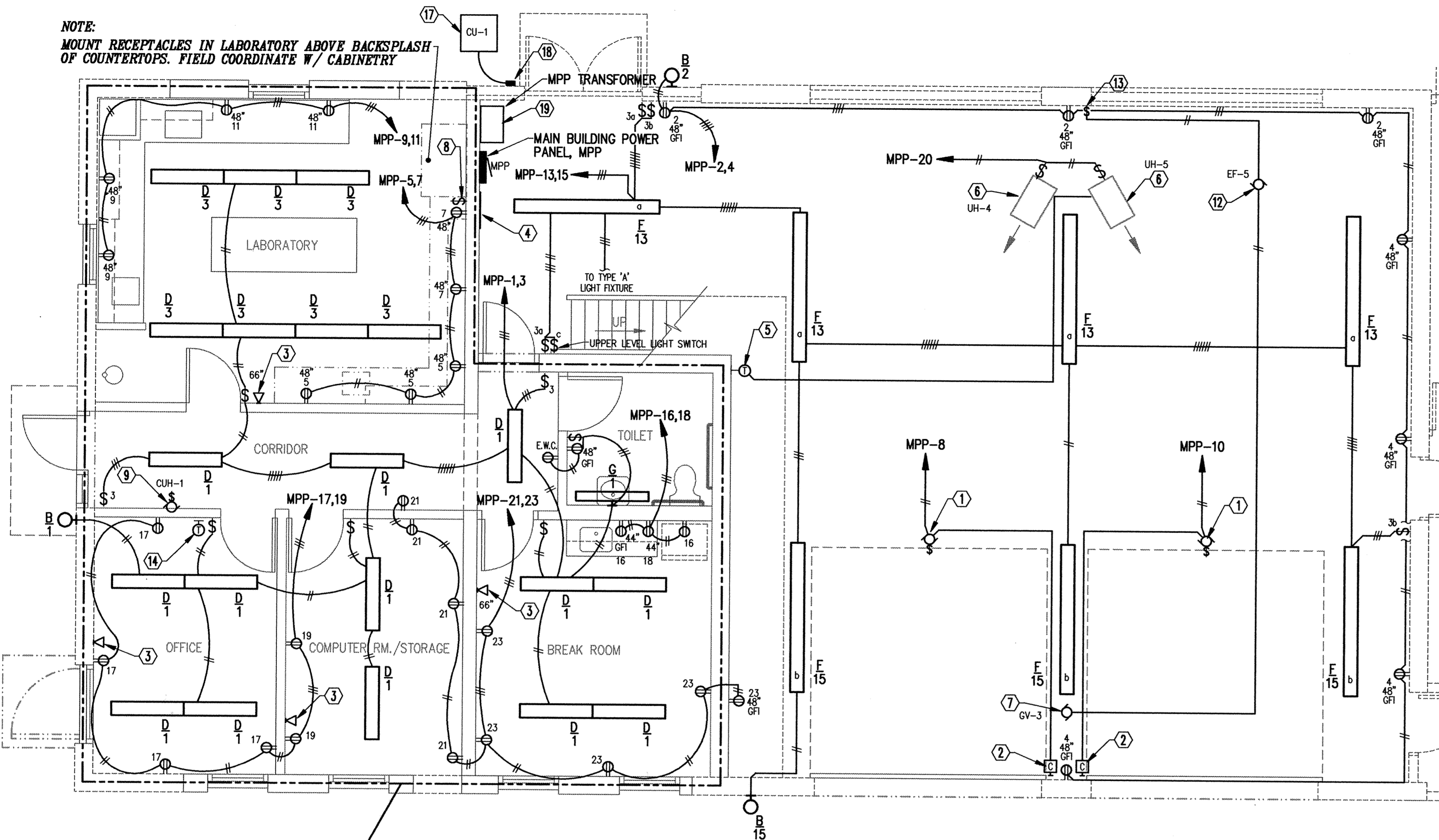


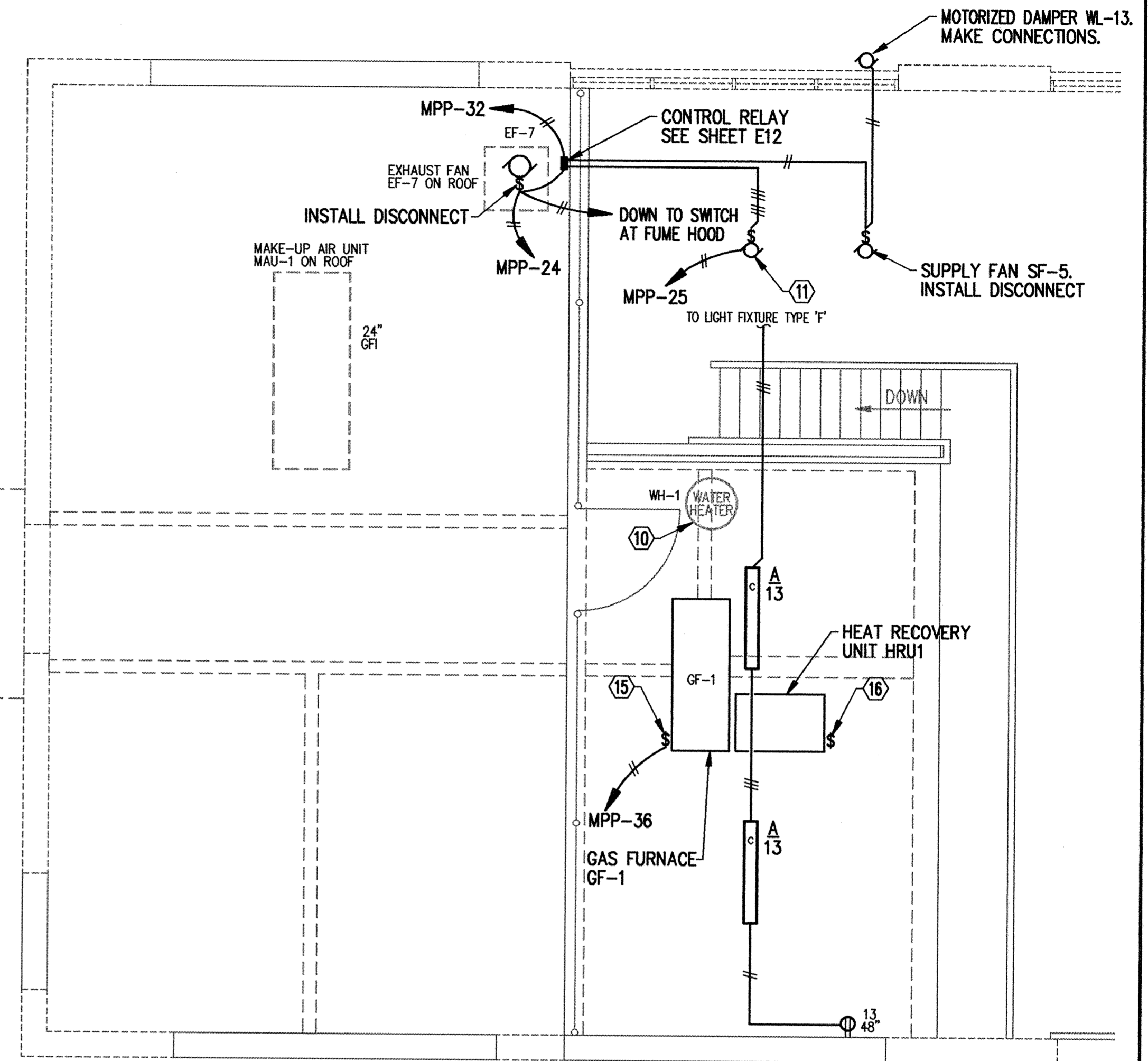
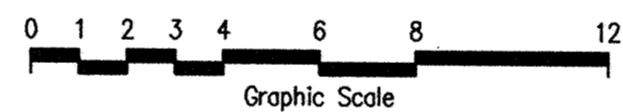
**NOTE:**  
MOUNT RECEPTACLES IN LABORATORY ABOVE BACKSPLASH OF COUNTERTOPS. FIELD COORDINATE W/ CABINETRY



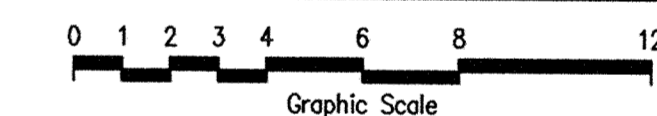
CONCEAL ALL CIRCUITRY IN THIS AREA. CONCEALED CONDUITS IN THIS AREA ONLY MAY BE E.M.T. W/ STAMPED STEEL BOXES. CONVENIENCE OUTLETS IN THIS AREA SHALL BE AT 18", UNLESS NOTED OTHERWISE



**MAIN BUILDING FIRST FLOOR PARTIAL PLAN**  
SCALE: 1/4" = 1'-0"



**MAIN BUILDING MECHANICAL LEVEL FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**MAIN BUILDING PANEL--MPP**

MOUNTING	LOCATION	SERVICE				REMARKS				
		AMPS	VOLTS	PHASE	WIRE					
SURFACE	GARAGE	100	120/208	3	4	100AMP MAIN BREAKER. GROUND PER ARTICLE 250, 1993 N.E.C.				
CIRCUIT DESCRIPTION	BKR	CKT	ANTICIPATED LOAD IN VA	PHASE			ANTICIPATED LOAD IN VA	CKT	BKR	CIRCUIT DESCRIPTION
				A	B	C				
LIGHTS- OFFICE, STG, BREAK, TOILET	20A1P	1	1400				720	2	20A1P	OUTLETS- GARAGE
LIGHTS- LAB	20A1P	3	700				720	4	20A1P	OUTLETS- GARAGE
OUTLETS- LAB	20A1P	5	720				720	6	20A1P	SPARE
OUTLETS- LAB	20A1P	7	720				800	8	20A1P	O.H. DOOR OPERATOR
OUTLETS- LAB	20A1P	9	720				800	10	20A1P	O.H. DOOR OPERATOR
OUTLETS- LAB	20A1P	11	720				800	12	20A1P	O.H. DOOR OPERATOR
LIGHTS- GARAGE, MECH LEVEL	20A1P	13	1200				800	14	20A1P	O.H. DOOR OPERATOR
LIGHTS- GARAGE	20A1P	15	850				1000	16	20A1P	COUNTER, REFRIGERATOR
OUTLETS- OFFICE	20A1P	17	1440				1500	18	20A1P	MICROWAVE, COFFEE
OUTLETS- COMPUTER	20A1P	19	720				1000	20	20A1P	UNIT HEATERS
OUTLETS- STG/BREAK RM	20A1P	21	1800				300	22	20A1P	CUH-1
OUTLETS- BREAK RM, GARAGE	20A1P	23	1440				1800	24	20A1P	EF5
DUCT FURNACE	20A1P	25	1000				1250	26	20A	WATER HEATER
CONDENSING UNIT	20A	27	1300				1250	28	2P	"
"	"	29	1300				700	30	20A1P	EF3
SPARE	20A1P	31	----				1000	32	20A1P	SF3, WL6
SPARE	20A1P	33	----				360	34	20A1P	SPARE
SPARE	----	35	----				500	36	20A1P	GAS FURNACE GF1
SPARE	----	37	----				500	38	20A1P	HEAT RECOVERY UNIT
SPARE	----	39	----				----	40	20A1P	SPARE
SPARE	----	41	----				----	42	20A1P	SPARE

**NUMBERED NOTES**

- 1/2hp, 120VAC DOOR OPERATOR. INSTALL DISCONNECT. MAKE CONNECTIONS
- DOOR CONTROL STATION W/ SAFETY CONTROLS. MOUNT AT 54" & MAKE CONNECTIONS. ASSUME 7-1/C-#14-1/2" TO DOOR OPERATOR
- TELEPHONE JUNCTION BOX & COVER PLATE W/ HOLE AND GROMMET. ROUTE 3/4" TO NEW TELEPHONE PANEL (SEE NUMBERED NOTE 4). OUTLET AT 18", UNLESS NOTED OTHERWISE
- 24" x 24" TELEPHONE PANEL AT 60". SEE SPEC SECTION 16700
- THERMOSTAT FOR UNIT HEATERS UH-4 & UH-5. SEE SPECIFICATION. ROUTE 2-1/C-#14-1/2" TO ASSOCIATED UNIT HEATER
- UNIT HEATER. INSTALL DISCONNECT. MAKE CONNECTIONS. ROUTE 2-1/C-#12-1/2" TO MPP-20
- DAMPER MOTOR AT ROOF DAMPER. MAKE CONNECTIONS. ROUTE 2-1/C-#12-1/2" TO EXHAUST FAN EF-5
- EXHAUST FAN EF-7 CONTROL SWITCH, ROUTE 2-1/C-#12-1/2" TO MPP-20
- CABINET UNIT HEATER CUH-1. INSTALL DISCONNECT. MAKE CONNECTIONS. ROUTE 2-1/C-#12-1/2" TO MPP-22.
- WATER HEATER. 2.5kW, 208V. ROUTE 2-1/C-#12-1/2" TO MPP-26,28.
- DUCT FURNACE DF1. INSTALL DISCONNECT. ROUTE 2-1/C-#12-1/2" TO MPP-25 & 4-1/C-#12-1/2" TO CONTROL RELAYS. SEE SHEET E12.
- EXHAUST FAN EF-5. MAKE CONNECTIONS.
- MANUAL STARTER FOR EF-5. ROUTE 2-1/C-#12-1/2" TO MPP-30.
- T\*STAT. FOR GAS FURNACE, INSTALL & MAKE CONNECTIONS. ASSUME 5-1/C-#16-1/2" TO GF-1. CONFIRM.
- GAS FURNACE GF-1. INSTALL DISCONNECT. ROUTE 2-1/C-#12-1/2" TO MPP-36. INSTALL 2-1/C-#14-1/2" TO CONDENSING UNIT. ROUTE 2-1/C-#14-1/2" FROM FAN CONTROL TO HEAT RECOVERY UNIT HRU-1.
- HEAT RECOVERY UNIT HRU-1. INSTALL DISCONNECT. ROUTE 2-1/C-#12-1/2" TO MPP-38.
- CONDENSING UNIT CU-1. MAKE CONNECTIONS. ROUTE 2-1/C-#12-1/2" LIQUID-TIGHT FLEXIBLE CONDUIT TO DISCONNECT.
- NEMA 3R, 240V, 2P, 30A DISCONNECT FOR CONDENSING UNIT CU-1. ROUTE 2-1/C-#12-3/4" TO MPP-27,29. & MAKE CONNECTIONS.
- NEW TRANSFORMER SHALL BE A 480:120/208V, 3P, 4W, 30kVA UNIT. MOUNT HIGH ON WALL. 3-1/C-#8-3/4" TO BREAKER IN EXISTING MCC (SEE DRAWING E10). 4-1/C-#3-1 1/4" FROM TRANSFORMER TO PANEL MPP. GROUND PER ARTICLE 250, NEC.

**DISCONNECT & REMOVE EXISTING CIRCUITRY TO UNUSED/REMOVED DEVICES & EQUIPMENT.**

This drawing was prepared by:  
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I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.  
*[Signature]*  
DATE 06 OCT 95 REG. NO. 9955



1326 ENERGY PARK DRIVE  
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5075 WAYZATA BLVD. SUITE 225  
MINNEAPOLIS, MINNESOTA 55441  
(612) 546-0432

DATE	DESCRIPTION	DESIGNED	PKF
		CHECKED	PKF
		DRAWN	JGB/TLH
		GRAPHIC SCALE	
		0 HORIZ.	
		0 VERT.	

**CITY OF ELK RIVER**  
WASTEWATER TREATMENT FACILITIES  
EXISTING MAIN BUILDING PARTIAL MODIFICATION PLANS

**E11**