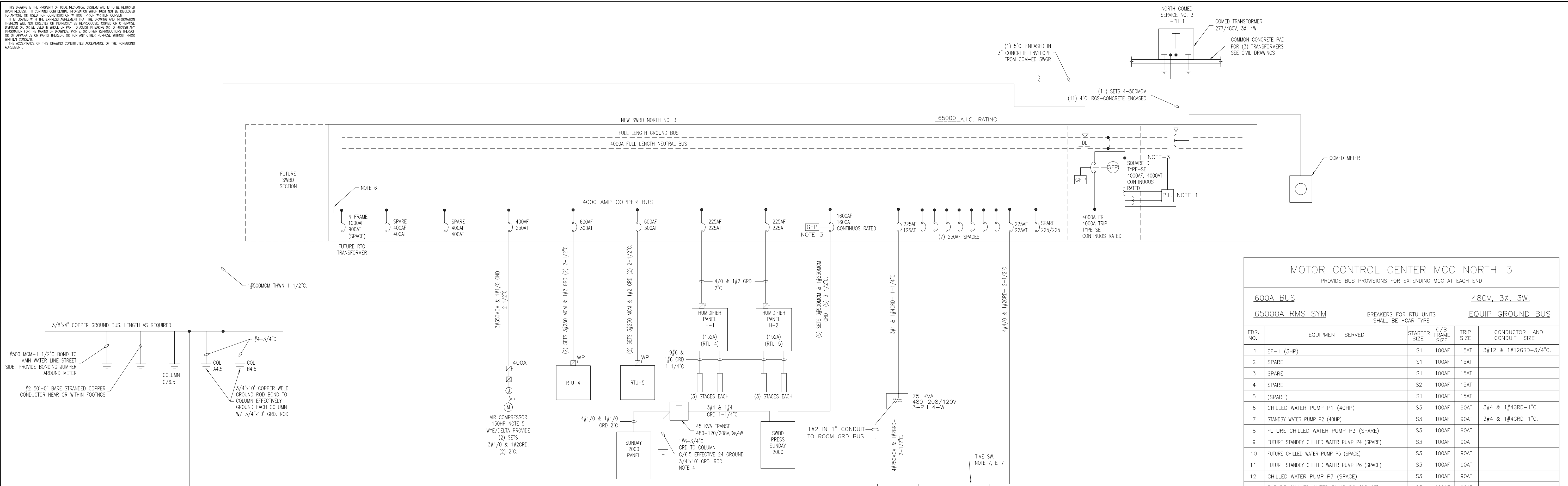
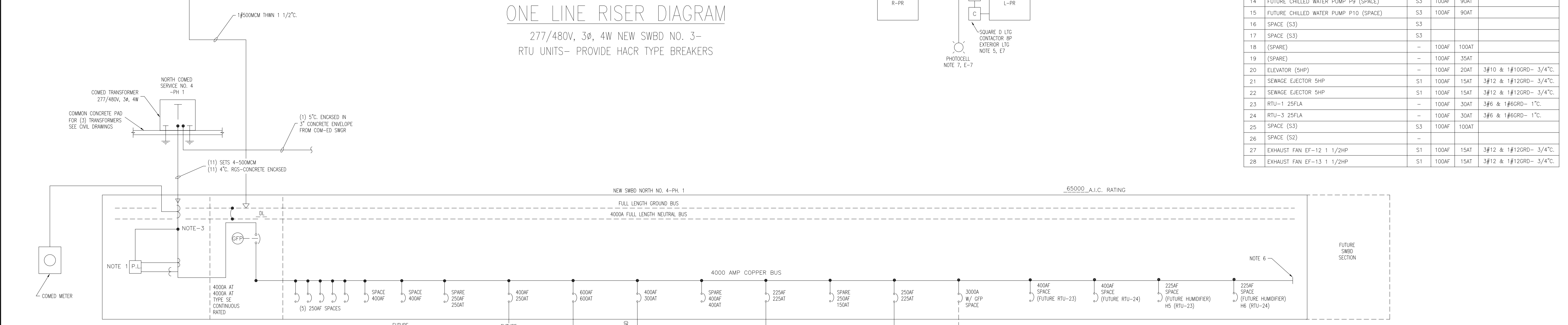


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ONE LINE RISER DIAGRAM
277/480V, 3Ø, 4W NEW SWBD NO. 3-
RTU UNITS- PROVIDE HACR TYPE BREAKERS

MOTOR CONTROL CENTER MCC NORTH-3					
PROVIDE BUS PROVISIONS FOR EXTENDING MCC AT EACH END					
600A BUS		480V, 3Ø, 3W			
65000A RMS SYM		BREAKERS FOR RTU UNITS		EQUIP GROUND BUS	
		SHALL BE HACR TYPE			
FDR. NO.	EQUIPMENT SERVED	STARTER SIZE	C/B FRAME SIZE	TRIP SIZE	CONDUCTOR AND CONDUIT SIZE
1	EF-1 (3HP)	S1	100AF	15AT	3#12 & 1#12GRD-3/4\"C.
2	SPARE	S1	100AF	15AT	
3	SPARE	S1	100AF	15AT	
4	SPARE	S2	100AF	15AT	
5	(SPARE)	S1	100AF	15AT	
6	CHILLED WATER PUMP P1 (40HP)	S3	100AF	90AT	3#4 & 1#4GRD-1\"C.
7	STANDY WATER PUMP P2 (40HP)	S3	100AF	90AT	3#4 & 1#4GRD-1\"C.
8	FUTURE CHILLED WATER PUMP P3 (SPARE)	S3	100AF	90AT	
9	FUTURE STANDY CHILLED WATER PUMP P4 (SPARE)	S3	100AF	90AT	
10	FUTURE CHILLED WATER PUMP P5 (SPACE)	S3	100AF	90AT	
11	FUTURE STANDY CHILLED WATER PUMP P6 (SPACE)	S3	100AF	90AT	
12	CHILLED WATER PUMP P7 (SPACE)	S3	100AF	90AT	
13	FUTURE CHILLED WATER PUMP P8 (SPACE)	S3	100AF	90AT	
14	FUTURE CHILLED WATER PUMP P9 (SPACE)	S3	100AF	90AT	
15	FUTURE CHILLED WATER PUMP P10 (SPACE)	S3	100AF	90AT	
16	SPACE (S3)	S3			
17	SPACE (S3)	S3			
18	(SPARE)	-	100AF	100AT	
19	(SPARE)	-	100AF	35AT	
20	ELEVATOR (SHP)	-	100AF	20AT	3#10 & 1#10GRD- 3/4\"C.
21	SEWAGE EJECTOR SHP	S1	100AF	15AT	3#12 & 1#12GRD- 3/4\"C.
22	SEWAGE EJECTOR SHP	S1	100AF	15AT	3#12 & 1#12GRD- 3/4\"C.
23	RTU-1 25FLA	-	100AF	30AT	3#6 & 1#6GRD- 1\"C.
24	RTU-3 25FLA	-	100AF	30AT	3#6 & 1#6GRD- 1\"C.
25	SPACE (S3)	S3	100AF	100AT	
26	SPACE (S2)	-			
27	EXHAUST FAN EF-12 1 1/2HP	S1	100AF	15AT	3#12 & 1#12GRD- 3/4\"C.
28	EXHAUST FAN EF-13 1 1/2HP	S1	100AF	15AT	3#12 & 1#12GRD- 3/4\"C.



ONE LINE RISER DIAGRAM
277/480V, 3Ø, 4W NEW SWBD NO. 4-
RTU UNITS- PROVIDE HACR TYPE BREAKER

- NOTES:**
- PROVIDE POWER LOGIC CIRCUIT MONITOR "D" TYPE 2350, WITH BUILT IN NETWORKING CAPABILITY.
 - MINIMUM AIC RATING FOR LIGHTING PANELS (277/480V) SHALL BE 35,000A SYM. MINIMUM AIC RATING FOR RECEPTACLE PANELS (120/208V) SHALL BE 10,000A SYM. MINIMUM AIC RATING FOR EMERGENCY PANELS (277/480V) SHALL BE 35,000A SYM.
 - CONTRACTOR SHALL SET GROUND FAULT RELAYS.
 - TRANSFORMER SECONDARY GROUNDING TRANSFORMERS LOCATED IN ELECTRIC ROOM, GROUND TO ROOM GROUND BUS TRANSFORMERS IN PROCESS AREAS. GROUND COLUMN WITH #4 AWG TO 3/4\" x 10' GROUND ROD. BOND TRANSFORMER SECONDARY TO COLUMN.
 - AIR COMPRESSOR 150HP-460V, 3Ø, 3W AIR COMPRESSOR AND WYE/ DELTA REDUCED VOLTAGE STARTER SUPPLIED BY BROWN PRINTING COMPANY. CONTRACTOR SHALL ACCEPT TALKATE DELIVERY, PROVIDE ALL POWER AND CONTROL WIRING TO PROPERLY INSTALL REDUCED VOLTAGE MOTOR STARTER AND WIRE AIR COMPRESSOR COMPLETE IN PLACE, READY FOR OPERATION IN ALL RESPECTS.
 - PROVIDE 277/480V, 3Ø, 4W 4000A BUS DETAILS AND EQUIPMENT GROUND BUS DETAILS FOR EXTENDING THE 4000A BUS AND GROUND BUS. BUS DETAIL EXTENSION SHALL BE AT THE OPPOSITE END FROM COMED METERING SECTION WHEN FACING FRONT OF SWITCHBOARD.
 - BREAKERS FOR RTU UNITS SHALL BE HACR TYPE.

9-8-00

4-24-00	ISSUED FOR BIDDING	
REV.	DATE	DESCRIPTION
		ONE LINE RISER DIAGRAM - NORTH SERVICES NO. 3 & NO. 4

tns PLANNERS DESIGNERS ENGINEERS

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BROWN PRINTING
PRESS ROOM, BINDERY AND WAREHOUSE EXPANSION

11595 MCCONNELL ROAD WOODSTOCK, ILLINOIS

DWN. BY AHC	SCALE AS NOTED	DWG. NO.
APP. BY JDV	JOB NO. 6518	E5.0
CKD. BY JDV	DATE 04/14/00	

ATTENTION
This drawing is PRELIMINARY and is not intended for Construction.