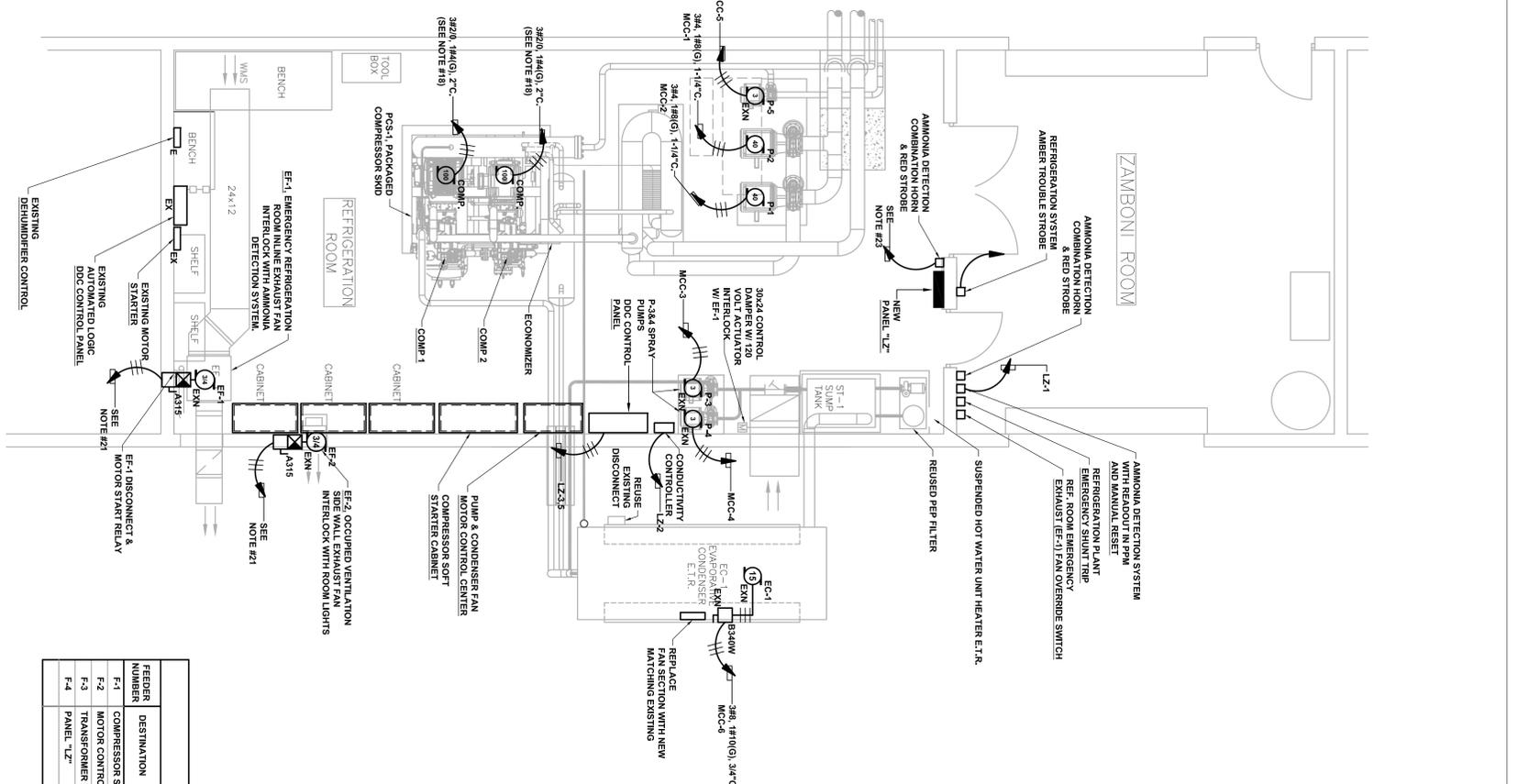
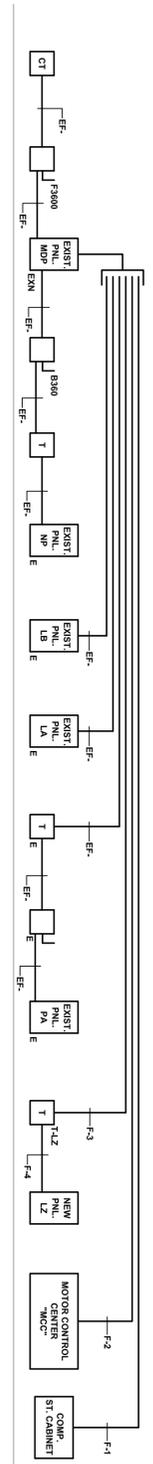


REFRIGERATION DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



REFRIGERATION SYSTEM ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



POWER RISER DIAGRAM
NOT TO SCALE

LEGEND

- HORIZONTAL ARROWS DENOTES THE NUMBER OF NUMBER OF #12 CONDUCTORS IN RACEWAY OR CABLE ASSEMBLY.
- RACEWAY OR CABLE ASSEMBLY INSTALLED CONVEALED.
- RACEWAY INSTALLED EXPOSED.
- MOTOR CONTROL CENTER.
- MOTOR (NUMERAL DENOTES HORSEPOWER).
- EXHAUST FAN.
- COMPRESSOR MOTOR.
- UNIT HEATER.
- POWER DISTRIBUTION PANEL BOARD (SURFACE MOUNTED 8'-6" TO TOP).
- LIGHTING PANEL BOARD (SURFACE MOUNTED).
- MOUNTED 8'-6" TO TOP.
- DIRECT ELECTRICAL CONNECTION ELECTRICAL EQUIPMENT READY FOR OPERATION.
- SUBSCRIBER 'E' DENOTES EXISTING EQUIPMENT TO BE REMOVED.
- EXHAUST FAN BRANCH CIRCUIT WIRING SHALL BE REMOVED.
- SUBSCRIBER 'EX' DENOTES EXISTING EQUIPMENT TO BE REMOVED.
- ELECTRICAL EQUIPMENT OR ELECTRICAL DEVICE WITH BRASS PARTS DENOTES EXISTING ELECTRICAL EQUIPMENT TO BE REMOVED. NEW ELECTRICAL EQUIPMENT OR NEW ELECTRICAL DEVICE SHALL BE INSTALLED UNDER THIS CONTRACT.
- SUBSCRIBER 'EF' DENOTES EXISTING FEEDER TO REMAIN.
- DISCONNECT SWITCH, ALPHANUMERIC CHARACTERS DENOTE SWITCH DESIGNATION, POLES, AMPERE RATING, AND RESPECTIVE PANEL BOARD.

DISCONNECT SWITCH SCHEDULE

DESIGNATION	SWITCH AMPERE RATING	DESIGNATION	SWITCH AMPERE RATING
A	30A	J	1500A
B	60A	K	1500A
C	300A	L	2500A
D	600A	N	3000A
E	500A	P	4000A
F	500A		
G	500A		
H	1000A		

PANEL SCHEDULE

CIRCUIT NUMBER	AMPS	POLES	AC	EQUIPMENT SERVED
1	350	3	65,000	COMPRESSOR MAIN LIQS. SURFACE MOUNTED.
2	175	3	65,000	MOTOR CONTROL CENTER.
3	40	3	65,000	MISCELLANEOUS EQUIPMENT.
4.6.9	30	3	65,000	TRANSFORMERS: PANEL, "MP", "TA" & "LZ".
5.7	30	3	65,000	MISCELLANEOUS EQUIPMENT & DEMULDER.
8	125	3	65,000	PANEL, "LA".
10-12	225	3	65,000	SPACE ONLY.
12	90	3	35,000	MOTOR CONTROL PANEL, "MCC-27/480V, 384V, 225 AMPERE MAIN LIQS. SURFACE MOUNTED.
3.5	20	3	35,000	PUMPS P-1, P-2
6	40	3	35,000	PUMPS P-3, P-4 & P-5
7.8	100	3	35,000	EVAPORATOR CONDENSER SPACE ONLY.
14-6	20	1	10,000	MISCELLANEOUS EQUIPMENT SPACES.
7-12	20	1	10,000	MISCELLANEOUS EQUIPMENT SPACES.

FEEDER SCHEDULE

FEEDER NUMBER	DESTINATION	SIZE	GND	CONDUIT SIZE	QUANTITY	BREAKER SIZE	POLE
F-1	COMPRESSOR STARTER CABINET	#600cmil	#3	3-1/2"	1	200	3
F-2	MOTOR CONTROL CENTER "MCC"	#420	#4	2-1/2"	1	175	3
F-3	TRANSFORMER "LZ"	#310	#10	3/4"	1	20	3
F-4	PANEL "LZ"	#48	#10	3/4"	1	50	3

NOTES

1. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING COMPRESSOR MAIN LIQS. AND ASSOCIATED BRANCH CIRCUIT WIRING BETWEEN COMPRESSOR MOTORS AND CAPACITORS.
2. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING WARM WATER FLOOR PUMP, ASSOCIATED STARTER AND BRANCH CIRCUIT WIRING BETWEEN WARM FLOOR PUMP, STARTER AND RESPECTIVE PANEL BOARD.
3. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING COLD WATER FLOOR PUMP, ASSOCIATED FAN STARTER AND RESPECTIVE PANEL BOARD.
4. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING AMMONIA LEAK DETECTION SYSTEM WIRING AND RESPECTIVE PANEL BOARD.
5. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING CONTROLLER BRANCH CIRCUIT WIRING BETWEEN COMPRESSORS, DISCONNECT SWITCHES, CONTROLLER AND RESPECTIVE PANEL BOARD. THIS SHALL REMAIN AS DETERMINED BY THE REFRIGERATION CONTRACTOR.
6. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING COMPRESSOR DISCONNECT SWITCH AND PUMP DISCONNECT SWITCH WITH ASSOCIATED BRANCH CIRCUIT WIRING.
7. EXISTING DEMULDER AND CONTROL UNIT WIRING SHALL REMAIN.
8. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXISTING AMMONIA LEAK DETECTION SYSTEM WIRING.
9. EXISTING "DDC" CONTROL SYSTEM WIRING SHALL REMAIN.
10. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXHAUST FAN BRANCH CIRCUIT WIRING, ASSOCIATED STARTER AND DISCONNECT SWITCH TO RESPECTIVE PANEL BOARD.
11. THE ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING EXHAUST FAN CONTROLS AND ASSOCIATED BRANCH CIRCUIT WIRING.
12. THE ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING REFRIGERATION PLANT CONTROL CABINET BRANCH CIRCUIT WIRING.
13. THE ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING CONDENSER FAN VARIABLE FREQUENCY DRIVE WITH ASSOCIATED BRANCH CIRCUIT WIRING TO THE CONDENSER FAN AND RESPECTIVE PANEL BOARD.
14. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE EXHAUST FAN BRANCH CIRCUIT WIRING TO SPRAY PUMP MOTOR AND RESPECTIVE PANEL BOARD.
15. EXISTING UNIT HEATER SHALL REMAIN UNDER THIS CONTRACT.
16. THE ELECTRICAL CONTRACTOR SHALL WIRE THE AMMONIA DETECTION SYSTEM TO PANEL CIRCUIT NUMBER.
17. THE ELECTRICAL CONTRACTOR SHALL WIRE THE AMMONIA DETECTION EQUIPMENT DETECTOR STROBE, EMERGENCY SHUNT TRIP AND EXHAUST FAN F-1.
18. THE ELECTRICAL CONTRACTOR SHALL WIRE COMPRESSORS TO COMPRESSOR SOFT STARTER CABINET, COMPRESSOR WIRING SHALL TERMINATE ON RESPECTIVE CIRCUIT BREAKER & STARTER.
19. THE ELECTRICAL CONTRACTOR SHALL WIRE HEAT TRACE CABLE TO CIRCUIT "LZ4" SEE SPEC DRAWINGS FOR THE EXACT LOCATION OF HEAT TRACE CABLE.
20. THE ELECTRICAL CONTRACTOR SHALL WIRE OIL SEPARATOR HEATERS TO CIRCUIT LZ4.
21. THE EXISTING CIRCUIT BREAKERS CURRENTLY SERVING THE EXISTING EXHAUST FANS.
22. THE ELECTRICAL CONTRACTOR SHALL WIRE REFRIGERATION PLANT EMERGENCY SHUNT TRIP, HORN, RED AND AMBER EQUIPMENT SUPPLIED BY OTHERS, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR.
23. THE ELECTRICAL CONTRACTOR SHALL WIRE TO AMMONIA DETECTION SYSTEM PANEL.
24. TRANSFORMER "LZ2" SHALL BE 480/208/120 VOLT, THREE PHASE, FLOOR WIRE.
25. THE ELECTRICAL CONTRACTOR SHALL DISCONNECT EXISTING ELECTRICAL SERVICE CONDUCTORS AND FEEDERS FROM INSTALL NEW PANEL, "MCC" AND RECONNECT EXISTING ELECTRICAL SERVICE CONDUCTORS AND FEEDERS TO NEW PANEL, "MCC". THE ELECTRICAL CONTRACTOR SHALL MODIFY "MCC" AS REQUESTED FOR TERMINATION INTO NEW PANEL.
26. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE MECHANICAL AND REFRIGERATION EQUIPMENT.

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revisions:

1	
1	

project: RINK REFRIGERATION SYSTEM REPLACEMENT
GORDON H. PAQUETTE ICE ARENA
LEDDY PARK
BURLINGTON, VT

drawing title: **RINK REFRIGERATION ELECTRICAL PLAN**
drawn: _____ scale: AS NOTED date: AUGUST 9, 2016

dwg no: _____