

**SHEET NOTES:**

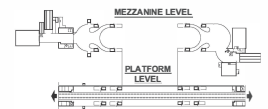
1. ALL SHOWN EQUIPMENT IS EXISTING TO REMAIN UNLESS SHOWN OTHERWISE.
2. FOR EQUIPMENT TO BE DEMOLISHED:  
ALL EXISTING CONDUIT AND WIRING SHALL BE REMOVED BACK TO SOURCE, UNLESS OTHERWISE NOTED.

**KEYNOTES:**

- ⊖ EXISTING SURFACE-MOUNTED 4' FLUORESCENT STRIP LIGHT TO BE DISCONNECTED AND REMOVED. REMOVE CONDUIT AND WIRING BACK TO SOURCE.
- ⊖ EXISTING SURFACE-MOUNTED 4' FLUORESCENT STRIP LIGHT (EMERGENCY CIRCUIT) TO BE DISCONNECTED AND REMOVED. PRESERVE EXISTING EMERGENCY CIRCUIT FOR RECONNECTION. REMOVE UNUSED CONDUIT AND WIRING.
- ⊖ EXISTING LIGHTING SWITCH TO BE REMOVED.

**CHILLER PLANT PLAN - LIGHTING - DEMOLITION**

SCALE: 1/4" = 1'-0"



CONTRACT NO.  
FQ17162

DESIGNED	O.FAKEM/BLAUFER	05/17
DRAWN	O.FAKEM	05/17
CHECKED	D.OWEN	05/17
APPROVED	D.OWEN	05/17

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	DESCRIPTION

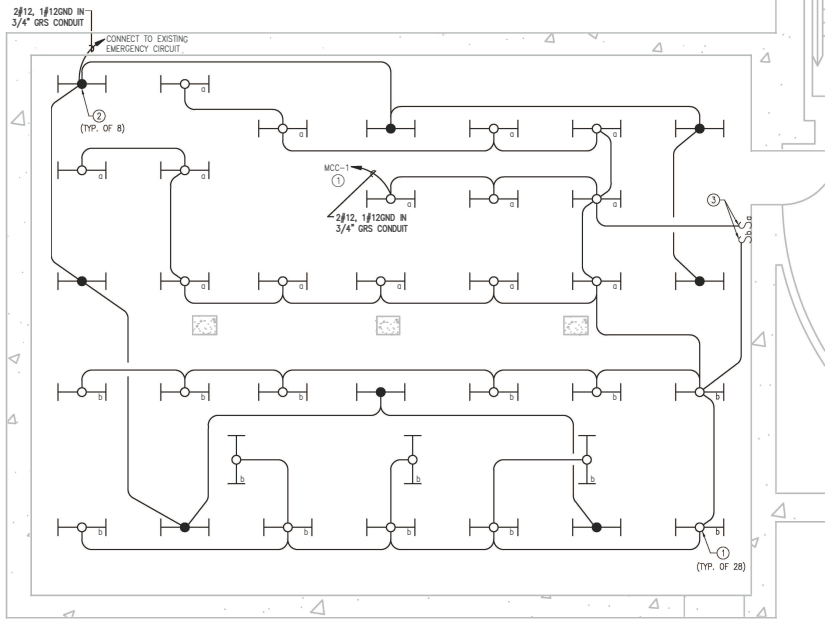
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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
 DEPARTMENT OF TRANSIT INFRASTRUCTURE  
 AND ENGINEERING SERVICES  
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM  
 APPROVED: *Mark H. [Signature]*

**GFP** A GORDON THOMAS/MATSONS JOINT VENTURE  
 SUBMITTED: *[Signature]*  
 PROJECT MANAGER

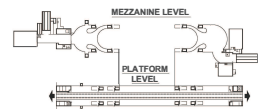
REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS  
 CWPC03 - FARRAGUT WEST  
 ELECTRICAL LIGHTING PLAN - DEMOLITION  
 SCALE: 1/4"=1'-0" 1 0 1 2 3 4 5  
 DRAWING NO. CWPC03-E-104 M1299-055



**KEYNOTES:**

- ① 4' SURFACE-MOUNTED FLUORESCENT STRIP LIGHT, 277 VOLT, SYMMETRIC REFLECTOR, WIRE GUARD, 2-32"W TB LAMPS, HIGH POWER FACTOR BALLAST. CONNECT TO EXISTING GENERAL LIGHTING CIRCUIT.
- ② 4' SURFACE-MOUNTED FLUORESCENT STRIP LIGHT, 277 VOLT, SYMMETRIC REFLECTOR, WIRE GUARD, 2-32"W TB LAMPS, HIGH POWER FACTOR BALLAST. CONNECT TO EXISTING UNSWITCHED EMERGENCY CIRCUIT.
- ③ NEW LIGHTING SWITCHES. CONNECT TO CONTROL NEW GENERAL LIGHTING, AS INDICATED.

**CHILLER PLANT PLAN - LIGHTING - NEW WORK**  
SCALE: 1/4" = 1'-0"



CONTRACT NO.  
FQ17162

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REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
DATE	BY	DESCRIPTION

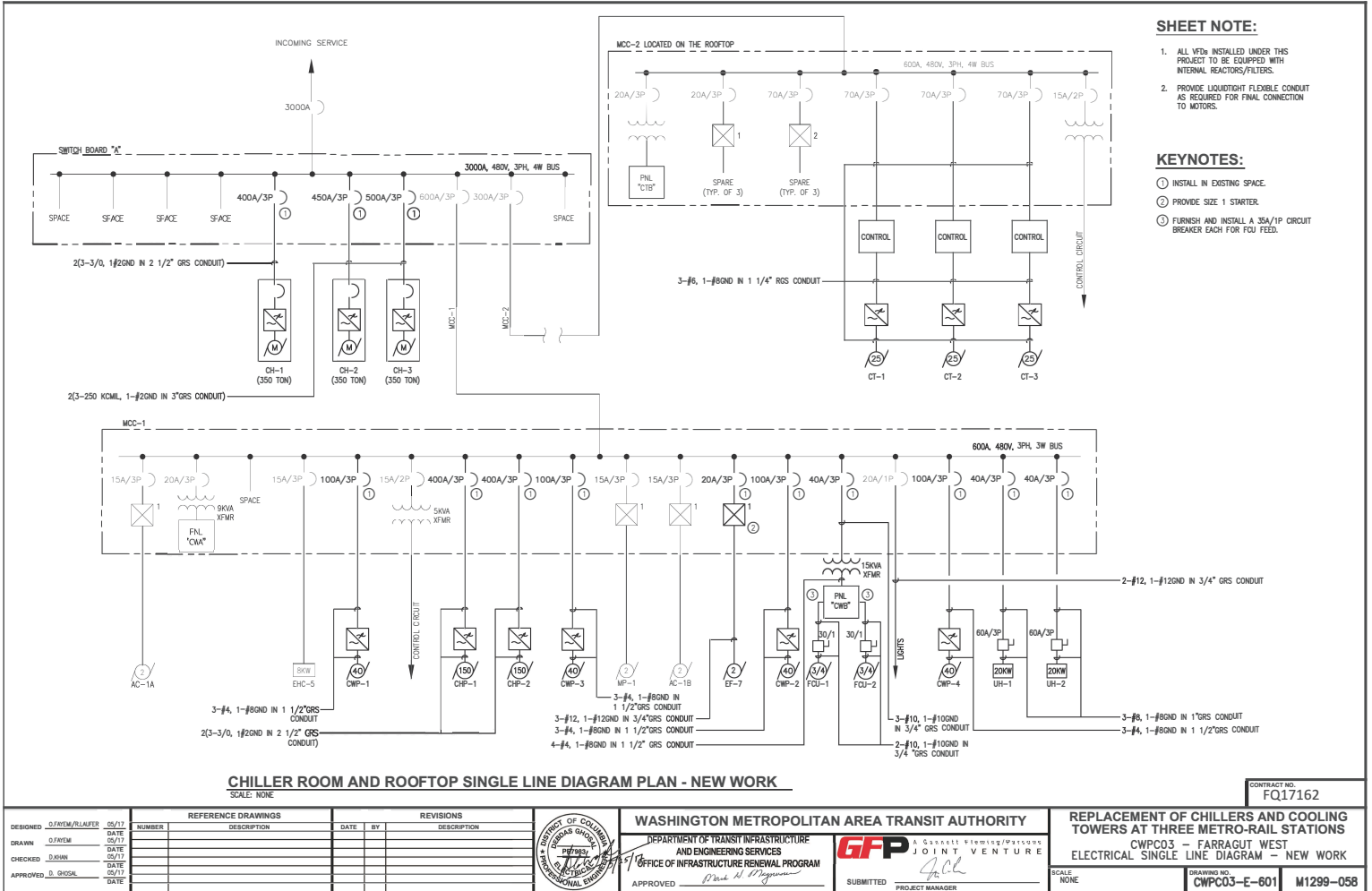


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**REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS**  
CWPC03 - FARRAGUT WEST  
ELECTRICAL LIGHTING PLAN - NEW WORK  
SCALE: 1/4"=1'-0" 1 0 1 2 3 4 5  
DRAWING NO. CWPC03-E-105 M1299-056





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REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY



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CONTRACT NO. **FQ17162**

**REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS**  
 CWPC03 - FARRAGUT WEST  
 ELECTRICAL SINGLE LINE DIAGRAM - NEW WORK

SCALE: NONE  
 DRAWING NO. **CWPC03-E-601**  
**M1299-058**



**KEY NOTE:**

① CONTRACTOR MAY CHOOSE TO REPLACE THE EXISTING BUCKETS WITH INTERIOR DEVICES, OR IF IN GOOD CONDITION REPLACE ONLY THE INTERIOR DEVICES.

PANEL: CWB														
MAIN BUS: 100A 208/120 VOLT ENCLOSURE: NEMA 1				MAIN DEVICE: 50A 3 PHASE, 4 WIRE + GROUND MOUNTING: SURFACE				NEUTRAL BUS: 100% RMS AIC: 10,000A LOCATION: CHILLER ROOM						
LOAD DESCRIPTION	LOAD VA	WIRE CTKT/NO	RCWY SIZE	C/B TRIP	C/B PL	CKT NMBR	PHASE A	KVA B	CKT C	C/B NMBR	RCWY TRIP	WIRE SIZE	LOAD VA	LOAD DESCRIPTION
FCU - 1	1656	10 10	3/4"	30	1	4056				2 1 25	3/4"	10 10	2400	WATER HEATER - INH-1
FCU - 2	1656	10 10	3/4"	30	1	3				4 1 20	3/4"	12 12	600	MOTORIZED DAMPER
WATER TREATMENT CONTROL PNL	600	12 12	3/4"	20	1	5				8 1 20	3/4"	12 12	200	BRODIE FEEDERS
REFRIGERANT MONITORING PNL	600	12 12	3/4"	20	1	7				8 1 20	3/4"	12 12	100	INHIBITOR FEED PUMP
CHILLER PLANT MONITORING PNL	800	12 12	3/4"	20	1	9				10 1 20	3/4"	12 12	800	CWP/CHP MONITORING SYSTEM
REFRIGERANT MONITORING PNL	600	12 12	3/4"	20	1	11				12 1 20				SPARE
SPARE	--	--	--	--	--	13				14 1 20				SPARE
SPARE	--	--	--	--	--	15				16 1 20				SPARE
SPACE	--	--	--	--	--	17				18 --				SPACE
SPACE	--	--	--	--	--	19				20 --				SPACE
SPACE	--	--	--	--	--	21				22 --				SPACE
SPACE	--	--	--	--	--	23				24 --				SPACE
<b>NOTES:</b>							CONNECTED LOAD: 9,812VA DEMAND LOAD: 9,812VA							

ELECTRICAL EQUIPMENT SCHEDULE		
ITEM	QTY	DESCRIPTION
1	1	SWITCHGEAR BREAKER TO MATCH EXISTING, 480V, 3PH, 400A/400AF
2	1	SWITCHGEAR BREAKER TO MATCH EXISTING, 480V, 3PH, 450A/400AF
3	1	SWITCHGEAR BREAKER TO MATCH EXISTING, 480V, 3PH, 500A/400AF
4	2	MCC BUCKET TO MATCH EXISTING WITH 400A/400AF BREAKER
5	4	MCC BUCKET TO MATCH EXISTING WITH 100A/100AF BREAKER
6	3	MCC BUCKET TO MATCH EXISTING WITH 40A/100AF BREAKER
7	1	MCC BUCKET WITH SIZE 1 FWR STARTER AND 20A/100AF BREAKER
8	4	VFD, 480V, 3PH, 40HP, 60HZ, NEMA 4X ENCLOSURE WITH BYPASS AND REACTOR/FILTERS
9	3	VFD, 480V, 3PH, 25HP, 60HZ, NEMA 4X ENCLOSURE WITH BYPASS AND REACTOR/FILTERS
10	2	VFD, 480V, 3PH, 150HP, 60HZ, NEMA 4X ENCLOSURE WITH BYPASS AND REACTOR/FILTERS
11	2	DISCONNECT SWITCH, 600VAC, 3PH, 60A, NEMA 4X ENCLOSURE, NON-FUSED
12	2	DISCONNECT SWITCH, 250VAC, 1PH, 30A, NEMA 4X ENCLOSURE, NON-FUSED
13	36	LIGHTING FIXTURE, 4' STRIP
14	LOT	3/4" GRS CONDUIT
15	LOT	1" GRS CONDUIT
16	LOT	1 1/4" GRS CONDUIT
17	LOT	1 1/2" GRS CONDUIT
18	LOT	2 1/2" GRS CONDUIT
19	LOT	3" GRS CONDUIT
20	LOT	#12 AWG RHW-2 WIRE
21	LOT	#10 AWG RHW-2 WIRE
22	LOT	#8 AWG RHW-2 WIRE (VFD RATED)
23	LOT	#6 AWG RHW-2 WIRE (VFD RATED)
24	LOT	#4 AWG RHW-2 WIRE (VFD RATED)
25	LOT	#2 AWG RHW-2 WIRE (VFD RATED)
26	LOT	3/0 RHW-2 WIRE (VFD RATED)
27	LOT	250 KCMIL RHW-2 WIRE (VFD RATED)
28	1	TRANSFORMER, DRY TYPE, 480V-208V/120V, 15 KVA
29	1	PANLEBOARD, UP TO 100A MCB, 24 CIRCUITS, 208/120V, 3P, 4W
30	LOT	3/4" LTFC
31	LOT	1" LTFC
32	LOT	1 1/4" LTFC
33	LOT	1 1/2" LTFC
34	LOT	2 1/2" LTFC

**CHILLER ROOM PANEL 'CWB' AND ELECTRICAL EQUIPMENT SCHEDULES - NEW WORK**

SCALE: NONE

CONTRACT NO.  
FQ17162

DESIGNED	O.FAKEM/RLAUFER	05/17
DRAWN	O.FAKEM	05/17
CHECKED	O.BONN	05/17
APPROVED	D.QUISAL	05/17

REFERENCE DRAWINGS	
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**REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS**  
 CWPC03 - FARRAGUT WEST  
 ELECTRICAL PNL & EQUIP'T SCHEDULES - NEW WORK

SCALE: NONE  
 DRAWING NO: CWPC03-E-602  
 M1299-059