

RISER DIAGRAM NOTES:

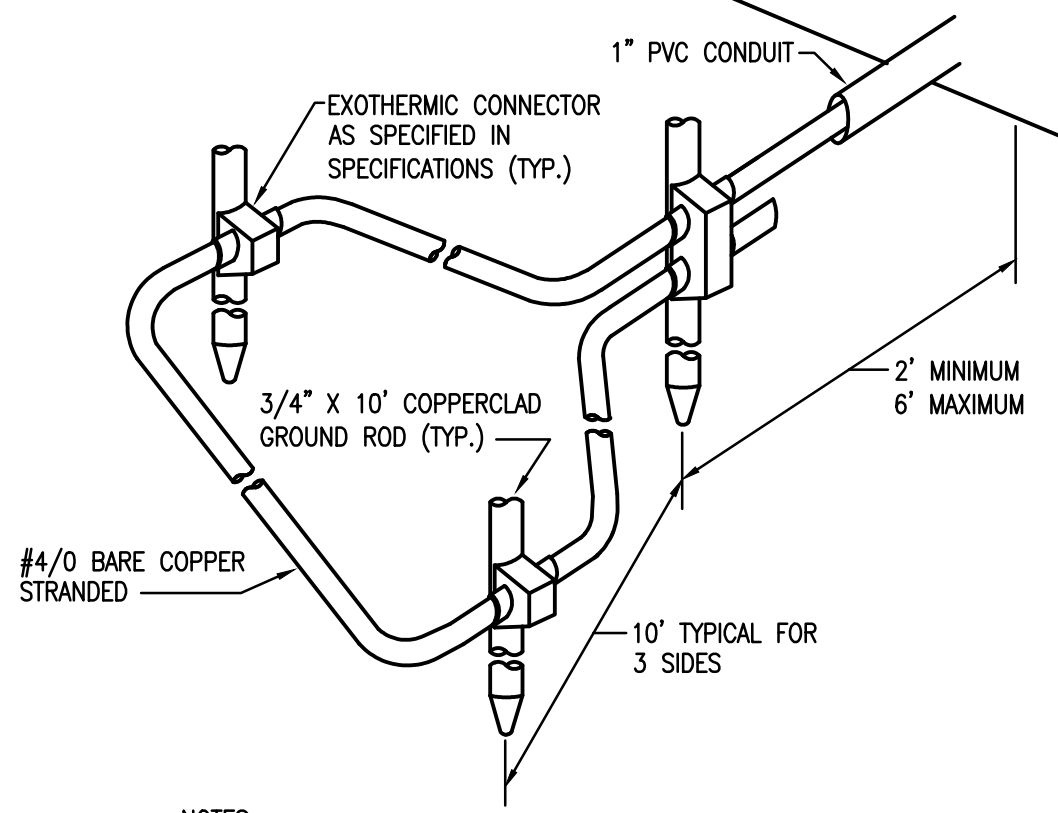
- CONNECT PANEL 'AH' AND PANEL 'TH' FEEDERS TO NEW 225A/3P CIRCUIT BREAKERS IN SWITCHBOARD. MAKE EXISTING 80A/3P BREAKER SPARE THAT CURRENTLY SERVES PANEL 'AH'. CONNECT PANEL 'EH' FEEDER TO NEW 400A/3P CIRCUIT BREAKER IN SWITCHBOARD. PROVIDE NEW BREAKERS TO MATCH EXISTING SQUARE D SWITCHBOARD INCLUDING AIC RATING. PROVIDE ALL REQUIRED BREAKER MOUNTING HARDWARE TO INSTALL NEW BREAKERS. RELABEL SWITCHBOARD ACCORDINGLY.
- REMOVE EXISTING FEEDER IN ITS ENTIRETY INCLUDING CONDUIT AND PROVIDE NEW SIZE AS SHOWN.
- CONNECT PANEL 'BR' FEEDER TO NEW 100A/3P CIRCUIT BREAKER IN DISTRIBUTION PANEL. PROVIDE NEW BREAKER TO MATCH EXISTING SQUARE D PANEL INCLUDING AIC RATING. PROVIDE ALL REQUIRED BREAKER MOUNTING HARDWARE TO INSTALL NEW BREAKER.
- CONNECT PANEL 'AL' FEEDER TO NEW 100A/3P CIRCUIT BREAKER IN PANEL. PROVIDE NEW BREAKER TO MATCH EXISTING SQUARE D PANEL INCLUDING AIC RATING. PROVIDE ALL REQUIRED BREAKER MOUNTING HARDWARE TO INSTALL NEW BREAKER. RELOCATE (1) 20A 120 VOLT BRANCH CIRCUIT FROM EXISTING PANEL TO NEW PANEL AS REQUIRED TO ALLOCATE 3-POLE BREAKER SPACE. SEE NEW PANEL SCHEDULE FOR CIRCUIT EXTENSION INFORMATION.
- CONNECT PANEL 'PPA' FEEDER TO NEW 100A/3P CIRCUIT BREAKER AND PANEL 'P' FEEDER TO NEW 225A/3P CIRCUIT BREAKER IN DISTRIBUTION PANEL. PROVIDE NEW BREAKERS TO MATCH EXISTING SQUARE D PANEL INCLUDING AIC RATING. PROVIDE ALL REQUIRED BREAKER MOUNTING HARDWARE TO INSTALL NEW BREAKERS.
- CONNECT AUDITORIUM DIMMER RACK FEEDER TO SPARE 225A/3P CIRCUIT BREAKER IN SWITCHBOARD. BREAKER MADE SPARE BY REMOVAL OF EXISTING PANEL 'P' FEEDER. RELABEL SWITCHBOARD ACCORDINGLY.

MAIN POWER RISER DIAGRAM

NO SCALE

UTILIZE THIS WIRE CHART FOR DETERMINING WIRE AND CONDUIT SIZE REQUIRED, UNLESS NOTED OTHERWISE, FOR EACH PANEL FEEDER SHOWN ON POWER RISER DIAGRAM AND EMERGENCY POWER RISER DIAGRAM BASED UPON WIRE AMPACITY AND WIRE QUANTITY INDICATED AT EACH PANEL, DISCONNECT AND/OR TRANSFORMER.

WIRE / CONDUIT SIZE CHART					
Wire Ampacity	Parallel Number of Sets	Wire Size (Cu) Conductor / Ground (THHN/THWN) or XHHW-2	Conduit Size		
			1Ø, 2W+G	1Ø, 3W+G 3Ø, 3W+G	3Ø, 4W+G
30	----	#10 / #10	3/4"	3/4"	3/4"
50	----	#6 / #10	1"	1"	1"
60	----	#4 / #8	1"	1"	1 1/4"
70	----	#4 / #8	1"	1"	1 1/4"
80	----	#3 / #8	1"	1 1/4"	1 1/4"
90	----	#2 / #8	1"	1 1/4"	1 1/4"
100	----	#1 / #6	1 1/4"	1 1/2"	1 1/2"
110	----	#1 / #6	----	1 1/2"	1 1/2"
125	----	#1 / #6	----	1 1/2"	1 1/2"
150	----	#1/0 / #6	----	1 1/2"	2"
175	----	#2/0 / #6	----	2"	2"
200	----	#3/0 / #6	----	2"	2"
225	----	#4/0 / #4	----	2"	2 1/2"
250	----	250kcmil / #4	----	2 1/2"	3"
300	----	300kcmil / #4	----	3"	3"
350	----	500kcmil / #2	----	3"	4"
400	----	500kcmil / #2	----	3"	4"
450	2	#4/0 / #2	----	2"	2 1/2"
500	2	#4/0 / #2	----	2"	2 1/2"
600	2	300kcmil / #1	----	2 1/2"	3"
700	2	400kcmil / #1/0	----	3"	4"
800	2	500kcmil / #1/0	----	3"	4"
1000	3	400kcmil / #2/0	----	3"	4"
1200	4	350kcmil / #3/0	----	3"	3"
Ground Feed	Provide #4/0 cu grounding connection to cold water & sprinkler pipe, gas piping, concrete slab rebar and building steel per N.E.C. article 250.				
Generator start ckt	Generator start circuits in 1" conduit.				
Note: Ground sizes are not for service entrances. Copper compression connectors must be used at both ends of cables.					



NOTES:

- INSTALL COUNTERPOISE MIN. 30" BELOW GRADE IN GRASS AREA OUTSIDE OF ELECTRICAL SERVICE ENTRANCE AND CONNECT TO GROUND OF MAIN SERVICE DISCONNECT.

COUNTERPOISE GROUNDING DETAIL

NO SCALE

PANEL SCHEDULE LEGEND

- NCB - PROVIDE NEW CIRCUIT BREAKER IN EXISTING PANEL SPACE.
- SPB - NEW CIRCUIT CONNECTED TO SPARE BREAKER. BREAKER MADE SPARE DURING PROJECT DUE TO EQUIPMENT DEMOLITION.
- RNCB - REMOVE EXISTING BREAKER MADE SPARE DURING PROJECT DUE TO EQUIPMENT DEMOLITION AND PROVIDE NEW CIRCUIT BREAKER IN SAME SPACE.
- GF - PROVIDE CIRCUIT BREAKER WITH GROUND FAULT CIRCUIT INTERRUPTER.
- ST - PROVIDE SHUNT TRIP CIRCUIT BREAKER.
- HL - PROVIDE BREAKER HANDLE LOCK ON/OFF ACCESSORY.

EXISTING SQUARE D SWITCHBOARD					
WITH GRD. BAR & 100% RATED NEUTRAL			AIC RATING		
PANEL	'HMDP'	MAINS	1500A MAIN SWITCH	Ø 3	WIRES 4
VOLTS	277/480	MOUNTING	FREE-STANDING	LOCATION	MTG. SPACE
REMARKS AND LOCATION	LOAD	BKR	CKT	LOAD	REMARKS AND LOCATION
EXIST. FOOTBALL FIELD PANEL	400	1	2	30	EXIST. TVSS
EXIST. CHILLER #2	500	3	4	150	LIFE SAFETY ATS
SPARE (FORMER PNL AH)	80	5	6	225	PANEL 'AH'
EXIST. PANEL 'HBP'	800	7	8	225	PANEL 'EH'
EXIST. PANELS BH/BH2	80	9	10	-	SPACE
NCB PANEL 'EH'	400	11	12	-	SPACE
NCB NON-CRITICAL ATS	400	13	14	-	SPACE
SPACE	-	15	16	-	SPACE

EXISTING SQUARE D I-LINE PANEL					
WITH GRD. BAR & 100% RATED NEUTRAL			AIC RATING		
PANEL	'LDP'	MAINS	800A MLO	Ø 3	WIRES 4
VOLTS	120/208	MOUNTING	SURFACE	LOCATION	MTG. SPACE
REMARKS AND LOCATION	LOAD	BKR	CKT	LOAD	REMARKS AND LOCATION
EXIST. TVSS	80	1	2	175	EXIST. PANEL 'BL-2'
EXIST. PANEL 'AL'	150	3	4	150	EXIST. PANELS 'BL1/BL1-2'
SPACE	-	5	6	225	EXIST. PANELS DL1/DL2
EXIST. PANELS 'CL-1-2A/2B'	250	7	8	100	PANEL 'PPA'
EXIST. PANELS 'LKPA/B'	300	9	10	225	PANEL 'P'
EXIST. PANEL 'CL-1'	150	11	12	-	SPACE