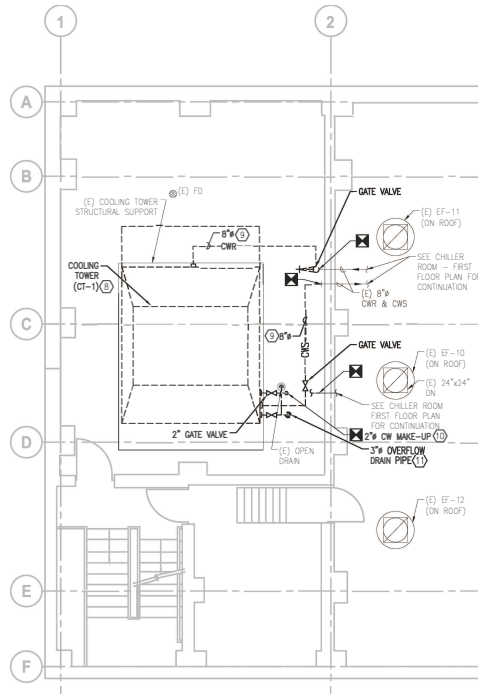


CHILLER PLANT - FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



CHILLER PLANT - PARTIAL SECOND FLOOR PLAN
SCALE: 1/4"=1'-0"

KEYNOTES:

- 1 REMOVE AND DISPOSE OF CHILLER. REMOVAL SHALL INCLUDE R-134a EVACUATION BY A CERTIFIED COMPANY. REFRIGERANT RECOVERED SHALL BE CLEANED BEFORE TURNING OVER TO THE PLANT.
- 2 REMOVE AND DISPOSE OF CHILLED WATER PIPING, INSULATION, AND VALVES. LENGTH OF PIPING TO BE REMOVED SHALL BE FIELD COORDINATED BY CONTRACTOR TO ACCOMMODATE NEW PIPING CONNECTIONS. IN GENERAL, EXTENT OF DEMOLITION SHALL BE TO THE INDICATED FLANGE OR PIPING LENGTH, AS REQUIRED.
- 3 REMOVE AND DISPOSE OF CONDENSER WATER PIPING, INSULATION, AND VALVES. LENGTH OF PIPING TO BE REMOVED SHALL BE FIELD COORDINATED BY CONTRACTOR TO ACCOMMODATE NEW PIPING CONNECTIONS. IN GENERAL, EXTENT OF DEMOLITION SHALL BE TO THE INDICATED FLANGE OR PIPING LENGTH, AS REQUIRED. CAP EXISTING THREAD-ON-LETS THAT EXCEEDS PIPING LENGTH.
- 4 REMOVE AND DISPOSE OF (E) CONDENSER WATER PUMPS, P-1 AND P-2. REMOVAL SHALL INCLUDE PUMP, MOTOR, VIBRATION SUPPORT, IMMEDIATE PIPING, ISOLATION VALVES, STRAINER, AND CHECK VALVE, WITH ALL INSTRUMENTATION AND CONTROLS. LENGTH OF PIPING TO BE REMOVED SHALL BE FIELD COORDINATED BY CONTRACTOR TO ACCOMMODATE NEW PIPING CONNECTIONS. IN GENERAL, EXTENT OF DEMOLITION SHALL BE TO THE INDICATED FLANGE OR PIPING LENGTH, AS REQUIRED.
- 5 REMOVE AND DISPOSE OF CHILLED WATER PUMPS, P-1 AND P-2. REMOVAL SHALL INCLUDE PUMP, MOTOR, VIBRATION SUPPORT, IMMEDIATE PIPING, ISOLATION VALVES, STRAINER, AND CHECK VALVE, WITH ALL INSTRUMENTATION AND CONTROLS. LENGTH OF PIPING TO BE REMOVED SHALL BE FIELD COORDINATED BY CONTRACTOR TO ACCOMMODATE NEW PIPING CONNECTIONS. IN GENERAL, EXTENT OF DEMOLITION SHALL BE TO THE INDICATED FLANGE OR PIPING LENGTH, AS REQUIRED.
- 6 REMOVE AND DISPOSE OF EXPANSION TANK INCLUDING PIPING AND SUPPORT.
- 7 REMOVE AND DISPOSE OF AIR SEPARATOR INCLUDING PIPING AND SUPPORT.
- 8 REMOVE AND DISPOSE OF COOLING TOWER INCLUDING FAN MOTORS, BELT DRIVES, RELATED STARTERS AND CONTROLS.
- 9 REMOVE AND DISPOSE OF CONDENSER WATER PIPING UP TO THE POINT OF DEMOLITION, INCLUDING VALVES AND FITTINGS.
- 10 REMOVE AND DISPOSE OF COLD WATER PIPING UP TO THE POINT OF DEMOLITION.
- 11 REMOVE AND DISPOSE OF OVERFLOW DRAIN PIPE AND VALVE IN ITS ENTIRETY.
- 12 REMOVE (E) REFRIGERANT MONITORING SYSTEM INCLUDING ALL TUBING AND DEVICES.
- 13 REMOVE AND DISPOSE OF FEEDING POT FOR (E) CHILLED WATER AND CONDENSER WATER INCLUDING ALL PIPING.
- 14 REMOVE (E) REFRIGERANT VENT PIPING INCLUDING SUPPORT.
- 15 REMOVE AND DISPOSE EXISTING CHEMICAL DRAIN, METERING PUMPS AND RELATED ELECTRICAL AND CONTROLS.
- 16 REMOVE AND DISPOSE EXISTING CONTROLLER.
- 17 REMOVE AND DISPOSE EXISTING TEMPERATURE SENSOR.

DESIGNED	B. YOKHANNAN	DATE	05/17
DRAWN	A. PRKOWSKI	DATE	05/17
CHECKED	J. SILVA	DATE	05/17
APPROVED	J. SILVA	DATE	05/17

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

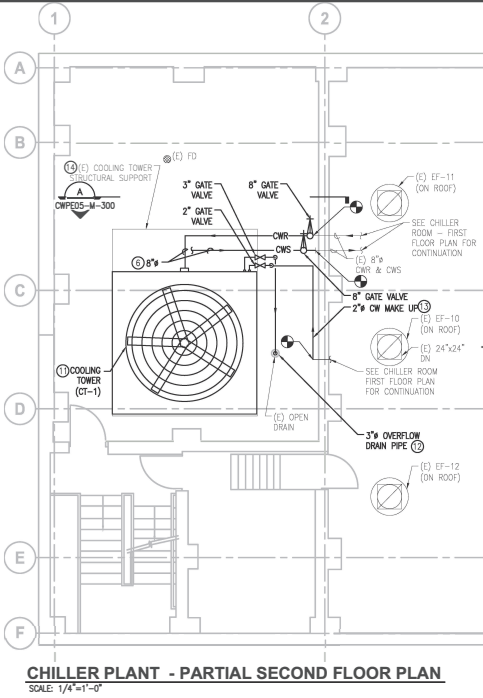
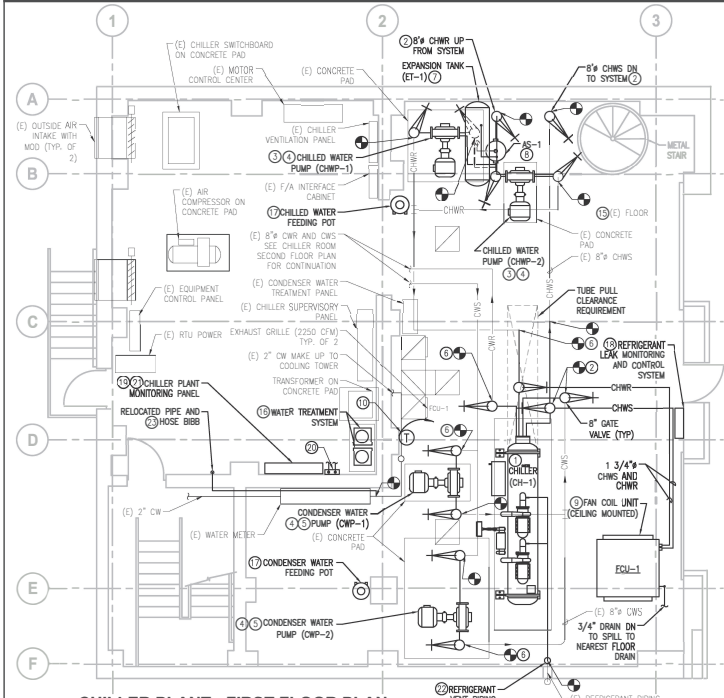
APPROVED: *Mark H. [Signature]*

GFP A GARRETT FIRMING/PALSONS JOINT VENTURE
SUBMITTED: *[Signature]*
PROJECT MANAGER

CONTRACT NO. **FQ17162**

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
CWPE05 - GEORGIA AVE - PETWORTH MECHANICAL PLAN - DEMOLITION

SCALE: 1/4"=1'-0" DRAWING NO. **CWPE05-M-100** **M1299-005**



- KEYNOTES:**
- PROVIDE AND INSTALL CHILLER INCLUDING VIBRATION ISOLATION AND SUPPORT.
 - PROVIDE AND INSTALL PIPING, FITTINGS, VALVES, INSULATIONS AND INSTRUMENTATION FOR CHILLER.
 - PROVIDE AND INSTALL CHILLED WATER PUMPS, CHWP-1 AND CHWP-2. INCLUDE PUMP, INVERTER RATED MOTOR, VIBRATION SUPPORT, IMMEDIATE PIPING, ISOLATION VALVES, FLEXIBLE CONNECTORS, STRAINER, AND CHECK VALVE WITH ALL INSTRUMENTATION AND CONTROLS. INSULATE PUMPS AND PIPING.
 - INTEGRATE PUMP VFD DRIVES WITH CHILLER CONTROL PANELS.
 - PROVIDE AND INSTALL CONDENSER WATER PUMPS, CWP-1 AND CWP-2. INCLUDE PUMP, INVERTER RATED MOTOR, VIBRATION SUPPORT, IMMEDIATE PIPING, ISOLATION VALVES, FLEXIBLE CONNECTORS, STRAINER, AND CHECK VALVE WITH ALL INSTRUMENTATION AND CONTROLS.
 - PROVIDE AND INSTALL PIPING, FITTINGS, VALVES, AND INSTRUMENTATION FOR CONDENSER WATER PIPES. PROVIDE AND INSTALL INSULATION AND JACKETING FOR PIPES LOCATED OUTSIDE ON THE ROOF.
 - PROVIDE AND INSTALL EXPANSION TANK, INCLUDING PIPES AND SUPPORT.
 - PROVIDE AND INSTALL AIR SEPARATOR, INCLUDING PIPES AND SUPPORT. INSULATE AIR SEPARATOR AND PIPING.
 - PROVIDE AND INSTALL FAN COIL UNIT INCLUDING PIPING, VALVING AND SUPPORT. REFER TO DRAWING CWP05-M-805 FOR FAN COIL SEQUENCE OF OPERATION.
 - PROVIDE AND INSTALL SPACE TEMPERATURE SENSOR. INTEGRATE WITH CHILLER PLANT MONITORING PANEL.
 - PROVIDE AND INSTALL COOLING TOWER WITH DIRECT DRIVEN ASSEMBLY AND MONITORING HARDWARE. THE VARIABLE FREQUENCY DRIVE CONTROLLERS SHALL BE LOCATED ADJACENT TO THE COOLING TOWER ON THE ROOF. INSIDE A NEMA 4X WEATHER PROOF ENCLOSURE.
 - PROVIDE AND INSTALL OVERFLOW DRAIN PIPE INCLUDING VALVE AND SUPPORT. INSULATE PIPE AND VALVE.
 - PROVIDE AND INSTALL DOMESTIC COLD WATER PIPE INCLUDING VALVE AND SUPPORT. INSULATE PIPE AND VALVE. FOR PIPING EXPOSED TO OUTSIDE, PROVIDE HEAT TRACING AND INSULATION. HEAT TRACING SHALL BE FED FROM PANEL CH IN CHILLER ROOM, CKJ8.
 - PAINT EXISTING STEEL SUPPORT FOR COOLING TOWER. BEFORE PAINTING REMOVE RUST AND PROVIDE PRIMER AND FINISH PAINT FOR EXTERIOR WEATHER.
 - CONTRACTOR TO PAINT CHILLER PLANT FLOORS AND EQUIPMENT PAIS WITH BATTLE SHIP GRAY OR EQUAL TRIPPING HAZARDOUS YELLOW OR RED.
 - A. PROVIDE AND INSTALL HANG 3D TRAGAR SOLIDS (OR APPROVED EQUAL) WATER TREATMENT SYSTEM.
B. PROVIDE AND INSTALL A CHILLED WATER TREATMENT SYSTEM. WATER TREATMENT SYSTEM SHALL INCLUDE PIPING, CHEMICAL SENSORS, AND CONTROLS. SENSORS SHALL INCLUDE: HIGH INDUCTIVE CONDUCTIVITY SENSOR - 3725ZT (PART OF THE CHILLER CONTROL PANEL), SENSOR FOR CONDUCTIVITY - 901300, FLOW SWITCH F-1, AND A CONVERTIBLE DIGITAL DIFFERENTIAL PH SENSOR PRODUCT NUMBER DCP1R2A.
C. PROVIDE AND INSTALL A CONDENSER WATER TREATMENT SYSTEM. WATER TREATMENT SYSTEM SHALL INCLUDE PIPING, CHEMICAL SENSORS, AND CONTROLS. SENSORS SHALL INCLUDE: HIGH INDUCTIVE CONDUCTIVITY SENSOR - 3725ZT (PART OF THE CHILLER CONTROL PANEL), SENSOR FOR CONDUCTIVITY - 901300, FLOW SWITCH F-2, AND A CONVERTIBLE DIGITAL DIFFERENTIAL PH SENSOR PRODUCT NUMBER DCP1R2A.
 - PROVIDE AND INSTALL CONDENSER AND CHILLED WATER FEEDING POT. CONDENSER FEEDING POT SHALL BE EQUIVALENT TO NEPTUNE BF-15. CHILLED WATER FEEDING POT SHALL BE EQUIVALENT TO NEPTUNE VIT-SHP.

- PROVIDE AND INSTALL REFRIGERANT LEAK MONITORING AND CONTROL SYSTEM. INTEGRATE WITH EXISTING EF-10. INTEGRATE WITH CHILLER PLANT MONITORING PANEL. REFRIGERANT DETECTION SYSTEM SHALL UTILIZE SHERLOCK 402-4 CONTROL MODULE AND SHERLOCK INFRARED REFRIGERANT GAS SENSOR FOR R134A. REFER TO SEQUENCE OF OPERATION ON CWP05-M-810. CONTRACTOR SHALL FIELD VERIFY AND MOUNT INFRARED SENSOR UNDERNEATH THE REFRIGERANT MONITORING PANEL, 18" ABOVE FINISHED FLOOR LEVEL.
- PROVIDE AND INSTALL CHILLER PLANT MONITORING PANEL FOR CHILLER. CHILLER PLANT MONITORING PANEL SHALL INCLUDE AUTOMATIC DIRECT PRODUCTIVITY 3000 PAC CONTROLLER, MODBUS CAPABLE INPUT AND OUTPUT CARDS, ETC. PROVIDE TWO HACH SC200 CONTROLLERS THAT SHALL BE CAPABLE OF ACCEPTING INPUT FROM PH PROBES OF THE WATATA CHILLED WATER & CONDENSER WATER TREATMENT SYSTEMS. HACH CONTROLLERS SHALL INCLUDE A RS485 COMMUNICATIONS CARD.
- PROVIDE AND INSTALL CHILLED WATER AND CONDENSER WATER FLOW MONITORING SYSTEM. PROVIDE AND INSTALL COMMUNICATIONS WIRING IN RIGID CONDUIT FROM FLOW METER MONITORING PANEL TO THE CHILLER PLANT CONTROL PANEL, UTILIZING BELDEN 8842 MULTI-CONDUCTOR - LOW CAPACITANCE COMPUTER AND COMPUTER POS CABLE OR EQUIVALENT. FLOW METER SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES. FLOW METERS & SENSOR CABLES SHOULD NOT BE INSTALLED WITHIN EIGHT FEET OF VFD'S OR FLORESCENT LIGHT FIXTURES.
- PROVIDE AND INSTALL OUTDOOR AIR TEMPERATURE, RELATIVE HUMIDITY, AND INSIDE TEMPERATURE SENSORS, AND INTERFACE WITH CHILLER PLANT MONITORING PANEL. AUTOMATION DIRECT PRODUCTIVITY 3000 PAC, PS-08R10 INPUT MODULE IN PRODUCTIVITY 3000 PAC TO ACCEPT INPUT FROM RTU TEMPERATURE SENSORS.
- PROVIDE AND INSTALL REFRIGERANT VENT PIPING.
- PIPING SHALL BE TAPPED OFF THE MAIN, DOWNSTREAM OF THE BACKFLOW PREVENTER. PROVIDE ISOLATION BALL VALVE AT AN ACCESSIBLE LOCATION, THE SAME SIZE AS THE PIPING.

DESIGNED	B. VIGNATHAN	DATE	05/17
DRAWN	A. PRKORSO	DATE	05/17
CHECKED	J. SILVA	DATE	05/17
APPROVED	B. SILVA	DATE	05/17

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED: *Mark H. [Signature]*

PROJECT MANAGER: *[Signature]*

CONTRACT NO. **FQ17162**

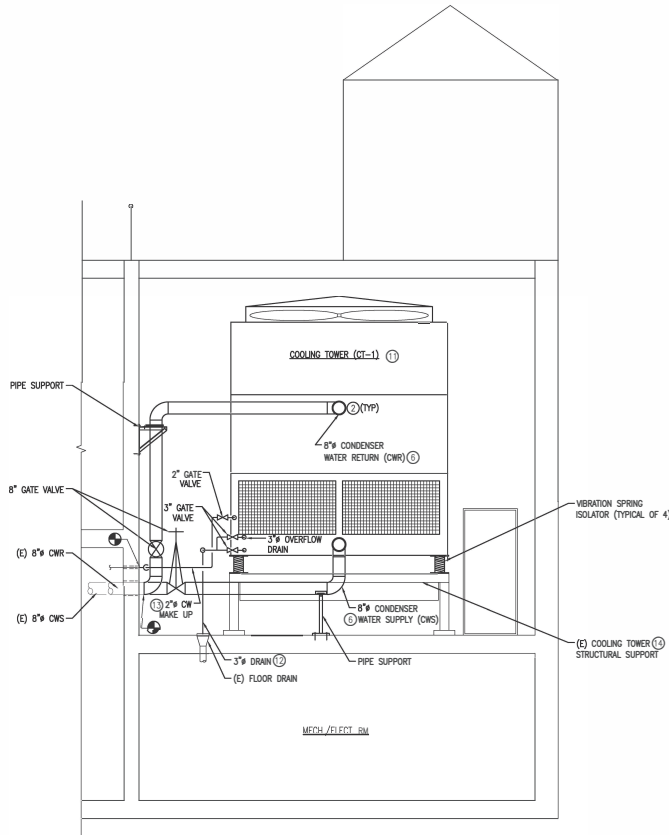
REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
 CWP05 - GEORGIA AVE - PETWORTH MECHANICAL PLAN - NEW WORK

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

DRAWING NO. **CWP05-M-101** | **M1299-006**

KEYNOTES:

1. SEE DWG CWPE05-M-101 FOR PLAN NOTES.
2. PROVIDE FLEXIBLE CONNECTION BETWEEN PIPING AND EQUIPMENT.



SECTION
 CWPE05-M-101 SCALE: 3/8"=1'-0"

CONTRACT NO.
 FQ17162

DESIGNED	B. VOKONATHAN	05/17
DRAWN	A. PINKOWSKI	05/17
CHECKED	R. SILVA	05/17
APPROVED	R. SILVA	05/17

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
 DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
 OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
 APPROVED: *Robert H. Pappas*

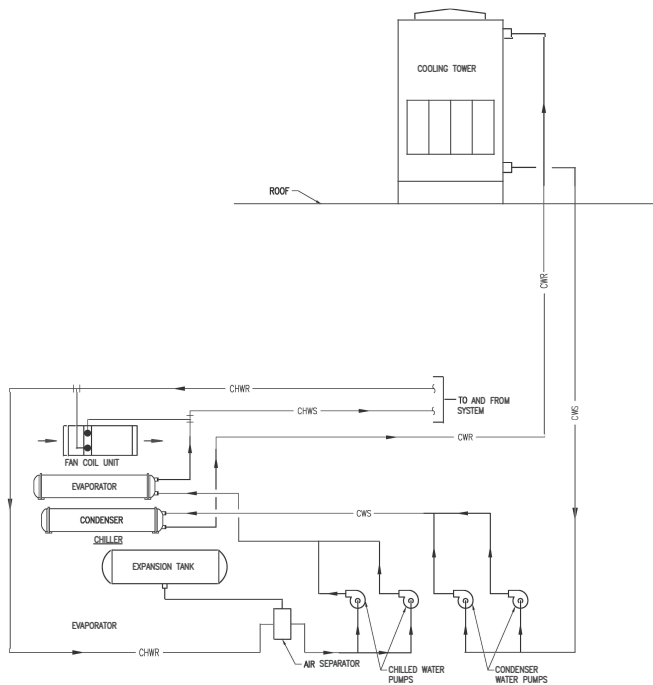
GFP A Gannett Fleming/Parsons JOINT VENTURE
 SUBMITTED: *[Signature]*
 PROJECT MANAGER

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
 CWPE05 - GEORGIA AVE - PETWORTH
 MECHANICAL SECTION

SCALE: 3/8"=1'-0" 1 0 1 2 3
 DRAWING NO. CWPE05-M-300 M1299-007

KEYNOTES:

1. THE DIAGRAM DOES NOT SHOW ALL VALVES, STRAINERS, FLOW SENSORS, GAUGES, ETC. REFER TO THE EQUIPMENT DETAILS ON DWGS M-500, M-501, & M-502.
2. CHILLER HAS 2-PASS EVAPORATOR AND 2-PASS CONDENSER.
3. THIS DIAGRAM SHOWS GENERAL ARRANGEMENT FOR CHILLER AND COOLING TOWER. REFER TO CONTRACT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) FOR EXACT SCOPE OF WORK AND COOLING TOWER.
4. FOR PIPE SIZES, REFER TO DWG CWPE05-M-101.



MECHANICAL FLOW DIAGRAM
NOT TO SCALE

CONTRACT NO.
FQ17162

DESIGNED	B. VEDANATHAN	05/17
DRAWN	A. PINKOISO	05/17
CHECKED	J. SILVA	05/17
APPROVED	R. SILVA	05/17

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION

NUMBER	DESCRIPTION	DATE	BY	DESCRIPTION



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

GFP A Gannett Fleming/Parsons
JOINT VENTURE
SUBMITTED: *[Signature]*
PROJECT MANAGER

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
CWPE05 - GEORGIA AVE - PETWORTH
MECHANICAL FLOW DIAGRAM

SCALE: NOT TO SCALE
DRAWING NO.: CWPE05-M-500
M1299-008

CHILLER SCHEDULE																			
PLANT	DESIGNATION	CAPACITY (TONS)	EVAPORATOR				CONDENSER				COMPRESSOR/CHILLER ELECTRICAL						BASIS OF DESIGN		
			GPM	PASSES	ENT 'F	LWT 'F	GPM	PASSES	ENT 'F	LWT 'F	VOLT	PH	HZ	RLA	LRA (EA)	QTY		MCCP	MCA
CWPE05	CHILLER	350	646	2	55	42	1050	2	85	94.5	460	3	60	294	162	2	450	331	DAKOH/MCQUAY WMC4000C

NOTES:

1. PROVIDE WITH SPRING TYPE VIBRATION ISOLATION.
2. PROVIDE WITH CHILLED WATER FLOW INDICATOR.
3. WATER-COOLED, SEMI-HERMETIC OIL-FREE CENTRIFUGAL COMPRESSOR WATER CHILLER.
4. TWO MAGNETIC BEARING, COMPLETELY OIL-FREE CENTRIFUGAL COMPRESSORS ON EACH CHILLER.
5. INTEGRATED VARIABLE FREQUENCY DRIVE, OPERATING CONTROLS AND EQUIPMENT PROTECTION CONTROLS.
6. CHILLERS SHALL BE CHARGED WITH REFRIGERANT R404A.
7. MOTORS SHALL BE LIQUID REFRIGERANT COOLED WITH INTERNAL THERMAL SENSING DEVICES IN THE STATOR WINDINGS.
8. THE CHILLER SHALL BE EQUIPPED WITH AN INTEGRATED VARIABLE FREQUENCY DRIVE (VFD) TO AUTOMATICALLY REGULATE COMPRESSOR SPEED IN RESPONSE TO COOLING LOAD AND THE COMPRESSOR PRESSURE LIFT REQUIREMENT.
9. CHILLER CONTROLS SHALL COORDINATE COMPRESSOR SPEED AND GUIDE VANE POSITION TO OPTIMIZE CHILLER EFFICIENCY.
10. CHILLER SHALL BE EQUIPPED WITH MICROTECH II CONTROLLER OR EQUIVALENT AND SHALL INCLUDE REMOTE COMMUNICATIONS CARDS WITH MODBUS RTU CAPABILITY.

LEAK DETECTION SYSTEM

1. PROVIDE ONE (1) IR 134A REFRIGERANT GAS SENSORS FOR LEAK DETECTION (SHERLOCK 60-0054 OR EQUAL)
2. PROVIDE GAS LEAK DETECTION SYSTEM (SHERLOCK 402 NEMA 4X OR EQUAL)
 - 2.1 PROVIDE RELAY OUTPUT FOR OPERATION OF (2) EXHAUST FAN EF-10, EF-11, EF-12 PER SEQUENCE.
 - 2.2 PROVIDE STROBE ALARM OUTPUT
 - 2.3 ALARMS ALARM OUTPUT TO BE DISABLED FOR THIS APPLICATION
 - 2.4 PROVIDE COMMUNICATIONS INTERFACE FOR RELAY MONITORING AND CONTROL GENCOM COMMUNICATIONS WITH ETHERNET CONNECTION PART 88-0541
3. REFRIGERANT GAS DETECTION INFRARED SENSOR SHALL BE MOUNTED UNDERNEATH REFRIGERANT MONITORING PANEL AND PER MANUFACTURER'S RECOMMENDATION.

FLOW MONITORING SYSTEM

1. NON-INTRUSIVE CLAMP-ON FLOW SENSORS
2. MAINTENANCE-FREE
3. ACCURACY: 1% OF VELOCITY
4. NO DEPENDENCY ON CONDUCTIVITY
5. AUTOMATICALLY ADAPT TO PIPE MATERIAL AND LIQUID PROPERTY VARIATIONS
6. BUILT-IN FLOW TOTALIZERS
7. ISOLATED RS-485 INTERFACE WITH POWER SURGE PROTECTION, SUPPORTS THE MODBUS PROTOCOL
8. REMOTE INPUT/OUTPUT, ISOLATED 4-20MA OUTPUT, RELAY, PULSE OUTPUT, ALARM OUTPUT
9. SELF-DIAGNOSTIC MENU-DRIVEN PROGRAMMING
10. PIPE SIZE RANGE: 8" - 10"
11. NEMA 4X (IP65) WEATHER-RESISTANT ENCLOSURE
12. ULTRASONIC FLOW METER NEMA 4X (WALL MOUNT) SIEMENS SITRANS FUS1010.

FAN COIL UNIT SCHEDULE														
PLANT	DESIGNATION	CAPACITY (TONS)	EVAPORATOR				CONDENSER				ELECTRICAL			BASIS OF DESIGN
			GPM	ROWS	ENT 'F	LWT 'F	CFM	ENT 'F	LWT 'F	HP	VOLT	PH	HZ	
CWPE05	FCU-1	7-1/2	19	6	42	55	3200	80	58	1.0	460	3	60	MCQUAY MODEL HC8830

NOTES:

1. FACTORY MOUNTED COILS, CONTROLS, MOTORS, DRIVE KITS.
2. PIPING PACKAGE WITH SINGLE 3-WAY MODULATING VALVE OPTION.

PUMP SCHEDULE														
ITEM NO.	SERVICE	TYPE	GPM	FT HEAD	INLET (IN)			OUTLET (IN)			MOTOR			BASIS OF DESIGN
					NO.	CFM	NO. OF MOTORS	HP	V	PH	HZ	RPM	HP	
CWP-1	CONDENSER WATER	CENTRIFUGAL	1050	65	6	5	10	1800	25	460	3	60	ARMSTRONG 4600 (6x5x12H)	
CWP-2	CONDENSER WATER	CENTRIFUGAL	1050	65	6	5	10	1800	25	460	3	60	ARMSTRONG 4600 (6x5x12H)	
CHWP-1	CHILLED WATER	CENTRIFUGAL	646	170	6	5	13	1800	50	460	3	60	ARMSTRONG 4600 (6x5x15L)	
CHWP-2	CHILLED WATER	CENTRIFUGAL	646	170	6	5	13	1800	50	460	3	60	ARMSTRONG 4600 (6x5x15L)	

NOTES:

1. PUMP SHALL INCLUDE VFD MOTORS.
2. CONTRACTOR TO PROVIDE ECCENTRIC REDUCER/ INCREASER AT PUMP INLET/ OUTLET.

COOLING TOWER SCHEDULE															
DESIGNATION	SERVICE	TYPE	GPM	ENT 'F	LWT 'F	AMB AIR		FAN				OPERATING WEIGHT (LBS)	BASIS OF DESIGN		
						WET BULB TEMP	DB	NO.	CFM	NO. OF MOTORS	HP			V	PH
CT-1	CONDENSER WATER	AXIAL	1050	95	85	78°F	1	89,300	1	20	460	3	60	13,700	EWPCO USS-112-112

NOTES:

1. FAN MOTORS SHALL BE CAPABLE OF INVERTER DUTY.
2. THE VFD CONTROLLER SHALL BE LOCATED ADJACENT TO THE COOLING TOWER.
3. TOWER TO HAVE STEEL FILL.
4. PROVIDE WITH GEAR DRIVE MOTORS.
5. PROVIDE AND COMPLETE INTERNAL WORKING PLATFORM AND LADDER SYSTEM FOR SERVICE.

CONTRACT NO.
FQ17162

DESIGNED	B. YOKANATHAN	05/17
DRAWN	A. PINKOISO	05/17
CHECKED	B. SILVA	05/17
APPROVED	B. SILVA	05/17

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY

REFERENCE DRAWINGS		REVISIONS	
NUMBER	DESCRIPTION	DATE	BY



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

GFP A SARGENT & JORDY/PERKINS JOINT VENTURE
 SUBMITTED: *[Signature]*
 PROJECT MANAGER

REPLACEMENT OF CHILLERS AND COOLING TOWERS AT THREE METRO-RAIL STATIONS
 CWPE05 - GEORGIA AVE - PETWORTH
 MECHANICAL EQUIPMENT SCHEDULES SHEET 1 OF 2

SCALE: NONE
 DRAWING NO.: CWPE05-M-600
 M1299-009