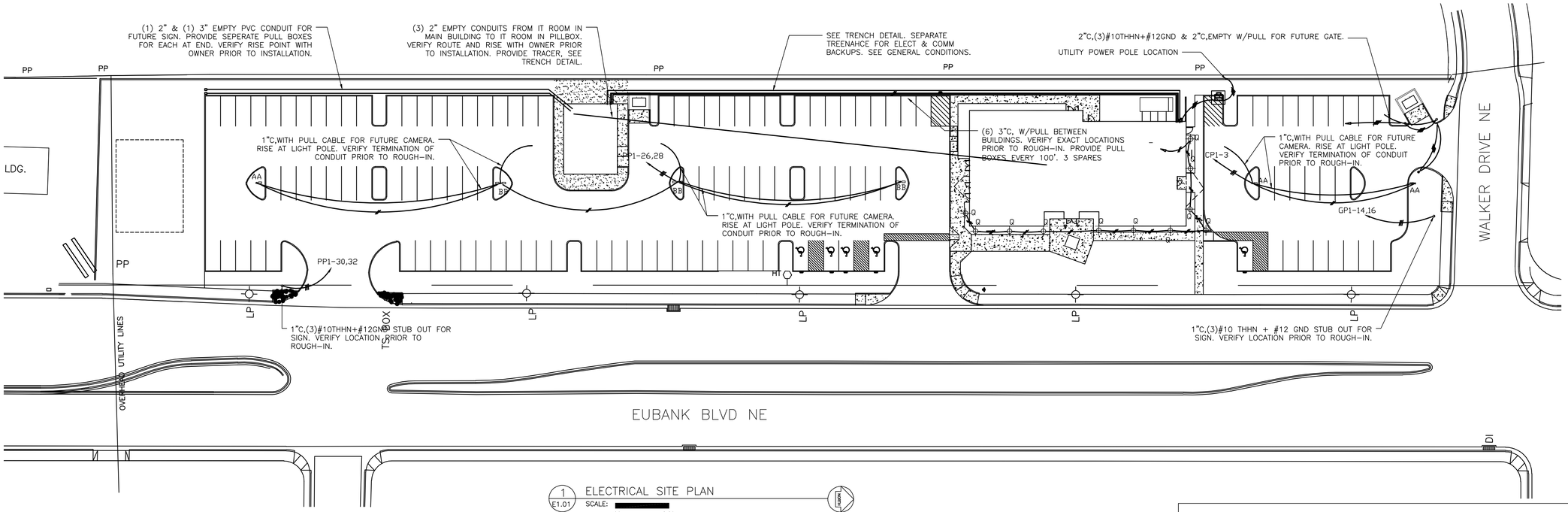
ELECTRICAL SITE LIGHTING FIXTURE SCHEDULE										
Quantity	KEY	ID	DESCRIPTION	ELECTRICAL DATA		LAMP DATA		BASIS OF DESIGN		NOTES
				LOAD VA	VOLTAGE	QTY	WATTAGE	MANUFACTURER	MODEL OR SERIES	
3		AA	SINGLE MOUNT SITE FIXTURE 25' POLE	400.0	208/1/60	1	400.0	SPAULDING	CR1-A-P40-H3-F-Q-BL	
3		BB	DUAL MOUNT SITE FIXTURE 25' POLE	800.0	208/1/60	2	400.0	SPAULDING	(2)CR1-A-P40-H3-F-Q-BL	
11		Q	ROUND ALUMINUM BOLLARD	70.0	120/1/60	1	70.0	KIM	VRB3-X-BL	

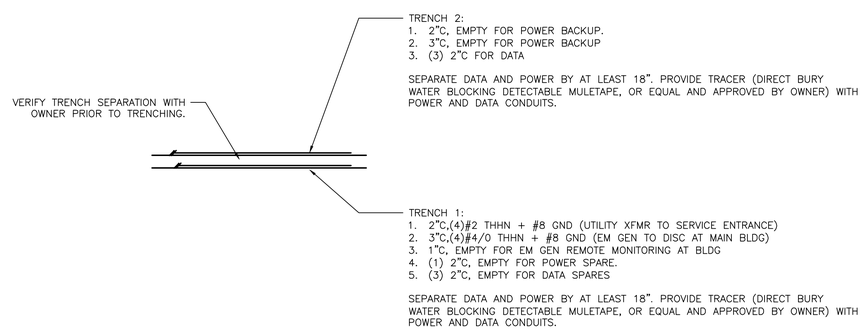
NOTES:
1. HUBBELL & LITHONIA ARE APPROVED EQUAL AS MANUFACTURER. FIXTURES SHALL BE AS SPECIFIED OR EQUAL IN QUALITY AND IN APPEARANCE. SUPPLIER MAY BE REQUIRED TO PROVIDE PHOTOMETRIC ANALYSES TO PROVE EQUAL IN PERFORMANCE.



1 E1.01 ELECTRICAL SITE PLAN
SCALE: 0' 32'

ELECTRICAL SYMBOLS

- WALL MOUNTED FIXTURE
- CEILING MOUNT FIXTURE
- EXIT SIGN
- FLUORESCENT FIXTURE
- EMERGENCY LIGHT TO REMAIN ON FOR 2 HRS.
- EMERGENCY LIGHT
- FAN WITH OR WITHOUT LIGHT
- COMP/PHONE OUTLET
- TELEPHONE OUTLET
- TELEPHONE WALL MTD
- FLOOR MTD COMP/PHONE OUTLET
- FLOOR MTD TELEPHONE OUTLET
- JUNCTION BOX 1
- JUNCTION BOX 2
- DOOR BUZZER
- BELL
- TV OUTLET
- CAMERA
- OCCUPANCY SENSOR
- SINGLE POLE SNAP SWITCH
- 2 POLE SNAP SWITCH
- 3-WAY SNAP SWITCH
- 4-WAY SNAP SWITCH
- DIMMER SWITCH
- KEY OPERATED SNAP SWITCH
- MOTION DETECTOR SWITCH
- FAN SWITCH
- PILOT SNAP SWITCH
- PROJECTION SCREEN SWITCH
- DIMMER SWITCH
- DUPLEX RECEPTACLE
- GROUND FAULT RECEPTACLE
- SWITCHED RECEPTACLE
- SINGLE RECEPTACLE
- FOUR-PLEX RECEPTACLE
- FLOOR RECEPTACLE
- SPECIAL RECEPTACLE
- ELECTRICAL PANEL
- ELECTRICAL EQUIP SCHED ITEM
- MOTOR WITH DISCONNECT
- DISCONNECT SWITCH
- DISCONNECT SWITCH – FUSED
- FARP FIRE ALARM REMOTE PANEL
- FAA FIRE ALARM ANNUNCIATOR
- FACP FIRE ALARM CONTROL PANEL
- HORN STROBE
- SINGLE POLE SNAP SWITCH
- FIRE ALARM STROBE
- HEAT DETECTOR
- SMOKE DETECTOR
- MAGNETIC HOLD OPEN
- MAG HOLD OPEN WALL MTD
- FIRE ALARM HORN
- MANUAL PULL STATION
- DUCT SMOKE DETECTOR
- DUCT HEAT DETECTOR
- FIXED TEMP HEAT DETECTOR
- TAMPER DETECTOR SWITCH
- SMOKE DETECTOR – IONIZATION
- TAMPER DETECTOR SWITCH
- PC PHOTO CELL
- TC TIME CLOCK
- CR CARD READER



2 E1.01 ELECTRICAL TRENCH/CONDUIT DETAIL
SCALE: NONE

PLAN SHEET INDEX

E1.01	ELECTRICAL INDEX & SITE PLAN
E2.01	ELECTRICAL MAIN BUILDING 1ST FLOOR LIGHTING PLAN
E2.02	ELECTRICAL MAIN BUILDING 2ND FLOOR LIGHTING PLAN
E2.03	ELECTRICAL PILL BOX LIGHTING & POWER PLAN
E3.01	ELECTRICAL MAIN BUILDING 1ST FLOOR POWER PLAN
E3.02	ELECTRICAL MAIN BUILDING 2ND FLOOR POWER PLAN
E3.03	ELECTRICAL SNOW MELT SYSTEM
E4.01	ELECTRICAL CABLE TRAY PLAN
E5.01	ELECTRICAL PANELBOARD SCHEDULES SHEET 1 OF 2
E5.02	ELECTRICAL PANELBOARD SCHEDULES SHEET 2 OF 2
E5.03	ELECTRICAL LIGHT FIXTURE SCHEDULE & 1-LINE DIAGRAM
E6.01	ELECTRICAL COMCHECK REPORT

ELECTRICAL INDEX & SITE PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EVE
NEW MEXICO
17593
LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E1.01

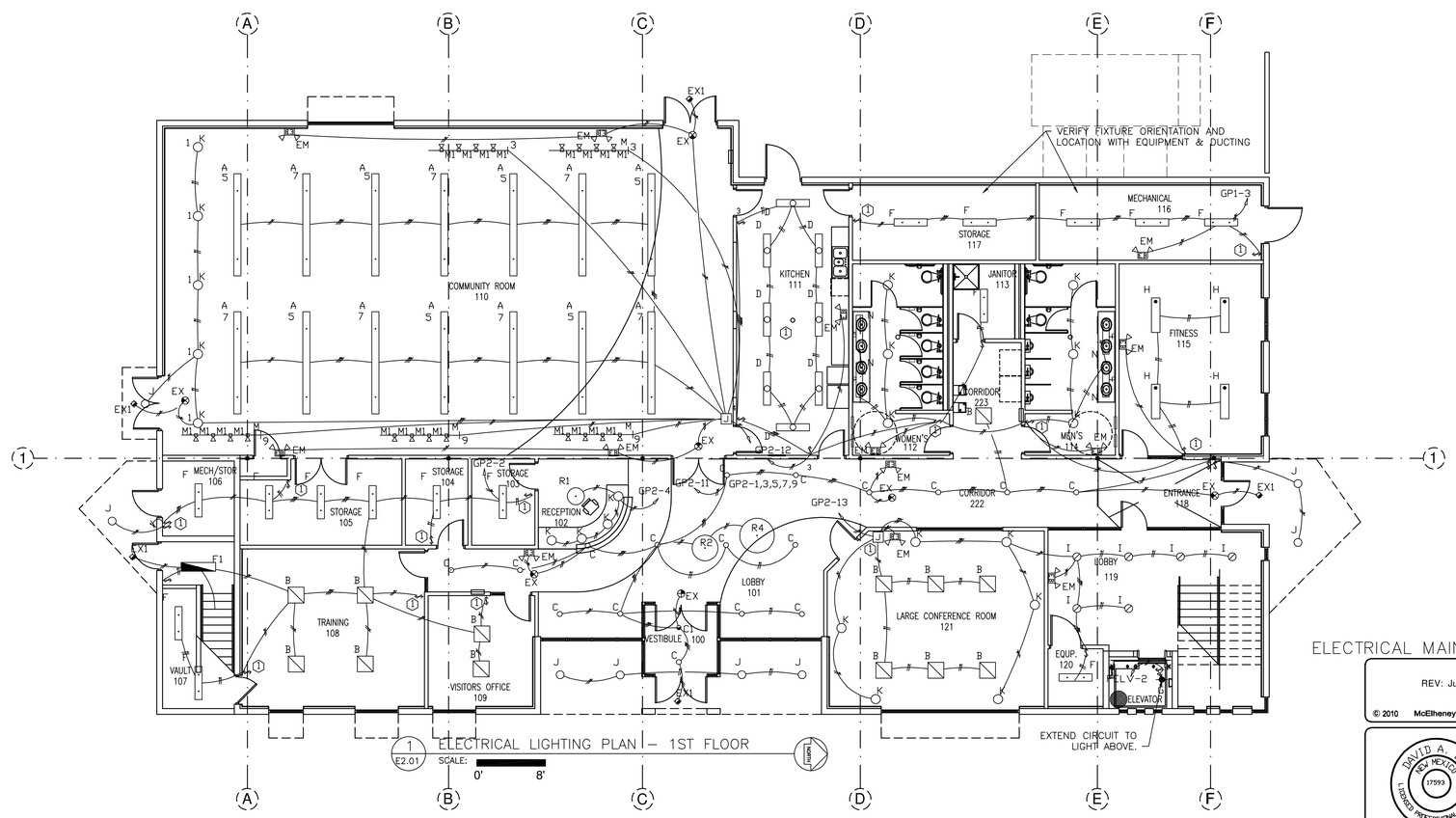
11/23/2010 11:37:25 AM

ONE–CALL 1st FLOOR LIGHT FIXTURE SCHEDULE										
Quantity	KEY	ID	DESCRIPTION	ELECTRICAL DATA		LAMP DATA		BASIS OF DESIGN		NOTES
				LOAD VA	VOLTAGE	QTY	WATTAGE	MANUFACTURER	MODEL OR SERIES	
14		A	12' LINEAR. WHITE BAFFLE. 2 CKT.	300.0	120/1/60	9	32.0	FINELITE	S4–12'–2T8–SC–91W–120–ACX–X–.88	
13		B	2X2 ACRYLIC LENS, 2 CKT	65.0	120/1/60	3	17.0	LEDALITE	3222–D1–ST–T317–S–2–1–E	
17		C	6" LED CYLINDER	70.0	120/1/60	2	32.0	CREE	LR6–SC6	
1		C1	6" LED CYLINDER	70.0	120/1/60	2	32.0	CREE	LR6–SC6	
8		D	1X4 SURFACE MOUNT	64.0	120/1/60	2	32.0	COLUMBIA	SM14–232–FSA12125–EU	
13		EM	EMERGENCY LIGHT	20.0	120/1/60	2	12.0	DUALLITE	LZ2	
7		EX	EXIT SIGN, WHITE THERMOPLASTIC	10.0	120/1/60	1	10.0	DUALLITE	LXURWE	
6		EX1	EGRESS EMERGENCY	20.0	120/1/60	1	20.0			
15		F	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4–132–EU–CSWG4	
1		F1	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4–132–EU–CSWG4	
1		G	JAR & GUARD	60.0	120/1/60	1	60.0	HUBBELL	VX–151	
4		H	4' CEILING MOUNT	100.0	120/1/60	3	32.0	KENALL	MLRS8–48–F–CBA–PIA–232–RS–1–120	
8		I	DECORATIVE PENDANT	70.0	120/1/60	2	32.0	D'AC	D5238–1FC40–120–CBA–COIL	
8		J	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB–6CFV–B24	
21		K	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB–6CFV–B24	
5		M	MONORAIL	0.0	120/1/60	0	0.0	LBL	RAIL–ST–SC–X	
20		M1	MR16 HEAD	50.0	120/1/60	1	42.0	HE441–SC–X–1A–50–MRL	LBL	
4		N	4' SLIM VANITY	55.0	120/1/60	2	32.0	AXIS	ARS–W–4–T8–2–CBA–E–120–1	
1		R1	2' DIA RECESSED CONVEX LENS'	0.0	120/1/60	2	0.0	FOCAL POINT	FSD–22–D–2BXX–E–120–U–CX–HW	
1		R2	3' DIA SURFACE MT CONVEX LENS	0.0	120/1/60	0	0.0	FOCAL POINT	FSD–33–D–3T86–E–120–SM–CX–WH	
1		R4	4' DIA PENDANT CONVEX LENS	170.0	120/1/60	5	32.0	FOCAL POINT	FSD–44–D–5T8U6–E–120–XX–CX–WH	

NOTES:
1. COOPER & LITHONIA ARE APPROVED EQUAL AS MANUFACTURER. FIXTURES SHALL BE AS SPECIFIED OR EQUAL IN QUALITY AND IN APPEARANCE. SUPPLIER MAY BE REQUIRED TO PROVIDE PHOTOMETRIC ANALYSES TO PROVE EQUAL IN PERFORMANCE.

1ST FLOOR GENERAL NOTES

1. PROVIDE MOTION CONTROL SWITCHES ON ALL OFFICES, BATHROOMS, STORAGE ROOMS AND OTHER AREAS IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES.
2. OPERATION OF THE FACILITY LIGHTING CONTROLLER SHALL BE IN FULL ACCORDANCE WITH LOCAL, STATE AND NATIONAL ENERGY CODES.



1 E2.01 ELECTRICAL LIGHTING PLAN – 1ST FLOOR

SCALE: 0' 8'

ELECTRICAL MAIN BUILDING 1ST FLOOR LIGHTING PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EYE NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO. E2.01

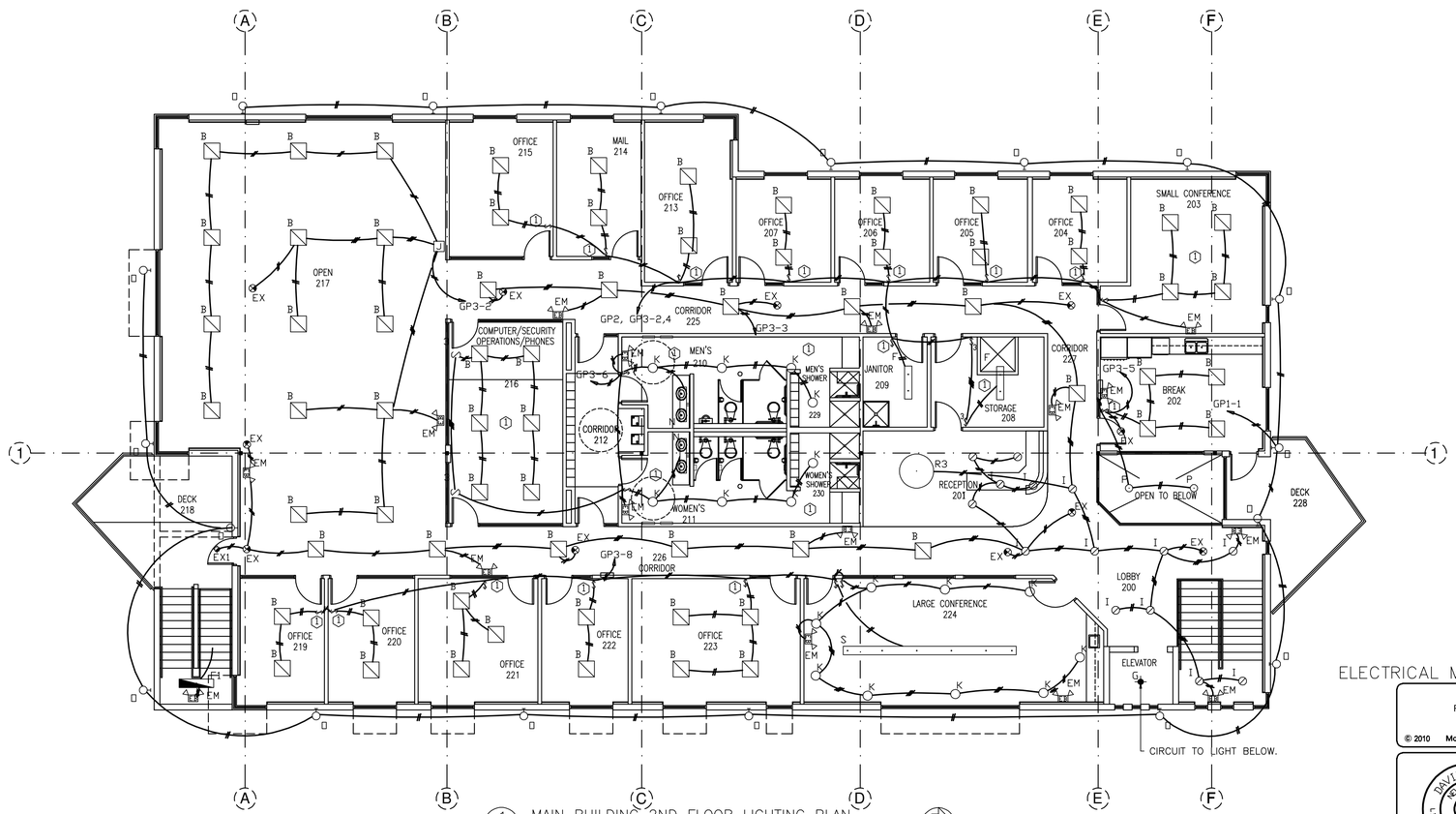
11/23/2010 11:37:39 AM

ONE-CALL 2ND FLOOR LIGHT FIXTURE SCHEDULE										
Quantity	KEY	ID	DESCRIPTION	ELECTRICAL DATA		LAMP DATA		BASIS OF DESIGN		NOTES
				LOAD VA	VOLTAGE	QTY	WATTAGE	MANUFACTURER	MODEL OR SERIES	
67		B	2X2 ACRYLIC LENS, 2 CKT	65.0	120/1/60	3	17.0	LEDALITE	3222-D1-ST-T317-S-2-1-E	
16		EM	EMERGENCY LIGHT	20.0	120/1/60	2	12.0	DUALLITE	LZ2	
11		EX	EXIT SIGN, WHITE THERMOPLASTIC	10.0	120/1/60	1	10.0	DUALLITE	LXURWE	
1		EX1	EGRESS EMERGENCY	20.0	120/1/60	1	20.0			
2		F	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4-132-EU-CSWG4	
1		F1	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4-132-EU-CSWG4	
1		G	JAR & GUARD	60.0	120/1/60	1	60.0	HUBBELL	VX-151	
14		I	DECORATIVE PENDANT	70.0	120/1/60	2	32.0	D'AC	D5238-1FC40-120-CBA-COIL	
1		J	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB-6CFV-B24	
17		K	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB-6CFV-B24	
2		N	4' SLIM VANITY	55.0	120/1/60	2	32.0	AXIS	ARS-W-4-T8-2-CBA-E-120-1	
18		O	ARCHITECTURAL WALLPACK	70.0	120/1/60	1	70.0	KIM	WFXX-70MH120-X	
2		P	DECORATIVE PENDANT	170.0	120/1/60	1	150.0	D'AC	D5239-2F26-120-X	
1		R3	4' DIA SURFACE MT CONVEX LENS	170.0	120/1/60	5	32.0	FOCAL POINT	FSD-44-5T8-U6-E-120-SM-CX-WH	
1		S	20' LINEAR, POLYMER BAFFLES	320.0	120/1/60	10	32.0	AXIS	SP-L-20'-T8-2-X-120-E-1-CAX	

NOTES:
1. COOPER & LITHONIA ARE APPROVED EQUAL AS MANUFACTURER. FIXTURES SHALL BE AS SPECIFIED OR EQUAL IN QUALITY AND IN APPEARANCE. SUPPLIER MAY BE REQUIRED TO PROVIDE PHOTOMETRIC ANALYSES TO PROVE EQUAL IN PERFORMANCE.

2ND FLOOR GENERAL NOTES

1. PROVIDE MOTION CONTROL SWITCHES ON ALL OFFICES, BATHROOMS, STORAGE ROOMS AND OTHER AREAS IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES.
2. OPERATION OF THE FACILITY LIGHTING CONTROLLER SHALL BE IN FULL ACCORDANCE WITH LOCAL, STATE AND NATIONAL ENERGY CODES.



1 E2.02 MAIN BUILDING 2ND FLOOR LIGHTING PLAN

SCALE: 0' 8'

ELECTRICAL MAIN BUILDING 2ND FLOOR LIGHTING PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

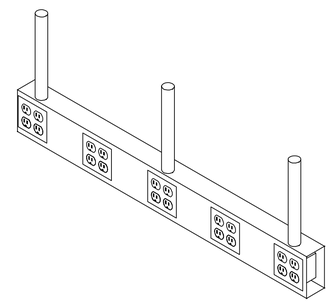
DAVID A. FOX NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER
July 14, 2010

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO. E2.02

11/23/2010 11:37:58 AM

ONE–CALL PILL BOX ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE															
ID	KEY	ELECTRICAL DATA MOCP AMPS	ELECTRICAL DATA VOLTAGE	LOCATION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	BASIS OF DESIGN DESCRIPTION	BASIS OF DESIGN CONDUIT & WIRE	FED FROM	CKT #	LOAD	DISCONNECT	CONTROL	REMARKS	NOTES
AC–3	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2) #10 THHN + # 12 GND	PP1	25,27	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AC–4	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2) #10 THHN + # 12 GND	PP1	29,31	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AH–1	⌀	20	208/3/60	RM 302	BRYANT	350AAV024060	AIR HANDLING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	37	200	YES	OTHERS		
C–3	⌀	20	208/1/60	WEST EXTERIOR	MITSUBISHI	PUY–A12NHA	CONDENSING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	25,27	3000	YES	OTHERS	PROVIDE DISCONNECT AT WALL	
C–5	⌀	25	208/1/60	WEST EXTERIOR	BRYANT	213ANA024	CONDENSING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	33,35	3000	YES	OTHERS	PROVIDE DISCONNECT AT WALL	
E–2	⌀	20	208/1/60	303	PANASONIC	FV–11VF2	EXHAUST FAN	3/4"C,(2) #10 THHN + # 12 GND	PP1	22	400	YES	OTHERS	CIRCUIT WITH LIGHT	
E–4	⌀	20	208/1/60	302	PANASONIC	FV–11VF2	EXHAUST FAN	3/4"C,(2) #10 THHN + # 12 GND	PP1	8	400	YES	OTHERS	CIRCUIT WITH LIGHT	
EH–1	⌀	20	120/1/60	WALL 303			ELECTRIC BASEBOARD	3/4"C,(2) #10 THHN + # 12 GND	PP1	18	1000	YES	OTHERS	SUPPLIED & INSTALLED BY OTHERS	
M1	⌀	20	120/1/60	WALL 304			MOTORIZED DAMPER	3/4"C,(2) #12 THHN + # 12 GND	PP1	36	400	YES	OTHERS	INTERLOCK WITH GENERATOR	
M2	⌀	20	120/1/60	WALL 304			MOTORIZED DAMPER	3/4"C,(2) #12 THHN + # 12 GND	PP1	36	400	YES	OTHERS	INTERLOCK WITH GENERATOR	
WH–5	⌀	20	208/1/60	302	PANASONIC	FV–11VF2	WATER HEATER	3/4"C,(2) #10 THHN + # 12 GND	PP1	30,32	3000	YES	OTHERS	CIRCUIT WITH LIGHT	



3 E2.03 IT ROOM CEILING PLUG MOLD DETAIL
SCALE: NONE

ONE–CALL PILL BOX LIGHT FIXTURE SCHEDULE										
Quantity	KEY	ID	DESCRIPTION	ELECTRICAL DATA LOAD VA	ELECTRICAL DATA VOLTAGE	LAMP DATA QTY	LAMP DATA WATTAGE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL OR SERIES	NOTES
8		B	2X2 ACRYLIC LENS, 2 CKT	65.0	120/1/60	3	17.0	LEDALITE	3222–D1–ST–T317–S–2–1–E	
6		D	1X4 SURFACE MOUNT	64.0	120/1/60	2	32.0	COLUMBIA	SM14–232–FSA12125–EU	
3		EM	EMERGENCY LIGHT	20.0	120/1/60	2	12.0	DUALLITE	LZ2	
2		EX	EXIT SIGN, WHITE THERMOPLASTIC	10.0	120/1/60	1	10.0	DUALLITE	LXURWE	
2		EX1	EGRESS EMERGENCY	20.0	120/1/60	1	20.0			
4		F	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4–132–EU–CSWG4	
6		O	ARCHITECTURAL WALLPACK	70.0	120/1/60	1	70.0	KIM	WFXX–70MH120–X	

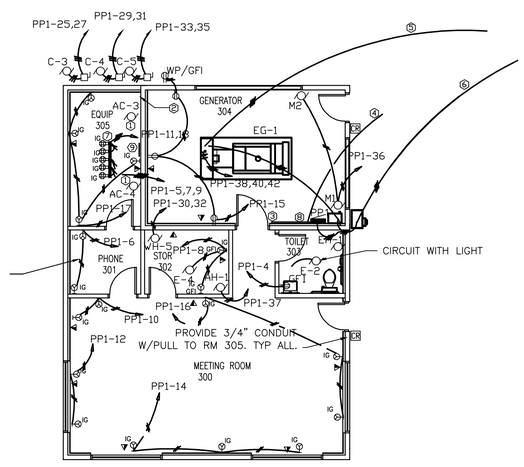
NOTES:
1. COOPER & LITHONIA ARE APPROVED EQUAL AS MANUFACTURER. FIXTURES SHALL BE AS SPECIFIED OR EQUAL IN QUALITY AND IN APPEARANCE. SUPPLIER MAY BE REQUIRED TO PROVIDE PHOTOMETRIC ANALYSES TO PROVE EQUAL IN PERFORMANCE.

PILL BOX POWER GENERAL NOTES

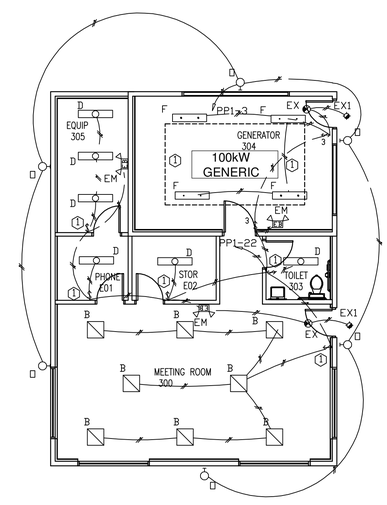
1. PANEL PP1 SHALL BE ISOLATED GROUND PANEL. ALL RECEPTACLES CONNECTED TO THIS PANEL SHALL BE ISOLATED GROUND WITH AN INDIVIDUAL, DEDICATED, GROUND BACK TO THE PANEL.

1 PILL BOX POWER KEY NOTES

1. SPLIT SYSTEM IT ROOM AIR CONDITIONING UNIT.
2. TWO (2) EMPTY CONDUITS EXTENDING TO MAIN BUILDING IT ROOM. VERIFY LOCATION AND TERMINATION WITH OWNER PRIOR TO INSTALL.
3. 4'x4'x3/4" PLYWOOD TELCO BACKBOARD. MOUNT AT 36" AFF.
4. 3" EMPTY CONDUIT TO PROPERTY LINE AT EAST PROPERTY LINE.
5. POWER & DATA CONDUITS TO MAIN BUILDING EMERGENCY GENERATOR DISCONNECT.
6. UTILITY FEED FROM UTILITY TRANSFORMER.
7. 6000 MOLDING, AT CEILING, WITH OUTLETS. SEE DETAIL. VERIFY LOCATION AND ORIENTATION WITH OWNER PRIOR TO ROUGH–IN.
8. STORM COOPER COMPONENTS SCGB–7KT .25"X4"X16" (OR EQUAL) GROUND BAR. CONNECT TO PILL BOX GROUND SYSTEM.
9. STORM COOPER COMPONENTS SCGB–7KT .25"X4"X16" (OR EQUAL) GROUND BAR. CONNECT TO PILL BOX BUS BAR WITH 1" X .35 FLAT BRAIDED COPPER, IN CONDUIT & CONTINUOUS BETWEEN BUS BARS. ARCOR UPB 1.0 OR EQUAL AND APPROVED.



2 E2.03 ELECTRICAL POWER – PILL BOX
SCALE: 0' 8'



1 E2.03 ELECTRICAL LIGHTING – PILL BOX
SCALE: 0' 8'

PILL BOX LIGHTING GENERAL NOTES

1. PROVIDE MOTION CONTROL SWITCHES ON ALL OFFICES, BATHROOMS, STORAGE ROOMS AND OTHER AREAS IN ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES.

ELECTRICAL PILL BOX LIGHTING & POWER PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EVE NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO. E2.03

11/23/2010 11:38:11 AM

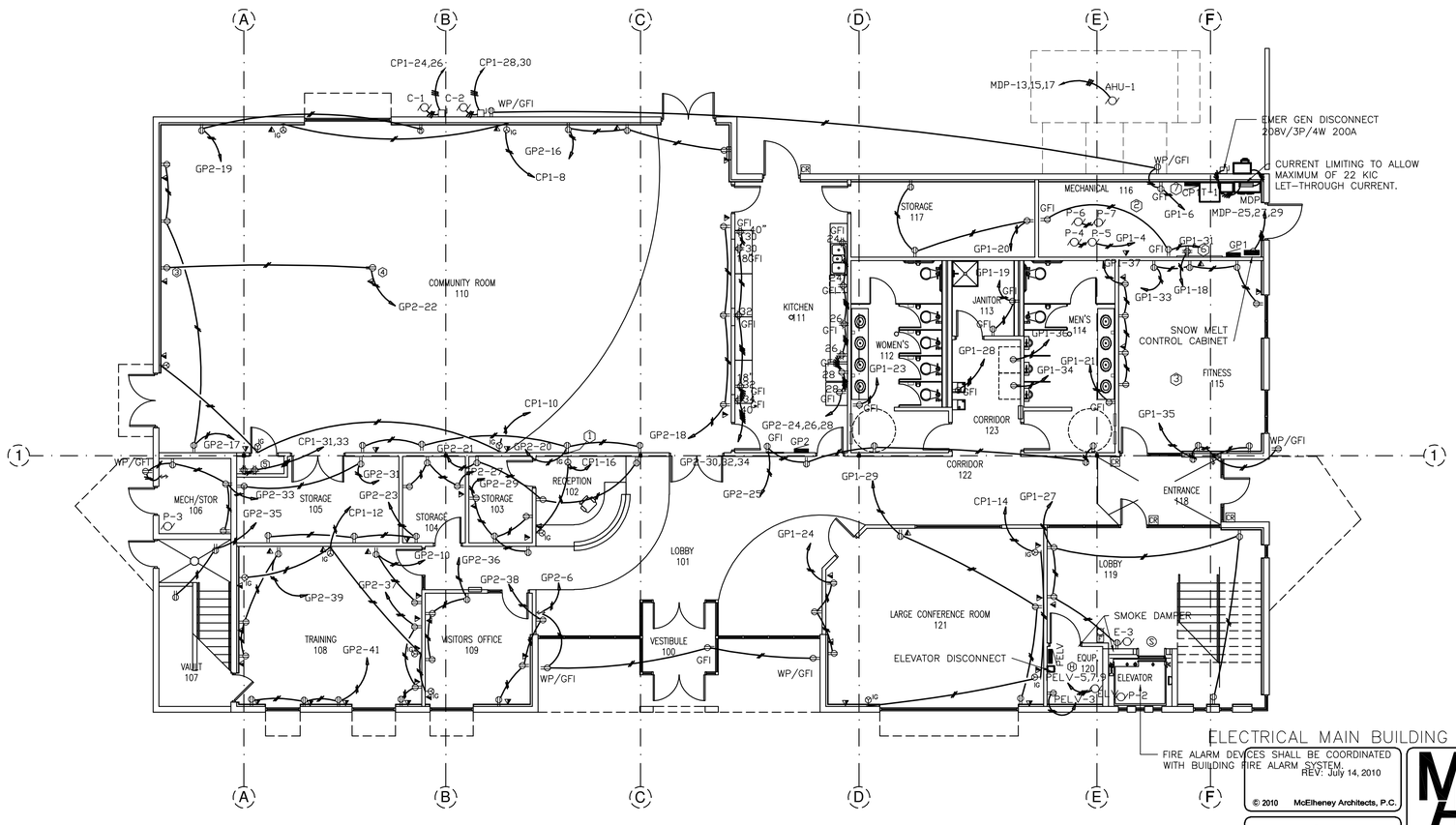
ONE–CALL MAIN BUILDING 1ST FLOOR ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE															
ID	KEY	ELECTRICAL DATA		LOCATION	BASIS OF DESIGN				FED FROM	CKT #	LOAD	DISCONNECT	CONTROL	REMARKS	NOTES
		MOCP AMPS	VOLTAGE		MANUFACTURER	MODEL NUMBER	DESCRIPTION	CONDUIT & WIRE							
AHU–1	⌀	300	208/3/60	NW EXTERIOR	AAON	RN–040–8–0–EA09	GND MTD ROOFTOP UNIT	3"C,(3)300KCMIL+#4GND	MDP	13,15,17	85800	YES	OTHERS		
C–1	⌀	30	208/1/60	WEST EXTERIOR			CONDENSING UNIT	3/4"C,(2) #10 THHN + #10 GND	CP1	24,26	3800	YES	OTHERS		
C–2	⌀	30	208/1/60	WEST EXTERIOR			CONDENSING UNIT	3/4"C,(2) #10 THHN + #10 GND	CP1	28,30	3800	YES	OTHERS		
E–3	⌀	20	120/1/60	AT ELEV RM		SERIES 100	EXHAUST FAN	3/4"C,(2) #10 THHN + #12 GND	PELV	2	200	YES	OTHERS		
ELV	⌀	0	208/3/60	RM 120			ELEVATOR MOTOR	1 1/4"C,(3) #4 + #8 GND	PELV	5,7,9	15000	YES	OTHERS		
P–2	⌀	20	120/1/60	ELEVATOR PIT	WEIL	1408	SUBMERSIBLE PUMP	3/4"C,(2) #10 THHN + #12 GND	PELV	4	900	YES	OTHERS		
P–3	⌀	20	120/1/60	RM 106		SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–4	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–5	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–6	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	2	400	YES	OTHERS		
P–7	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	2	400	YES	OTHERS		

① 1ST FLOOR KEY NOTES

1. (2) EMPTY 2" CONDUITS TO PILL BOX. RISE IN WALL TO IT ROOM ABOVE. RISE IN WALL OF IT ROOM AND PROVIDE PULL/J–BOX AT 12" AFF. VERIFY LOCATION WITH OWNER PRIOR TO ROUGH–IN.
2. SIX (6) 2" CONDUITS UP TO CEILING OF 2ND FLOOR. COORDINATE WITH MECHANICAL EQUIPMENT. EXTEND AS NECESSARY TO CLEAR MECHANICAL EQUIPMENT.
3. RECEPTACLE & DATA HIGH. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH–IN.
4. RECEPTACLE & DATA AT CEILING. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH–IN. PROVIDE 1" CONDUIT DOWN TO 18" AFF ON SOUTH WALL. PROVIDE 4" SQUARE FLUSH J–BOX FOR VIDEO CABLE.
5. PROVIDE 4'WX8'HX3/4"THICK PLYWOOD BACKBOARD. MOUNT (2) QUADRAPLEX OUTLETS @ 48" & 60" AFF. EXTEND CONDUITS TO EDGE OF BACKBOARD.
6. 4'X4'X3/4" TELCO BACKBOARD. PROVIDE 3" CONDUIT TO WEST PROPERTY LINE.
7. STORM COOPER COMPONENTS SCGB–7KT .25"X4"X16" (OR EQUAL) GROUND BAR. CONNECT TO MAIN BUILDING GROUND SYSTEM

1ST FLOOR GENERAL NOTES

1. PANEL CP1 SHALL BE ISOLATED GROUND PANEL. ALL RECEPTACLES CONNECTED TO THIS PANEL SHALL BE ISOLATED GROUND WITH AN INDIVIDUAL, DEDICATED, GROUND BACK TO THE PANEL.



1 E3.01 ELECTRICAL POWER PLAN 1ST FLOOR

SCALE: 0' 8'

ELECTRICAL MAIN BUILDING 1ST FLOOR POWER PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

DAVID A. EYE
NEW MEXICO
17593
LICENSED PROFESSIONAL ENGINEER
July 14, 2010

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E3.01

11/23/2010 11:38:29 AM

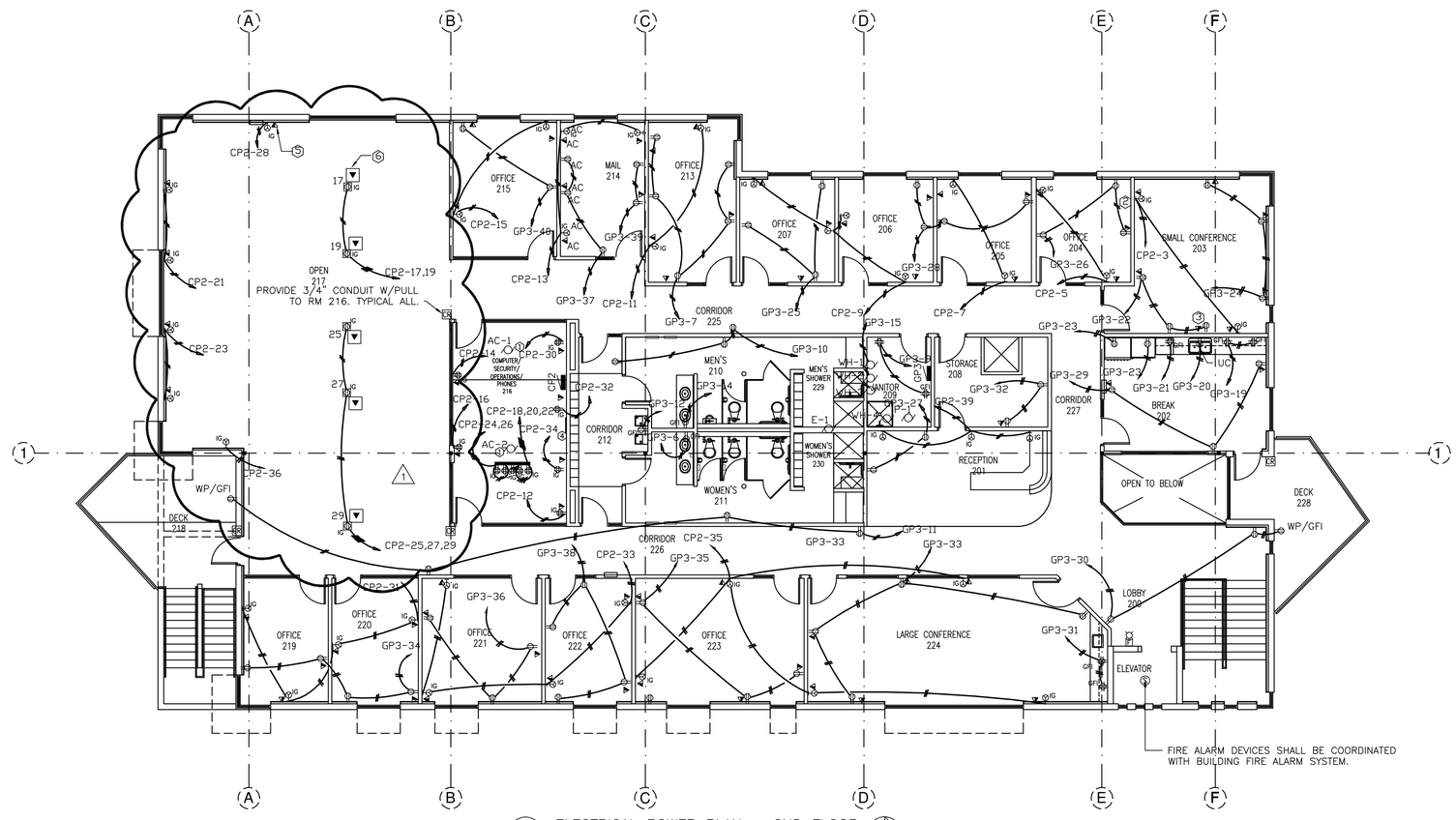
ONE–CALL MAIN BUILDING 2ND FLOOR ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE																
ID	KEY	ELECTRICAL DATA		LOCATION	BASIS OF DESIGN				FED FROM	CKT #	LOAD	DISCONNECT	CONTROL	REMARKS	NOTES
		MOCP AMPS	VOLTAGE		MANUFACTURER	MODEL NUMBER	DESCRIPTION	CONDUIT & WIRE							
AC–1	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2)#10 THHN + #12 GND	CP1	24,26	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AC–2	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2)#10 THHN + #12 GND	CP1	28,30	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
E–1	⌀	20	120/1/60	2ND FLOOR BATH	COOKE	CED 120C15D	EXHAUST FAN	3/4"C,(2) #10 THHN + #12 GND	GP3	13	600	YES	OTHERS	WITH MOTORIZED DAMPER	
WH–1	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–2	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–3	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–4	⌀	20	208/1/60	JANITOR 209			6 GALLON WATER HEATER	3/4"C,(2)#10 THHN + #12 GND	GP3	16,18	3000	YES	OTHERS	ABOVE CEILING	

① 2ND FLOOR KEY NOTES

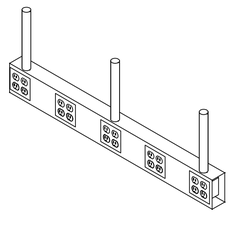
1. AC UNIT TO BE WIRED FROM ASSOCIATED OUTSIDE CONDENSING UNIT. SEE MANUFACTURER'S INSTRUCTIONS FOR DETAILS.
2. SIX (6) 2" CONDUITS DOWN TO MECHANICAL ROOM. EXTEND TO ABOVE CEILING AND CAP.
3. DUPLEX & DATA HIGH FOR PROJECTION.
4. STORM COOPER COMPONENETS SCGB–7KT .25"X4"X16" (OR EQUAL) GROUND BAR. VERIFY LOCATION AND ORIENTATION WITH OWNER PRIOR TO INSTALL. CONNECT TO MAIN BUILDING GROUND BAR IN MECHANICAL ROOM WITH 1" X .35 FLAT BRAIDED COPPER, IN CONDUIT & CONTINUOUS BETWEEN BUS BARS. ARCOR UPB 1.0 OR EQUAL AND APPROVED.
5. TEL/DATA OUTLET. PROVIDE 1" CONDUIT UP TO EXPOSED CEILING (TYP ALL). PROVIDE PULL CABLE
6. FLOOR TEL/DATA. PROVIDE CONDUIT THROUGH FLOOR AND UP WALL TO EXPOSED CEILING. LABEL AND PROVIDE PULL CABLE

2ND FLOOR GENERAL NOTES

1. PANEL CP2 SHALL BE ISOLATED GROUND PANEL. ALL RECEPTACLES CONNECTED TO THIS PANEL SHALL BE ISOLATED GROUND WITH AN INDIVIDUAL, DEDICATED, GROUND BACK TO THE PANEL.



1 E3.02 ELECTRICAL POWER PLAN – 2ND FLOOR
SCALE: 0' 8'



2 E3.02 IT ROOM CEILING PLUG MOLD DETAIL
SCALE:

8/31/10 REV 1 REVISED FLOOR POWER LAYOUT
ELECTRICAL MAIN BUILDING 2ND FLOOR POWER PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

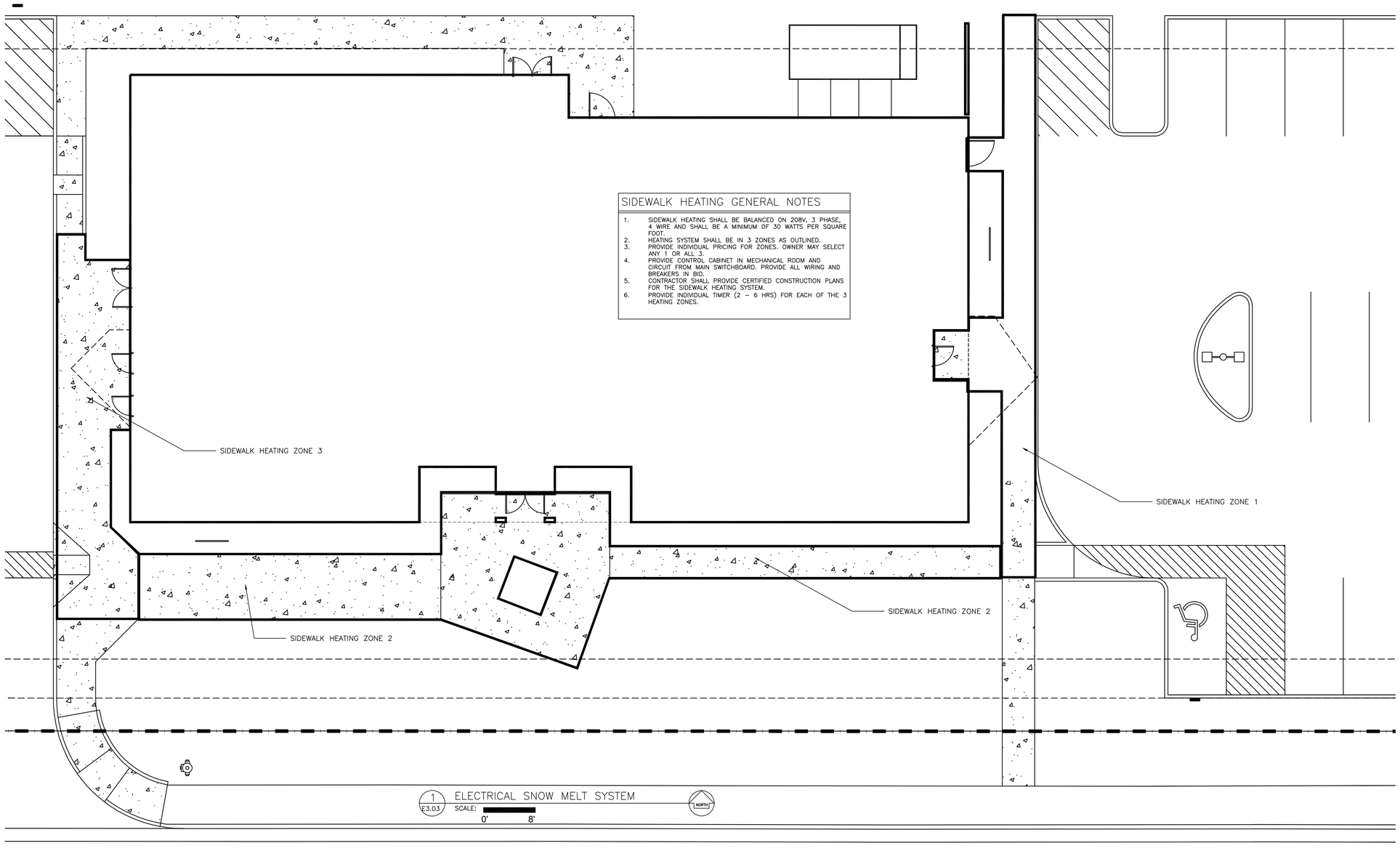
DAVID A. EYE NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO. E3.02

11/23/2010 11:38:54 AM



SIDEWALK HEATING GENERAL NOTES

1. SIDEWALK HEATING SHALL BE BALANCED ON 208V, 3 PHASE, 4 WIRE AND SHALL BE A MINIMUM OF 30 WATTS PER SQUARE FOOT.
2. HEATING SYSTEM SHALL BE IN 3 ZONES AS OUTLINED.
3. PROVIDE INDIVIDUAL PRICING FOR ZONES. OWNER MAY SELECT ANY 1 OR ALL 3.
4. PROVIDE CONTROL CABINET IN MECHANICAL ROOM AND CIRCUIT FROM MAIN SWITCHBOARD. PROVIDE ALL WIRING AND BREAKERS IN BID.
5. CONTRACTOR SHALL PROVIDE CERTIFIED CONSTRUCTION PLANS FOR THE SIDEWALK HEATING SYSTEM.
6. PROVIDE INDIVIDUAL TIMER (2 – 6 HRS) FOR EACH OF THE 3 HEATING ZONES.

ELECTRICAL SNOW MELT SYSTEM

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EYE
NEW MEXICO
17593
LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

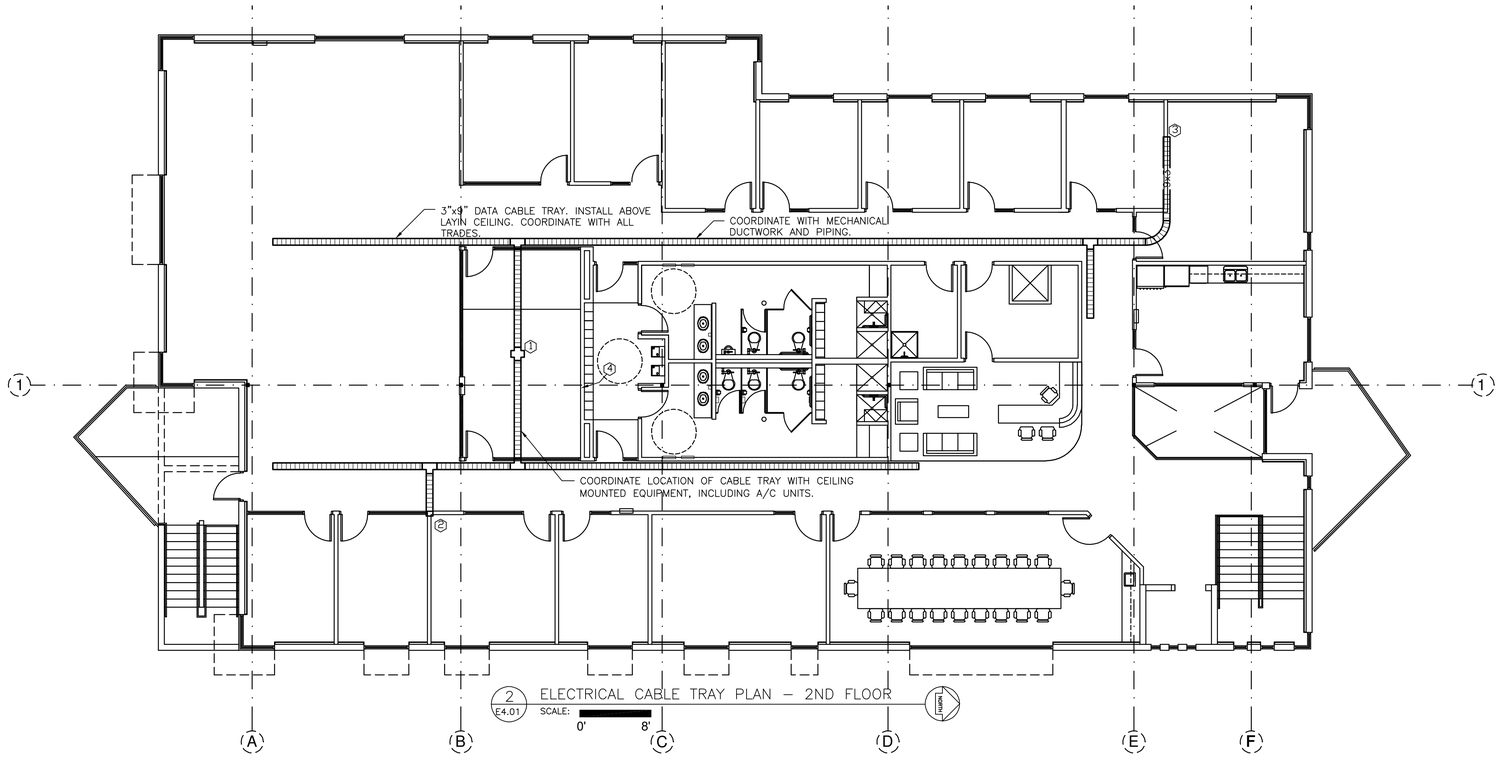
New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E3.03

11/23/2010 11:39:06 AM

① 2ND FLOOR KEY NOTES

1. COORDINATE LOCATION OF "T" WITH IT DEPARTMENT PRIOR TO INSTALLATION.
2. SIX (6) 2" EMPTY CONDUITS UP FROM LOWER LEVEL. COORDINATE WITH CABLE TRAY.
3. SIX (6) 2" CONDUITS UP FROM MECHANICAL ROOM TO ABOVE CEILING. CAP AND LABEL.
4. EMPTY CONDUITS EXTENDING TO PILL BOX BUILDING.

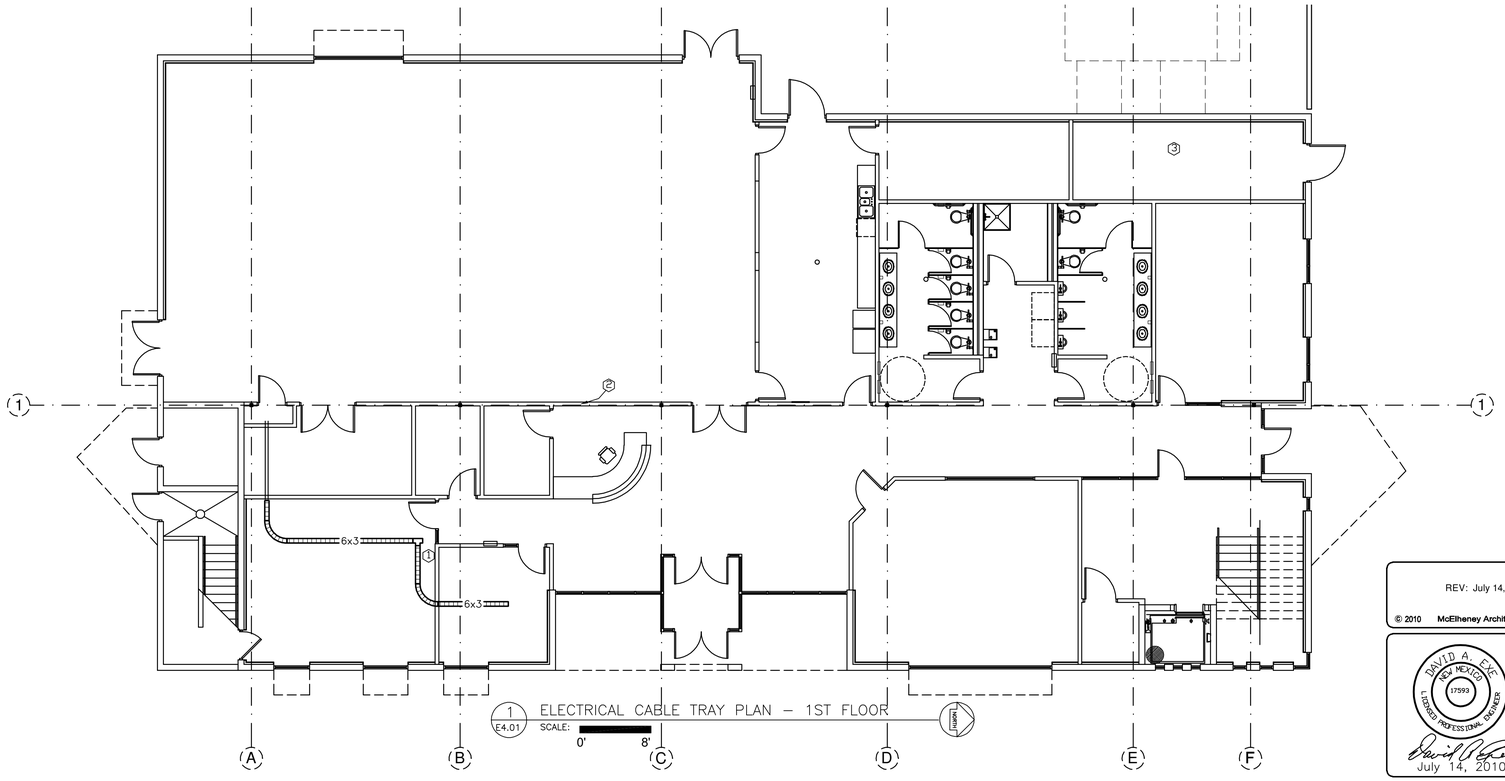


2 E4.01 ELECTRICAL CABLE TRAY PLAN – 2ND FLOOR

SCALE: 0' 8'

① 1ST FLOOR KEY NOTES

1. CONDUITS UP TO 2ND FLOOR CABLE TRAY.
2. CONDUITS FROM PILL BOX BUILDING AND UP TO IT ROOM ABOVE. VERIFY LOCATION AND TERMINATION AT IT ROOM.
3. SIX (6) 2" CONDUITS UP TO 2ND FLOOR TO ABOVE CEILING. CAP AND LABEL.



1 E4.01 ELECTRICAL CABLE TRAY PLAN – 1ST FLOOR

SCALE: 0' 8'

ELECTRICAL CABLE TRAY PLAN

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EKE NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER

July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E4.01

11/23/2010 11:39:09 AM

PANEL PELV

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	SURFACE
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	22000
MINIMUM BUS CAPACITY (A):	100 A	NOTES:	----
MAIN O.C. DEVICE (A):	100 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	SPARE	20	1	0	400					1	20	LTG	2
3	RECPT	20	1			180	900			1	20	SUMP PUMP	4
5,7,9	ELEVATOR MOTOR	70	3					5000	0	1	20	SPARE	6
5,7,9	ELEVATOR MOTOR	70	3	5000	0					1	20	SPARE	8
5,7,9	ELEVATOR MOTOR	70	3			5000	0			1	20	SPARE	10
11	SPACE	20	1					0	0	1	20	SPACE	12
				CONNECTED LOAD PHASE TOTALS (VA)									
				5400		6080		5000					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	0.2	1.25	0.3
Motors	1.1	1.00	1.1
Motors (Largest)	15.0	1.25	18.8
Receptacles (0 – 10 KVA)	0.2	1.00	0.2
TOTAL:	16.5		20.3
LOAD (AMPS):	45.7		56.3

DEMAND LOAD	20.3 KVA
SPARE CAPACITY	12.1 KVA
SPARE CAPACITY	33.7 AMPS
SPARE CAPACITY	37 %
PHASE BALANCE	
A TO B	89 %
B TO C	82 %
C TO A	93 %

PANEL PP1

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	SURFACE
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	0
MINIMUM BUS CAPACITY (A):	100 A	NOTES:	----
MAIN O.C. DEVICE (A):	100 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	SPARE	20	1	0	0					1	20	SPARE	2
3	LIGHTING EXTERIOR	20	1			420	180			1	20	RECPT 303	4
5	RECPT CEILING 305	20	1					400	360	1	20	RECPT TELEPHONE	6
7	RECPT CEILING 305	20	1	400	760					1	20	RECEPT OFFICE	8
9	RECPT CEILING 305	20	1			400	360			1	20	RECPT 300 SW	10
11	RECPT CEILING 305	20	1					400	360	1	20	RECPT 300 S E	12
13	RECPT CEILING 305	20	1	400	540					1	20	RECPT 300 E	14
15	RECPT 304	20	1			720	540			1	20	RECPT 300 N	16
17	RECPT 305	20	1					720	1000	1	20	ELECTRIC HEAT 303	18
19	SPARE	20	1	0	----					----	----	----	----
----	----	----	----			----	1540			1	20	LTG & BATH FAN	22
----	----	----	----					----	0	1	20	SPARE	24
25,27	C-3	25	2	1800	1750					2	25	PARKING LOT LTG	26,28
25,27	C-3	25	2			1800	0			2	25	PARKING LOT LTG	26,28
29,31	C-4	25	2					1800	1500	2	20	WATER HEATER	30,32
29,31	C-4	25	2	1800	1500					2	20	WATER HEATER	30,32
33,35	C-5	20	2			1500	----			----	----	----	----
33,35	C-5	20	2					1500	800	1	20	MOTORIZED DAMPERS	36
37	AH-1	20	1	200	300					1	20	EM GEN HEATER	38
39	SPARE	20	1			0	300			1	20	EM GEN BAT CHRGR	40
41	SPARE	20	1					0	300	1	20	EM GEN CONTROLLER	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				9450		7760		9140					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	3.3	1.25	4.1
Motors	13.0	1.00	13.0
Motors (Largest)	3.0	1.25	3.8
Receptacles (0 – 10 KVA)	7.0	1.00	7.0
TOTAL:	26.3		27.9
LOAD (AMPS):	73.1		77.5

DEMAND LOAD	27.9 KVA
SPARE CAPACITY	4.5 KVA
SPARE CAPACITY	12.5 AMPS
SPARE CAPACITY	14 %
PHASE BALANCE	
A TO B	82 %
B TO C	85 %
C TO A	97 %

PANEL GP1

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	SURFACE
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	22000
MINIMUM BUS CAPACITY (A):	225 A	NOTES:	----
MAIN O.C. DEVICE (A):	225 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	EXT LTG WALL PACKS	20	1	1260	1200					1	20	P-2, P-6, P-7	2
3	LTG 116, 117	20	1			300	1200			1	20	P-3, P-4, P-5	4
5	SPARE	20	1					0	540	1	20	RECPT 116	6
7,9,11	SPACE	80	3	0	----					----	----	----	----
7,9,11	SPACE	80	3			0	----			----	----	----	----
7,9,11	SPACE	80	3					0	----	----	----	----	----
13	SPARE	20	1	0	0					2	20	FUTURE SIGN	14,16
----	----	----	----			----	0			2	20	FUTURE SIGN	14,16
----	----	----	----					----	360	1	20	TELCO BOARD	18
19	RECPT 119	20	1	360	540					1	20	RECPT 117 N	20
21	RECPT 114	20	1			180	0			1	20	SPARE	22
23	RECPT 112	20	1					180	540	1	20	RECPT 121 S	24
25	SPARE	20	1	0	0					1	20	SPA6E	26
27	RECPT 119	20	1			540	180			1	20	DRINK FNTN	28
29	RECPT 121	20	1					540	0	1	20	DRINK FNTN	30
31	RECPT 116 N E	20	1	180	0					1	20	SPACE	32
33	RECPT 115 N	20	1			720	180			1	20	VENDING	34
35	RECPT 115 S	20	1					720	180	1	20	VENDING	36
37	RECPT 115 W	20	1	720	0					1	20	SPACE	38
39	SPACE	20	1			0	0			1	20	SPACE	40
41	SPACE	20	1					0	0	1	20	SPACE	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				4260		3300		3060					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	1.6	1.25	2.0
Motors	2.0	1.00	2.0
Motors (Largest)	0.4	1.25	0.5
Receptacles (0 – 10 KVA)	6.7	1.00	6.7
TOTAL:	10.6		11.1
LOAD (AMPS):	29.5		30.8

DEMAND LOAD	11.1 KVA
SPARE CAPACITY	59.1 KVA
SPARE CAPACITY	164.2 AMPS
SPARE CAPACITY	84 %
PHASE BALANCE	
A TO B	77 %
B TO C	93 %
C TO A	72 %

PANEL CP2

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	RECESSED
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	10000
MINIMUM BUS CAPACITY (A):	225 A	NOTES:	----
MAIN O.C. DEVICE (A):	225 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	SPARE	20	1	0	0					1	20	SPARE	2
3	RECPT 203	20	1			720	0			1	20	SPARE	4
5	RECPT 204	20	1					1080	0	1	20	LIGHTING S W	6
7	RECPT 205 & 206	20	1	720	0					1	20	SPARE	8
9	RECPT 206 & 207	20	1			1440	0			1	20	SPARE	10
11	RECPT 213	20	1					720	1000	1	20	RECPT 216 NE	12
13	RECPT 214	20	1	1080	1000					1	20	RECPT 216 WN	14
15	RECPT 215	20	1			720	1000			1	20	RECPT WC	16
17	RECPT 217 FLOOR	20	1					180	1000	1	20	RECPT 216 CEILING	18
19	RECPT 217 FLOOR	20	1	180	1000					1	20	RECPT 216 CEILING	20
21	RECPT 217	20	1			1440	1000			1	20	RECPT 216 CEILING	22
23	RECPT 217 WS	20	1					1440	1000	1	20	RECPT 216 CEILING	24
25	RECPT 217 FLOOR	20	1	180	1000					1	20	RECPT 216 CEILING	26
27	RECPT 217 FLOOR	20	1			180	720			1	20	RECPT 217 ES	28
29	RECPT 217 FLOOR	20	1					180	360	1	20	RECPT 216 E N	30
31	RECPT 219 & 220	20	1	1440	360					1	20	RECPT 216 E C	32
33	RECPT 221 & 222	20	1			1080	1000			1	20	RECPT 216 E S	34
35	RECPT 223 & 224	20	1					1800	720	1	20	RECEPT 217	36
37	RECPT 217 E	20	1	0	0					1	20	SPARE	38
39	RECPT 201	20	1			1080	0			1	20	SPARE	40
41	SPARE	20	1					0	0	1	20	SPARE	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				6960		10380		9480					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Receptacles (0 – 10 KVA)	10.0	1.00	10.0
Receptacles (Over 10 KVA)	16.8	0.50	8.4
TOTAL:	26.8		18.4
LOAD (AMPS):	74.4		51.1

DEMAND LOAD	18.4 KVA
SPARE CAPACITY	51.8 KVA
SPARE CAPACITY	143.9 AMPS
SPARE CAPACITY	74 %
PHASE BALANCE	
A TO B	67 %
B TO C	91 %
C TO A	73 %

PANEL GP3

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	RECESSED
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	10000
MINIMUM BUS CAPACITY (A):	225 A	NOTES:	----
MAIN O.C. DEVICE (A):	225 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	LTG SE	20	1	0	840					1	20	LTG 217	2
3	LTG NE & CORR	20	1			1490	1200			1	20	LTG NE	4
5	LTG 202 & OPEN AREA	20	1					380	940	1	20	LTG CENTER	6
7	RECPT 213	20	1	900	1490					1	20	SPARE	8
9	RECPT 209	20	1			720	540			1	20	RECPT 210	10
11	RECPT 226	20	1					720	180	1	20	DRINK FNTN	12
13	BATHROOM FAN	20	1	600	180					1	20	RECPT 210	14
15	WH-1, WH-2, WH-3	20	1			360	1500			2	20	WH-4	16,18
17	SPARE	20	1					0	1500	2	20	WH-4	16,18
19	RECPT 202	20	1	720	180					1	20	RECPT 202	20
21	RECPT 202	20	1			360	540			1	20	RECPT 203	22
23	RECPT 202	20	1					360	540	1	20	RECPT 203 N	24
25	RECPT 207	20	1	540	540					1	20	RECPT 204	26
27	RECPT 201	20	1			360	720			1	20	RECPT 205 & 2J06	28
29	RECPT 202	20	1					540	540	1	20	RECPT 200	30
31	RECPT 224	20	1	720	360					1	20	RECPT 208	32
33	RECPT 224	20	1			720	720			1	20	RECPT 219, 220	34
35	RECPT 223	20	1					540	540	1	20	RECPT 221	36
37	RECPT 214	20	1	540	720					1	20	RECPT 222	38
39	RECPT 214	20	1			360	360			1	20	OFFICE 215	40
41	SPARE	20	1					0	0	1	20	SPARE	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				8330		9950		6780					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	5.6	1.25	7.0
Motors	1.0	1.00	1.0
Motors (Largest)	3.0	1.25	3.8
Receptacles (0 – 10 KVA)	10.0	1.00	10.0
Receptacles (Over 10 KVA)	4.9	0.50	2.5
TOTAL:	24.5		24.2
LOAD (AMPS):	68.1		67.3

DEMAND LOAD	24.2 KVA
SPARE CAPACITY	46.0 KVA
SPARE CAPACITY	127.7 AMPS
SPARE CAPACITY	66 %
PHASE BALANCE	
A TO B	84 %
B TO C	68 %
C TO A	81 %

DISTRIBUTION BOARD MDP

120/208 VOLTS	3 ϕ 4 W	1000 A AMP MLO 875 A AMP BUS	100000 A.I.C. RATING SURFACE MOUNTED

CKT NO.	TRIP/ POLES	DESCRIPTION	DEMAND LOAD VA	WIRE SIZE
1,3,5	225/3	PANEL GP1	11110	3°C, (4) #3/0 CU + #4 GND
2,4,6	225/3	PANEL GP3	24750	3°C, (4) #3/0 CU + #4 GND
7,9,11	225/3	PANEL GP2	24433	3°C, (4) #3/0 CU + #4 GND
8,10,12	225/3	SPARE	0	<Undefined>
13,15,17	300/3	AHU-1	85800	3°C, (4) #300 KCMIL CU + #4 GND
14,16,18	100/3	PANEL PELV	20280	1 1/4°C, (4) #3 CU + #8 GND
19,21,23	225/3	PANEL CP1	31665	3°C, (4) #3/0 CU + #4 GND
20,22,24	100/3	----	0	<Undefined>
25,27,29	300/3	SIDEWALK MELTING (SM)	75000	3°C, (4) #300 KCMIL CU + #4 GND
26,28,30	20/3	SPACE	0	<Undefined>
				<Undefined>

Load Category	Connected Load (KVA) x	Demand Factor =	Demand Load (KVA)
Lighting	14.2	1.25	17.8
Motors	31.3	1.00	31.3
Motors (Largest)	85.8	1.25	107.3
Receptacles (0 – 10 KVA)	10.0	1.00	10.0
Receptacles (Over 10 KVA)	132.7	0.50	66.3

TOTAL CONN. LOAD:	274.0 KVA
TOTAL DEMAND LOAD:	232.6 KVA
TOTAL DEMAND LOAD:	645.8 AMPS
SPARE CAPACITY:	229.2 AMPS

PANEL CP1

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	SURFACE
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	22000
MINIMUM BUS CAPACITY (A):	225 A	NOTES:	WITH TVSS & 200% NEUTRAL
MAIN O.C. DEVICE (A):	225 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	SPARE	20	1	0	6960					3	225	PANEL CP2	2,4,6
3	LIGHTING PARKING LOT	20	1			500	10380			3	225	PANEL CP2	2,4,6
5	SPARE	20	1					0	9480	3	225	PANEL CP2	2,4,6
7,9,11	SPARE	20	3	0	720					1	20	RECPT 110 W	8
7,9,11	SPARE	20	3			0	1080			1	20	RECPT 110 S E	10
7,9,11	SPARE	20	3					0	1440	1	20	RECPT 108	12
13,15,17	SPACE	20	3	0	1080					1	20	RECPT 121	14
13,15,17	SPACE	20	3			0	720			1	20	RECPT 102	16
13,15,17	SPACE	20	3					0	0	1	20	SPARE	18
19,21,23	SPACE	20	3	0	----					----	----	----	----
19,21,23	SPACE	20	3			0	0			1	20	SPARE	22
19,21,23	SPACE	20	3					0	2200	2	40	C-1	24,26
25	SPARE	20	1	0	2200					2	40	C-1	24,26
27	SPARE	20	1			0	2200			2	40	C-2	28,30
29	SPARE	20	1					0	2200	2	40	C-2	28,30
31	RM 110 A/V	20	1	360	0					1	20	SPARE	32
33	RM 110 A/V	20	1			360	0			1	20	SPACE	34
35	SPACE	20	1					0	0	1	20	SPACE	36
37	SPACE	20	1	0	0					1	20	SPACE	38
39	SPACE	20	1			0	0			1	20	SPACE	40
41	SPACE	20	1					0	0	1	20	SPACE	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				11320		15240		15320					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	0.5	1.25	0.6
Motors	5.0	1.00	5.0
Motors (Largest)	3.8	1.25	4.8
Receptacles (0 – 10 KVA)	10.0	1.00	10.0
Receptacles (Over 10 KVA)	22.6	0.50	11.3
TOTAL:	41.9		31.7
LOAD (AMPS):	116.3		87.9

DEMAND LOAD	31.7 KVA
SPARE CAPACITY	40.4 KVA
SPARE CAPACITY	112.1 AMPS
SPARE CAPACITY	56 %
PHASE BALANCE	
A TO B	74 %
B TO C	99 %
C TO A	74 %

PANEL GP2

VOLTAGE (L-N):	120	ENCLOSURE TYPE:	----
VOLTAGE (L-L):	208	MOUNTING:	SURFACE
PHASES, WIRES:	3 ϕ 4 W	AIC RATING (A):	22000
MINIMUM BUS CAPACITY (A):	225 A	NOTES:	----
MAIN O.C. DEVICE (A):	225 A		

CKT NO	DESCRIPTION	TRIP AMPS	POLE	PHASE LOADS (VA) A		PHASE LOADS (VA) B		PHASE LOADS (VA) C		POLE	TRIP AMPS	DESCRIPTION	CKT NO
1	LTG 110	20	1	440	760					1	20	LTG SE	2
3	LTG 110	20	1			800	1120			1	20	LTG 102	4
5	LTG 110	20	1					1890	540	1	20	RECPT EXT E	6
7	LTG 110	20	1	1890	0					1	20	SPARE	8
9	LTG 110 TRACK E	20	1			1200	360			1	20	RECPT 108	10
11	LTG LOBBY	20	1					1080	1050	1	20	LTG N W	12
13	LTG 119 & 121	20	1	960	0					1	20	SPARE	14
15	SPARE	20	1			0	540			1	20	RECPT 110 NW	16
17	RECPT 110 S E	20	1					540	540	1	20	RECPT 110 N	18
19	RECPT 110 WS	20	1	360	720					1	20	RECPT 110 E	20
21	RECPT 102 & 103	20	1			540	360			1	20	RECPT 110S HIGH	22
23	RECPT 105 & 104	20	1					540	360	1	20	RECPT NW	24
25	RECPT 122 & 111	20	1	900	360					1	20	RECPT NC	26
27	RECPT 104	20	1			540	360			1	20	RECPT NE	28
29	RECPT 103	20	1					720	360	1	20	RECPT 111 SW	30
31	RECPT 105 E S	20	1	360	360					1	20	RECPT SC	32
33	RECPT 106	20	1			720	180			1	20	RECPT SE	34
35	RECPT 107	20	1					360	540	1	20	RECPT 109	36
37	RECPT 108	20	1	540	540					1	20	RECPT 109	38
39	RECPT 108	20	1			540	0			1	20	SPARE	40
41	RECPT 108	20	1					540	0	1	20	SPARE	42
				CONNECTED LOAD PHASE TOTALS (VA)									
				8190		7260		9060					

	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
Lighting	6.3	1.25	7.9
Receptacles (0 – 10 KVA)	10.0	1.00	10.0
Receptacles (Over 10 KVA)	3.3	0.50	1.7
TOTAL:	19.6		19.6
LOAD (AMPS):	54.5		54.3

DEMAND LOAD	19.6 KVA
SPARE CAPACITY	50.7 KVA
SPARE CAPACITY	140.7 AMPS
SPARE CAPACITY	72 %
PHASE BALANCE	
A TO B	89 %
B TO C	80 %
C TO A	90 %

DISTRIBUTION BOARD GEN-1

120/208 VOLTS	3 ϕ 4 W	300 A AMP MLO 270 A AMP BUS	10000 A.I.C. RATING RECESSED MOUNTED

CKT NO.	TRIP/ POLES	DESCRIPTION	DEMAND LOAD VA	WIRE SIZE
1,3,5	100/3	PANEL PP1	27928	1 1/4°C, (4) #3 CU + #8 GND

Load Category	Connected Load (KVA) x	Demand Factor =	Demand Load (KVA)
Lighting	3.3	1.25	4.1
Motors	13.0	1.00	13.0
Motors (Largest)	3.0	1.25	3.8
Receptacles (0 – 10 KVA)	7.0	1.00	7.0

TOTAL CONN. LOAD:	26.3 KVA
TOTAL DEMAND LOAD:	27.9 KVA
TOTAL DEMAND LOAD:	77.5 AMPS
SPARE CAPACITY:	192.5 AMPS

8/31/10 REV 1 REVISED FLOOR POWER LAYOUT
ELECTRICAL SCHEDULES & DETAILS SHEET 1

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EYE
NEW MEXICO
17593
LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E5.01

11/23/2010 11:39:30 AM

ONE–CALL MAIN BUILDING ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ID	KEY	ELECTRICAL DATA MOCP AMPS	ELECTRICAL DATA VOLTAGE	LOCATION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	BASIS OF DESIGN DESCRIPTION	BASIS OF DESIGN CONDUIT & WIRE	FED FROM	CKT #	LOAD	DISCONNECT	CONTROL	REMARKS	NOTES
AC–1	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2)#10 THHN + #12 GND	CP1	24,26	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AC–2	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2)#10 THHN + #12 GND	CP1	28,30	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AHU–1	⌀	300	208/3/60	NW EXTERIOR	AAON	RN–040–8–0–EA09	GND MTD ROOFTOP UNIT	3"C,(3)300KCMIL+#4GND	MDP	13,15,17	85800	YES	OTHERS		
C–1	⌀	30	208/1/60	WEST EXTERIOR			CONDENSING UNIT	3/4"C,(2) #10 THHN + #10 GND	CP1	24,26	3800	YES	OTHERS		
C–2	⌀	30	208/1/60	WEST EXTERIOR			CONDENSING UNIT	3/4"C,(2) #10 THHN + #10 GND	CP1	28,30	3800	YES	OTHERS		
E–1	⌀	20	120/1/60	2ND FLOOR BATH	COOKE	CED 120C15D	EXHAUST FAN	3/4"C,(2) #10 THHN + #12 GND	GP3	13	600	YES	OTHERS	WITH MOTORIZED DAMPER	
E–3	⌀	20	120/1/60	AT ELEV RM		SERIES 100	EXHAUST FAN	3/4"C,(2) #10 THHN + #12 GND	PELV	2	200	YES	OTHERS		
ELV	⌀	0	208/3/60	RM 120			ELEVATOR MOTOR	1 1/4"C,(3) #4 + #8 GND	PELV	5,7,9	15000	YES	OTHERS		
P–1	⌀	20	120/1/60	RM 209	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	2	400	YES	OTHERS		
P–2	⌀	20	120/1/60	ELEVATOR PIT	WEIL	1408	SUBMERSIBLE PUMP	3/4"C,(2) #10 THHN + #12 GND	PELV	4	900	YES	OTHERS		
P–3	⌀	20	120/1/60	RM 106		SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–4	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–5	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	4	400	YES	OTHERS		
P–6	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	2	400	YES	OTHERS		
P–7	⌀	20	120/1/60	MECH RM 116	BELL & GOSSETT	SERIES 100	HOT WATER CIRCULATING PUMP	3/4"C,(2) #10 THHN + #12 GND	GP1	2	400	YES	OTHERS		
WH–1	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–2	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–3	⌀	20	120/1/60	JANITOR 209			GAS WATER HEATER	3/4"C,(2)#12 THHN + #12 GND	GP3	15	120	YES	OTHERS		
WH–4	⌀	20	208/1/60	JANITOR 209			6 GALLON WATER HEATER	3/4"C,(2)#10 THHN + #12 GND	GP3	16,18	3000	YES	OTHERS	ABOVE CEILING	

ONE–CALL PILL BOX ELECTRICAL MECHANICAL EQUIPMENT SCHEDULE

ID	KEY	ELECTRICAL DATA MOCP AMPS	ELECTRICAL DATA VOLTAGE	LOCATION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	BASIS OF DESIGN DESCRIPTION	BASIS OF DESIGN CONDUIT & WIRE	FED FROM	CKT #	LOAD	DISCONNECT	CONTROL	REMARKS	NOTES
AC–3	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2) #10 THHN + # 12 GND	PP1	25,27	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AC–4	⌀	20	120/1/60	IT 216	MITSUBISHI	PKA–A12GAL	SPLIT SYSTEM A/C	3/4"C,(2) #10 THHN + # 12 GND	PP1	29,31	600	YES	OTHERS	CIRCUIT THROUGH COMPRESSOR	
AH–1	⌀	20	208/3/60	RM 302	BRYANT	350AAV024060	AIR HANDLING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	37	200	YES	OTHERS		
C–3	⌀	20	208/1/60	WEST EXTERIOR	MITSUBISHI	PUY–A12NHA	CONDENSING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	25,27	3000	YES	OTHERS	PROVIDE DISCONNECT AT WALL	
C–5	⌀	25	208/1/60	WEST EXTERIOR	BRYANT	213ANA024	CONDENSING UNIT	3/4"C,(2) #10 THHN + # 12 GND	PP1	33,35	3000	YES	OTHERS	PROVIDE DISCONNECT AT WALL	
E–2	⌀	20	208/1/60	303	PANASONIC	FV–11VF2	EXHAUST FAN	3/4"C,(2) #10 THHN + # 12 GND	PP1	22	400	YES	OTHERS	CIRCUIT WITH LIGHT	
E–4	⌀	20	208/1/60	302	PANASONIC	FV–11VF2	EXHAUST FAN	3/4"C,(2) #10 THHN + # 12 GND	PP1	8	400	YES	OTHERS	CIRCUIT WITH LIGHT	
EH–1	⌀	20	120/1/60	WALL 303			ELECTRIC BASEBOARD	3/4"C,(2) #10 THHN + # 12 GND	PP1	18	1000	YES	OTHERS	SUPPLIED & INSTALLED BY OTHERS	
M1	⌀	20	120/1/60	WALL 304			MOTORIZED DAMPER	3/4"C,(2) #12 THHN + # 12 GND	PP1	36	400	YES	OTHERS	INTERLOCK WITH GENERATOR	
M2	⌀	20	120/1/60	WALL 304			MOTORIZED DAMPER	3/4"C,(2) #12 THHN + # 12 GND	PP1	36	400	YES	OTHERS	INTERLOCK WITH GENERATOR	
WH–5	⌀	20	208/1/60	302	PANASONIC	FV–11VF2	WATER HEATER	3/4"C,(2) #10 THHN + # 12 GND	PP1	30,32	3000	YES	OTHERS	CIRCUIT WITH LIGHT	

ELECTRICAL TRANSFORMER SCHEDULE

TAG	KVA	PRIMARY CURRENT RATING FLA	PRIMARY PROTECTION	PRIMARY VOLTAGE	PRIMARY WIRE SIZE PHASE	PRIMARY WIRE SIZE NEUTRAL	PRIMARY WIRE SIZE GROUND	PRIMARY CONDUIT SIZE	SECONDARY CURRENT RATING FLA	SECONDARY PROTECTION	SECONDARY VOLTAGE	SECONDARY WIRE SIZE PHASE	SECONDARY WIRE SIZE NEUTRAL	SECONDARY WIRE SIZE GROUND	SECONDARY CONDUIT SIZE	GROUNDING WIRE SIZE GROUND	GROUNDING CONDUIT SIZE	NOTES
T–1	75	200.0	200	208/3/60	3/0	500	6	2 1/2"	200.0	200	208/3/60	3/0	500	6	2 1/2"	6	1"	

ELECTRICAL SCHEDULES & DETAILS SHEET 2

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EVE
NEW MEXICO
17593
LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

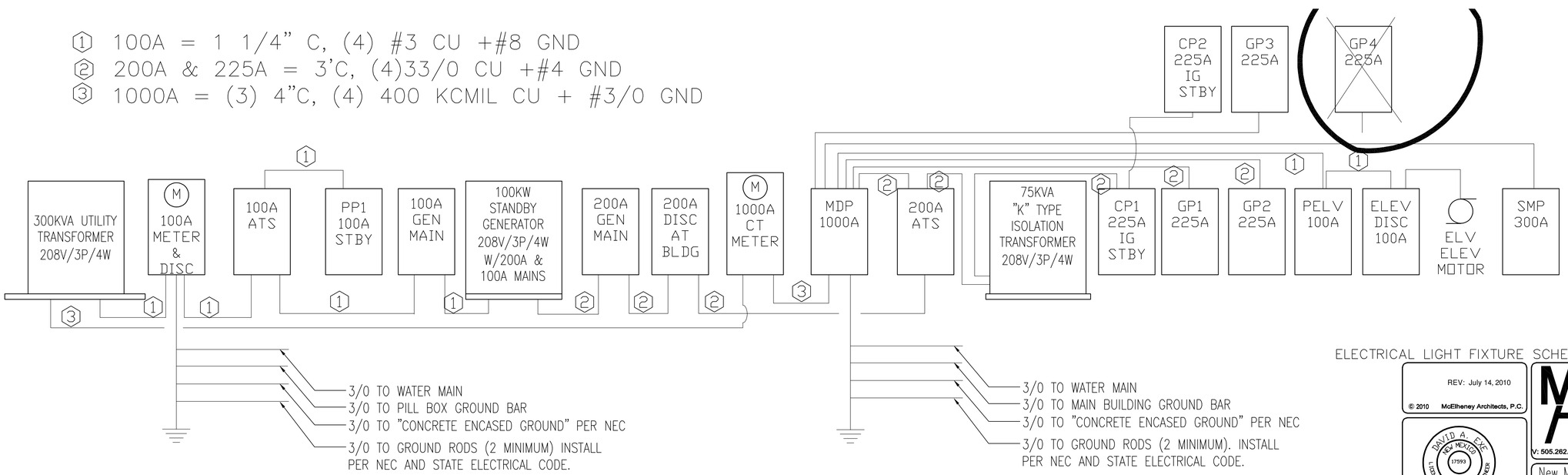
New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E5.02

11/23/2010 11:39:54 AM

ONE–CALL COMPOSITE LIGHT FIXTURE SCHEDULE										
Quantity	KEY	ID	DESCRIPTION	ELECTRICAL DATA		LAMP DATA		BASIS OF DESIGN		NOTES
				LOAD VA	VOLTAGE	QTY	WATTAGE	MANUFACTURER	MODEL OR SERIES	
14		A	12' LINEAR. WHITE BAFFLE. 2 CKT.	300.0	120/1/60	9	32.0	FINELITE	S4–12'–2T8–SC–91W–120–ACX–X–.88	
3		AA	SINGLE MOUNT SITE FIXTURE 25' POLE	400.0	208/1/60	1	400.0	SPAULDING	CR1–A–P40–H3–F–Q–BL	
88		B	2X2 ACRYLIC LENS, 2 CKT	65.0	120/1/60	3	17.0	LEDALITE	3222–D1–ST–T317–S–2–1–E	
3		BB	DUAL MOUNT SITE FIXTURE 25' POLE	800.0	208/1/60	2	400.0	SPAULDING	(2)CR1–A–P40–H3–F–Q–BL	
17		C	6" LED CYLINDER	70.0	120/1/60	2	32.0	CREE	LR6–SC6	
1		C1	6" LED CYLINDER	70.0	120/1/60	2	32.0	CREE	LR6–SC6	
14		D	1X4 SURFACE MOUNT	64.0	120/1/60	2	32.0	COLUMBIA	SM14–232–FSA12125–EU	
32		EM	EMERGENCY LIGHT	20.0	120/1/60	2	12.0	DUALLITE	LZ2	
20		EX	EXIT SIGN, WHITE THERMOPLASTIC	10.0	120/1/60	1	10.0	DUALLITE	LXURWE	
8		EX1	EGRESS EMERGENCY	20.0	120/1/60	1	20.0			
21		F	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4–132–EU–CSWG4	
2		F1	4' STRIP WITH WIREGUARD	32.0	120/1/60	1	32.0	COLUMBIA	CS4–132–EU–CSWG4	
2		G	JAR & GUARD	60.0	120/1/60	1	60.0	HUBBELL	VX–151	
4		H	4' CEILING MOUNT	100.0	120/1/60	3	32.0	KENALL	MLRS8–48–F–CBA–PIA–232–RS–1–120	
20		I	DECORATIVE PENDANT	70.0	120/1/60	2	32.0	D'AC	D5238–1FC40–120–CBA–COIL	
8		J	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB–6CFV–B24	
38		K	6" OPEN DOWNLIGHT	55.0	120/1/60	2	26.0	PRESCOLITE	LF6CFV32EB–6CFV–B24	
5		M	MONORAIL	0.0	120/1/60	0	0.0	LBL	RAIL–ST–SC–X	
20		M1	MR16 HEAD	50.0	120/1/60	1	42.0	HE441–SC–X–1A–50–MRL	LBL	
6		N	4' SLIM VANITY	55.0	120/1/60	2	32.0	AXIS	ARS–W–4–T8–2–CBA–E–120–1	
24		O	ARCHITECTURAL WALLPACK	70.0	120/1/60	1	70.0	KIM	WFXX–70MH120–X	
2		P	DECORATIVE PENDANT	170.0	120/1/60	1	150.0	D'AC	D5239–2F26–120–X	
11		Q	ROUND ALUMINUM BOLLARD	70.0	120/1/60	1	70.0	KIM	VRB3–X–BL	
1		R1	2' DIA RECESSED CONVEX LENS'	0.0	120/1/60	2	0.0	FOCAL POINT	FSD–22–D–2BXX–E–120–U–CX–HW	
1		R2	3' DIA SURFACE MT CONVEX LENS	0.0	120/1/60	0	0.0	FOCAL POINT	FSD–33–D–3T86–E–120–SM–CX–WH	
1		R3	4' DIA SURFACE MT CONVEX LENS	170.0	120/1/60	5	32.0	FOCAL POINT	FSD–44–5T8–U6–E–120–SM–CX–WH	
1		R4	4' DIA PENDANT CONVEX LENS	170.0	120/1/60	5	32.0	FOCAL POINT	FSD–44–D–5T8U6–E–120–XX–CX–WH	
1		S	20' LINEAR, POLYMER BAFFLES	320.0	120/1/60	10	32.0	AXIS	SP–L–20'–T8–2–X–120–E–1–CAX	

1 100A = 1 1/4" C, (4) #3 CU +#8 GND
2 200A & 225A = 3'C, (4)33/0 CU +#4 GND
3 1000A = (3) 4"C, (4) 400 KCMIL CU + #3/0 GND



1 E5.03 ELECTRICAL 1–LINE DIAGRAM
SCALE: NONE

ELECTRICAL LIGHT FIXTURE SCHEDULE & 1–LINE DIAGRAM

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EKE NEW MEXICO 17593 LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E5.03

11/23/2010 11:40:16 AM

COM*check* Software Version 3.7.1

Exterior Lighting Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : New Mexico One Call
Exterior Lighting Zone: **2 (Neighborhood business district)**

Construction Site: 1021 Eubank Ave NE, Albuquerque, NM 87111
Owner/Agent:
Designer/Contractor:

Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (C x D)	F Proposed Watts
Parking area	75000 ft2	0.06	Yes	4500	4370
Walkway >= 10 feet wide	8350 ft2	0.14	Yes	1169	1680
		Total Tradable Watts* =		5669	6050
		Total Allowed Watts =		5669	
		Total Allowed Supplemental Watts** =		600	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Parking area (75000 ft2): Tradable Wattage				
HID 1: Metal Halide 400W / Pulse start	1	3	400	1200
HID 2: Metal Halide 400W / Pulse start	2	3	800	2400
HID 3: Metal Halide 70W / Pulse start	1	11	70	770
Walkway >= 10 feet wide (8350 ft2): Tradable Wattage				
HID 4: Metal Halide 70W / Pulse start	1	24	70	1680
			Total Tradable Proposed Watts =	6050

Section 4: Requirements Checklist

Lighting Wattage:

- ☐ 1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.
  Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

- ☐ 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
- ☐ 3. Lighting not designated for dusk-to-dawn operation is controlled by either a a photosensor (with time switch), or an astronomical time switch.
- ☐ 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
- ☐ 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.

- ☐ 10. Photocell/astronomical time switch on exterior lights.
  Exceptions:
  Lighting intended for 24 hour use.
- ☐ 11. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
  Exceptions:
  Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Section 4: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COM*check* Version 3.7.1 and to comply with the mandatory requirements in the Requirements Checklist.

David A. Exe, P.E. — Name - Title
Signature
July 14, 2010 — Date

DAVID A. EXE — NEW MEXICO — 17593 — LICENSED PROFESSIONAL ENGINEER

COM*check* Software Version 3.7.1

Interior Lighting Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : New Mexico One Call

Construction Site: 1021 Eubank Ave NE, Albuquerque, NM 87111
Owner/Agent:
Designer/Contractor:

Section 2: General Information

Building Use Description by: **Activity Type**

Activity Type(s)	Floor Area
Office	17200

Section 3: Requirements Checklist

Interior Lighting:

- ☐ 1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
17200	15202	YES

Controls, Switching, and Wiring:

- ☐ 2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
- ☐ 3. Daylight zones have individual lighting controls independent from that of the general area lighting.
  Exceptions:
  Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
  Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
- ☐ 4. Independent controls for each space (switch/occupancy sensor).
  Exceptions:
  Areas designated as security or emergency areas that must be continuously illuminated.
  Lighting in stairways or corridors that are elements of the means of egress.
- ☐ 5. Master switch at entry to hotel/motel guest room.
- ☐ 6. Individual dwelling units separately metered.
- ☐ 7. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
- ☐ 8. Each space provided with a manual control to provide uniform light reduction by at least 50%.
  Exceptions:
  Only one luminaire in space;
  An occupant-sensing device controls the area;
  The area is a corridor, storeroom, restroom, public lobby or sleeping unit.
  Areas that use less than 0.6 Watts/sq.ft.
- ☐ 9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.
  Exceptions:

Exterior Lighting Efficacy:

- ☐ 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.
  Exceptions:
  Controlled by motion sensor or exempt from consideration under the provisions of Section 505.6.2.

Exterior Lighting **PASSES**: Design 0.0% better than code.

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COM*check* Version 3.7.1 and to comply with the mandatory requirements in the Requirements Checklist.

David A. Exe, P.E. — Name - Title
Signature
July 14, 2010 — Date

DAVID A. EXE — NEW MEXICO — 17593 — LICENSED PROFESSIONAL ENGINEER

COM*check* Software Version 3.7.1

Interior Lighting Application Worksheet

2009 IECC

Section 1: Allowed Lighting Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Office	17200	1	17200
		Total Allowed Watts =	17200

Section 2: Proposed Lighting Power Calculation

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Office (17200 sq.ft.)				
Linear Fluorescent 1: 48" T8 32W (Super T8) / Electronic	8	14	250	3500
Linear Fluorescent 2: 24" T5 17W / Electronic	3	88	51	4488
Linear Fluorescent 3: 48" T8 32W (Super T8) / Electronic	2	14	64	896
Linear Fluorescent 5: 48" T8 32W (Super T8) / Electronic	1	23	32	736
Linear Fluorescent 6: 48" T8 32W (Super T8) / Electronic	3	4	96	384
Linear Fluorescent 7: 48" T8 32W (Super T8) / Electronic	2	6	64	384
Linear Fluorescent 8: 48" T8 32W (Super T8) / Electronic	8	1	250	250
Compact Fluorescent 1: Triple 4-pin 32W / Electronic	1	18	32	576
Compact Fluorescent 2: Triple 4-pin 32W / Electronic	2	20	64	1280
Compact Fluorescent 3: Triple 4-pin 26W / Electronic	2	36	53	1908
HID 1: Metal Halide 150W / Pulse start	1	2	160	320
Compact Fluorescent 4: Triple 4-pin 32W / Electronic	2	1	64	64
Compact Fluorescent 5: Triple 4-pin 32W / Electronic	3	1	96	96
Compact Fluorescent 6: Triple 4-pin 32W / Electronic	5	2	160	320
			Total Proposed Watts =	15202

Section 3: Compliance Calculation

If the Total Allowed Watts minus the Total Proposed Watts is greater than or equal to zero, the building complies.

Total Allowed Watts = 17200
Total Proposed Watts = 15202
Project Compliance = 1998

Interior Lighting **PASSES**: Design 12% better than code.

ELECTRICAL COMCHECK REPORT

REV: July 14, 2010

© 2010 McElheney Architects, P.C.

DAVID A. EXE — NEW MEXICO — 17593 — LICENSED PROFESSIONAL ENGINEER
July 14, 2010

McELHENEY Architects
2001 CARLISLE BLVD. NE, SUITE B
ALBUQUERQUE, NM 87110-4943
V: 505.262.0193 F: 505.881.9114 E: bobmacarch@mac.com

New Mexico One Call Inc
1021 Eubank Blvd NE
Albuquerque, NM 87111

SHEET NO.
E6.01

11/23/2010 11:40:20 AM