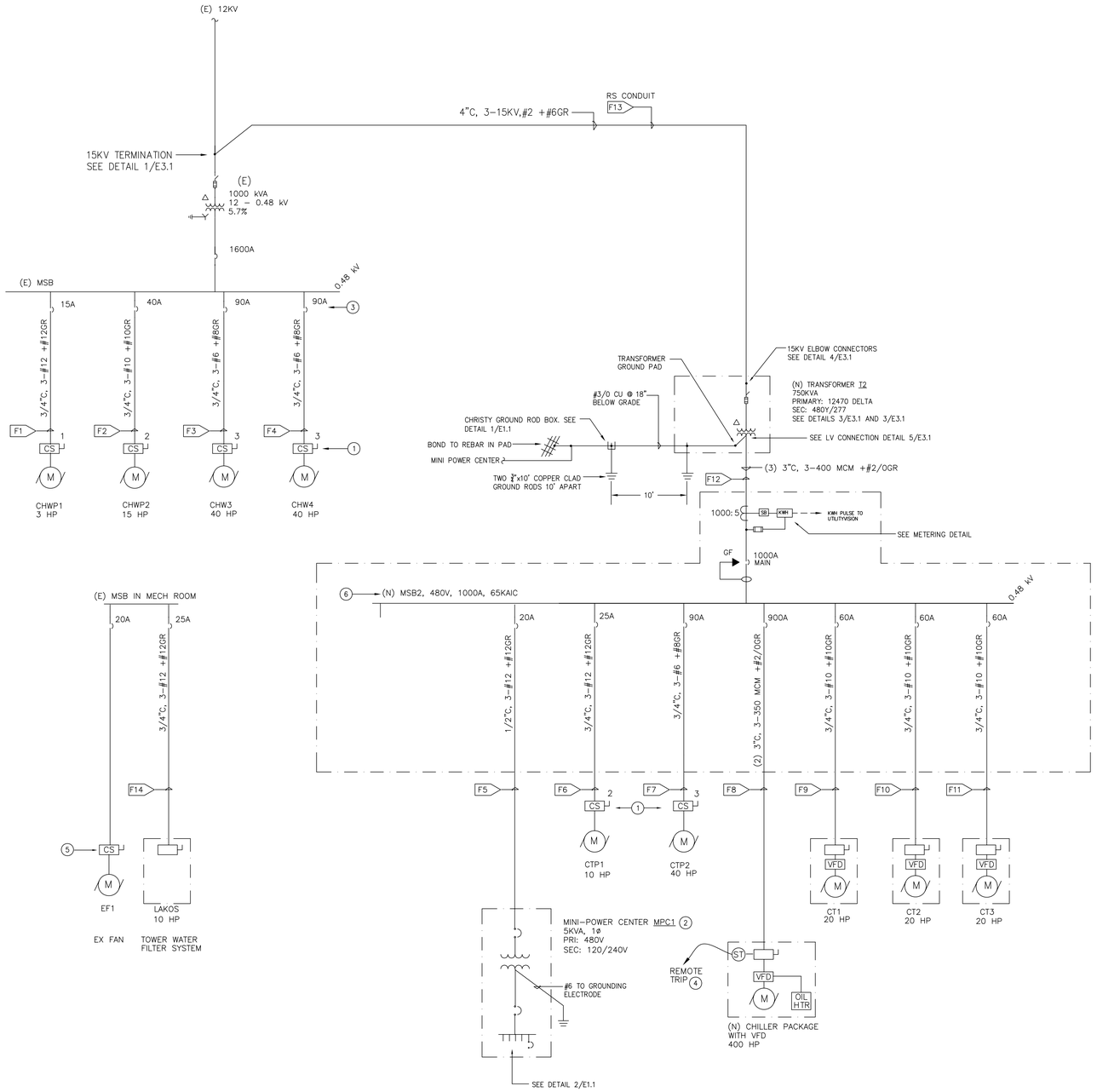


1 SINGLE LINE DIAGRAM
N.T.S.

GENERAL NOTES

1. PERFORM ALL WORK ACCORDING TO THE CALIFORNIA ELECTRICAL CODE, 2001
2. USE STRANDED COPPER WIRE, THWN
3. CONDUIT REQUIREMENTS:
   INDOORS: WHERE PROTECTED, EMT. RS WHERE NOT PROTECTED.

   OUTDOORS: RS, WRAPPED WITH 10 MIL PIPE TAPE, HALF-LAPPED, AT RISERS FROM 3" ABOVE GRADE TO 24" BELOW GRADE.

   UNDERGROUND: SCHEDULE 40 PVC AT 24" COVER, EXCEPT AT EXPOSED RISERS. USE SCHEDULE 40 PVC RISERS WITH ENDBELLS INSIDE TRANSFORMERS AND SWITCHBOARDS.
4. LOCATIONS OF EQUIPMENT IS DIAGRAMMATIC. LOCATE (N) THE EQUIPMENT TO AVOID CONFLICTS AND MAINTAIN WORKING CLEARANCE AT LEAST 36" IN FRONT AND 30" AROUND.
5. GENERAL PURPOSE BRANCH CIRCUITS ARE 1/2"C, 2-#12 +#12 GR UNLESS OTHERWISE NOTED
6. MAINTAIN FIRE RATING AND WATERPROOFING ALL PENETRATIONS. SEAL UNUSED OPENINGS IN ELECTRICAL ENCLOSURES.
7. MODIFY (E) REFRIGERANT LEAK PANEL TO ACCOMODATE (N) CHILLER. SEE MECHANICAL DRAWINGS.

SHEET NOTES

(1) (TYPICAL) COMBINATION STARTER/DISCONNECT 480V, NEMA SIZE AS SHOWN, NEMA 3R ENCLOSURE MOTOR CIRCUIT PROTECTOR (MCP), CONTROL POWER TRANSFORMER 480:120, FUSED PRIMARY AND SECONDARY, OFF-AUTO SELECTOR SWITCH AND RED LED "RUN" PILOT LIGHT. SEE DETAIL 6/E3.1

(2) MINI POWER CENTER: COMBINATION TRANSFORMER AND PANELBOARD WITH INTEGRAL MAIN CIRCUIT BREAKER; SQUARE D, CUTLER HAMMER, OR EQUAL. PROVIDE CIRCUIT BREAKERS AS SHOWN IN DETAIL 2.

(3) PROVIDE (N) 480V CIRCUIT BREAKER OF RATING SHOWN AT (E) MCC/MSB, 65KAIC.

(4) CONNECT (N) CHILLER SHUTDOWN TO (E) AND MODIFY CONTROLS AS SHOWN ON THE MECHANICAL DRAWINGS.

(5) CONNECT EXHAUST FAN SPEED CONTROL TO LEAK DETECTION PANEL. SEE SHEET NOTE 1 ON E2.1

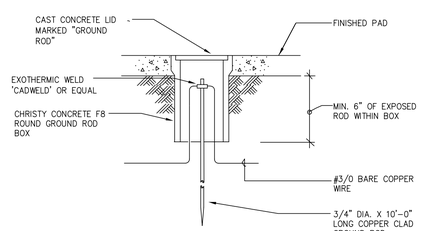
(5) OUTDOOR WEATHERPROOF SWITCHBOARD (NEMA 3R ENCLOSURE). PROVIDE INSULATED CASE MAIN CIRCUIT BREAKER WITH GF PROTECTION AND MOLDED CASE BRANCH CIRCUIT BREAKERS. MANUFACTURRE'S STANDARD CONSTRUCTION WITH AIC RATING AS SHOWN.

DEMOLITION

DEMOLITION IS INCLUDED. SEE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. RELOCATE (E) BRANCH CIRCUITS FOR EQUIPMENT THAT IS RELOCATED. REMOVE CONDUCTORS AND EXPOSED CONDUITS TO EQUIPMENT THAT IS REMOVED. SEAL UNUSED OPENINGS. PROVIDE CLEAN, TYPEWRITTEN UPDATED PANEL SCHEDULES FOR AFFECTED PANELBOARDS. LABEL UNUSED SECTIONS OF (E) MOTOR CONTROL CENTER AS 'SPARE.'

LEGEND

CB	ENCLOSED CIRCUIT BREAKER, NEMA 1
	HP RATED NON-FUSED DISCONNECT NEMA 1 OR 3R AS NOTED
DF	HP RATED FUSED DISCONNECT WITH TIME DELAY FUSES NEMA 1 OR 3R AS NOTED
CS 2	COMBINATION STARTER WITH MOTOR CIRCUIT PROTECTOR, STARTER, AND CONTROL DEVICES, NEMA SIZE AS SHOWN. SEE DETAIL 1/E3.1
VFD	VARIABLE FREQUENCY DRIVE
	NON-FUSED HP RATED DISCONNECT, LOCKABLE IN THE OFF POSITION
VFD M	VARIABLE FREQUENCY DRIVE FURNISHED WITH MOTOR
	CONTROL POWER DISCONNECT, 120V, 20A TOGGLE SWITCH IN WEATHER PROOF BELL BOX WITH 5155-0 FLAP COVER
M	MOTOR
(N)	NEW EQUIPMENT
(E)	EXISTING EQUIPMENT
	CIRCUIT BREAKER (GF INDICATES INTEGRAL GROUND FAULT PROTECTION)
F#	FEEDER TAG PLAN AND SINGLE LINE DIAGRAM
- - - - - - -	CONDUIT UNDERGROUND
———	CONDUIT ABOVE GROUND



1 GROUND ROD DETAIL
N.T.S.

MINI POWER CENTER MPC1 5 KVA, 120/240 V					
DESCRIPTION	KVA LOAD A	KVA LOAD B	CB		CKT
			20A 1P		
RECEPTACLE, TOWER	.2				1
TOWER WATER TREAT		.5			2
CONTROLS AT TOWER	1				3
TOWER SEWER EJECTOR		1.2			4
LAKOS FILTER SYSTEM					5
					6
TOTAL	2.2	2.7			

2 MPC1 PANEL SCHEDULE
N.T.S.

RECORD DRAWING
RECORD DRAWING IS BASED ON INFORMATION PROVIDED BY THE CONTRACTOR AND HAS NOT BEEN VERIFIED IN THE FIELD BY THE ENGINEER
DATE: 09/14/06

NORTH

ChevronTexaco
Chevron Energy Solutions Company
A Division of Chevron U.S.A. Inc.
An Affiliation of Chevron Corporation
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REV	DATE	BY	DESCRIPTION
2	7/25/05	JS	ADDED EQUIPMENT
1	06/03/05	JS	DSA BACKCHECK
0	03/04/05	JS	FOR PERMIT
A		JS	PRELIMINARY FOR REVIEW

Cañada College Modernization
CENTRAL PLANT RENOVATION
San Mateo County Community College District

ELECTRICAL SINGLE LINE DIAGRAM AND NOTES

SCALE	AS NOTED
PROJECT NO.	
DESIGNED BY	JS
DRAWN BY	
CHECKED BY	
DATE	

E1.1