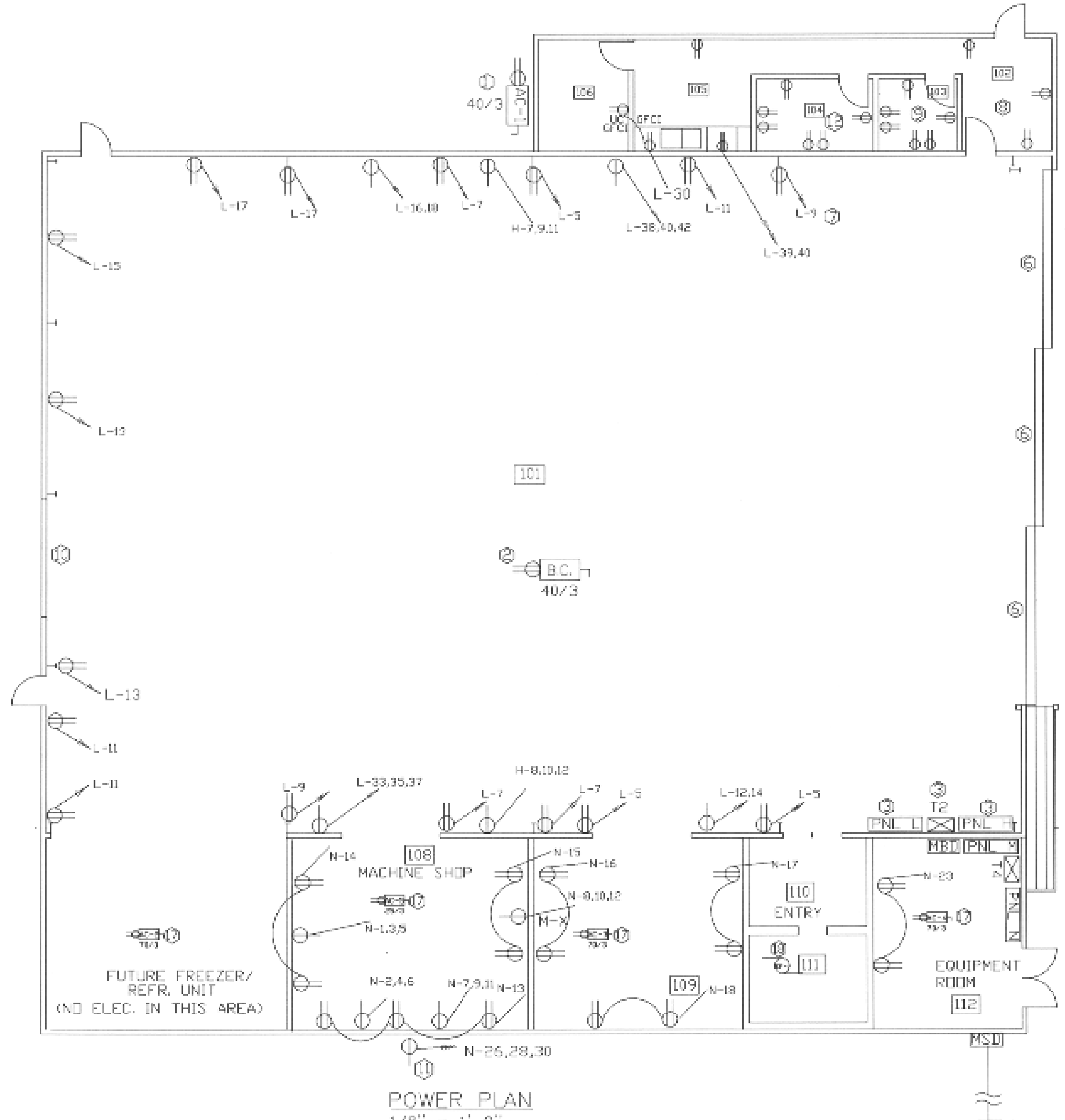

POWER PLAN

1/8" = 1'-0"

GENERAL NOTES (SHEETS E1, E2 & E3):

THESE PLANS ARE SCHEMATIC AND DO NOT SHOW THE EXACT LOCATIONS OF EQUIPMENT, CONDUIT ROUTING, OBSTRUCTIONS, ETC. THE CONTRACTOR MUST REFER
1. TO ARCHITECTURAL AND MECHANICAL PLANS AND DETAILS FOR SPECIFIC INFORMATION.
WIRE AND BREAKER SIZES ARE BASED ON INFORMATION AVAILABLE AT THE TIME OF DESIGN. THE CONTRACTOR MUST VERIFY THE ELECTRICAL REQUIREMENTS OF
2. EQUIPMENT AND MODIFY WIRE AND BREAKER SIZES APPROPRIATELY PER NEC.
SUBMIT LIGHT FIXTURE INFORMATION TO THE OWNER FOR REVIEW AND APPROVAL BEFORE PURCHASING LIGHT FIXTURES.
3. EXIT LIGHTING SHALL BE UNSWITCHED, ON A DEDICATED CIRCUIT AS SCHEDULED.
4. ALL CALCULATIONS ARE BASED ON LOADING AS INDICATED. WIRE AND CONDUIT ARE SIZED FOR FUTURE HVAC EQUIPMENT AS SCHEDULED (SEE LOAD SUMMARY
5. OPTION T1 THIS SHEET). FUSE SIZES WERE SELECTED BASED UPON CURRENT LOADING (SEE LOAD SUMMARY OPTION T2 THIS SHEET). IF FUTURE HVAC
EQUIPMENT IS INSTALLED, THE EXISTING 150KVA TRANSFORMER MAY BE INADEQUATE. ADDITIONAL ENGINEERING SHOULD BE PERFORMED AT THAT TIME.
TYPE 1A7 FIXTURES SHALL BE PENDANT MOUNTED AT A NOMINAL HEIGHT OF 31'-0". ADJUST MOUNTING HEIGHT AS REQUIRED TO KEEP FIXTURES ABOVE BRIDGE
6. CRANE APPARATUS AT ALL TIMES. ALL FIXTURES SHALL BE AT A UNIFORM HEIGHT. ADJUST LOCATION TO COORDINATE WITH MECHANICAL AND AS APPROVED
BY EG & G.
PROVIDE UTILITY GRADE METER ON TRANSFORMER T1 SECONDARY TO SHOW KWH AND KW OF DEMAND.
7. CONTRACTOR MAY LOCATE PANELS H, L AND TRANSFORMER T2 IN ROOM 112 AS APPROVED BY EG & G.

KEYED ELECTRICAL NOTES: (SHEETS E1, E2 & E3)

PROVIDE 4 TON 208 VOLT 3 PHASE HVAC UNIT WITH PROPANE HEATING. PAD MOUNT PER MECHANICAL. PROVIDE DISCONNECT AND MAINTENANCE OUTLET FOR
UNIT.
1. PROVIDE CONDUIT NECESSARY FOR MECHANICAL CONTRACTOR TO INSTALL THERMOSTAT WIRING. HOMERUN AS SCHEDULED.
15 TON BRIDGE CRANE PROVIDE FEED(S) AND CONTROL ELECTRICAL AS REQUIRED FOR ACTUAL CRANE USED. ACTUAL LOCATION PER BRIDGE CRANE
2. MANUFACTURER. HOMERUN TO PANEL H-8,10,12.
PROVIDE PANELS AND TRANSFORMERS AS INDICATED.
EXISTING 150 KW 480 VOLT TRANSFORMER (APPROXIMATELY 30') FROM NEW BUILDING) AS SHOWN. REPLACE AS INDICATED ON RISER DIAGRAM.
3. PROVIDE PHOTO-ELECTRIC SMOKE DETECTORS. EXTEND WIRING TO JBOX FOR CONNECTION BY FIRE ALARM SYSTEM INSTALLER. TYPICAL FOR 12. SEE FA8M 5.
4. 120 VOLT DOOR OPENER. CONNECT CONTROL PROVIDED WITH UNIT. HOMERUN TO PANEL L-2.
5. PROVIDE GFCI PROTECTION FOR ALL RECEPTACLES IN ROOM 101, WHETHER INDICATED OR NOT.
6. PROVIDE HOMERUN FOR DUPLEX RECEPTACLES IN ROOM 102 AND HALLWAY TO PANEL L-29.
7. PROVIDE HOMERUN FOR DUPLEX RECEPTACLES IN ROOM 103 TO PANEL L-25.
8. PROVIDE 120 VOLT DOOR OPENER. CONNECT CONTROL PROVIDED WITH UNIT. HOMERUN TO PANEL L-8.
9. PROVIDE WEATHERPROOF SPECIAL PURPOSE OUTLET WITH RECEPTACLE FOR AIR COMPRESSOR. SEE MECHANICAL FOR RECEPTACLE TYPE. COORDINATE EXACT
10. LOCATION PER OWNER.
11. PROVIDE HOMERUN FOR DUPLEX RECEPTACLES IN 104 TO PANEL L-27.
PROVIDE FIXTURE AS INDICATED AND SCHEDULED. ACTIVATION SHALL BE BY INCOMING PHONE CALL.
12. PROVIDE SEPERATE 3/4" CONDUIT WITH PULL STRING FROM EACH TELEPHONE OUTLET TO TELEPHONE CABINET.
13. PROVIDE 1" CONDUIT WITH PULL STRING FROM EACH DATA OUTLET TO TELEPHONE BOARD FOR FUTURE FIBER CONNECTIONS (BY OTHERS). PROVIDE WIDE SWEEPS
14. FOR ALL TURNS GREATER THAN 30 DEGREES.
INSTALL EG & G SUPPLIED ILCO UNICAN MODEL #1011-26D-41 WITH XO SPIN DIAL FOR IDS SYSTEM (BY OTHERS). ELECTRICAL SUBCONTRACTOR SHALL
15. PROVIDE 4" SQUARE BOXES, MOUNTING PER EG &G, AND 1" CONDUIT (WITH PULL STRING)
HOMERUN TO IDS BACK BOARD. IDS DEVICE AND SYSTEM REQUIREMENTS SHOWN ON SHEET A1 ARE IN ADDITION TO SPIN DIAL SHOWN ON THIS SHEET.
16. PROVIDE DISCONNECT SWITCH AND MAINTENANCE RECEPTACLES AS INDICATED. SIZE AS INDICATED, WITH HOMERUN AS SCHEDULED. COORDINATE EXACT LOCATION
17. WITH MECHANICAL.
PROVIDE ELECTRICAL FOR EF-1, LOCATION PER MECHANICAL. HOMERUN AS SCHEDULED.

18.

PANEL H — VOLTS 277/480 — WIRES 4 — MLO — 400 A

CIRC. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	LOAD SERVED	WIRE SIZE	CIRC. NO.	TRIP AMPS	NO. POLES
1	50	3	8	TRANSFORMER T4	14840 / 20700			AC - 1	4	2	90	3
3	–	–	–	" "		15000 / 20700		" "	–	4	–	–
5	–	–	–	" "			14820 / 20700	" "	–	6	–	–
7	70	3	4	SPARE	– / 20700			AC - 4	4	8	90	3
9	–	–	–	" "		– / 20700		" "	–	10	–	–
11	–	–	–	" "			– / 20700	" "	–	12	–	–
13	25	3	10	REFR. UNIT (FUTURE)	5100 / 5100			AC-5	10	14	25	3
15	–	–	–	" "		5100 / 5100		" "	–	16	–	–
17	–	–	–	" "			5100 / 5100	" "	–	18	–	–
19	20	1	12	SPARE	– / 9000			FREEZER UNIT (FUTURE)	8	20	40	3
21	20	1	12	SPARE		– / 9000		–	–	22	–	–
23	20	1	12	SPARE			– / 9000	–	–	24	–	–
25	20	1	12	SPARE	– / –			SPARE		26	20	1
27	30	1	10	SPARE		– / –		SPACE		28	–	–
29	30	1	10	SPARE			– / –	SPACE		30	–	–
31	30	1	10	SPARE	– / –			SPARE		32	–	–
33	–	–		SPACE		– / –		SPACE		34	–	–
35	–	–		SPACE			– / –	SPACE		36	–	–
37	–	–		SPACE	– / –			SPACE		38	–	–
39	–	–		SPACE		– / –		SPACE		40	–	–
41	–	–		SPACE			– / –	SPACE		42	–	–
TOTAL CONN. LOAD 225.9 KVA; EST. DEMAND LOAD 224 KVA				TOTAL	75240	75400	75820	DEMAND LINE AMPS 271				

PANEL N — VOLTS 120/208 — WIRES 4 — MCB — 150 A

CIRC. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	LOAD SERVED	WIRE SIZE	CIRC. NO.	TRIP AMPS	NO. POLES
1	30	3	10	RECEPTACLE	2000 / 2880			RECEPTACLE	10	2	30	3
3	–	–	–	" "		2000 / 2880		" "	–	4	–	–
5	–	–	–	" "			2000 / 2880	" "	–	6	–	–
7	30	3	10	RECEPTACLE	2880 / 2880			RECEPTACLE	10	8	30	3
9	–	–	–	" "		2880 / 2880		" "	–	10	–	–
11	–	–	–	" "			2880 / 2880	" "	–	12	–	–
13	20	1	12	RECEPTACLES	360 / 360			RECEPTACLES	12	14	20	1
15	20	1	12	RECEPTACLES		360 / 360		RECEPTACLES	12	16	20	1
17	20	1	12	RECEPTACLES			540 / 360	RECEPTACLES	12	18	20	1
19	20	1	12	LIGHTS, ROOM 111	120 / 240			LIGHTS, ROOM 109	12	20	20	1
21	20	1	12	LIGHTS, ROOM 110		240 / 500		LIGHTS, ROOM 108	12	22	20	1
23	20	1	12	RECEPTACLES			360 / 240	LIGHTS, ROOM 112	12	24	20	1
25	20	1	12	HVAC MAINT RECEPT.	240 / 1000			AIR COMPRESSOR	12	26	20	3
27	30	1	10	EF-1		120 / 1800		" "	12	28	–	–
29	30	1	10	SPARE			– / 1800	" "	12	30	–	–
31	20	1	–	SPARE	– / –			SPARE	–	32	20	1
33	20	1		SPACE		– / –		SPACE		34	20	1
35	20	1		SPACE			– / –	SPACE		36	20	1
37	–	–		SPACE	–			SPACE		38	20	1
39	–	–		SPACE		– / –		SPACE		40	–	–
41	–	–		SPACE			– / –	SPACE		42	–	–
TOTAL CONN. LOAD 44.6 KVA; EST. DEMAND LOAD 43 KVA				TOTAL	14840	15000	14820	DEMAND LINE AMPS 120				

PANEL H — VOLTS 277/480 — WIRES 4 — MLO — 400 A

CIRC. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	LOAD SERVED	WIRE SIZE	CIRC. NO.	TRIP AMPS	NO. POLES
1	90	3	2	TRANSFORMER T3	18720 / 20620			TRANSFORMER T2	6	2	50	3
3	–	–	–	" "		18880 / 21040		" "	–	4	–	–
5	–	–	–	" "			19420 / 25920	" "	–	6	–	–
7	125	1		PORTABLE OVEN	26700 / 26700			PORTABLE OVEN	1	8	125	3
9	–	–		" "		26700 / 26700		" "	–	10	–	–
11	–	–		" "			26700 / 26700	" "	–	12	–	–
13	20	1		SPARE	– / –			SPARE	6	14	80	3
15	20	1		SPARE		– / –		" "	–	16	–	–
17	20	1		SPARE			– / –	" "	–	18	–	–
19	20	1		SPARE	– / –			SPARE	10	20	30	3
21	20	1		SPARE		– / –		–	–	22	–	–
23	20	1		SPARE			– / –	–	–	24	–	–
25	–	–		SPACE	– / –			SPARE	12	26	20	3
27	–	–		SPACE		– / –		" "	–	28	–	–
29	–	–		SPACE			– / –	" "	–	30	–	–
31	–	–		SPACE	– / –			SPACE		32	–	–
33	–	–		SPACE		– / –		SPACE		34	–	–
35	–	–		SPACE			– / –	SPACE		36	–	–
37	–	–		SPACE	–			SPACE		38	–	–
39	–	–		SPACE		– / –		SPACE		40	–	–
41	–	–		SPACE			– / –	SPACE		42	–	–
TOTAL CONN. LOAD 285 KVA; EST. DEMAND LOAD 247 KVA				TOTAL	93440	94140	97260	DEMAND LINE AMPS 297				

PANEL L — VOLTS 120/208 — WIRES 4 — MCB — 225A

CIRC. NO.	TRIP AMPS	NO. POLES	WIRE SIZE	LOAD SERVED	PHASE LOAD VA A	PHASE LOAD VA B	PHASE LOAD VA C	LOAD SERVED	WIRE SIZE	CIRC. NO.	TRIP AMPS	NO. POLES
1	20	1	10	LIGHTING TYPE A	2400 / 910			ELECTRIC DOOR	10	2	20	1
3	20	1	10	RECEPTACLES		540 / 1510		WATER HEATER	10	4	20	1
5	20	1	10	RECEPTACLES			540 / 3400	LIGHTING TYPE A	10	6	20	1
7	20	1	10	" "	540 / 310			ROLL UP DOOR	10	8	20	1
9	20	1	10	" "		540 / 200		FIRE ALARM PANEL	10	10	20	1
11	20	1	10	" "			540 / 1500	208 V SOURCE	10	12	20	2
13	20	1	10	" "	540 / 1500			" "	10	14	–	–
15	20	1	10	" "		540 / 1500		208 V SOURCE	10	16	20	2
17	25	2	8	AC-1			1500 / 1500	" "	10	18	–	–
19	–	–	8	" "	1500 / 600			RED LIGHTS	10	20	20	1
21	25	2	8	AC-2		1500 / 400		LTG ENTRY/HALL	10	22	20	1
23	–	–	8	" "			1500 / 3400	LIGHTING TYPE A	10	24	20	1
25	20	1	10	RECEPT: RM 103	1080 / 2400			LIGHTING TYPE A	10	26	20	1
27	20	1	10	RECEPTS RM 104		1080 / 3400		LIGHTING TYPE A	10	28	20	1
29	20	1	10	RECEPTS 102 & HALL			720 / 360	RECEPTS RR & KITCH	10	30	20	1
31	20	1	10	EXTERIOR LIGHTS	600 / 200			LIGHTING OFFICES	10	32	20	1
33	30	3	8	208 V SOURCE		3000 / 500		LTG RESTROOM	10	34	20	1
35	–	–	8	" "			3000 / 200	EXIT LIGHTS	10	36	20	1
37	–	–	8	" "	3000 / 3000			208 V SOURCE	8	38	30	3
39	40	2		RANGE		3200 / 3000		" "	8	40	–	–
41	–	–		" "			3200 / 3100	" "	8	42	–	–
TOTAL CONN. LOAD 58.4 KVA; EST. DEMAND LOAD 60.0 KVA				TOTAL	21040	21840	25560	DEMAND LINE AMPS 166				

Cottonwood Engineering Corp.
920 HAWAII
ALAMOGORDO, NEW MEXICO 88310
PHONE: 505-434-9195
E-MAIL: CTNWOOD@LOOKINGGLASS.NET

White Sands Missile Range, NM

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SHEET E1 OF 3