B	200	2" C-2#250kcmil AL,#250kcmil AL N,#4G

SIZING METHOD: N FOR NEUTRAL, G FOR GROUND, C FOR CONDUIT. NUMBER BETWEEN () INDICATES NUMBER OF LINE & NEUTRAL PARALLEL RUNS

PANEL SCHEDULE

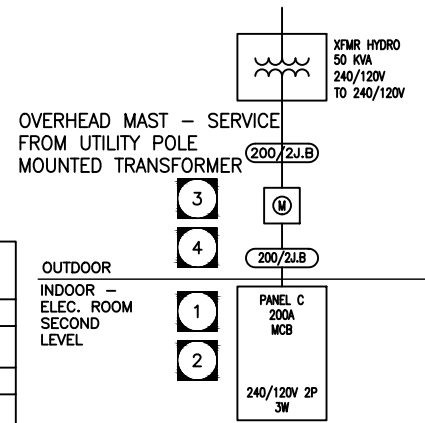
CALLOUT	VOLTS	BUS AMPS	MAIN DISCONNECT TYPE	MAIN DISCONNECT AMPS	MOUNTING	POLES	NOTE 1	AIC RATING
C	240/120V 2P 3W	200	BREAKER	200	SURFACE	42	EATON-P1AB4A2-42ED-C/W 200AMP MAIN BREAKER	22,000

ELECTRICAL CONTROLS, OUTLETS, & SWITCHES INSTALLATION

TYPE	AREA/ROOM				
	PUBLIC AREAS	OFFICE	MECH. ROOM	WASHROOMS	COUNTERS
RECEPTACLE *	18	18	40	-	-
HVAC CONROLS			47.3 (1200mm)		
COMMUNICATION OUTLETS			40		
EMERGENCY LIGHTING			96"		
MANUAL LIGHT CONTROLS			43		
OCCUPANCY SENSORS			47.3 (1200mm)		

* EXCEPT CEILING MOUNTED ONES
** EXCEPT OTHERWISE NOTED ON PLANS
*** HEIGHTS ARE MEASURED FROM FINISH FLOOR LEVEL TO BOTTOM OF OUTLET BOX.

2 SINGLE LINE DIAGRAM - ELECTRICAL SERVICE



4 INSTALLATION HEIGHTS - ELECTRICAL CONTROLS

IBASA Electrical Engineering Enterprises Inc. Design & Consulting
490 Paul Blvd. Winnipeg, MB R2N 4C8
T. 204-515-1158
info@ibasa.ca www.ibasa.ca

COPY RIGHT RESERVED: THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING - ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO IBASA ENTERPRISES INC. THE COPYRIGHTS TO ALL DESIGNS AND DRAWINGS ARE THE PROPERTY OF IBASA ENTERPRISES INC. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY IBASA ENTERPRISES INC. IS FORBIDDEN.

E	AK	AK	21	02	26
D RE-ISSUED FOR CONSTRUCTION	AK	AK	21	02	04
C RE-ISSUED FOR CONSTRUCTION	AK	AK	21	01	30
B ISSUED FOR CONSTRUCTION	AK	AK	21	01	21
A ISSUED FOR REVIEW	AK	AK	21	01	21
ISSUED	BY	APPR.	DATE		

SEAL: **APEGM**
Certificate of Authorization
Ibasa Enterprises Inc.
No. 5474 Expiry: April 30, 2021

KASEM
REGISTERED PROFESSIONAL ENGINEER
Member 35704
January 30, 2021

CLIENT: BRIDGMAN COLLABORATIVE ARCHITECTURE
678 MAIN STREET
WINNIPEG, MB R3B 1E4
(204)488-3857

PROJECT TITLE: LOO LOO WINNIPEG
715 MAIN ST., WINNIPEG, MB
BID OPPORTUNITY 54-2021

SHEET TITLE: EQUIPMENT & PANEL SCHEDULES

PROJECT NO: 201231
SCALE: NTS

DESIGNED BY: AL
DRAWN BY: AL
REVIEWED BY: AL

SHEET NO: **E06**

MANITOBA ENERGY CODE FOR BUILDINGS (MECB) ELECTRICAL COMPLIANCE MATRIX

#	CLAUSE	ITEM	NOTES	VERDICT	UNITS
1	4.2.1	INTERIOR LIGHTING POWER			
2	4.2.1.1	EXIT SIGNS	PER SIGN		1.5 W
3	4.2.1.2	FLUORESCENT LAMP BALLASTS			NO FLUORESCENT FIXTURES SPECIFIED
4	4.2.1.3	LIMITS TO INSTALLED INTERIOR LIGHTING POWER			WITHIN LIMIT
5	4.2.1.5	CALCULATION OF INTERIOR LIGHTING POWER ALLOWANCE USING THE BUILDING AREA METHOD			BUILDING DESIGN
6	4.2.1.5	ALLOWED LIGHTING DENSITY	TABLE 4.2.1.5.1 TRANSPORTATION TERMINAL	11.6	W/SQ M
7	4.2.1.5	BUILDING AREA		76.6	SQ M
8	4.2.1.5	BUILDING SERVICE AREA		0	SQ M
9	4.2.1.5	ALLOWED LIGHTING DENSITY IN BUILDING SPACES		889	W
10	4.2.1.5	ACTUAL LIGHTING DENSITY		824	W
11	4.2.2	LIGHTING CONTROLS IN ENCLOSED SPACES			PROVIDED
12	4.2.2	INTERIOR LIGHTING CONTROLS			PROVIDED
13	4.2.3	EXTERIOR LIGHTING POWER			
14	4.2.3.1.A	LIGHTING ZONE CLASSIFICATION	TABLE 4.2.3.1.A	2	
15	4.2.3.1.B	BASIC LIGHTING ALLOWANCE	ALLOWED PER TABLE 4.2.3.1.B	600	W
16	4.2.3.1.C	USED		54	W
17	4.2.3.1.D	REMAINING		546	W
18	4.2.3.2	SPECIFIC BUILDING EXTERIOR APPLICATIONS			
19					
20					
21					
22					NOT USED
23					
24					
25					
26					
27	4.2.4	EXTERIOR LIGHTING CONTROLS	PHOTOCELL & TIME-LOCK PROVIDED		
28	7.2.1	ELECTRICAL DISTRIBUTION SYSTEM			
29	7.2.1.1 (1)	MONITORING			DEMAND CALCULATIONS SHOW DEMAND BELOW 250KVA
30	7.2.1.1 (2)	MONITORING			N/A
31	7.2.2	VOLTAGE DROP			PER WEB TABLES
32	7.2.3	TRANSFORMERS			NOT INSTALLED/USED IN THE PROJECT
33	7.2.4	ELECTRICAL MOTORS			
34	7.2.4.1	EFFICIENCY			NOTE INCLUDED TO INDICATE EFFICACY REQUIREMENTS

5 MECB COMPLIANCE MATRIX - NEW BUILDING