

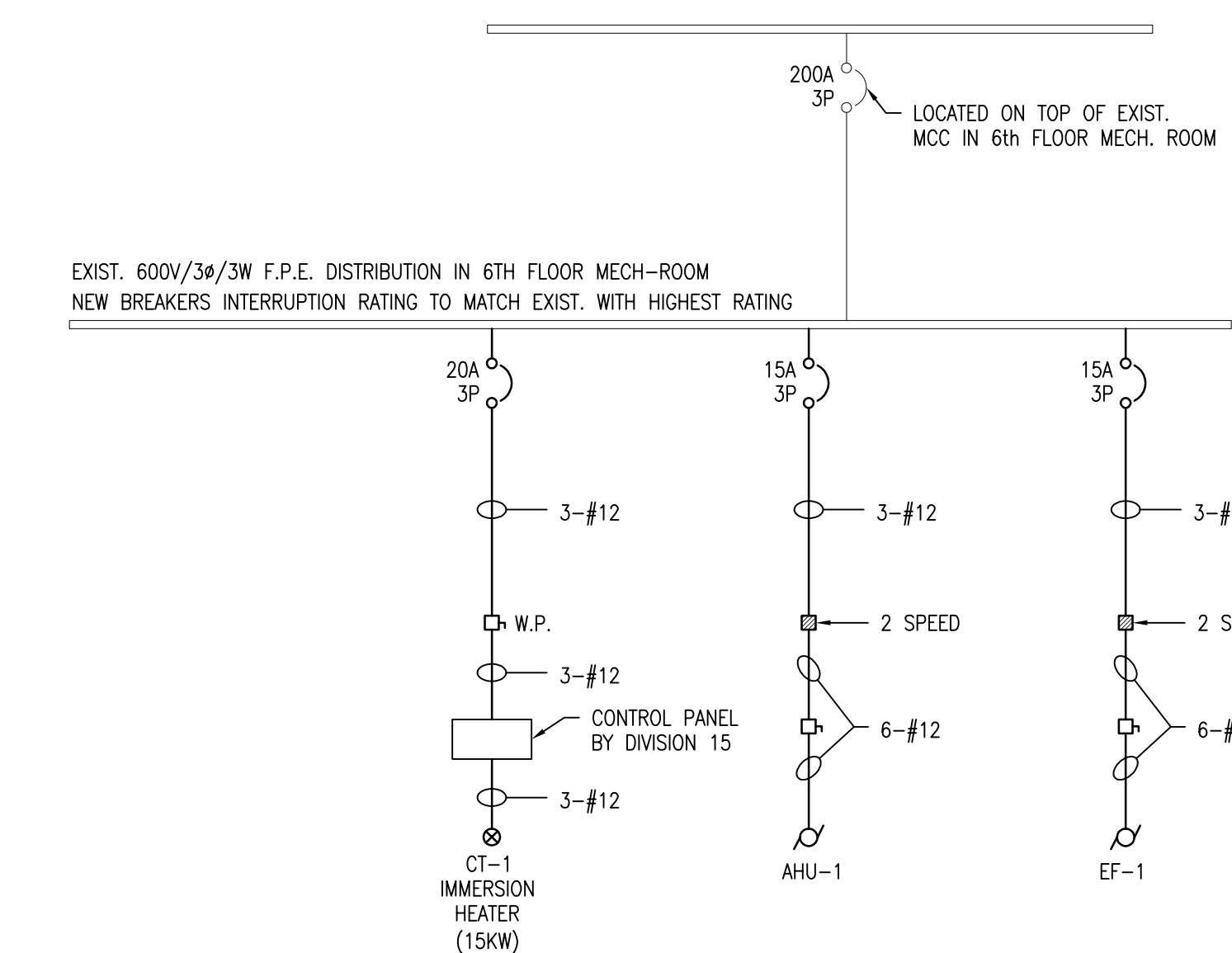
DRAWING NOTES (DEMO) (E)

- EXISTING 20HP. COOLING TOWER TO BE DISCONNECTED. REMOVE ALL EXISTING CONDUIT & WIRE NO LONGER REQUIRED.
- EXISTING CHILLER TO BE DISCONNECTED. REMOVE ALL EXISTING CONDUIT & WIRE NO LONGER REQUIRED.
- EXISTING FUSED STARTER FOR EXISTING CHILLER (SEE NOTE 2) TO BE REMOVED ALONG WITH ALL WIRING & CONDUIT FROM STARTER TO CHILLER. EXISTING SINGLE CONDUCTOR CABLE TO PRIMARY SIDE OF STARTER TO REMAIN & BE RE-USED (SEE ELECTRICAL DISTRIBUTION RISER #2).

SYMBOL LEGEND	
	20A GFI RECEPTACLE CONNECTED TO 20A GFI CIRCUIT
	JUNCTION BOX
	DISCONNECT
	MOTOR
	MAGNETIC STARTER
	THERMOSTAT
	WEATHER PROOF

* PLEASE NOTE *

ALL EQUIPMENT SHOWN "FADED BACK" IS EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
ALL EQUIPMENT SHOWN "DASHED" IS EXISTING TO BE REMOVED UNLESS OTHERWISE NOTED.

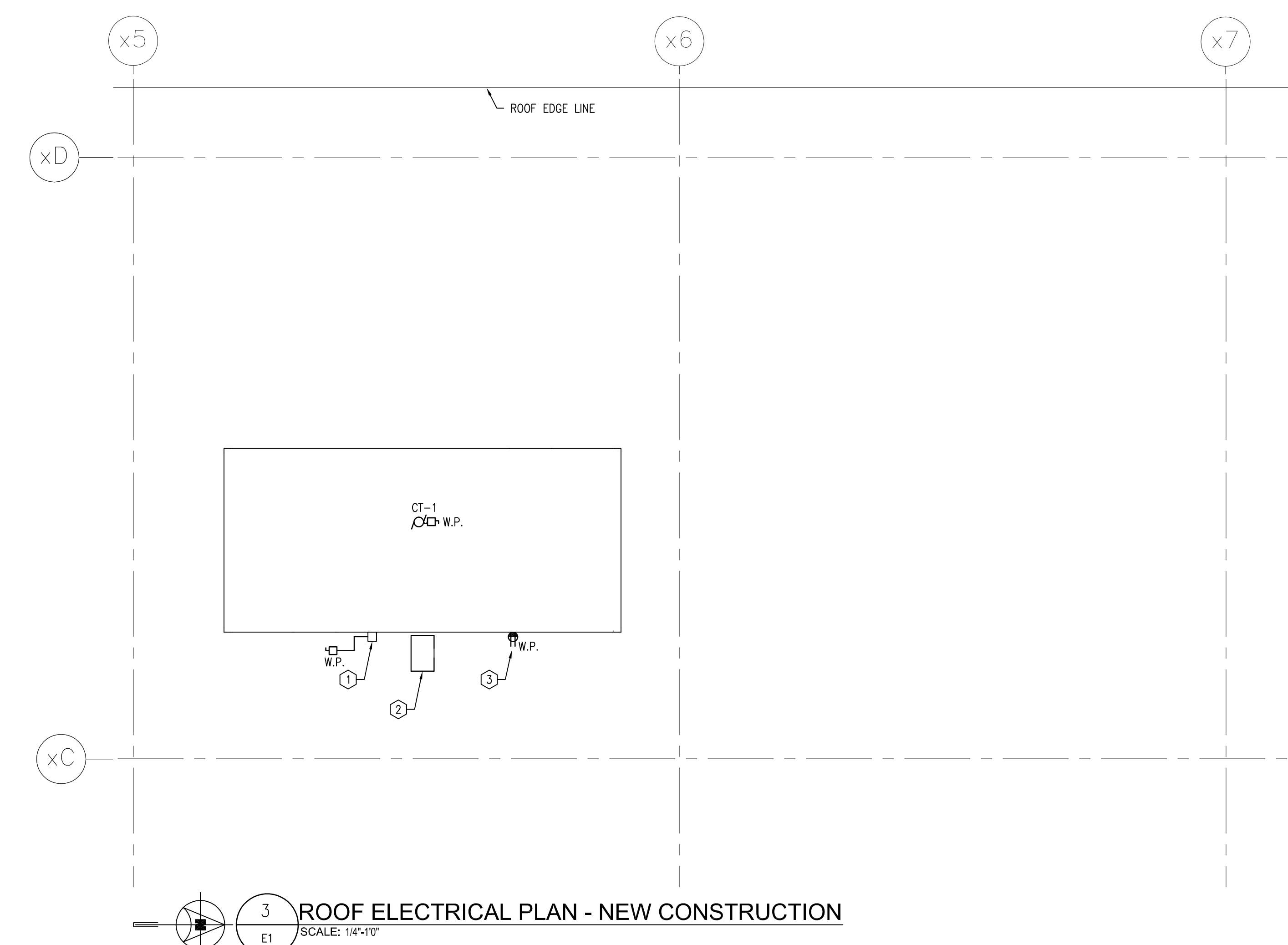
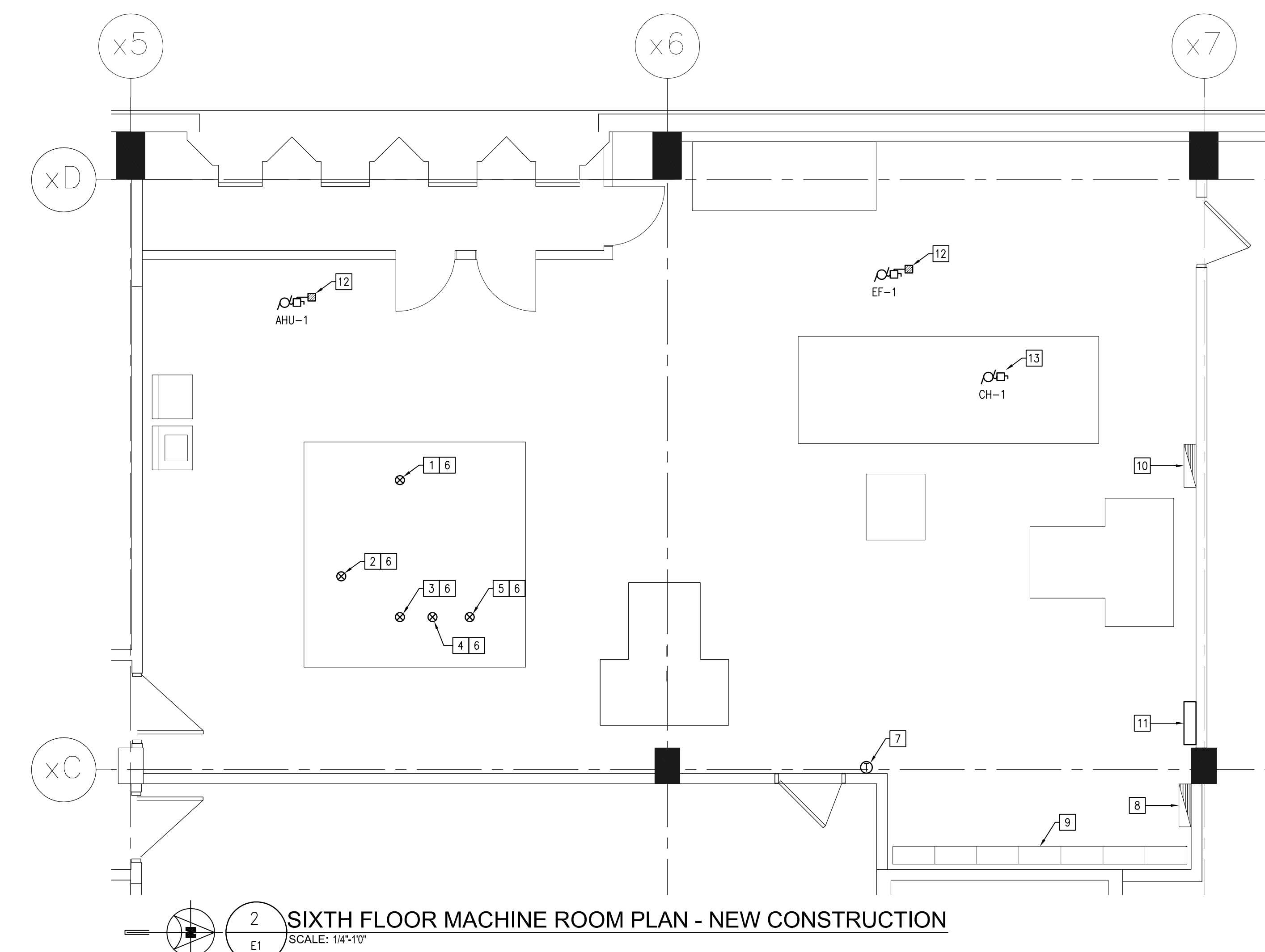


DRAWING NOTES (NEW CONSTRUCTION) (E)

- DIVISION 16 TO HEAT TRACE MECH. 8" RETURN LINE (1" INSULATION). HEAT TRACE CABLE TO BE 2 RUNS OF TYCO #8XL1-CR (260 WATTS) C/W ALL REQUIRED COMPONENTS. MINIMUM 13' OF EACH CABLE.
- DIVISION 16 TO HEAT TRACE MECH. 8" SUPPLY LINE (1" INSULATION). HEAT TRACE CABLE TO BE 2 RUNS OF TYCO #8XL1-CR (260 WATTS) C/W ALL REQUIRED COMPONENTS. MINIMUM 13' OF EACH CABLE.
- DIVISION 16 TO HEAT TRACE MECH. 1" DRAIN LINE (1" INSULATION). HEAT TRACE CABLE TO BE TYCO #8XL1-CR (130 WATTS) C/W ALL REQUIRED COMPONENTS. MINIMUM OF 13' OF CABLE.
- DIVISION 16 TO HEAT TRACE MECH. 1" DRAIN LINE (1" INSULATION). HEAT TRACE CABLE TO BE TYCO #8XL1-CR (130 WATTS) C/W ALL REQUIRED COMPONENTS. MINIMUM OF 13' OF CABLE.
- DIVISION 16 TO HEAT TRACE MECH. 1" WATERLINE (2" INSULATION). HEAT TRACE CABLE TO BE TYCO #8XL1-CR (130 WATTS) C/W ALL REQUIRED COMPONENTS. MINIMUM OF 13' OF CABLE.
- DIVISION 16 TO HEAT TRACE MECH. PIPING MINIMUM 2" INTO BUILDING WARM SPACE.
- DIVISION 16 TO SUPPLY & INSTALL A TYCO REC-TS STAT TO CONTROL ALL HEATING CABLES. WIRE & CONNECT THERMOSTAT & HEATING CABLES TO A DEDICATED 120 VOLT CIRCUIT IN EXIST. PANEL "C". THERMOSTAT SENSING BULB TO BE EXTENDED TO EXTERIOR OF BUILDING. SUPPLY & INSTALL ALUMINUM GUARD OVER SENSING BULB. COORDINATE THERMOSTAT FINAL LOCATION WITH SENSING BULB CABLE LENGTH. WIRE AND CONNECT ALL HEATING CABLES AND CONTROLLER WITH 2#12 IN CONDUIT. PROVIDE 15AMP. SINGLE POLE GROUND FAULT BREAKER IN PANEL.
- EXIST. 120/208/347V. F.P.E. 24 CKT. PANEL "C". MODIFY AS REQUIRED TO ACCEPT NEW BREAKERS. SUPPLY & INSTALL NEW UPDATED TYPED DIRECTORY.
- EXIST. GENERAL ELECTRIC MODEL CR7092C, TYPE B, CLASS 1 MOTOR CONTROL CENTRE.
- EXIST. 600V/34/3W F.P.E. DISTRIBUTION.
- NEW 600V/34/3W SPLITTER SP600-A.
- MOUNT STARTERS & DISCONNECTS ON VERTICAL UNI-STRUT SUPPORTS. SECURE UNI-STRUT TO FLOOR & CEILING SYSTEM.
- CHILLER CONTROL PANEL AND VFD ARE LOCATED ON OR ADJACENT TO CHILLER. PROVIDE WIRING FROM 600V SPLITTER TO VFD AND FROM VFD TO CHILLER.

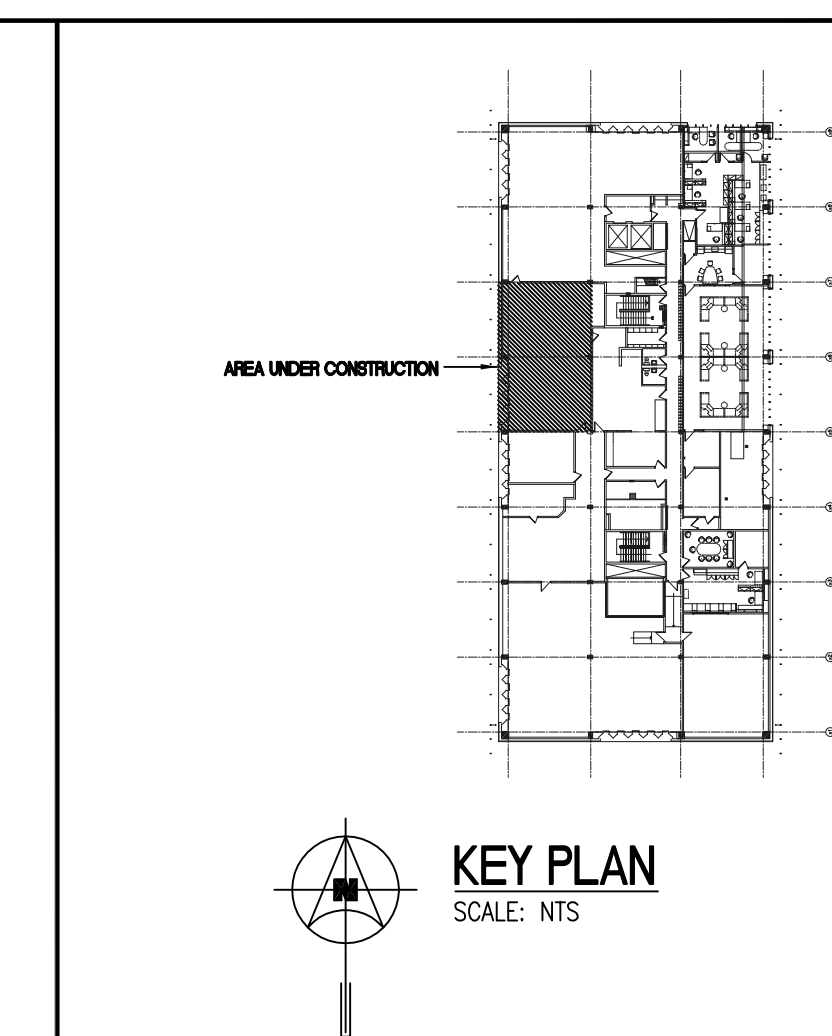
DRAWING NOTES (ROOF CONSTRUCTION) (E)

- IMMERSION HEATER CONTROL PANEL BY DIVISION 15. DIVISION 16 TO WIRE & CONNECT FROM CONTROL PANEL TO 15KW, 600V/34/3W CT-1 ELECTRIC IMMERSION HEATER. INSTALL WIRE AND CONNECT SENSOR PROBE/CORD ASSEMBLY IN SUITABLE LOCATION ON COOLING TOWER.
- CT-1 VFD BY DIVISION 15. MOUNTED ON UNIT. VERIFY EXACT LOCATION WITH DIVISION 15.
- PROVIDE WEATHERPROOF 20AMP T-SLOT RECEPTACLE AND MOUNT IN SUITABLE LOCATION AT COOLING TOWER CT-1. WIRE AND CONNECT TO PANEL "C" WITH 2#12 IN CONDUIT AND PROVIDE 20A GFI BREAKER IN PANEL.

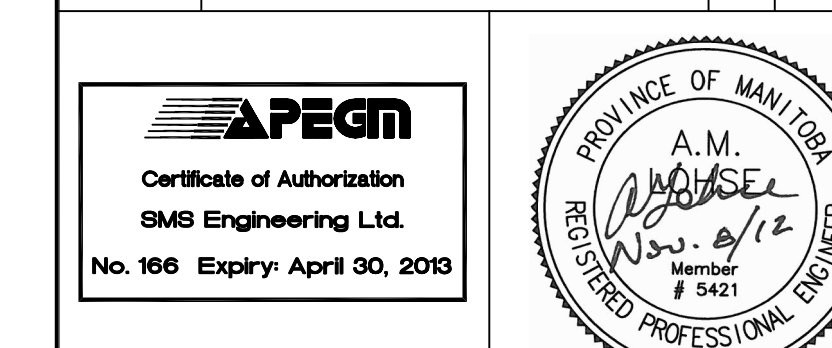


ELECTRICAL DISTRIBUTION RISER NOTES

- EXISTING F.P.E. HF-1 TYPE(100A RATING) 600A-3P BREAKER. PROVIDE NEW SOLID STATE FULLY ADJUSTABLE LSI OVER CURRENT RELAY FOR EXISTING BREAKER. SET LONG-TIME TRIP AT 35AMPS. MODIFY EXISTING TRIP UNIT TO OPERATE WITH NEW RELAY. SET AS PER COORDINATION STUDY.
- EXISTING PARALLEL SINGLE CONDUCTOR COPPER FEEDERS PRESENTLY INSTALLED FROM EXISTING 600A BREAKER TO EXISTING CHILLER STARTER IN 6th FLOOR MECH-ROOM.



NO.	Revisions	BY	DD/MM/YY
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Project Title
**CITY OF WINNIPEG
 COOLING PLANT REPLACEMENT
 151 PRINCESS STREET
 BID OPPORTUNITY 887-2012**

Drawing Title
**MACHINE ROOM COOLING PLANT
 ELECTRICAL PLANS**

Drawn By wpd	Checked By AML	Approved By AML
Scale AS NOTED	Date NOV. 2012	Project No. 09-307-02
Revision Number 0	Drawing Number E1	Sheet Order 1 OF 1