

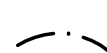


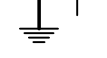



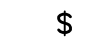

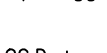

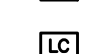


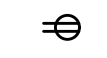
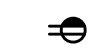
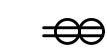







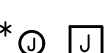
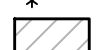











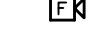
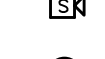




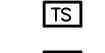



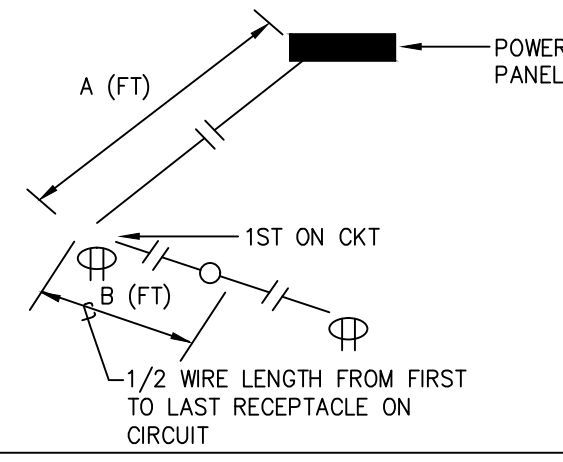
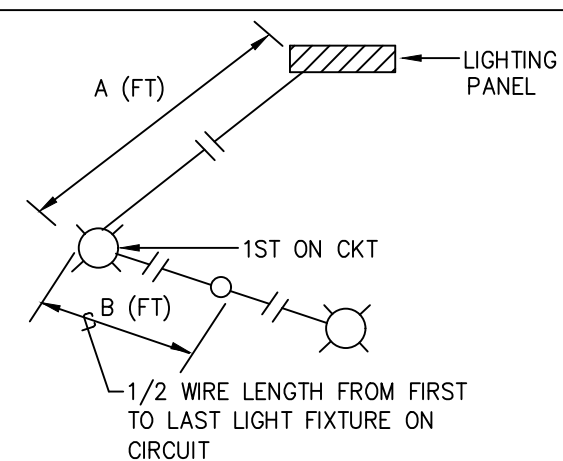
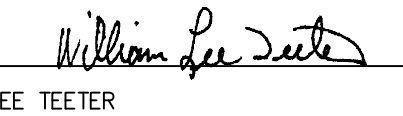












GENERAL SYMBOLS			
	HOMERUN TO PANELBOARD. SEE "CIRCUIT HOMERUN AND CONDUCTOR LOGIC".		
	CONDUIT RUN CONCEALED OVERHEAD ABOVE CEILING AND IN WALLS OR MC CABLE WHERE PERMITTED. USE SURFACE RACEWAY SYSTEM EXPOSED ON INACCESSIBLE EXISTING CONSTRUCTION.		
	CONDUIT RUN EXPOSED.		
	CONDUIT RUN CONCEALED BELOW FLOOR.		
	FLEXIBLE CONDUIT WITH CONNECTION TO EQUIPMENT SERVED.		
	GROUND SIZED PER NEC 250.		
	120/208 VOLT PANELBOARD. SEE PANEL SCHEDULE.		
	277/480 VOLT PANELBOARD. SEE PANEL SCHEDULE.		
	MONITORING PANEL. SEE PLANS FOR DESCRIPTION.		
SWITCHES			
	SWITCH RATED 120/277 VOLTS AND 20 AMPERES. SUBSCRIPTS FOR BASIC SYMBOL. BLANK--SINGLE POLE 2--DOUBLE POLE 3--THREE WAY 4--FOUR WAY D--DIMMER WITH SILICON CONTROLLED RECTIFIER (DEVICE SHALL BE COMPATIBLE WITH THE LOAD IT SERVES, VERIFY) P--PILOT LIGHT 3,D--THREE WAY SWITCH WITH DIMMING OPTION		
	TWO SWITCHES IN COMMON OUTLET BOX AT 48" AFF.		
	SWITCH RATED 120/277 VOLTS AND 20 AMPERES WITH OCCUPANT SENSOR FOR MANUAL ON AND AUTO OFF AFTER PRESET TIME.		
	COMBO SWITCH RATED 120/277 VOLTS AND 20 AMPERES WITH DIMMER AND OCCUPANT SENSOR FOR MANUAL ON AND AUTO OFF AFTER PRESET TIME.		
	TIME CLOCK -- ELECTRONIC 24 HOUR-7 DAY		
	LIGHTING CONTROL LIGHTING CONTACTOR.		
	LINE VOLTAGE TYPE DUAL TECHNOLOGY CEILING MOUNTED OCCUPANT SENSOR		
WIRING DEVICES			
	120V, 20A DUPLEX RECEPTACLE WALL MOUNTED AT 18" AFF UNLESS OTHERWISE NOTED EWC-- GFCI TYPE RECEPTACLE SERVING ELECTRIC WATER COOLER. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH PLUMBING CONTRACTOR AND INSTALL RECEPTACLE SO THAT IT IS CONCEALED FROM VIEW. R--RECEPTACLE SERVING REFRIGERATOR. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH EQUIPMENT CONTRACTOR AND INSTALL RECEPTACLE SO THAT IT IS CONCEALED FROM VIEW AND DOES NOT IMPEDE THE INSTALLATION OF THE REFRIGERATOR. GFCI-- DUPLEX RECEPTACLE WITH BUILT-IN GROUND FAULT CIRCUIT INTERRUPTING MECHANISM. WP-- WEATHERPROOF COVER.		
	120V, 20A DUPLEX RECEPTACLE WITH BOTTOM OF BOX 2" ABOVE COUNTER BACKSLASH OR AT COUNTER HEIGHT		
	TWO 120V, 20A DUPLEX RECEPTACLES UNDER COMMON COVER		
	TWO 120V, 20A DUPLEX RECEPTACLE UNDER COMMON COVER MOUNTED AT COUNTER HEIGHT		
	120V, 20A DUPLEX RECEPTACLE WITH ISOLATED GROUND TERMINAL--COLORED ORANGE		
	120V, 20A DUPLEX RECEPTACLE FLUSH MOUNTED IN CEILING		
	SPECIAL EQUIPMENT RECEPTACLE. (SEE NOTES)		
LIGHTING (SEE LIGHTING FIXTURE SCHEDULE)			
EQUIPMENT CONNECTIONS			
	CONNECTION TO 120 VOLT MOTOR.		
	CONNECTION TO 3-PHASE MOTOR.		
	HEAVY DUTY SAFETY SWITCH. (NON-FUSED) SEE "EQUIPMENT DISCONNECT SCHEDULE".		
	HEAVY DUTY SAFETY SWITCH. (FUSED) SEE "EQUIPMENT DISCONNECT SCHEDULE".		
	JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED.		
	CONNECTION TO HVAC, PLUMBING OR OTHER EQUIPMENT AS NOTED.		
	CONNECTION TO WATER HEATER.		
	CONNECTION TO OVERHEAD DOOR. PROVIDE SAFETY SWITCH AT CONNECTION POINT. RUN POWER WIRING THROUGH DOOR CONTROLLER. CONNECT ALL DOOR CONTROLS (UP/DOWN CONTROL STATION, LIMIT SWITCHES, OBSTRUCTION SAFETY SWITCHES, ETC.)		
	MOTOR CONTROLLER		
* NOTE: PROVIDE A DISCONNECT ON ALL FANS, UNIT HEATERS, FAN COILS, PUMPS, AIR HANDLERS, UNIT VENTILATORS, ETC.			
COMMUNICATIONS SYMBOLS			
	COMBINATION DATA/TELEPHONE CABLEING OUTLET. COORDINATE MOUNTING HEIGHT WITH CLOSEST POWER RECEPTACLE.		
	TV OUTLET BOX.		
	2-COMPARTMENT RECESSED FLOOR BOX, WITH ONE DUPLEX RECEPTACLE AND ONE SECTION FOR OWNERS COMMUNICATIONS REQUIREMENTS.		
	3-COMPARTMENT RECESSED FLOOR BOX, WITH ONE QUAD RECEPTACLE AND TWO SECTIONS FOR OWNERS COMMUNICATIONS REQUIREMENTS.		
	FIRE RATED FLUSH STYLE POKE THRU DEVICE		
FIRE ALARM SYMBOLS			
	CONTROL PANEL.		
	REMOTE ANNUNCIATOR 66" AFF TO MIDDLE OF DEVICE.		
	MANUAL PULL STATION 48" AFF.		
	AUDIBLE & VISUAL SIGNAL STROBE LIGHT MOUNTED 80" AFF. OR 6" BELOW CEILING WHICHEVER IS LOWER.		
	VISUAL SIGNAL STROBE LIGHT MOUNTED 80" AFF OR 6" BELOW CEILING WHICHEVER IS LOWER.		
	AUDIBLE & VISUAL SIGNAL STROBE LIGHT CEILING MOUNTED		
	PHOTO-ELECTRIC TYPE SMOKE DETECTOR.		
	THERMAL TYPE DETECTOR.		
	DUCT MOUNT SMOKE DETECTOR WITH RELAY BASE IN AIR DUCT.		
	ADDRESSABLE CONTROL MODULE		
	REMOTE TEST SWITCH WITH INDICATOR LAMP FOR DUCT MOUNTED SMOKE DETECTOR		
	TAMPER SWITCH CONNECTED TO SPRINKLER VALVE.		
	WATER FLOW SWITCH CONNECTED TO SPRINKLER PIPING.		
ABBREVIATIONS			
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPERE	LC	LIGHTING CONTACTOR
A/C	AIR CONDITIONING	LED	LIGHT EMITTING DIODE
ADA	AMERICANS WITH DISABILITIES ACT	LT	LIGHT
AF	ABOVE FINISHED FLOOR	LTO	LIGHTING
AFG	ABOVE FINISHED GRADE	MIN	MINIMUM
AHU	AIR HANDLING UNIT	MAX	MAXIMUM
AL	ALUMINUM	MCA	MINIMUM CIRCUIT AMPERES
AMP	AMPERE	MCB	MAIN CIRCUIT BREAKER
ATS	AUTOMATIC TRANSFER SWITCH	MFS	MAXIMUM FUSE SIZE
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUGS ONLY
BB	BACKBOARD	MOCP	MAXIMUM OVER-CURRENT PROTECTION
C	CONDUIT	MMS	MANUAL MOTOR STARTER
CB	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE
CU	CONDENSING UNIT	NEMA	NATIONAL ELECTRICAL MFRS ASSOC.
DPT	DOUBLE POLE DOUBLE THROW	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
EC	EMPTY CONDUIT	NIC	NOT IN CONTRACT
EG	EXHAUST FAN	P	POLE
EGG	EQUIPMENT GROUNDING	PB	PULL BOX
EM	EMERGENCY	PE	PHOTO-ELECTRIC SWITCH
EMT	ELECTRICAL METALLIC TUBING	PVC	POLYVINYL CHLORIDE CONDUIT
ER	EXISTING	PNL	PANEL
EX	EXISTING TO BE REMOVED	RMC	RIGID METAL CONDUIT
ETR	EXISTING TO REMAIN	RTU	ROOF TOP UNIT
F	FUSE	SF	SUPPLY FAN
FACP	FIRE ALARM CONTROL PANEL	SPD	SURGE PROTECTIVE DEVICE
FLA	FULL LOAD AMPERES	SPDT	SINGLE POLE DOUBLE THROW
FPN	FUSE PER NAMEPLATE	SST	SINGLE POLE SINGLE THROW
FT	FEET	SW	SWITCH
GC	GENERAL CONTRACTOR	SWBD	SWITCHBOARD
GND	GROUND	TIB	TELEPHONE TERMINAL
OF	GAS FURNACE	UL	UNDERWRITER'S LABORATORIES
OTD	GROUND FAULT CIRCUIT INTERRUPTER	UH	UNIT HEATER
GRD	GROUND	UNO	UNLESS NOTED OTHERWISE
GRC	GALVANIZED RIGID STEEL CONDUIT	UNO	UNLESS OTHERWISE NOTED
QWB	CYSPUM WALLBOARD	UPS	UNINTERRUPTIBLE POWER SUPPLY
HP	HORSEPOWER	V	VOLT
HVAC	HEATING-VENTILATING--AIR CONDITIONING	W	WATT
IG	ISOLATED GROUND	VA	VOLT-AMPERE
IMC	INTERMEDIATE METAL CONDUIT	W/P	WEATHER PROOF
KW	KILOWATT	XFMR	TRANSFORMER
KVA	KILOVOLT-AMPERE	XP	EXPLOSION PROOF
JB	JUNCTION BOX		
NOTES:			
1. PROVIDE A BLANK COVERPLATE ON TELEPHONE OUTLETS.			
2. SEE DETAILS FOR ELEVATION REPRESENTATION OF ALL DEVICE MOUNTING HEIGHTS. ALL QUESTIONS ABOUT MOUNTING HEIGHTS SHALL BE DIRECTED TO THE ARCHITECT AND ENGINEER PRIOR TO ROUGH-IN.			
3. THESE ARE STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON PROJECT DRAWINGS. WHEREVER THE SYMBOL ON THE PROJECT OCCURS, THE ITEM SHALL BE PROVIDED AND INSTALLED.			

























CONDUCTOR SIZING TABLE	
FOR 120V-20A BRANCH CIRCUITS ONLY, UNLESS OTHERWISE NOTED	
IF DISTANCE A + B IN FEET IS: (SEE DIAGRAM AT RIGHT)	USE COPPER WIRE IN METALLIC CONDUIT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT AND SIZE CONDUIT ACCORDINGLY:
0' TO 100'	#12 (MIN.)
100' TO 175'	#10
175' TO 300'	#8
300' TO 450'	#6 (MAX.)
	
FOR 277V-20A BRANCH CIRCUITS ONLY, UNLESS OTHERWISE NOTED	
IF DISTANCE A + B IN FEET IS: (SEE DIAGRAM AT RIGHT)	USE COPPER WIRE IN METALLIC CONDUIT, AWG SIZE AS FOLLOWS ON ENTIRE CIRCUIT AND SIZE CONDUIT ACCORDINGLY:
0' TO 250'	#12 (MIN.)
250' TO 400'	#10
400' TO 700'	#8
700' TO 1000'	#6 (MAX.)
	
THESE TABLES ARE BASED ON AN EVENLY DISTRIBUTED LOAD ALLOWING A 3% VOLTAGE DROP AT LAST OUTLET. APPLY ACCORDINGLY.	

NEW YORK ENERGY CODE	
(2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE - SECTION 407)	
METHOD OF COMPLIANCE.	
2020 ENERGY CONSERVATION CODE OF NEW YORK STATE:	<input checked="" type="checkbox"/> PRESCRIPTIVE <input type="checkbox"/> PERFORMANCE
2007 ASHRAE 90.1:	<input type="checkbox"/> PRESCRIPTIVE <input type="checkbox"/> PERFORMANCE
LIGHTING SCHEDULE.	
LAMP TYPE REQUIRED IN FIXTURE	SEE "LIGHTING FIXTURE SCHEDULE"
NUMBER OF LAMPS IN FIXTURE	SEE "LIGHTING FIXTURE SCHEDULE"
BALLAST TYPE USED IN THE FIXTURE	SEE "LIGHTING FIXTURE SCHEDULE"
NUMBER OF BALLASTS IN FIXTURE	SEE "LIGHTING FIXTURE SCHEDULE"
TOTAL WATTAGE PER FIXTURE	SEE "LIGHTING FIXTURE SCHEDULE"
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED (WHOLE BUILDING OR SPACE BY SPACE)	SEE "LIGHTING FIXTURE SCHEDULE"
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	SEE "LIGHTING FIXTURE SCHEDULE"
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NEW YORK ENERGY CONSERVATION CODE.	
SIGNED: 	
NAME: WILLIAM LEE TEETER	
TITLE: PROFESSIONAL ENGINEER	

EQUIPMENT DISCONNECT SCHEDULE	
\$M MANUAL MOTOR STARTING SWITCH WITH OVERLOAD PROTECTION EQUAL TO SQUARE-D CLASS 2510 TYPE KG-1 SERIES.	
3P/30A/208V 	HEAVY DUTY SAFETY SWITCH: 3 POLE, 30 AMP, 208 VOLT. FIRST NUMERAL INDICATES QUANTITY OF POLES SECOND NUMERAL INDICATES AMPERE RATING. THIRD NUMERAL INDICATES VOLTAGE. IE: 3P/30A/208V INDICATES 3 POLE, 30 AMP, 208 VOLT, ETC.
3P/30A/208V 	FUSED HEAVY DUTY SAFETY SWITCH SAME AS ABOVE EXCEPT WITH FUSES, ACTUAL SIZE AND TYPE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FUSES SHALL BE "RK-5" FUSETRONS.
3P/30A/208V/3R 	NEMA 3R CONSTRUCTION HEAVY DUTY SAFETY SWITCHES. NO-FUSE AND FUSED SWITCHES RESPECTIVELY AS SPECIFIED ABOVE. /3R INDICATES NEMA 3R CONSTRUCTION. NOTE: PROVIDE NEUTRAL BARS, GROUNDING CLIPS, SERVICE ENTRANCE LABELS, FUSES AND ALL OTHER ACCESSORIES REQUIRED FOR THE APPLICATION.

CIRCUIT HOMERUN SYMBOL SCHEDULE	
A-1 	ONE CIRCUIT HOMERUN TO PANEL "A", CIRCUIT #1.
A-1,3 	TWO CIRCUIT HOMERUN TO PANEL "A", CIRCUITS #1 & 3. (REQUIRES MULTI-POLE CIRCUIT BREAKER.)
A-1,3,5 	THREE CIRCUIT HOMERUN TO PANEL "A", CIRCUITS #1, 3, & 5. (REQUIRES MULTI-POLE CIRCUIT BREAKER.)
A-(1,3) 	ONE CIRCUIT HOMERUN TO PANEL "A", 208 VOLT OR 480 VOLT-1 PHASE CIRCUIT TO POLES #1 & 3.
A-(1,3,5) 	ONE CIRCUIT HOMERUN TO PANEL "A", 208 VOLT OR 480 VOLT-3 PHASE CIRCUIT TO POLES #1, 3, & 5.
	SLASH MARKS INDICATE QUANTITY OF CONDUCTORS OTHER THAN TWO. --- INDICATES NEUTRAL. --- INDICATES HOT, NOTE: TWO WIRE CIRCUITS DO NOT SHOW SLASH MARKS.
	SLASH MARK INDICATES EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE 250-122.

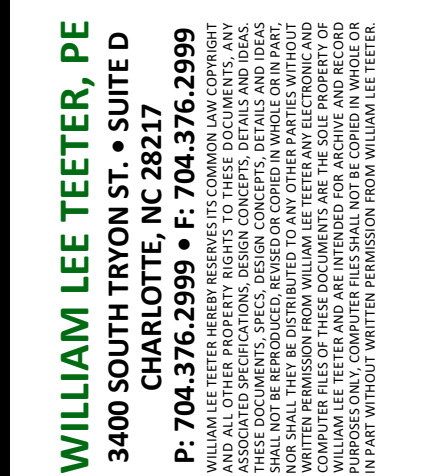
LIGHTING NOTES	
1. LED DRIVERS SHALL BE ELECTRONIC TYPE.	
2. LED'S SHALL BE SOLID STATE WITH 3500 DEGREE COLOR TEMP.	
3. LIGHTING FIXTURE CATALOG NUMBERS IDENTIFY THE SERIES OF LIGHTING FIXTURE ONLY. PROVIDE ALL FIELD FABRICATION, MOUNTING HARDWARE, ACCESSORIES AND OPTIONS REQUIRED TO ADAPT TO THE CONDITIONS AND MEET THE INTENT OF THE FIXTURE DESCRIPTION.	
4. COORDINATE FIXTURE OPERATING VOLTAGES WITH THAT PROVIDED BY THE CIRCUITRY.	
5. COORDINATE FIXTURE TRIMS WITH THE CEILING TYPE.	
6. DRIVERS AND LED'S SHALL BE DESIGNED TO START AND MAINTAIN PROPER OPERATION IN THE ENVIRONMENTAL AND TEMPERATURE CONDITIONS IN WHICH THE FIXTURES ARE APPLIED.	
7. RECESSED LIGHTING FIXTURES SHALL HAVE THERMAL PROTECTION.	
8. DOWNLIGHTS IN NONACCESSIBLE CEILINGS SHALL HAVE BOTTOM ACCESS.	
9. LAY-IN TYPE FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE INDEPENDENT FROM THE CEILING SYSTEM.	
10. DOWNLIGHT FIXTURES AND EXIT SIGNS IN SUSPENDED CEILINGS SHALL NOT BE SUPPORTED BY THE GRID SYSTEM AND SHALL BE SUPPORTED FROM THE STRUCTURE AND NOT RELY ON THE CEILING SYSTEM ALONE FOR SUPPORT.	
11. LIGHTING FIXTURES IN WET LOCATIONS SHALL BE "WET LOCATION" LISTED. LIGHTING FIXTURES IN DAMP LOCATIONS SHALL BE "DAMP LOCATION" LISTED.	
12. SUBMIT SHOP DRAWINGS FOR APPROVAL.	

LIGHTING FIXTURE SCHEDULE							
SYMBOL & TYPE	MANUFACTURER & CATALOG NUMBER	DESCRIPTION	LAMP TYPE & QUANTITY	VOLTS/ DRIVER	MOUNTING	INPUT WATTS	TOTAL FIXTURES
 A	EQUAL TO: LITHONIA #CPX-2X4-4000LM-80CRI-40K-SWL-MN10-2T-MVOLT	2'x4' LED TROFFER, ALUMINUM FRAME WITH SATIN WHITE DIFFUSER. A/NL - NIGHT LIGHT FIXTURE, 24/7.	LED 4000 LUMENS	120-277V ELECTRONIC	RECESSED CEILING	40.0	167
 AE		SAME AS "A" WITH INTEGRATED E10W/CP EMERGENCY BATTERY PACK.	-	-	-	40.0	2
 A1	EQUAL TO: LITHONIA #CPX-2X4-4000LM-80CRI-40K-SWL-MN10-2T-MVOLT	2'x4' LED TROFFER, ALUMINUM FRAME WITH SATIN WHITE DIFFUSER. A1/NL - NIGHT LIGHT FIXTURE, 24/7.	LED 4000 LUMENS 4000K	120-277V ELECTRONIC	RECESSED CEILING	44.0	4
 A1E		SAME AS "A1" WITH INTEGRATED E10W/CP EMERGENCY BATTERY PACK.	-	-	-	44.0	4
 A2	EQUAL TO: LITHONIA #CPX-2X2-3200LM-80CRI-40K-SWL-MN10-2T-MVOLT	2'x2' LED TROFFER, ALUMINUM FRAME WITH SATIN WHITE DIFFUSER. A2/NL - NIGHT LIGHT FIXTURE, 24/7.	LED 3200 LUMENS 4000K	120-277V ELECTRONIC	RECESSED CEILING	31.0	10
 A2F	EQUAL TO: LITHONIA #CPX-2X2-3200LM-80CRI-40K-SWL-MN10-2T-MVOLT	2'x2' LED TROFFER, ALUMINUM FRAME WITH SATIN WHITE DIFFUSER. MULTISURFACE KIT INCLUDED.	LED 3200 LUMENS 4000K	120-277V ELECTRONIC	SURFACE CEILING	31.0	1
 B	EQUAL TO: LITHONIA #BSL4-LP840 (G-254RKL)	1'x4' LED WRAPAROUND FIXTURE.	LED 2884 LUMENS 4000K	120-277V ELECTRONIC	SURFACE CEILING	32.0	154
 M	SELECTED BY OWNER, PURCHASED AND INSTALLED BY ELECTRICAL CONTRACTOR	LARGE PENDANT FIXTURE WITH LED BULBS. CONTRACTOR TO PROVIDE \$1,000 ALLOWANCE.	LED	120V	PENDANT CEILING	100.0 MAX	2
 C	EQUAL TO: GOTHAM EVO #EVO6-35-10-WR-WD-LSS-MVOLT	8" ROUND LED DOWNLIGHT, WHITE REFLECTOR, WHITE FLANGE.	LED 1000 LUMENS 3500K	120V	RECESSED CEILING	10.0	316
 CE		SAME AS "C" WITH INTEGRATED 10W EL EMERGENCY BATTERY PACK. C/NL - NIGHT LIGHT FIXTURE, 24/7.	-	-	-	10.0	2
 D	EQUAL TO: TECH LIGHTING #700-TD-S-S-S-5 VERIFY WITH ARCHITECT PRIOR ORDERING.	SMALL PENDANT LIGHTING FIXTURE, SMOKE COLOR, SATIN NICKEL FINISH. CONTRACTOR TO PROVIDE ONE (1) E11 BASE GOW T6 MINI-CANDELABRA BULB.	INCANDESCENT	120V	PENDANT CEILING	60.0	5
 V	EQUAL TO: LITHONIA #FVCSLS-48H-MVOLT-35K-90CRI-BN-M4	1'x4' LED WALL MOUNTED CONTEMPORARY SWITCHABLE SQUARE VANITY FIXTURE.	LED 2960 LUMENS 3000K	120-277V ELECTRONIC	SURFACE WALL	36.0	5
 F	EQUAL TO: LITHONIA #CPX-2X4-4000LM-80CRI-40K-SWL-MN10-2T-MVOLT	2'x4' LED TROFFER, ALUMINUM FRAME WITH SATIN WHITE DIFFUSER. SHALLOW DEPTH MULTI-SURFACE MOUNTING KIT INCLUDED.	LED 4000 LUMENS 4000K	120-277V ELECTRONIC	SURFACE CEILING	40.0	4
 G	PROVIDED BY OWNER, INSTALLED BY ELECTRICAL CONTRACTOR	PROCEDURE (EXAM) LED LIGHT MEDICAL ILLUMINATION M-550, PROVIDED BY OWNER, INSTALLED BY E.C.	LED	120V	SURFACE CEILING	16.0 (TASK)	2
 G2	PROVIDED BY OWNER, INSTALLED BY ELECTRICAL CONTRACTOR	SURGERY LED LIGHT MEDICAL ILLUMINATION M-1000, PROVIDED BY OWNER, INSTALLED BY E.C.	LED	120V	SURFACE CEILING	54.0 (TASK)	2
 N NE	EQUAL TO: LITHONIA #WL4-30L-SLD-LP840-DIM10 "NE" - WITH E10W/CP	5'x51" LED WRAPAROUND FIXTURE WITH INTEGRATED OCCUPANCY SENSOR. FIXTURE DIMS TO 10% WHEN UNOCCUPIED.	LED 3000 LUMENS 4000K	120-277V ELECTRONIC	SURFACE WALL	28.0	7
 P	EQUAL TO: PHOENIX LIGHTING #VA-W-17LED-WW-FGC	INDUSTRIAL TYPE ENCLOSED/GASKETED VAPORTIGHT SURFACE MOUNTED LIGHTING FIXTURE, FROSTED GLASS LENS.	LED 1336 LUMENS 3000K	120V-277V	SURFACE CEILING	17.0	1
 S	EQUAL TO: LITHONIA #OLLWJ-LED-P1-40K-MVOLT-WH	EXTERIOR LED DECORATIVE WALL SCONCE UP & DOWN FIXTURE, WHITE FINISH. SEE EXTERIOR ELEVATIONS SHEETS A201 & A202 FOR EXACT MOUNTING HEIGHTS AND LOCATIONS.	LED 947 LUMENS 4000K	120V-277V	SURFACE WALL # 7" AGL	14 (EXTERIOR)	10
 U	EQUAL TO: STONCO BY SIGNIFY #P1W6-50-WW-G3-1-120-BK (VERIFY WITH CIVIL DRAWINGS C900 & C910 PRIOR ORDERING)	EXTERIOR LED WALL MOUNT MEDIUM SCONCE FIXTURE, BLACK FINISH. SEE EXTERIOR ELEVATIONS SHEETS A201 & A202 FOR EXACT MOUNTING HEIGHTS AND LOCATIONS.	LED 5334 LUMENS 4000K	120V	SURFACE WALL # 15" AFG	50 (EXTERIOR)	14
 OB	EQUAL TO: LITHONIA LIGHTING #SX0-LED-P1-40K-70CRI-13LG-MVOLT-SPA-FIR	LED POLE MOUNTED FIXTURE. DARK BRONZE FINISH. TYPE 3 LOW GLARE DISTRIBUTION. INTEGRATED PHOTOCELL AND HIGH/LOW MOTION/AMBIENT SENSOR DIM TO 30% WHEN UNOCCUPIED.	LED 4280 LUMENS 4000K	120V-277V	POLE	33.0 (EXTERIOR)	17
 EO	EQUAL TO: LITHONIA #ERE-GY-T-WP-RD	WALL MOUNTED LED SQUARE TWIN REMOTE HEAD FIXTURE. GRAY COLOR.	LED	120V	WALL	<5	5
 EX	EQUAL TO: LITHONIA #EXRG-EL-M6	SURFACE MOUNTED LED EXIT SIGN. 90 MINUTE MINIMUM BATTERY BACKUP, WHITE FINISH, RED/GREEN LETTERS.	LED	120V	UNIVERSAL	<5	20
 EX1	EQUAL TO: LITHONIA #ECRG-HO-RD-M6	COMBINATION EMERGENCY LIGHTING UNIT/EXIT SIGN. WHITE THERMOPLASTIC HOUSING, RED/GREEN LETTERS. 90 MINUTE MINIMUM BATTERY BACKUP. REMOTE CAPABLE WHERE REQUIRED.	LED EXIT, TWO(2) LED LAMPHEADS	120V	UNIVERSAL	<5	37
 EM	EQUAL TO: LITHONIA #ELM2L-M12	SURFACE MOUNTED EMERGENCY LIGHTING UNIT. WHITE THERMOPLASTIC HOUSING. 90 MINUTE MINIMUM BATTERY BACKUP, WHITE FINISH.	TWO(2) LED LAMPHEADS	120V	UNIVERSAL	<5	61
QUANTITY NOTE THE LIGHTING FIXTURE QUANTITIES LISTED IN THIS SCHEDULE ARE FOR ENERGY CODE COMPLIANCE ONLY. THE FLOOR PLANS GOVERN THE ACTUAL QUANTITIES. THE CONTRACTOR SHALL MAKE HIS OWN QUANTITY TAKEOFF.						TOTAL WATTS PER PROJECT (INTERIOR)	16,614
						TOTAL SQUARE FEET (INTERIOR)	30,000
						TOTAL WATTS / SQUARE FOOT	0.55
						ALLOWED WATTS / SQUARE FOOT (-10%)	0.71

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NOTE:
ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTOR FOR EXACT EQUIPMENT BEING FURNISHED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL DISCONNECTS, FUSES, REDUCERS, CONTROL CIRCUITS AND CONNECTIONS REQUIRED FOR THE INSTALLATION OF THE PLUMBING EQUIPMENT.

NOTE:
ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE PLUMBING CONTRACTORS FOR EXACT EQUIPMENT BEING FURNISHED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL DISCONNECTS, FUSES, REDUCERS, CONTROL CIRCUITS AND CONNECTIONS REQUIRED FOR THE INSTALLATION OF THE PLUMBING EQUIPMENT.



BDA



09/09/24

**ROCKLAND GREEN CENTER FOR ANIMAL
RESCUE AND EDUCATIONAL
SERVICES, INC.**
R.G. C.A.R.E.S. ANIMAL SHELTER
427 BEACH RD. LOCATED IN THE TOWN OF
HARVERSTRAW, NY 10993

SITE PLAN - ELECTRICAL

REV #	DATE	COMMENTS
REVISION:	09/09/2024	ADDENDUM 2
REVISION:		
REVISION:		
REVISION:		

REVIEWS	
INITIALS	
	BDA DSGN. REV.
	BDA TECH REV.

RGAS

PROJECT NO.: 23077

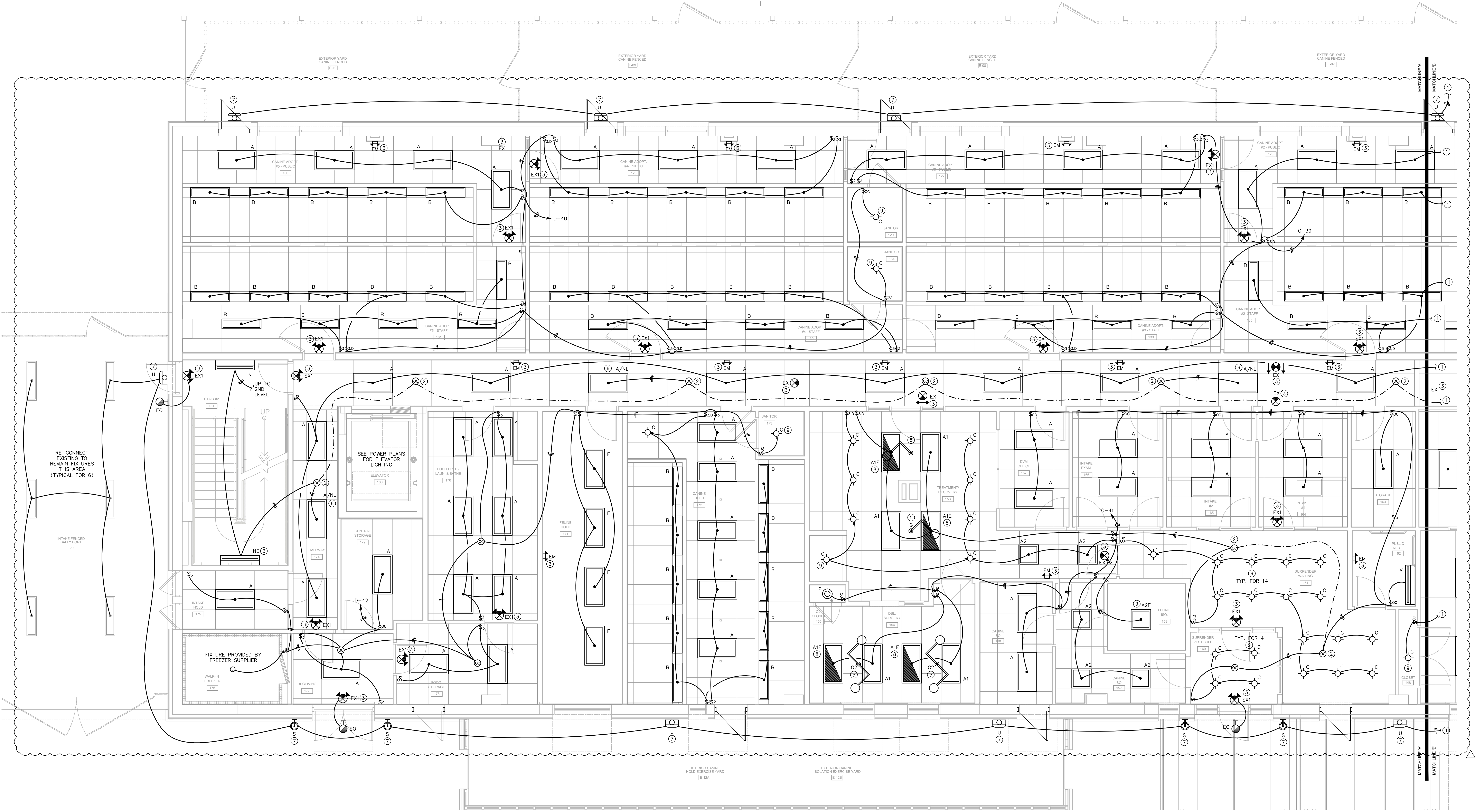
DRAWN: ZLT

DATE: 07/08/2024

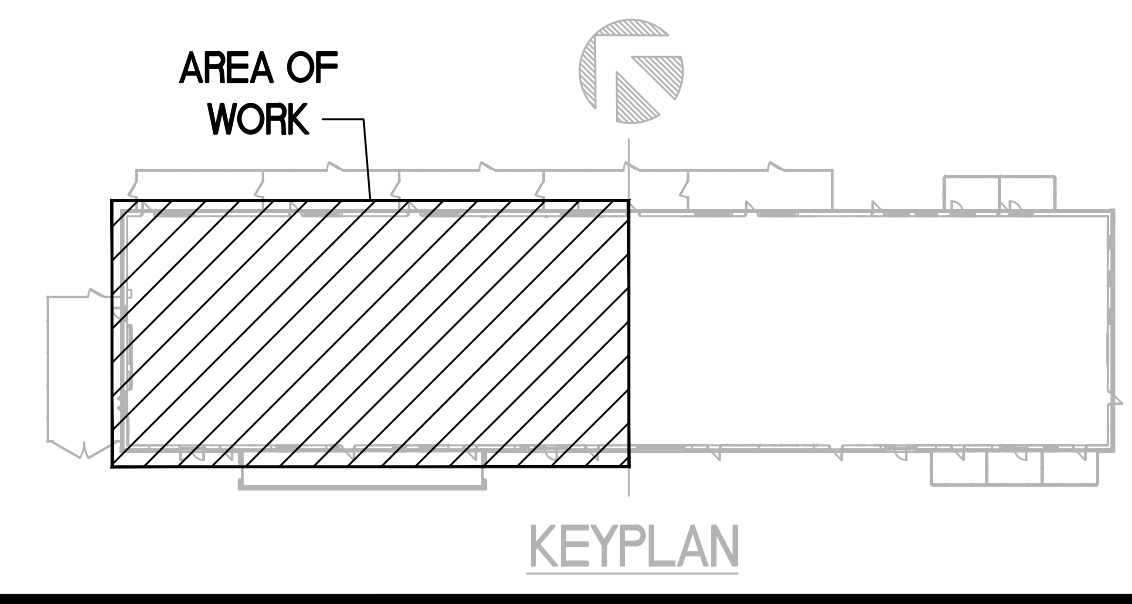
E100

4 OF 19

- KEY NOTES
- SEE DRAWING E102 FOR CONTINUATION.
 - CONNECT FIXTURES SUCH THAT ACTIVATION OF ANY OCCUPANCY SENSOR SHALL ENERGIZE ALL FIXTURES IN THIS SPACE. SEE DETAIL #1 SHEET E402.
 - NIGHT LIGHTS, EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES (DRIVERS) SHALL BE CONNECTED TO LOCAL AREA LIGHTING CIRCUIT UNSWITCHED, AHEAD OF AREA LIGHTING CONTROLS.
 - SEE UPPER LEVEL PLAN FOR LIGHTING IN THIS AREA.
 - OWNER SUPPLIED EXAM/SURGERY LIGHT. SEE SHEET E201 FOR POWER CONNECTION.
 - NIGHT LIGHT FIXTURE "ON" 24/7.
 - WIRE EXTERIOR LIGHTING FIXTURE VIA PHOTOCELL/LIGHTING CONTACTOR. VERIFY LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. SEE LIGHTING CONTROL DETAIL #7 ON SHEET E402 FOR ADDITIONAL INFORMATION.
 - SEE SWITCHED EMERGENCY LIGHTING DETAIL #11 ON SHEET E402 FOR ADDITIONAL INFORMATION.
 - PROVIDE A FLANGE KIT FOR FIXTURES MOUNTED IN HARD CEILING (TYPICAL).



1 MAIN LEVEL FLOOR PLAN - LIGHTING - WEST
SCALE: 1/4" = 1'-0"

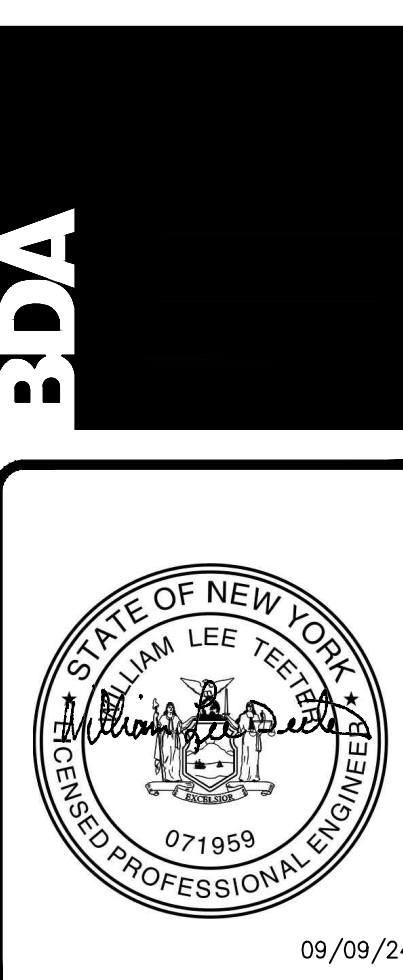


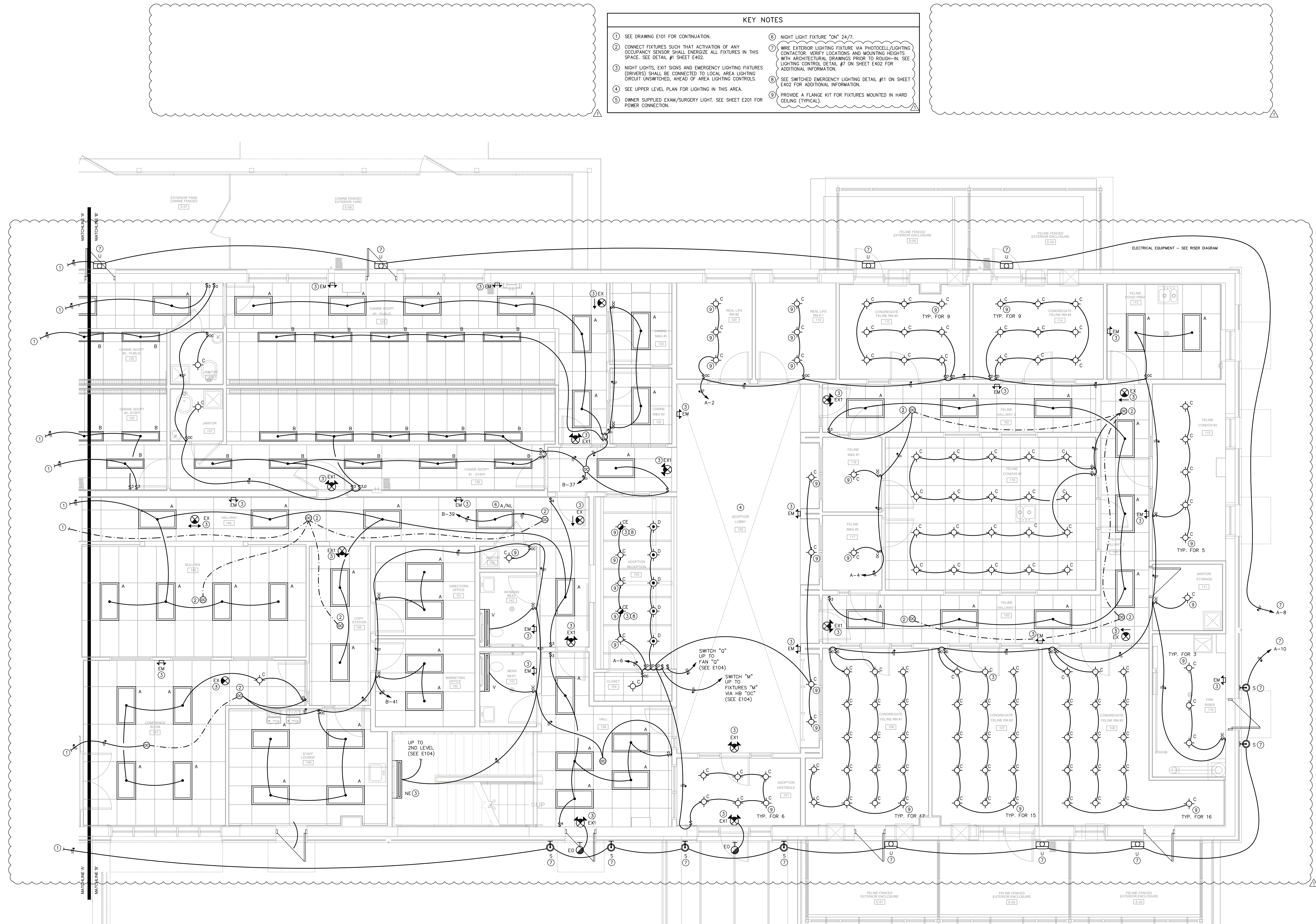
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REV. #		DATE	COMMENTS
1		08/09/2024	ADDENDUM 2
REVISION:			
REVISION:			
REVISION:			

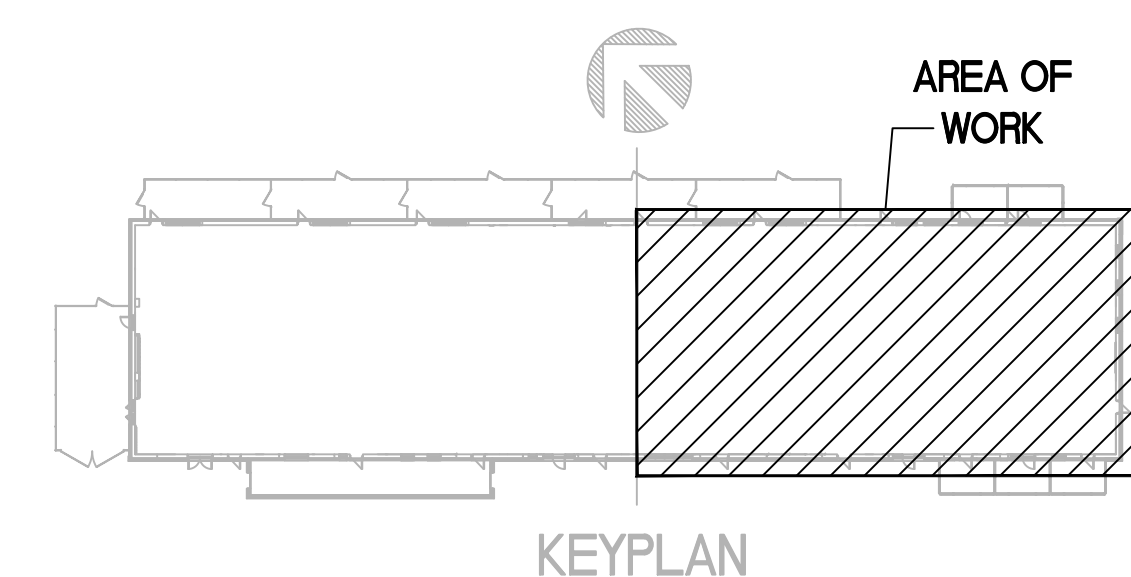
INITIALS		REVIEWS
		BDA DSGN. REV.
		BDA TECH. REV.
RGAS		
PROJECT NO.:	23077	
DRAWN:	ZLT	
DATE:	07/08/2024	
E101		
5	OF	19

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STATE OF NEW YORK
071959
09/09/24





1
MAIN LEVEL
FLOOR PLAN - LIGHTING - EAST
SCALE: 1/4" = 1'-0"



- KEY NOTES
- SEE DRAWING E101 FOR CONTINUATION.
 - CONNECT FIXTURES SUCH THAT ACTIVATION OF ANY OCCUPANCY SENSOR SHALL ENERGIZE ALL FIXTURES IN THIS SPACE. SEE DETAIL #1 SHEET E402.
 - NIGHT LIGHTS, EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES (DRIVERS) SHALL BE CONNECTED TO LOCAL AREA LIGHTING CIRCUIT UNSWITCHED, AHEAD OF AREA LIGHTING CONTROLS.
 - SEE UPPER LEVEL PLAN FOR LIGHTING IN THIS AREA.
 - OWNER SUPPLIED EXAM/SURGERY LIGHT. SEE SHEET E201 FOR POWER CONNECTION.
 - NIGHT LIGHT FIXTURE "ON" 24/7.
 - WIRE EXTERIOR LIGHTING FIXTURE VIA PHOTOCELL/LIGHTING CONTACTOR. VERIFY LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. SEE LIGHTING CONTROL DETAIL #7 ON SHEET E402 FOR ADDITIONAL INFORMATION.
 - SEE SWITCHED EMERGENCY LIGHTING DETAIL #11 ON SHEET E402 FOR ADDITIONAL INFORMATION.
 - PROVIDE A FLANGE KIT FOR FIXTURES MOUNTED IN HARD CEILING (TYPICAL).

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09/09/24

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R.G. C.A.R.E.S. ANIMAL SHELTER
427 BEACH RD. LOCATED IN THE TOWN OF
HARVERSTRAW, NY 10993

REVIEWS	
INITIALS	REVISIONS
BDA DSGN. REV.	
BDA TECH REV.	

REVIEWS	
REV.#	COMMENTS
1	08/09/2024
2	ADENDUM 2

REVISION:	DATE
REVISION:	08/09/2024
REVISION:	
REVISION:	

RGAS
PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024
E102
6 OF 19

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WALLPAPER: 704.544.4444

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ROCKLAND GREEN CENTER FOR ANIMAL
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R.G. C.A.R.E.S. ANIMAL SHELTER
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HARVERSTRAW, NY 10993

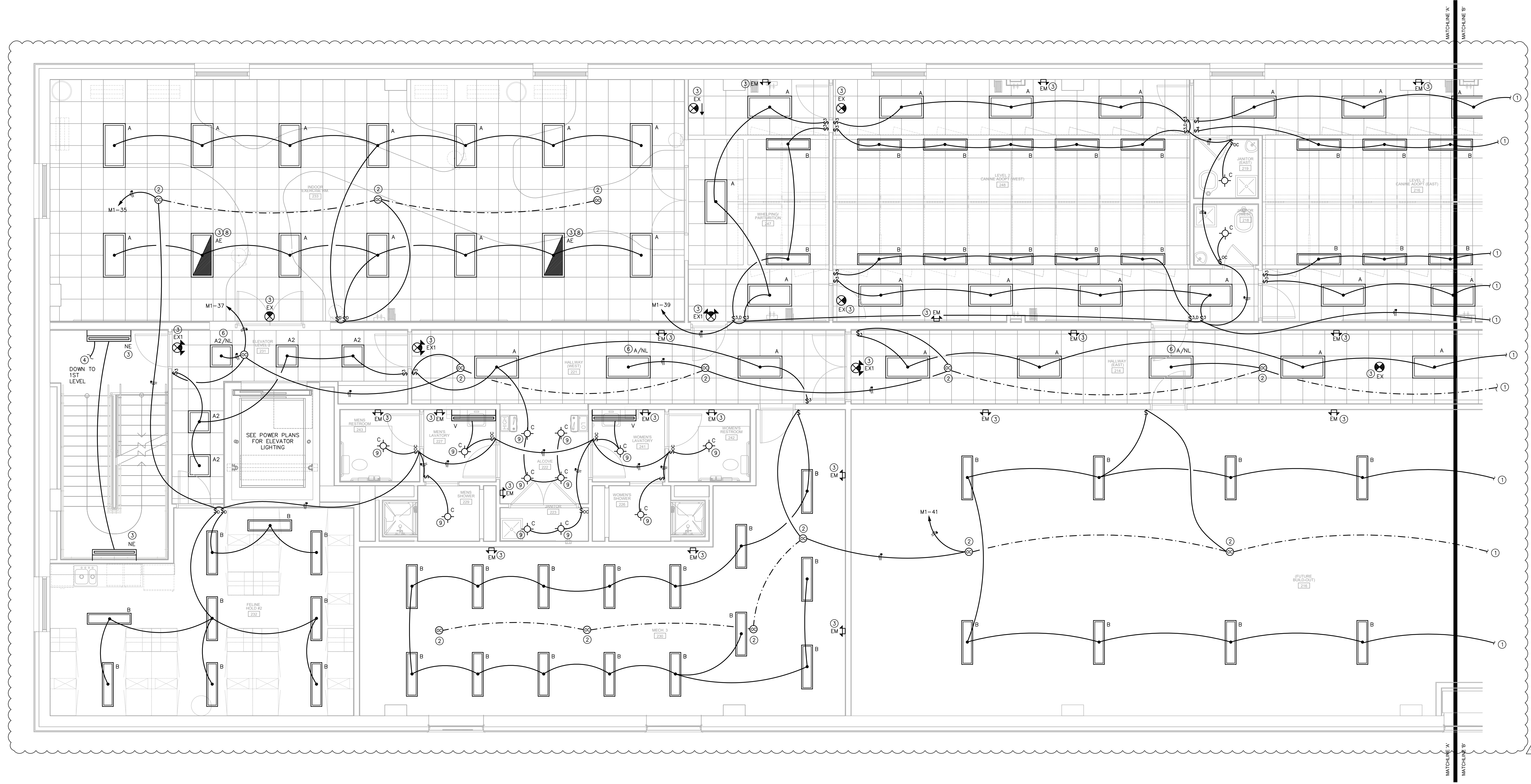
REVIEWS	
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BDA TECH. REV.	

REVIEWS	
REV. #	COMMENTS
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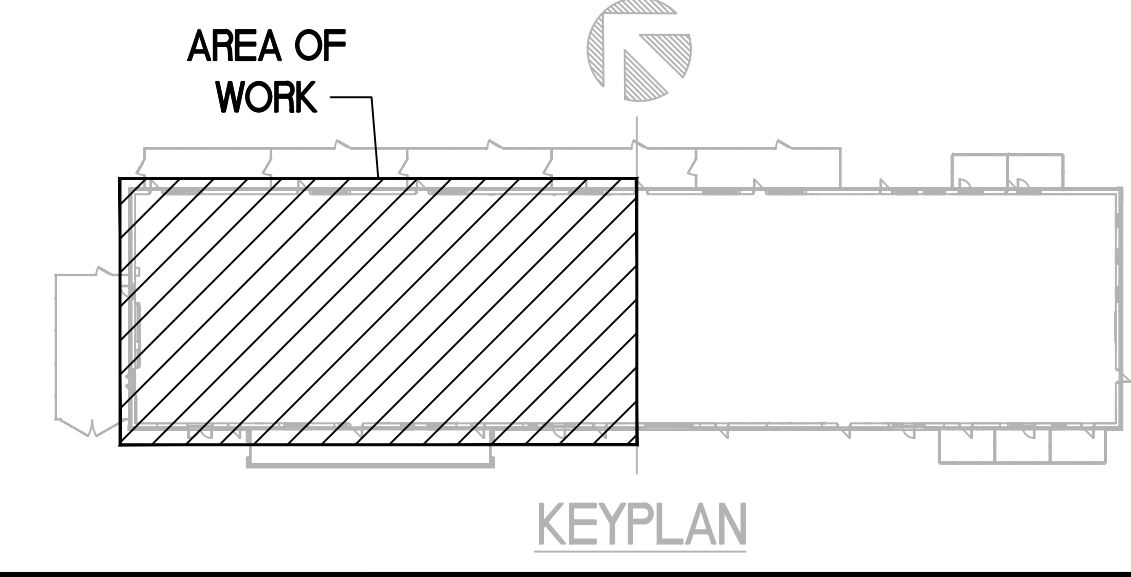
REVIEWS	
INITIALS	REVISIONS
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BDA TECH. REV.	

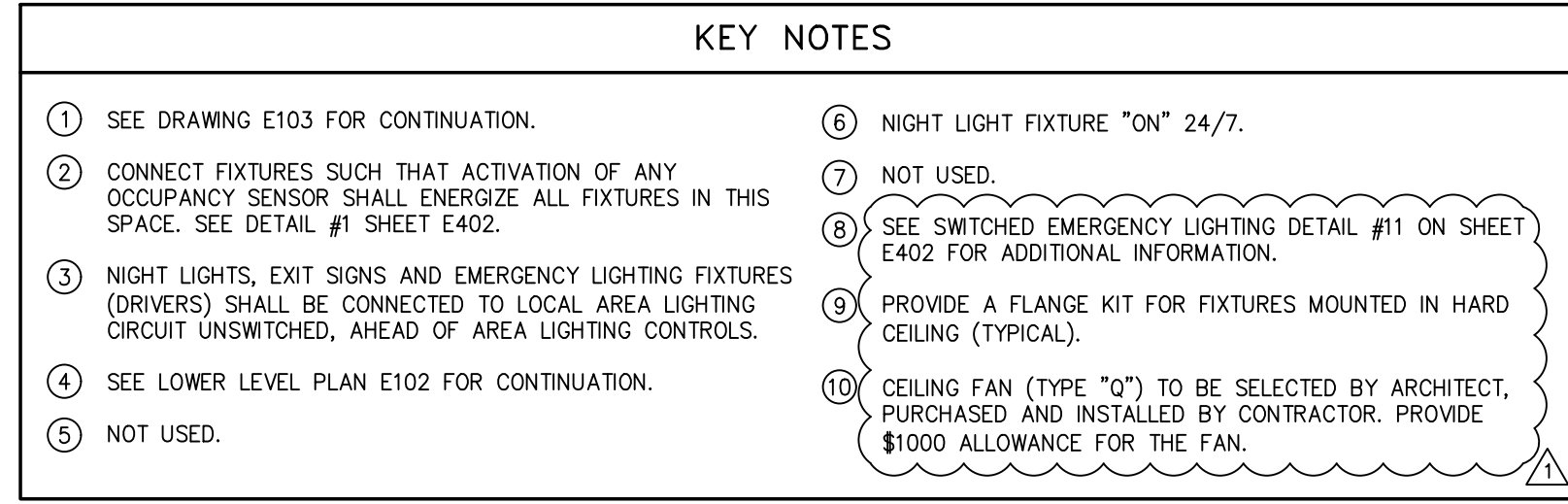
REVIEWS	
REV. #	COMMENTS
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- KEY NOTES
- SEE DRAWING E104 FOR CONTINUATION.
 - CONNECT FIXTURES SUCH THAT ACTIVATION OF ANY OCCUPANCY SENSOR SHALL ENERGIZE ALL FIXTURES IN THIS SPACE. SEE DETAIL #1 SHEET E402.
 - NIGHT LIGHTS, EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES (DRIVERS) SHALL BE CONNECTED TO LOCAL AREA LIGHTING CIRCUIT UNSWITCHED, AHEAD OF AREA LIGHTING CONTROLS.
 - SEE LOWER LEVEL PLAN E101 FOR CONTINUATION.
 - NOT USED.
 - NIGHT LIGHT FIXTURE "ON" 24/7.
 - NOT USED.
 - SEE SWITCHED EMERGENCY LIGHTING DETAIL #11 ON SHEET E402 FOR ADDITIONAL INFORMATION.
 - PROVIDE A FLANGE KIT FOR FIXTURES MOUNTED IN HARD CEILING (TYPICAL).



1 UPPER LEVEL
FLOOR PLAN - LIGHTING - WEST
SCALE: 1/4" = 1'-0"

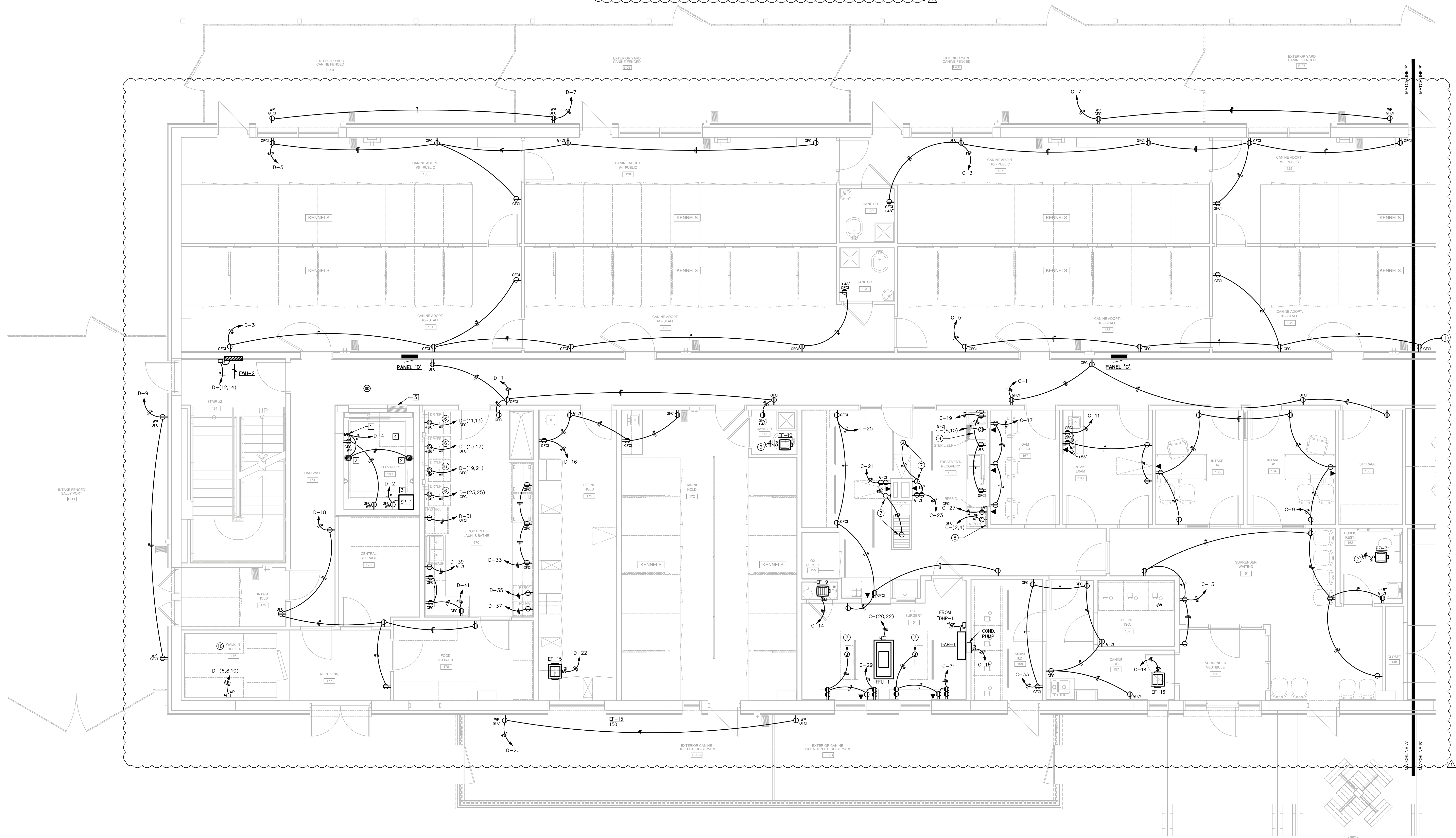




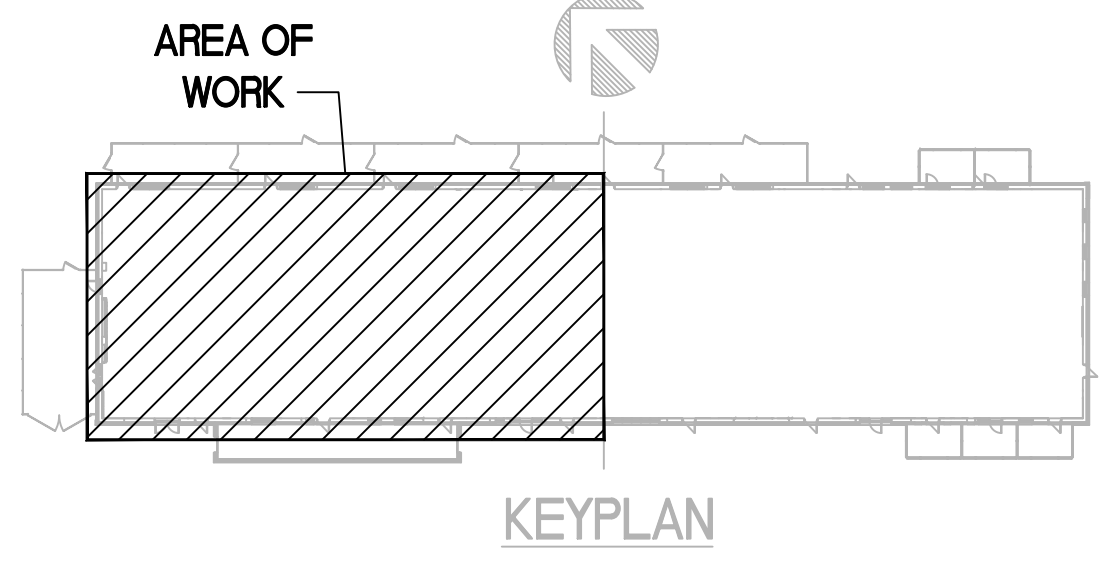
- ELEVATOR NOTES**
1. LOCATE ELEVATOR LIGHT SWITCH ADJACENT TO LADDER 60" ABOVE LANDING. SWITCH SHALL BE EASILY ACCESSIBLE FROM ENTRANCE TO ELEVATOR PIT.
 2. ELEVATOR PIT LIGHT, 120V VAPOR PROOF LIGHT FIXTURE WALL MOUNTED 18" AFF. ELEVATOR LIGHTS SHALL SHARE CIRCUIT WITH ELEVATOR PIT RECEPTACLES. PER NEC 600-23(A), LIGHTS SHALL BE UPSTREAM OF GFCI DEVICES SUCH THAT GFCI RECEPTACLE DEVICES SHALL NOT INTERRUPT POWER TO LIGHT FIXTURES.
 3. LIGHT FIXTURE MODEL #: CREE #C-VT-A-SMWL OR APPROVED EQUAL.
 4. ELEVATOR SUMP PUMP. SEE DRAWING E003 FOR DETAILS.
 5. SEE ELEVATOR DETAILS #1 AND #2 ON E401 FOR ADDITIONAL INFORMATION AND SPECIFICATIONS.
 6. LOCATION OF ELEVATOR CONTROL BOX, ELEVATOR INDICATOR, AND FIREFIGHTER OVERRIDE.

- KEY NOTES**
1. SEE DRAWING E202 FOR CONTINUATION.
 2. POWER EXHAUST FAN VIA UN-SWITCHED LEG OF LOCAL 120V LIGHTING CIRCUIT. COORDINATE CONTROLS WITH MECHANICAL CONTRACTOR.
 3. NOT USED.
 4. NOT USED.
 5. RECEPTACLE AND DATA PORT AT 72" HEIGHT FOR WALL MOUNTED MONITOR. VERIFY REQUIREMENTS AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
 6. CONNECTION FOR DRYER, 208V, 1-PH, 0.42 KW MOTOR WITH 5.4 KW HEATING ELEMENT, 2R AMPS. VERIFY ELECTRICAL CONNECTION TYPE REQUIRED WITH EQUIPMENT DELIVERED PRIOR TO ROUGH-IN.
 7. POWER J-BOX IN CEILING FOR EXAM/SURGERY LIGHT, 115V, 1PH, 16W/54W. ELECTRICAL CONTRACTOR TO INSTALL. OWNER SUPPLIED LIGHT.
 8. CONNECTION FOR AUTOCLAVE 208V, 1-PH. VERIFY REQUIRED ELECTRICAL CONNECTION TYPE WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
 9. CONNECTION FOR STERILIZER 208V, 1-PH. VERIFY REQUIRED ELECTRICAL CONNECTION TYPE WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
 10. VERIFY WALK-IN COOLER AND FREEZER ELECTRICAL REQUIREMENT IN THE FIELD. ADJUST ELECTRICAL CONNECTIONS PER MANUFACTURER'S DOCUMENTATION AS REQUIRED.

- GENERAL NOTES**
- A. REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.
 - B. REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.



1
**MAIN LEVEL
FLOOR PLAN - POWER - WEST**
SCALE: 1/4" = 1'-0"



**ROCKLAND GREEN CENTER FOR ANIMAL
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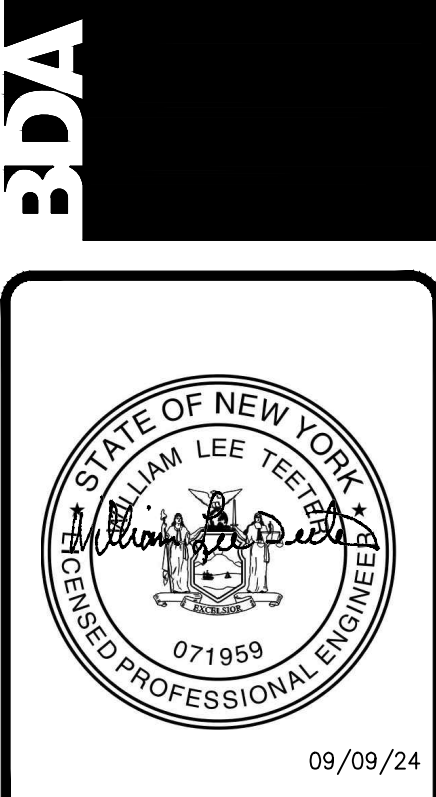
MAIN LEVEL	
FLOOR PLAN - POWER - WEST	
REV. #	COMMENTS
1	08/09/2024
2	ADDENDUM 2

REVIEWS	
INITIALS	DATE
BDA DSGN. REV.	
BDA TECH REV.	

RGAS
PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

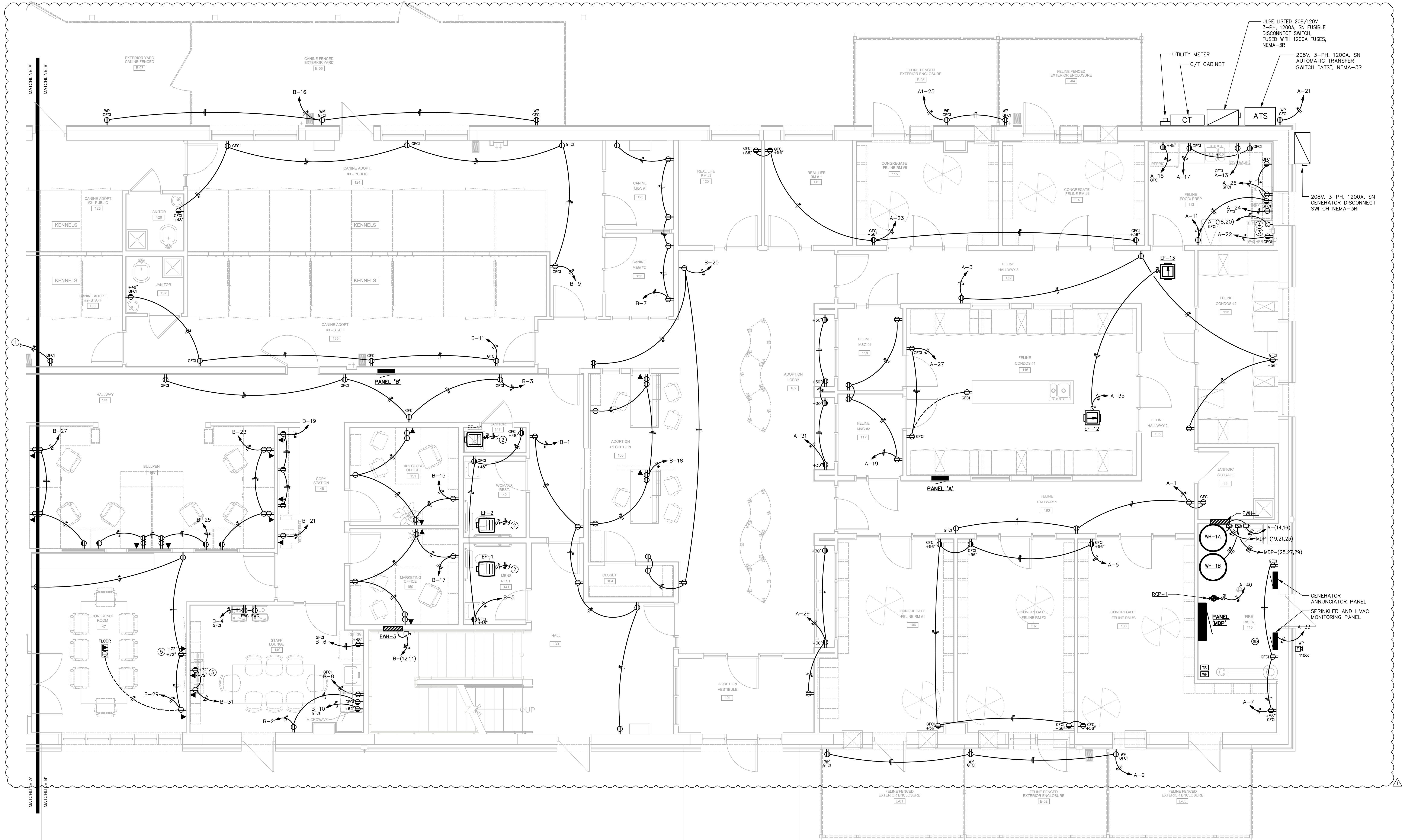
E201
9 OF 19

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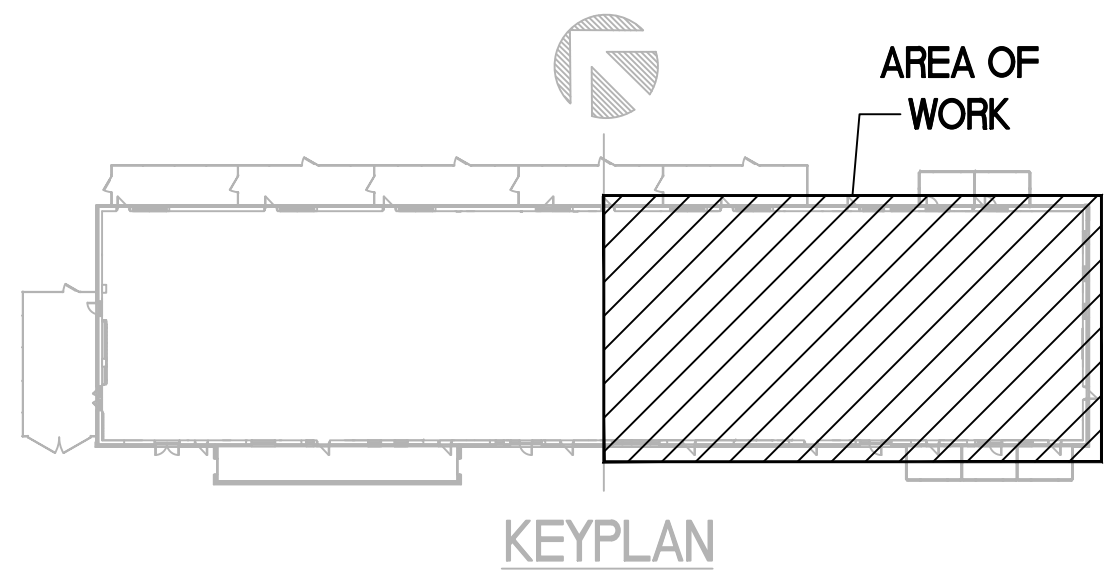


- KEY NOTES**
- SEE DRAWING E201 FOR CONTINUATION.
 - POWER EXHAUST FAN VIA UN-SWITCHED LEG OF LOCAL 120V LIGHTING CIRCUIT. COORDINATE CONTROLS WITH MECHANICAL CONTRACTOR.
 - CONNECTION FOR STACKABLE WASHER 120V, 1-P, 15 AMPS. VERIFY ELECTRICAL CONNECTION TYPE WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE RESPECTIVE POWER CORD WITH PLUG AND CONNECT WASHER.
 - CONNECTION FOR STACKABLE ELECTRIC DRYER 208V, 1-P, 0-42 KW MOTOR WITH 5-4 KW HEATING ELEMENT, 25 AMPS. VERIFY ELECTRICAL CONNECTION TYPE WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE RESPECTIVE POWER CORD WITH PLUG AND CONNECT DRYER.
 - RECEPTACLE AND DATA PORT AT 72" HEIGHT FOR WALL MOUNTED MONITOR. VERIFY REQUIREMENTS AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.

- GENERAL NOTES**
- A. REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.
- B. REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.



1
**MAIN LEVEL
FLOOR PLAN - POWER - EAST**
SCALE: 1/4" = 1'-0"



**ROCKLAND GREEN CENTER FOR ANIMAL
RESCUE AND EDUCATIONAL
SERVICES, INC.**
R.G. C.A.R.E.S. ANIMAL SHELTER
427 BEACH RD. LOCATED IN THE TOWN OF
HARVERSTRAW, NY 10993

**MAIN LEVEL
FLOOR PLAN - POWER - EAST**

REV. #	DATE	COMMENTS
1	08/09/2024	ADDENDUM 2
REVISION:		
REVISION:		
REVISION:		

INITIALS	REVIEWS
	BDA DSGN. REV.
	BDA TECH. REV.

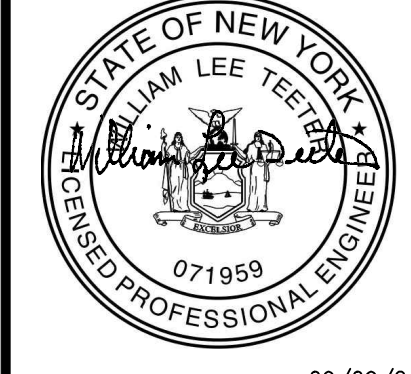
RGAS
PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

E202

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www.williamleeteeter.com
I am a duly Licensed Professional Engineer in the State of North Carolina, License No. 071959. I am also a member of the North Carolina Society of Professional Engineers, Inc. I have been practicing as a Professional Engineer for over 20 years. I am currently employed by William Lee Teeter, P.E., a sole proprietorship. I am the owner and principal engineer of the firm. I am responsible for the design and construction of electrical systems for commercial and industrial buildings. I have a B.S. in Electrical Engineering from the University of North Carolina at Charlotte. I am a member of the IEEE and the NCSE. I have been a Professional Engineer for over 20 years. I am currently employed by William Lee Teeter, P.E., a sole proprietorship. I am the owner and principal engineer of the firm. I am responsible for the design and construction of electrical systems for commercial and industrial buildings. I have a B.S. in Electrical Engineering from the University of North Carolina at Charlotte. I am a member of the IEEE and the NCSE. I have been a Professional Engineer for over 20 years.

BDA

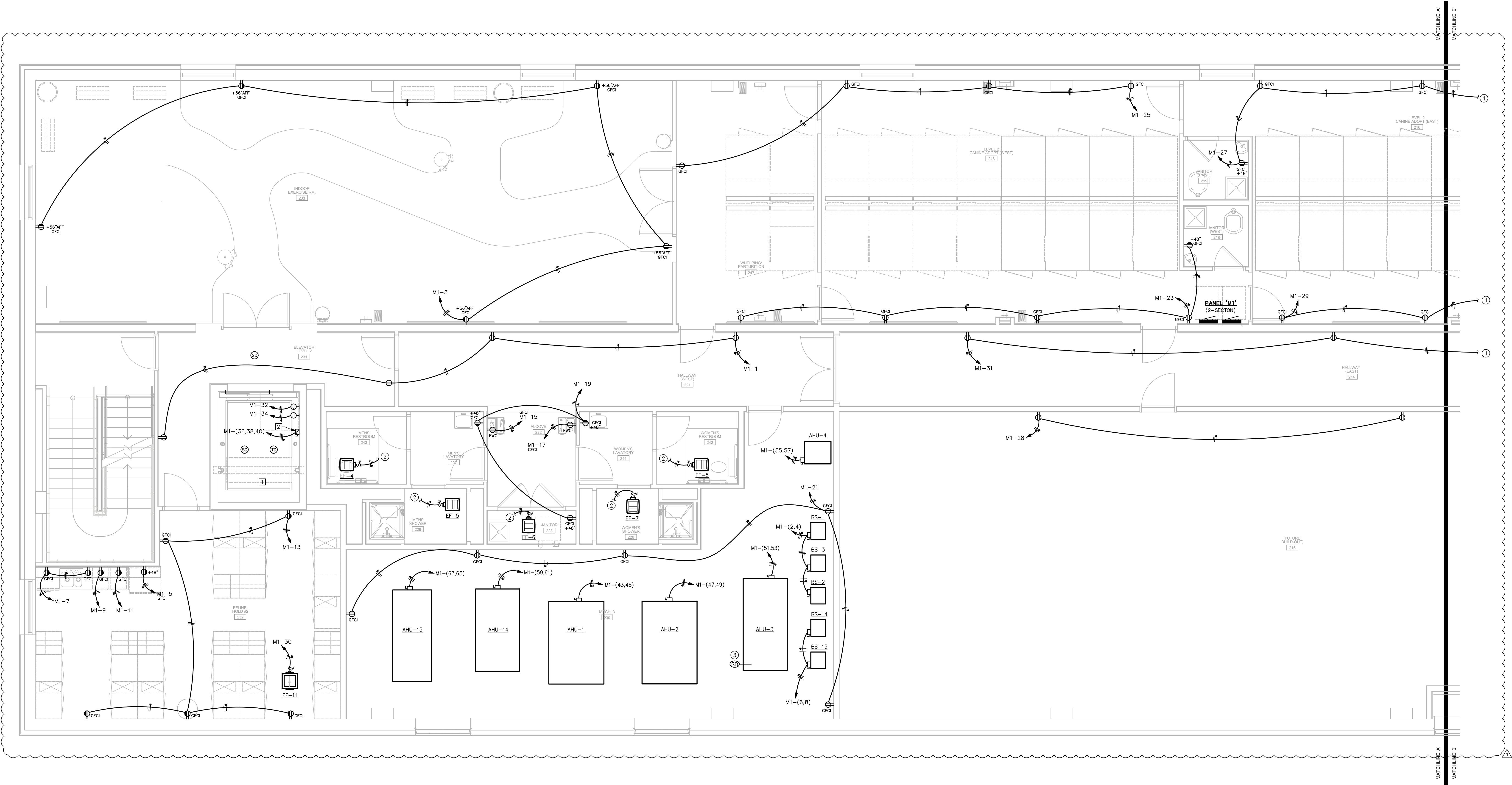


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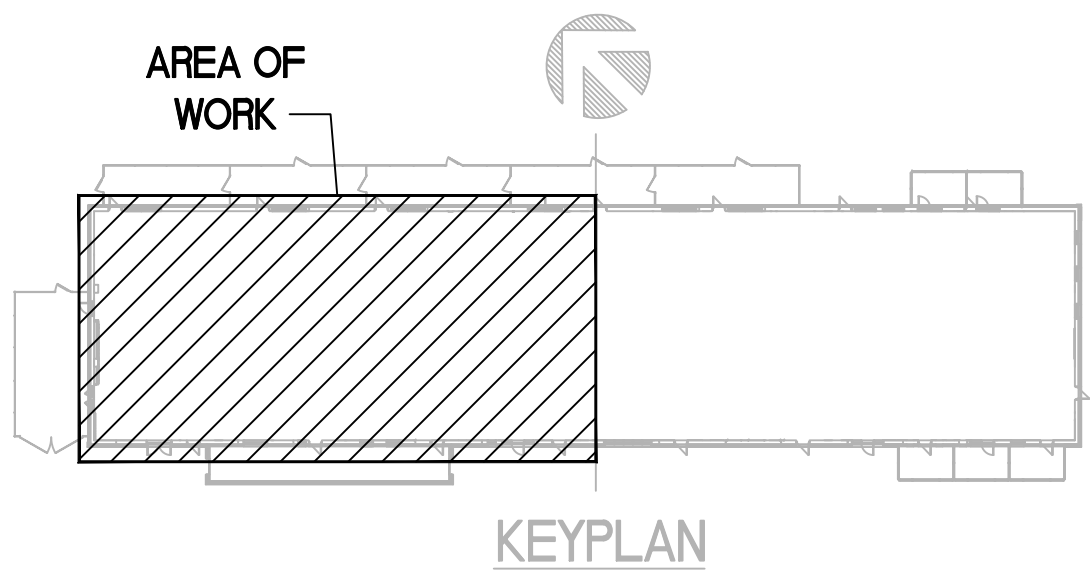
ELEVATOR NOTES
1 SEE ELEVATOR DETAILS #1 AND #2 ON E401 FOR ADDITIONAL INFORMATION AND SPECIFICATIONS.
2 ELEVATOR DISCONNECT BY ELEVATOR MANUFACTURER.

KEY NOTES
1 SEE DRAWING E202 FOR CONTINUATION.
2 POWER EXHAUST FAN VIA UN-SWITCHED LEG OF LOCAL 120V LIGHTING CIRCUIT. COORDINATE CONTROLS WITH MECHANICAL CONTRACTOR.
3 DUCT MOUNTED SMOKE DETECTOR(S) PROVIDED AND INSTALLED IN THE DUCT BY MECHANICAL CONTRACTOR. THE DUCT MOUNTED SMOKE DETECTOR(S) SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR TO HVAC AND SPRINKLER MONITORING PANEL (PANEL PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR IN FIRE RISER ROOM 110). SEE E401 FOR RISER AND NOTES.

GENERAL NOTES
A. REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.
B. REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.



1
UPPER LEVEL
FLOOR PLAN - POWER - WEST
SCALE: 1/4" = 1'-0"



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HARVERSTRAW, NY 10993

UPPER LEVEL
FLOOR PLAN - POWER - WEST

REV. #	DATE	COMMENTS
1	08/09/2024	ADDENDUM 2

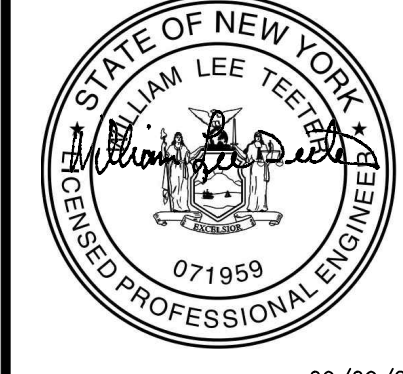
INITIALS	REVIEWS
BDA DSGN. REV.	
BDA TECH. REV.	

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PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

E203
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REGISTERED PROFESSIONAL ELECTRICAL ENGINEER
STATE OF NEW YORK
071959
09/09/24

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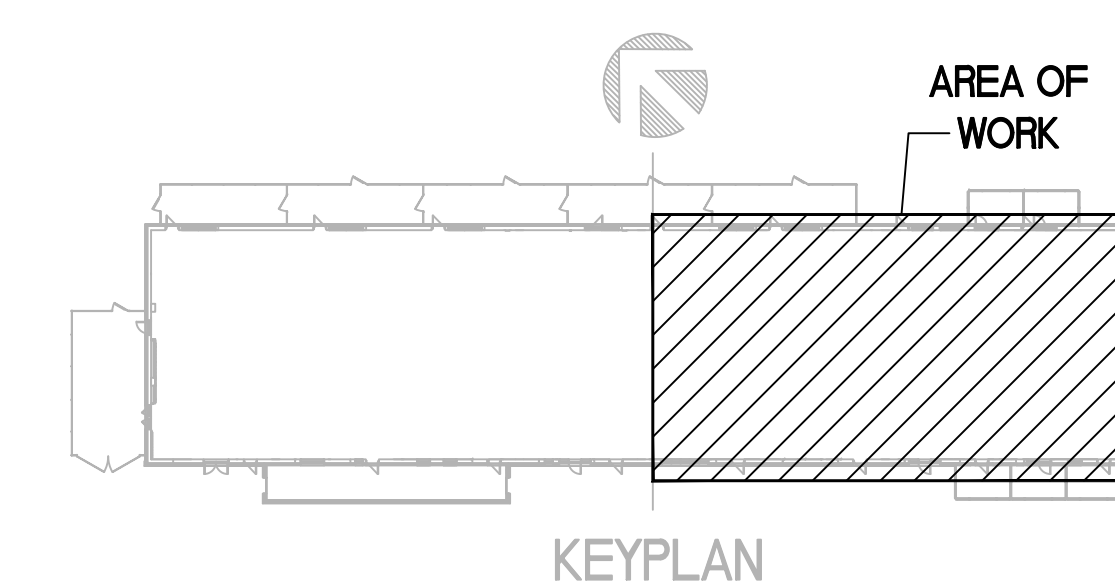
KEY NOTES

- ① SEE DRAWING E203 FOR CONTINUATION.
- ② DUCT MOUNTED SMOKE DETECTOR(S) PROVIDED AND INSTALLED IN THE DUCT BY MECHANICAL CONTRACTOR. THE DUCT MOUNTED SMOKE DETECTOR(S) SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR TO HVAC AND SPRINKLER MONITORING PANEL (PANEL PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR IN FIRE RISER ROOM 110). SEE E401 FOR RISER AND NOTES.

- ② DUCT MOUNTED SMOKE DETECTOR(S) PROVIDED AND INSTALLED IN THE DUCT BY MECHANICAL CONTRACTOR. DETECTED MOUNTED SMOKE DETECTOR(S) SHALL BE WIRED BY THE ELECTRICAL CONTRACTOR TO HVAC AND SPRINKLER MONITORING PANEL (PANEL PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR IN FIRE RISER ROOM 110). SEE E401 FOR RISER AND NOTES.

GENERAL NOTES	
A.	REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.
B.	REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.

- A. REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.
- B. REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.



UPPER LEVEL
FLOOR PLAN - POWER - EAST

UPP		FLOOR PLAN		COMMENTS
REV.#	DATE			
REVISION:	06/09/2024	ADDENDUM 2		
REVISION:				
REVISION:				
REVISION:				

REVIEWS	
INITIALS	
	BDA DSGN. REV.
	BDA TECH REV.

RGAS

PROJECT NO.: 23077

DRAWN: ZLT

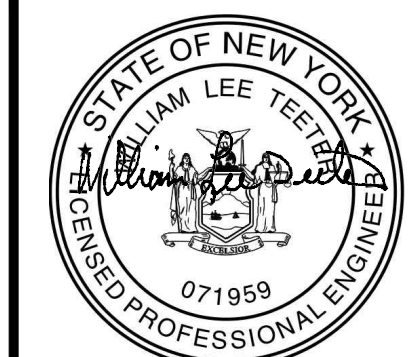
DATE: 07/08/2024

E204

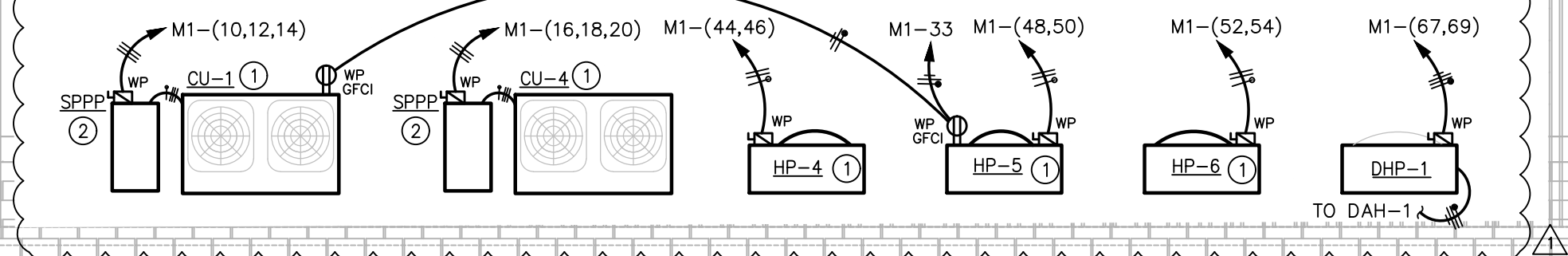
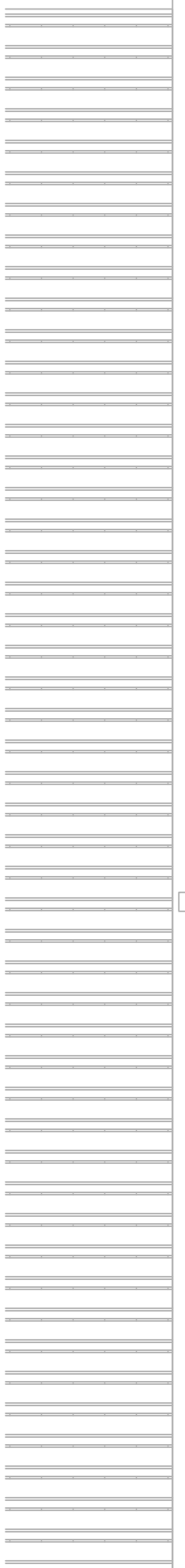
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3DA



09/09/2

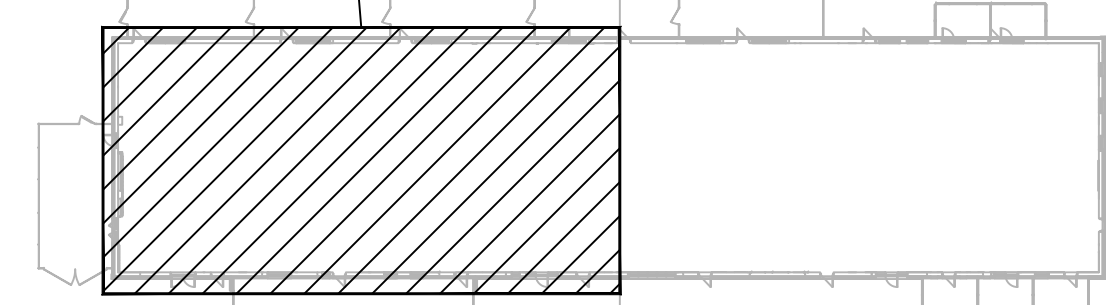


- ① CONDENSING/HEAT-PUMP OUTDOOR UNIT INSTALLED ATOP OF THE ROOF OVER THE CANINE EXERCISE YARDS BY MECHANICAL.
- ② SINGLE POINT POWER PANEL EQUIP. "SPPP" PROVIDED BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR TO HAVE ALL ELECTRICAL CONNECTIONS LANDED AT PANEL AND THEN DISTRIBUTED TO ASSOCIATED INDOOR UNIT(S) AS REQUIRED.

A. REFER TO DRAWING E001 & E002 FOR ELECTRICAL SPECIFICATIONS, SYMBOL LEGENDS, AND NOTES.

B. REFER TO DRAWING E003 FOR MECHANICAL AND PLUMBING EQUIPMENT SCHEDULES.

SCALE: 1/4" = 1'-0"



KEYPLAN

ROOF PLAN - POWER - WEST

REVISION:		REV. #	DATE	COMMENTS
REVISION:		△	09/09/2024	ADDENDUM 2
REVISION:				
REVISION:				
REVISION:				

REVIEWS	
INITIALS	
	BDA DSGN. REV.
	BDA TECH REV.

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PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

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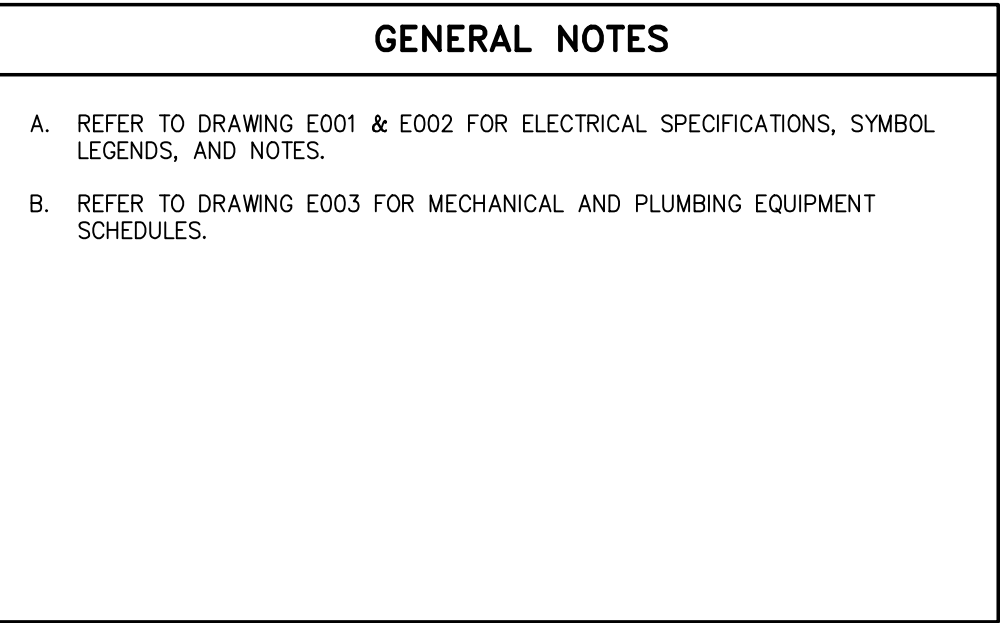
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BDA



09/09/24

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R.G.C.A.R.E.S. ANIMAL SHELTER
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A KEYPLAN diagram showing a large rectangular structure with a smaller, hatched rectangular area on the right side. A line points from the text "AREA OF WORK" to this hatched area. Above the main structure is a circular symbol with a diagonal line and a shaded quadrant, indicating a specific orientation or section. The word "KEYPLAN" is written below the main structure.

PROPOSED UTILITY TRANSFORMER BANK OR EXISTING POWER POLE (SIZED BY UTILITY COMPANY)

AVAILABLE SHORT CIRCUIT FAULT CURRENT & COORDINATION STUDY
BASED ON A 500 KVA, 17KZ POLE BANK UTILITY TRANSFORMER (3x100 KVA), THE CALCULATED MAXIMUM FAULT CURRENT AVAILABLE AT THE TRANSFORMER IS 55,600 AMPS AND AT THE POINT OF SERVICE (70' AWAY) IT IS 40,326 AMPS OR LESS. ALL EQUIPMENT SHALL BE COORDINATED AND RATED NO LESS THAN THE AVAILABLE FAULT CURRENT AS CALCULATED.

POWER RISER NOTES

- ALL OVERCURRENT PROTECTION DEVICES SHALL HAVE THE SAME FAULT CURRENT RATING AS THAT OF THE PANEL OR SWITCHGEAR THEY ARE LOCATED WITHIN.
- AVAILABLE FAULT CURRENT SHALL BE FIELD MARKED ON ALL SERVICE EQUIPMENT IN ACCORDANCE WITH NEC 110.24.
- ALUMINUM FEEDER CONDUCTORS SHALL BE TERMINATED WITH BARREL TYPE COMPRESSION CONNECTORS WITH A MINIMUM OF TWO COMPRESSION INDENTS PER WIRE AND LISTED FOR USE WITH COPPER/ALUMINUM CONDUCTORS, EQUAL TO BURNDY COMPRESSION PIN ADAPTER AYPO.
- UNIT SHALL HAVE FORM-C DRY CONTACTS FOR REMOTE STATUS MONITORING.
- METAL OXIDE VARISTORS SHALL BE "LARGE DIAMETER" TYPE.
- THE SURGE SUPPRESSOR AT THE SERVICE SWITCH "MDP" SHALL BE 240 KA PER PHASE, FOR A 120/208 VOLT, 3-PHASE, 4-WIRE SYSTEM INTERNALLY MOUNTED EQUAL TO SQUARE "D" #JLDM42AC SERIES.
- SPD SHALL HAVE A TEN (10) YEAR REPLACEMENT WARRANTY.

SPD SPECIFICATION

- PROVIDE TRANSIENT VOLTAGE SURGE SUPPRESSION (SPD) AT THE SERVICE PANEL "MDP".
- SPD UNIT SHALL BE EQUAL TO THE SQUARE "D" "SURGELOGIC" (EMA) SERIES.
- ACTIVE RESPONSE NETWORK SHALL PROVIDE EMI AND RFI NOISE FILTERING.
- UNIT SHALL HAVE FORM-C DRY CONTACTS FOR REMOTE STATUS MONITORING.
- METAL OXIDE VARISTORS SHALL BE "LARGE DIAMETER" TYPE.
- THE SURGE SUPPRESSOR AT THE SERVICE SWITCH "MDP" SHALL BE 240 KA PER PHASE, FOR A 120/208 VOLT, 3-PHASE, 4-WIRE SYSTEM INTERNALLY MOUNTED EQUAL TO SQUARE "D" #JLDM42AC SERIES.
- SPD SHALL HAVE A TEN (10) YEAR REPLACEMENT WARRANTY.

UPPER LEVEL

- PANEL 'M1' SEC.L: 22K AIC, 400 AMP MLO, 208/120V. 20.236 AIC connection from MDP.
- PANEL 'M1' SEC.R: 22K AIC, 400 AMP MLO, 208/120V. 20.236 AIC connection from MDP.
- PANEL 'M2' SEC.L: 22K AIC, 400 AMP MLO, 208/120V. 13.631 AIC connection from MDP.
- PANEL 'M2' SEC.R: 22K AIC, 400 AMP MLO, 208/120V. 13.631 AIC connection from MDP.
- Two sets of 400 AMP TWO(2) SETS: 3" C, 4-#300 KCM AL, 1-#3 CU GND.

MAIN LEVEL

- PANEL 'MDP': NEMA-3R, 65K AIC, 1200 AMP MLO, 208/120V. 31.789 AIC connection to busbar.
- BUSBAR: 225 AMP 3" C, 4-#300 KCM AL, 1-#4 CU GND.
- PANEL 'A': 22K AIC, 225 AMP MLO, 208/120V. 18.050 AIC connection from busbar.
- PANEL 'B': 22K AIC, 225 AMP MLO, 208/120V. 10.950 AIC connection from busbar.
- PANEL 'C': 10K AIC, 225 AMP MLO, 208/120V. 7.506 AIC connection from busbar.
- PANEL 'D': 10K AIC, 225 AMP MLO, 208/120V. 6.129 AIC connection from busbar.
- LOCATED IN FIRE RISER ROOM 110. REMOTE ANNUNCIATOR.
- 1" C FOR FUTURE CONTROLS W/ PULL STRING.
- 1" C, 2-#8, 1-#8 CU GND FOR GENERATOR HEATER.
- 1" C, 2-#10, 1-#10 CU GND FOR GENERATOR BATTERY CHARGER.

Other Equipment:

- CT (Current Transformer): 1" C, 40.326 AIC.
- 'UTILITY' Panel: 1200A 1200F, 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, NO GROUND.
- ATS (Automatic Transfer Switch): 3-POLE 1200 AMP SOLID NEUTRAL, NEMA-A-3R, 208/120V, 3ø-4W.
- 'GENERATOR' Panel: 1200A NON-FUSED, SOLID NEUTRAL, NEMA-3R, 65K AIC, 208/120V, 3ø-4W.
- DIESEL GENERATOR: 300 KW, 375 KVA, 208Y/120 VOLT, 60 HZ, 3 PHASE, 4 WIRE PAD MOUNTED STAND-BY DIESEL GENERATOR WITH 1200A LOAD SIDE BREAKER AND WEATHERPROOF SOUND ATTENUATION ENCLOSURE.
- Generator Connections: 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, 1-#3/0 CU GROUND.
- Driven Ground Rods: 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, 1-#3/0 CU GROUND.
- Water Pipe (If Metal).
- #3/0 CU Grounding.
- NEMA-3R, 65K AIC, ULSE, 208/120V, 3ø-4W.
- 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, 1-#3/0 CU GROUND.
- 1" C FOR FUTURE CONTROLS W/ PULL STRING.
- 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, 1-#3/0 CU GROUND.
- 1200 AMP FOUR(4) SETS: 4" C, 4-#500 KCM AL, 1-#3/0 CU GROUND.

PANEL SCHEDULE

'MDP'

REVIEWS	
INITIALS	
	BDA DSGN. REV.
	BDA TECH REV.

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SUPPLY: 208/120V, 3-PH, 4W
MAINS: 400A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

(LEFT SECTION)

TYPE: BRANCH CIRCUIT PANELBOARD
BUS MATERIAL: CU OR AL PER SECTION. PROVIDE SUB-FEED LUGS AND
MANUFACTURER: SQ-D, GE, SIKEM
CONNECTION TO SECOND SECTION.

REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 400A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

(LEFT SECTION)

TYPE: BRANCH CIRCUIT PANELBOARD WITH 42 POLES
 BUS MATERIAL: CU OR AL PER SECTION. PROVIDE SUB-FEED LUGS AND
 MANUFACTURER: SQ-D, GE, SAFTI CONNECTION TO SECOND SECTION.

PANEL NOTES + REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 400A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

(RIGHT SECTION)

TYPE: BRANCH CIRCUIT PANELBOARD SECTION PANELBOARD WITH 42 POLES
BUS MATERIAL: CU OR AL PER SECTION. PROVIDE SUB-FEED LUGS AND
MANUFACTURER: SQ-D, GE, SIKKENS CONNECTION TO SECOND SECTION.

REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY.

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 400A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

(RIGHT SECTION)

TYPE: BRANCH CIRCUIT PANELBOARD
 BUS MATERIAL: CU OR AL PER SECTION. PROVIDE SUB-FEED LUGS AND
 MANUFACTURER: SQ-D, GE, SIEMENS CONNECTION TO SECOND SECTION.

PANEL NOTES + REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY.

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 225A MLO
INTERRUPT RATING: 10K AIC
MOUNTING: RECESSED

TYPE: BRANCH CIRCUIT PANELBOARD
BUS MATERIAL: CU OR AL
MANUFACTURER: SQ-D, GE, SIEMENS

REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY.

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 225A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

TYPE: BRANCH CIRCUIT PANELBOARD
BUS MATERIAL: CU OR AL
MANUFACTURER: SQ-D, GE, SIEMENS

PANEL NOTES + REQUIREMENTS:
1. WITH EQUIPMENT GROUND BUS

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 225A MLO
INTERRUPT RATING: 22K AIC
MOUNTING: RECESSED

TYPE: BRANCH CIRCUIT PANELBOARD
BUS MATERIAL: CU OR AL
MANUFACTURER: SQ-D, GE, SIEMENS

REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY

SUPPLY: 208/120V, 3-PH, 4W
MAINS: 225A MLO
INTERRUPT RATING: 10K AIC
MOUNTING: RECESSED

TYPE: BRANCH CIRCUIT PANELBOARD
BUS MATERIAL: CU OR AL
MANUFACTURER: SQ-D, GE, SIEMENS

PANEL NOTES + REQUIREMENTS:

1. WITH EQUIPMENT GROUND BUS
2. PROVIDE A TYPEWRITTEN DIRECTORY

PANEL SCHEDULE KEY

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1. FURNISH AND INSTALL A SUPERVISED, LOW VOLTAGE, ADDRESSABLE CONTROL PANEL. THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, CONTROL PANEL WITH REQUIRED COMPONENTS, POWER SUPPLIES, STANDBY BATTERY SYSTEM, INTERNAL ALARM, CONTROL, OUTLETS AND WIRE, END-OF-LINE DEVICES, POWER ALARM, 120 VOLT POWER CIRCUIT, ETC.
2. ALL COMPONENTS SHALL BE U.L. LISTED AND COMPLY WITH NFPA 72. WRING SHALL COMPLY WITH NEC ARTICLE 760.
3. CATALOG NUMBERS GIVEN ARE THOSE OF EDWARDS AND DENOTE THE MINIMUM EQUIPMENT REQUIRED TO PROVIDE EQUAL EQUIPMENT BY FCI, SIMPLEX, ADT, AUTOCALL, GANWELL, PYROTECHNICS OR OTHER APPROVED MANUFACTURER WILL BE ACCEPTABLE.
4. WRING SHALL BE CLASS-B, COPPER SINGLE STRANDED CONDUCTORS, #16AWG, WITH 100% REDUCED VOLTAGE EQUAL EQUIPMENT. ADDRESSABLE WIRE AND CONDUIT SHOWN IN RISER DIAGRAM WILL BE EQUIPMENT SUPPLIER prior to CONDUIT INSTALLATION. ALL WIRE SHALL BE RUN IN EMT CONDUIT, 1/2" CONDUIT. ALL WIRE AT CONTROL PANEL SHALL BE 1/2" CONDUIT. NO LOW SMOKE PRODUCING FIRE ALARM CABLE (UL LISTED FOR THE PURPOSE MAY BE USED WITHOUT CONDUIT.
5. THE CONTROL PANEL SHALL BE EQUAL TO THE EDWARDS FIRE SHIELD SERIES CONTROL PANEL. SHARED PANELS SHALL BE COMPARED AND NOT BE LIMITED TO, POWER MODULES, MASTER PANEL, CONTROL, SIGNAL, CIRCUIT MODULES FOR AUDIBLE/VISUAL, DEVICES, SMOKE DETECTOR ALARM, SMOKE DETECTOR MODULES, REMOTE STATION MONITOR MODULES CAPABLE, 24 HOUR STANDBY BATTERY WITH INTERFACE MODULE AND CHARGER MODULE, AUXILIARY MODULES, TROUBLE MODULES, ALL REQUIRED TERMINAL STRIPS AND TERMINALS. THE SYSTEM SHALL BE INSTALLED AS A COMPLETE SYSTEM, PROVIDE TRANSIENT SUPPRESSION ON THE POWER SUPPLY.
6. THE SYSTEM SHALL BE TESTED AND CERTIFIED.
7. PROVIDE 12 MONTH GUARANTEE ON ALL WORKMANSHIP AND MATERIALS EFFECTIVE THE DATE OF BENEFICIAL USE.
8. THE SYSTEM SHALL OPERATE ON 120 VOLT POWER. FAILURE TO THE NORMAL POWER SOURCE SHALL AUTOMATICALLY TRANSFER TO THE STANDBY BATTERY.
9. SYSTEM OPERATION:
ACTUAL SOUND OF EARLY ELEVATOR LOBBY, ELEVATOR HOSTWAY, AND ELEVATOR MACHINE ROOM SMOKE DETECTOR SHALL INITIATE ALARM CONDITION AND REVEAL WIRE. WIRE SHALL BE INSTALLED AS SUPERVISORY SIGNAL. SHALL BE ACTIVATED AT CONTROL PANEL, THE ALARM INITIATION CIRCUIT FROM WHICH THE ALARM ORIGINATED.
10. THE SYSTEM SHALL BE FULLY SUPERVISED SUCH THAT ANY CIRCUIT OPENS OR GROUNDS, POWER FAILURES, OR DISARRANGEMENT OF SYSTEM COMPONENTS, WIRE SHALL BE INSTALLED AS SUPERVISORY SIGNAL.



1. THE ELECTRICAL WORK ASSOCIATED WITH THE ELEVATOR SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AND STANDARDS.
2. THIS CONTRACTOR SHALL COORDINATE THE ELEVATOR REQUIREMENTS WITH THE ELEVATOR MANUFACTURER. LOCAL EQUIPMENT ROOM AND HOSTWAY SWITCHES, LIGHTS, DETECTORS, RECEPTACLES, TELEPHONE, ETC AS DIRECTED BY THE ELEVATOR INSTALLER.
3. THE HOSTWAY SHALL INCLUDE THE FOLLOWING: TWO (2) VAPOR-TIGHT, WALL MOUNTED LIGHT FIXTURES AT 18" ABOVE THE PIT FLOOR AND TWO (2) 100 WATT, 120V, 15 AMPERES, 1" SQUARE EQUIPMENT ROOM AND HOSTWAY SWITCHES. BEST LOCATION IN THE FIELD TO ILLUMINATE ELEVATOR EQUIPMENT AT TOP OF HOSTWAY. TWO LIGHT FIXTURES SHALL BE MOUNTED ON EACH SIDE OF THE PIT FLOOR. ONE (1) 100 WATT, 120V, 15 AMPERES, 1" SQUARE EQUIPMENT ROOM AND HOSTWAY SWITCH AT 60" ABOVE THE LOWEST AND UPPER LANDING ENTRANCE SLIT. 20 AMPERE, GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE AT 18" ABOVE THE PIT FLOOR. A SECOND 20 AMPERE RECEPTACLE AT 18" ABOVE THE PIT FLOOR FOR ELEVATOR SERVICE CIRCUIT. A 100 WATT, 120V, 15 AMPERES, 1" SQUARE EQUIPMENT ROOM AND HOSTWAY SWITCH AT 60" ABOVE THE PIT FLOOR. A THERMAL DETECTOR AT THE TOP OF THE HOSTWAY (WHEN HOSTWAY IS SPRINKLERED).
4. THIS ELEVATOR IS MACHINE ROOMLESS TYPE. PROVIDE A DIRECT CONNECTION FOR ELEVATOR AS REQUIRED BY THE ELEVATOR SUPPLIER. COORDINATE ELEVATOR REQUIREMENTS WITH ELEVATOR INSTALLER PRIOR TO ROUGHING. PROVIDE CONDUIT FOR ELEVATOR SIGNALING CABLE FOR ELEVATOR SIGNALING AND ELEVATOR SERVICE AS REQUIRED. CABLE SHALL BE 1/2" PLAIN, 42 IN. X 4" CONDUIT. PROVIDE A CONDUIT TO CONTROL UNIT FOR THE #2 ALARM IN CONDUIT, AND GAS EMERGENCY MODE GROUND.
5. ACTIVATION OF ANY THERMAL DETECTOR IN THE HOSTWAY SHALL AUTOMATICALLY SIGNAL THE ELEVATOR CONTROLLER AND ACTIVATE A SHUNT TRIP UNIT ON THE ELEVATOR SERVICE CIRCUIT BREAKER, PRIOR TO THE APPLICATION OF WATER.
6. ACTIVATION OF ANY SMOKE DETECTOR IN THE HOSTWAY OR ELEVATOR LOBBIES SHALL AUTOMATICALLY SIGNAL THE ELEVATOR CONTROLLER. THESE SIGNALS WILL BE USED TO STOP THE ELEVATOR.
7. THE ALARM IN THE HOSTWAY SHALL BE RUN IN EMT CONDUIT (NO FLEX OR CABLE) ONLY WIRING ASSOCIATED WITH THE ELEVATOR EQUIPMENT IS ALLOWED TO RUN THROUGH THE HOSTWAY AND EQUIPMENT ROOMS. ALL POWER WIRING CIRCUITS SHALL HAVE A CODE SIZED EQUIPMENT GROUNDING CONDUIT.
8. ALL WIRING BETWEEN THE ELEVATOR POWER AND CONTROLS/LIGHT FUSED SWITCHING AND ELEVATOR EQUIPMENT SHALL BE BY THIS CONTRACTOR.
9. ONLY ITEMS THAT PERTAIN TO THE OPERATION OF THE ELEVATOR ARE ALLOWED IN THE ELEVATOR HOSTWAY.



** FLOOR PLAN GOVERNS THE QUANTITY AND LOCATIONS OF ALL INITIATION AND NOTIFICATION DEVICES.

1. FURNISH AND INSTALL A SUPERVISED, LOW VOLTAGE, HAVC MONITORING SYSTEM. THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, CONTROL PANEL WITH ALL REQUIRED COMPONENTS, POWER SUPPLIES, STANDBY BATTERY SYSTEM, INTEGRAL ALARM, CONDUIT, OUTLETS AND WIRE, END-OF-LINE DEVICES, POWER CIRCUIT, 120 VOLT POWER CIRCUIT, ACCESS TO TELEPHONE EQUIPMENT, AUTOMATIC DIALER, ETC.
2. ALL COMPONENTS SHALL BE U.L. LISTED AND COMPLY WITH NFPA 72. WIRING SHALL COMPLY WITH NEC ARTICLE 760.
3. CATALOG NUMBERS GIVEN ARE FOR THOSE OF POTTER AND DENOTE THE MINIMUM QUALITY AND PERFORMANCE REQUIRED. EQUAL EQUIPMENT BY FCI, SIMPLEX, ADT, AUTOCALL, GEMWELL, PYROTROXICS OR OTHER APPROVED MANUFACTURER WILL BE ACCEPTABLE.
4. WIRING SHALL BE CLASS-B, COPPER SINGLE STRANDED CONDUCTORS, #16AWG, COLOR CODED AS REQUIRED BY EQUIPMENT SUPPLIER. SYSTEM SHALL HAVE NO MORE THAN 50 ADDRESSABLE DEVICES ON EACH INITIATING CIRCUIT. CONDUCTORS SHALL BE RUN IN EMT CONDUIT, 9/16" MINIMUM SIZE. RUN INITIATING AND NOTIFICATION DEVICES WITH #16-21SWG AND POWER WITH #12 AWG. AT THE CONTRACTORS OPTION, FIRE RETARDANT (2-HR O RATED) AND LOW SMOKE PRODUCING FIRE ALARM CABLE U.L. LISTED FOR THE PURPOSE MAY BE USED WITHOUT CONDUIT, PROVIDED ALL CABLES ARE RUN CONCEALED FROM VIEW IN WALLS OR ABOVE CEILINGS. EACH AND ALL ITEMS OF THE MONITORING SYSTEM SHALL BE LISTED AS A PRODUCT OF A SINGLE MANUFACTURER UNDER THE APPROPRIATE CATEGORY BY "UL". ALL DEVICES BY ANOTHER MANUFACTURER SHALL NOT BE ACCEPTABLE. THE ENTIRE SYSTEM SHALL BE INSTALLED BY A CURRENTLY LICENSED CONTRACTOR TRAINED & CERTIFIED BY THE MANUFACTURER. INSTALLER SHALL BE A NICET-CERTIFIED TECHNICIAN LEVEL IV MINIMUM.
5. THE CONTROL PANEL SHALL BE SEMI-FLUSH MOUNTED. THE PANEL SHALL BE COMPLETE WITH POWER SUPPLY MODULES, MASTER PANEL CONTROLS, SIGNAL CIRCUIT MODULES FOR AUDIBLE/VISUAL DEVICES, ALARM RECEIVING MODULES, SILENCER, REMOTE MONITORING STATION, POWER MONITOR MODULE CAPABLE, 24 HOUR STANDBY BATTERY WITH INTERFACE MODULE AND CHARGER MODULE, AUXILIARY MODULES, TROUBLE MODULES, ALL REQUIRED TERMINAL STRIPS AND BLOCKS AND ACCESSORY RELAYS, AND ALL OTHER NECESSARY FEATURES FOR A COMPLETE SYSTEM. PROVIDE TRANSIENT SUPPRESSION WIRED IN SERIES TO THE POWER SUPPLY AND MONITORING CIRCUITS. THE SPO SHALL HAVE A MINIMUM PEAK SURGE CURRENT OF 54,000 AMPS AND A RESPONSE TIME OF 5 NANSECONDS.
6. THE REMOTE ANNUNCIATOR SHALL DUPLICATE FUNCTIONS OF THE CONTROL PANEL FOR ALARM, SUPERVISORY, AND TROUBLE INDICATIONS. ALSO DUPLICATE MANUAL SWITCHING FUNCTIONS OF THE CONTROL PANEL, INCLUDING ALARM SILENCING, SILENCER TESTING, ALPHANUMERIC DISPLAY SHALL BE THE SAME AS THE CONTROL PANEL. CABINET SHALL BE FLUSH MOUNTED IN WALL AND LOCATED AT A CONSTANTLY ATTENDED LOCATION APPROVED BY THE FIRE MARSHAL.
7. THE SYSTEM SHALL BE FULLY SUPERVISED SUCH THAT CIRCUIT OPENS OR GROUNDS, POWER FAILURES, OR DISARRANGEMENT OF SYSTEM COMPONENTS AND WIRING SHALL BE INDICATED AT THE CONTROL PANEL.
8. THE SYSTEM SHALL HAVE PROVISIONS FOR CENTRAL STATION MONITORING VIA A DIGITAL COMMUNICATOR. CENTRAL STATION MONITORING SHALL BE DONE BY A U.L. LISTED STATION.
9. THE SYSTEM SHALL BE PROVIDED WITH SUFFICIENT BATTERY TO OPERATE THE ENTIRE SYSTEM UPON LOSS OF NORMAL 120 VAC POWER IN A NORMAL SUPERVISORY MODE FOR A PERIOD OF TWENTY-FOUR (24) HOURS WITH FIVE (5) MINUTES OF ALARM INDICATION AT THE END OF THIS PERIOD OR AS REQUIRED.
10. AREA SMOKE DETECTOR SHALL BE REQUIRED BY THE APPLICATION FOR DETECTION. DETECTOR SHALL INCLUDE DRY CONTACTS WERE REQUIRED FOR CONTROL FUNCTIONS. DETECTORS SHALL BE PHOTOELECTRIC TYPE.
11. DUCT MOUNT SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE WITH APPROPRIATE SAMPLING TUBE, REMOTE MONITOR STATION, AND DRY CONTACTS FOR AHU SHUT-DOWN. (ADDITIONAL CONTACTS FOR AHU SHUT-DOWN WHILE MULTIPLE UNITS ARE SERVING A COMMON AREA). SELF-RESTORING, WHITE COLOR, AIR SHUT HOUSING WITH SAMPLING TUBE RUN ENTIRE WIDTH OF DUCT. DETECTORS TO BE SUPPLIED BY THE ELECTRICAL CONTRACTOR, INSTALLED IN THE DUCT WORK BY THE MECHANICAL CONTRACTOR, AND WIRED BY THE ELECTRICAL CONTRACTOR.
12. FLOW AND TAMPER SWITCHES TO BE SUPPLIED AND INSTALLED IN THE PIPING BY THE PLUMBING CONTRACTOR, AND WIRED BY THE ELECTRICAL CONTRACTOR.
13. THE COMPLETED SYSTEM SHALL BE FULLY TESTED BY THE CONTRACTOR AND THE MANUFACTURER'S CERTIFIED TECHNICAL REPRESENTATIVE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
14. PROVIDE 12 MONTH GUARANTEE ON ALL WORKSMANSHIP AND MATERIALS EFFECTIVE THE DATE OF BENEFICIAL USE.
15. THE SYSTEM SHALL OPERATE ON 120 VOLT POWER. FAILURE TO THE NORMAL POWER SOURCE SHALL AUTOMATICALLY TRANSFER TO THE STANDBY BATTERY.
16. SYSTEM OPERATION:
 - a) ACTIVATION OF A WATER FLOW DEVICE SHALL OPERATE AUDIBLE HORN AND VISUAL SIGNAL IN CONTROL PANEL AND INDICATE WHERE THE SIGNAL ORIGINATED. IT SHALL TRANSMIT AN ALARM SIGNAL TO AN OFF PREMISE SECURITY MONITORING COMPANY (APPROVED SUPERVISING STATION).
 - b) BY ACTIVATION OF A DUCT MOUNTED SMOKE DETECTOR SHALL OPERATE AUDIBLE HORN AND VISUAL SIGNAL IN CONTROL PANEL AND INDICATE WHERE THE SIGNAL ORIGINATED. CONTROL PANEL SHALL TRANSMIT A SUPERVISORY SIGNAL TO THE OFF PREMISE SECURITY MONITORING COMPANY.
 - c) AUDIBLE SIGNAL DEVICES SHALL SOUND CONTINUOUSLY UNTIL ACKNOWLEDGED AND VISUAL SIGNALS SHALL ILLUMINATE UNTIL RESET.
 - d) DEACTIVATION OF ANY THERMAL DETECTOR IN THE HOISTWAY SHALL AUTOMATICALLY SIGNAL THE ELEVATOR CONTROLLER AND ACTIVATE A SHUNT TRIP UNIT ON THE ELEVATOR SERVICE CIRCUIT BREAKER. PRIOR TO THE DEACTIVATION OF ANY SMOKE DETECTOR IN THE HOISTWAY OR ELEVATOR LOBBIES SHALL AUTOMATICALLY SIGNAL THE ELEVATOR CONTROLLER. THESE SIGNALS WILL BE USED TO PLACE THE ELEVATOR IN AN EMERGENCY MODE OF OPERATION.
16. THE SYSTEM SHALL BE FULLY SUPERVISED SUCH THAT ANY CIRCUIT OPENS OR GROUNDS, POWER FAILURES, OR DISARRANGEMENT OF SYSTEM COMPONENTS OR WIRING SHALL BE INDICATED AT THE CONTROL PANEL.
16. THE SYSTEM SHALL HAVE MONITORING VIA A DIGITAL COMMUNICATOR.

ELECTRICAL DETAILS

REVIEWS	
INITIALS	
	BDA DSGN. REV.
	BDA TECH REV.

RGAS

PROJECT NO.: 23077

DRAWN: ZLT

DATE: 07/08/2024

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17 OF 19

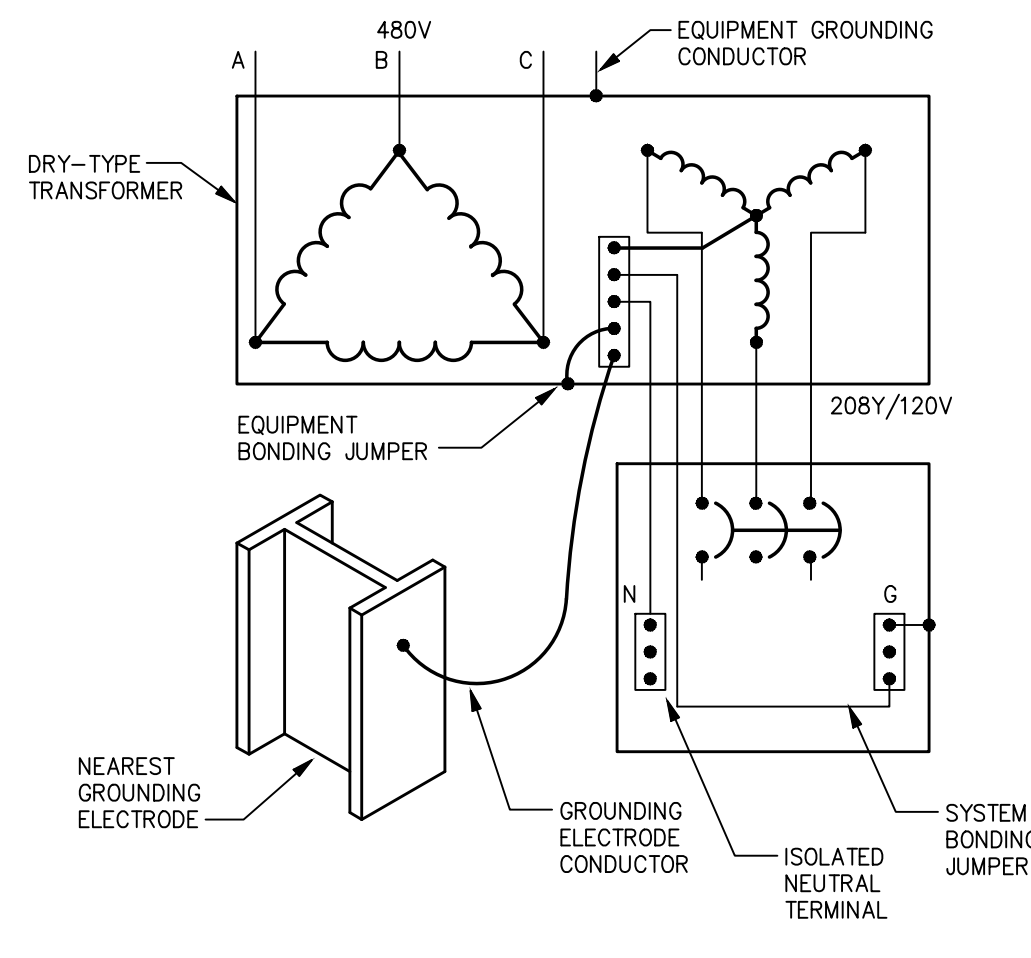
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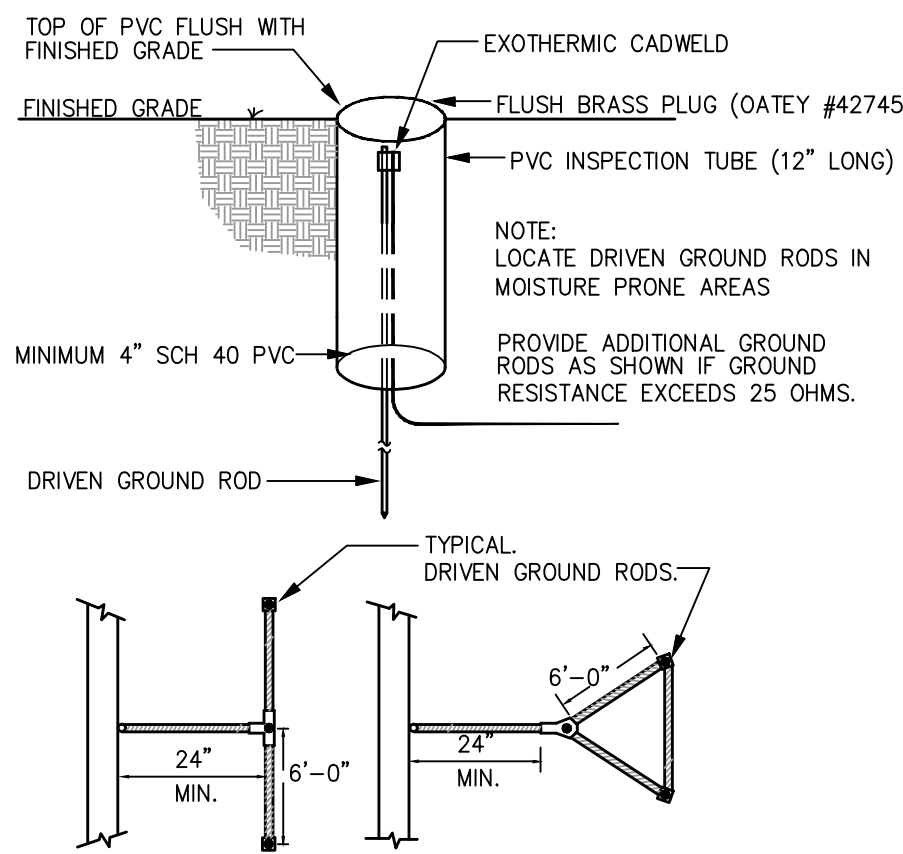


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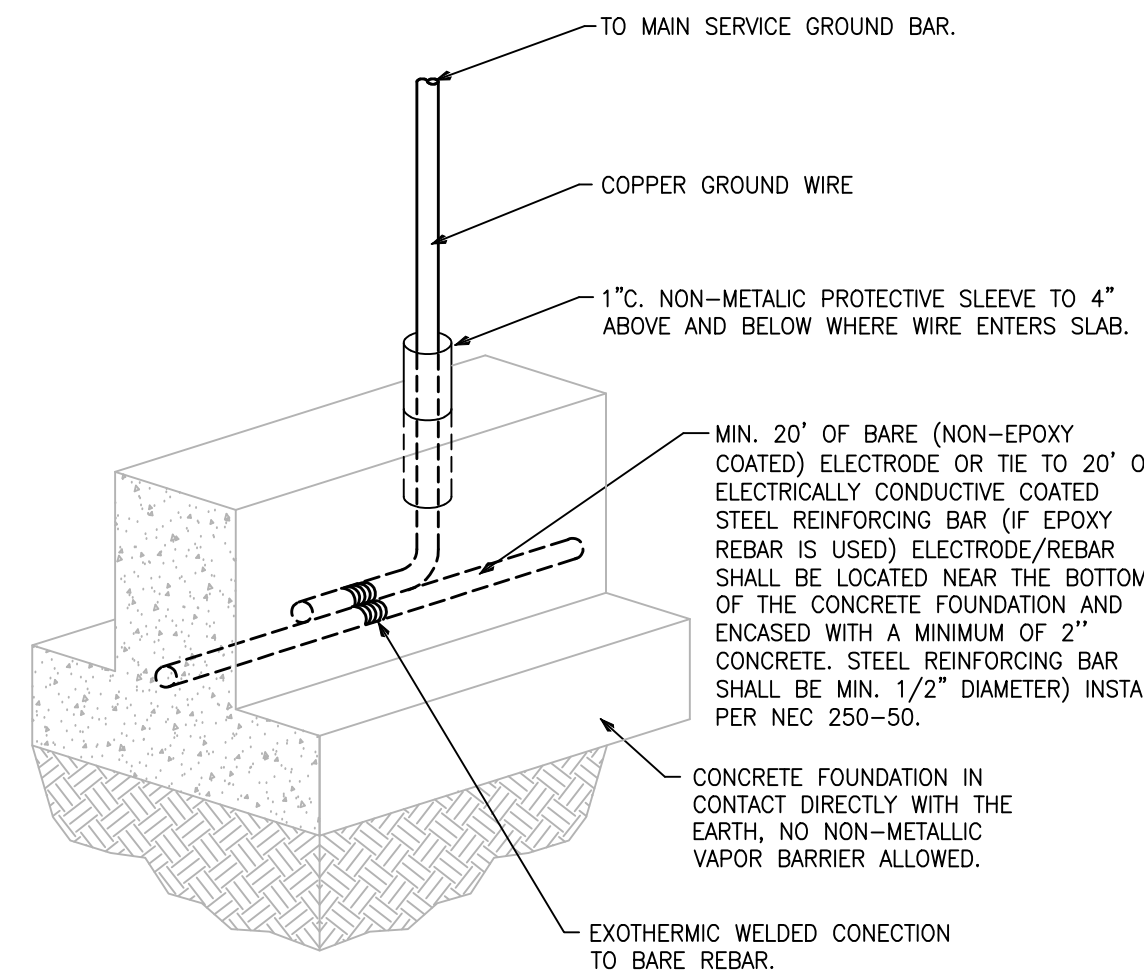
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427 BEACH RD. LOCATED IN THE TOWN OF
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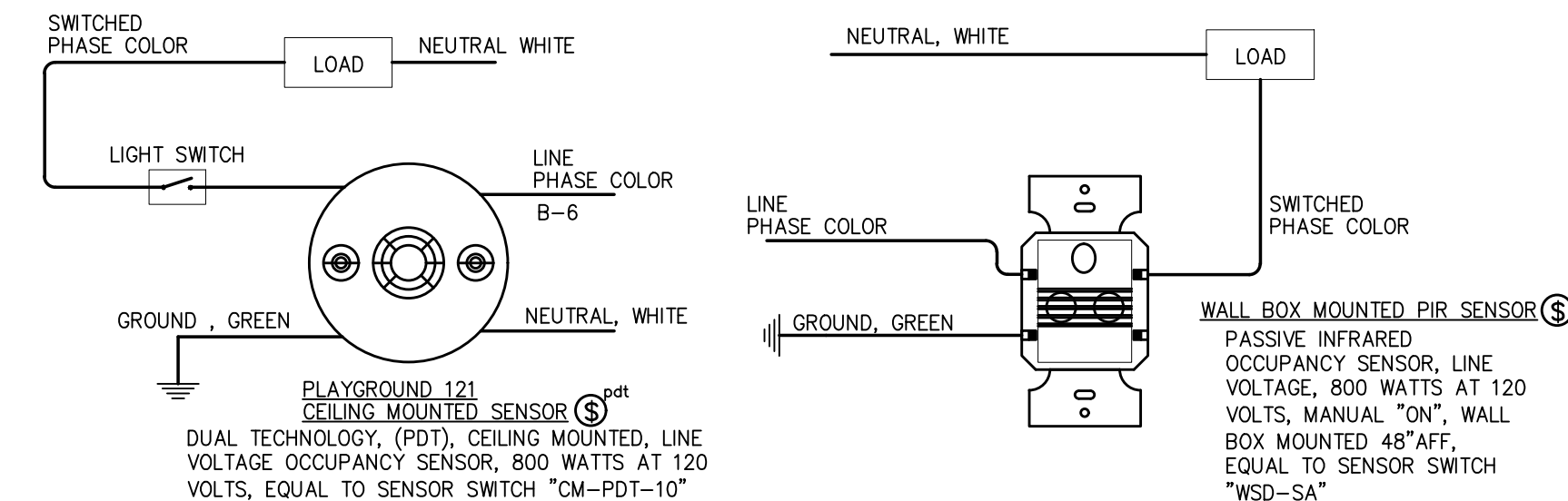
4 **TRANSFORMER GROUND SYSTEM**
NOT TO SCALE



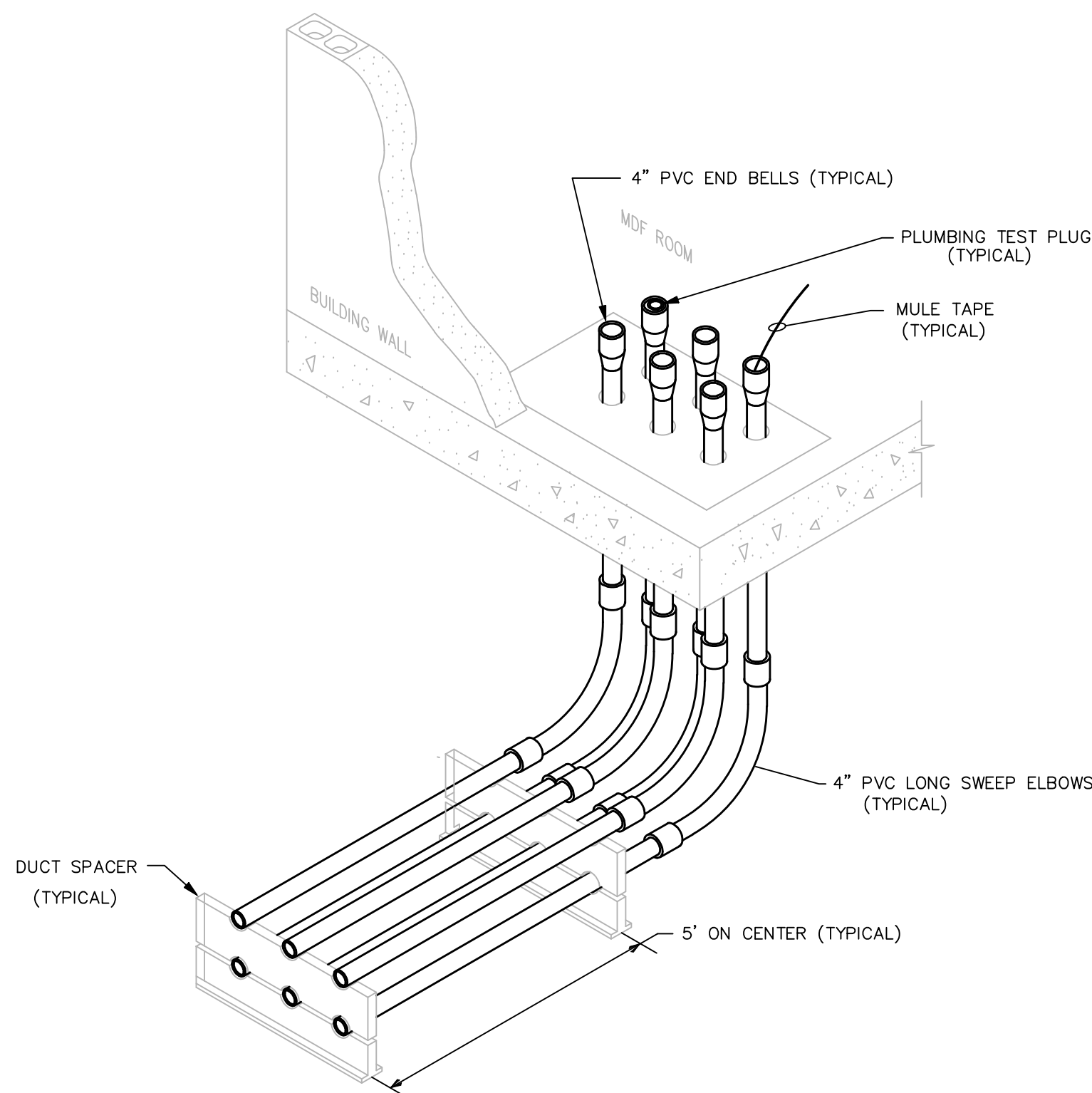
3 **DRIVEN GROUND DETAIL**
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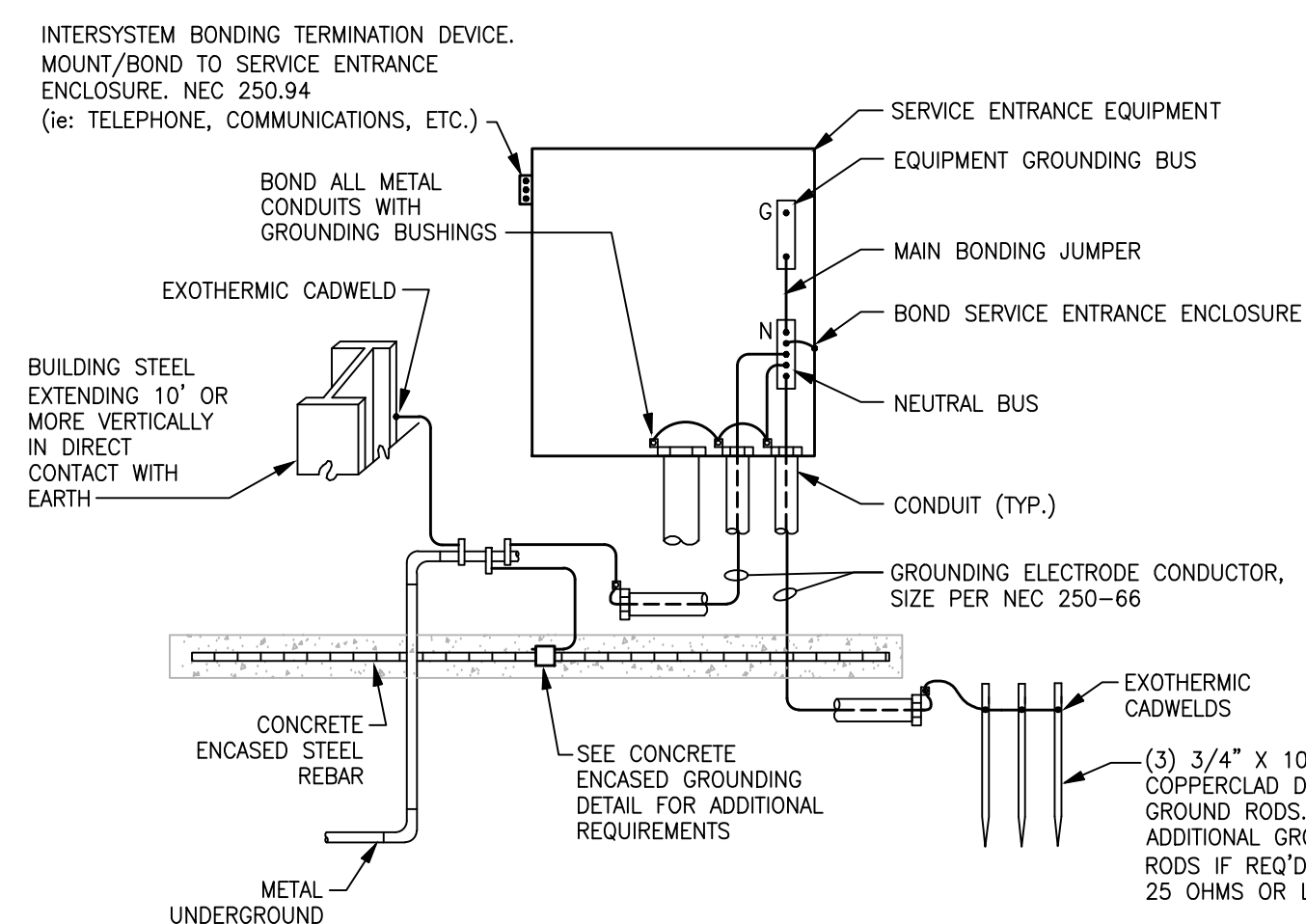
2 **CONCRETE ENCASED GROUNDING DETAIL**
NOT TO SCALE



1 **OCCUPANCY SENSOR LIGHTING CONTROLS**
DIAGRAMMATIC

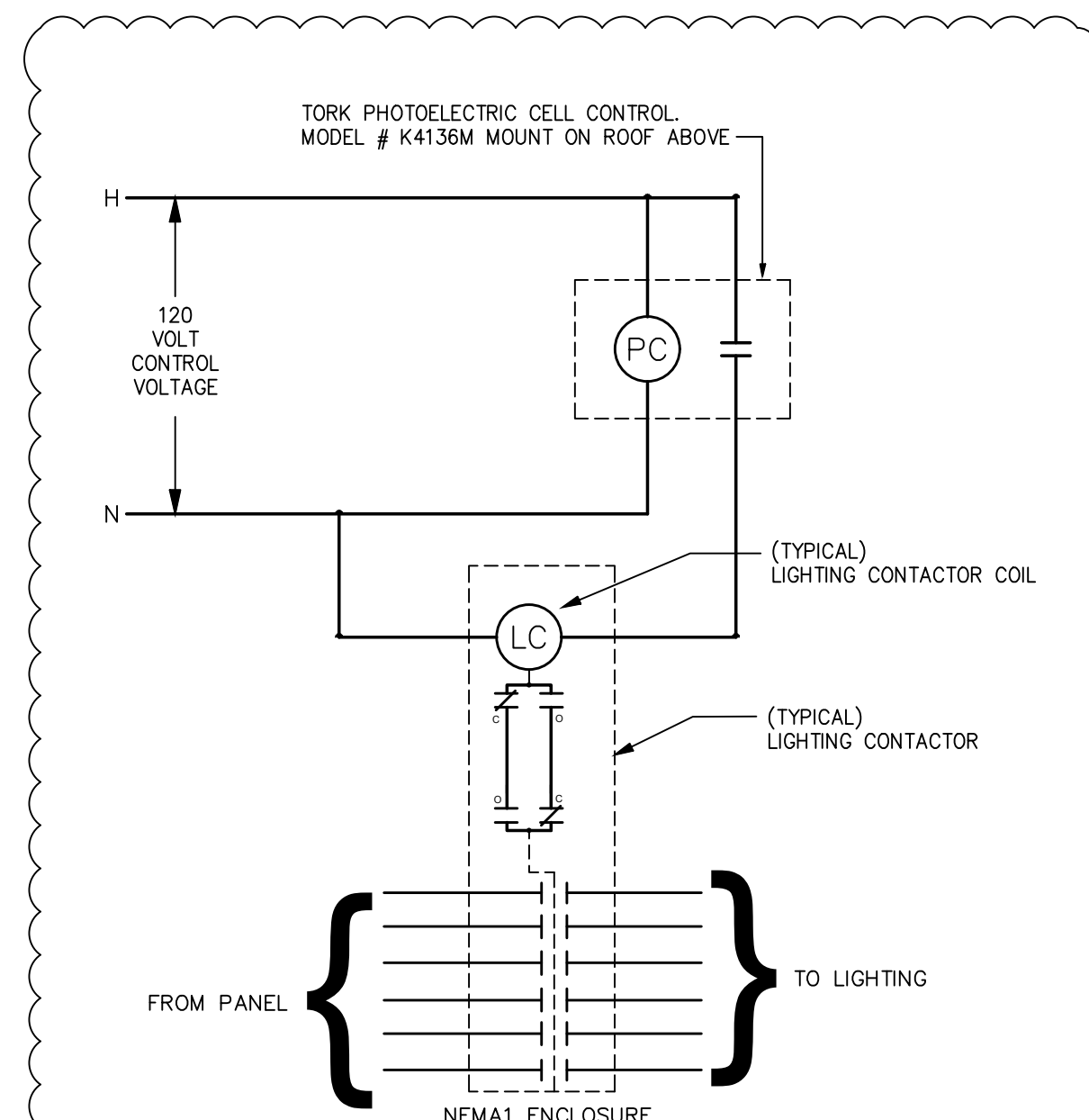


5 **CONDUIT ENTRANCE DETAIL**
NTS

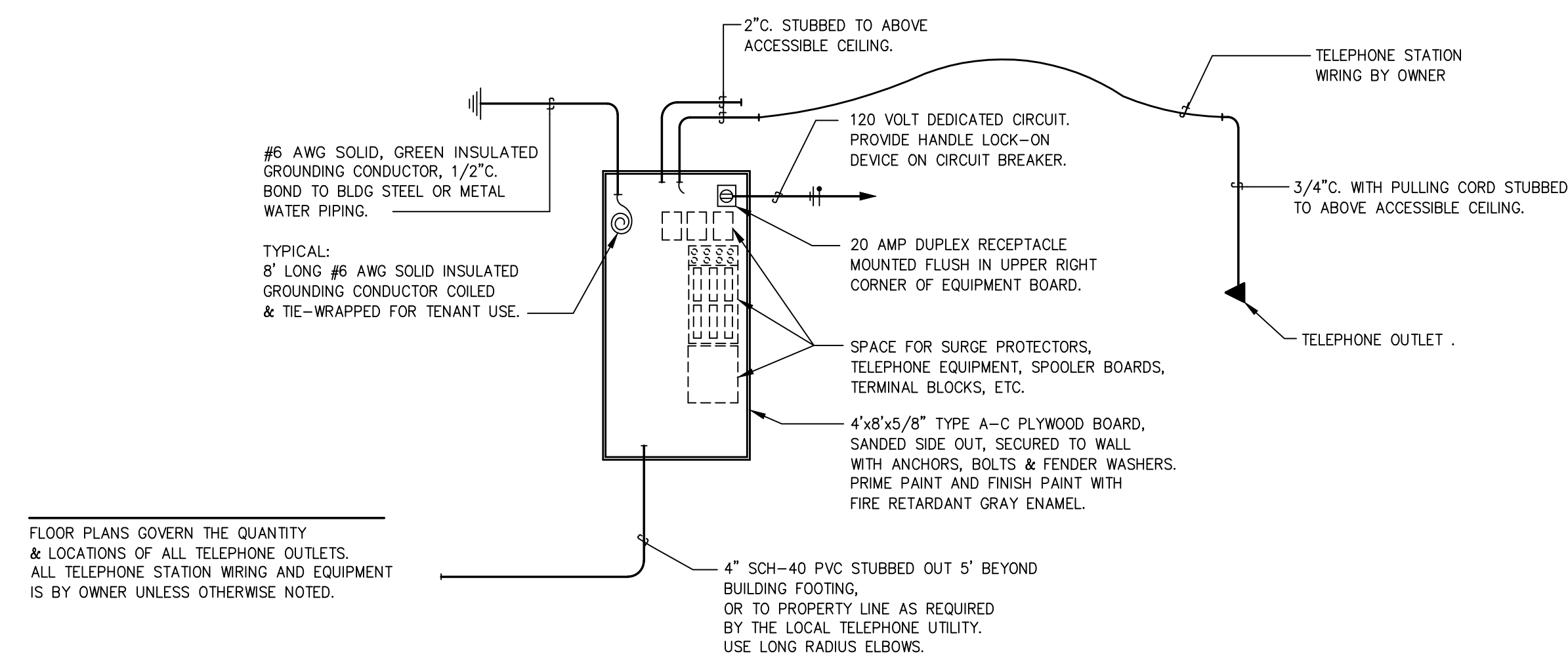


- NOTES:
1. GROUNDING ELECTRODE CONDUCTOR SHALL BE ENCLOSED FULL LENGTH BY CONDUIT (RMC OR EMT).
 2. GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS (UNBROKEN) FROM THE NEUTRAL BUS TO THE GROUNDING ELECTRODE. SPLICES AND/OR JOINTS ARE PROHIBITED. EXCEPTIONS AS ALLOWED PER NEC 250.64(C) IRREVERSIBLE COMPRESSION TYPE CONNECTORS OR BY EXOTHERMIC WELDING WILL BE ACCEPTABLE FOR REMODEL WORK ONLY.
 3. GROUNDING ELECTRODE CONDUCTORS SHALL BE COPPER.
 4. CONNECTION TO THE METAL COLD WATER PIPE SHALL BE MADE WITHIN 5' OF THE POINT OF ENTRANCE INTO THE BUILDING.
 5. GROUNDING ELECTRODE CONDUCTORS AND BONDING JUMPER CONNECTIONS TO BUILDING STEEL, CONCRETE ENCASED STEEL REBAR, AND DRIVEN GROUND RODS SHALL BE CONNECTED BY EXOTHERMIC CADWELDS.
 6. ALL GROUNDING BUSHINGS, CLAMPS, JUMPERS, FASTENERS, ETC. SHALL BE APPROVED AND LISTED FOR THE PURPOSE.

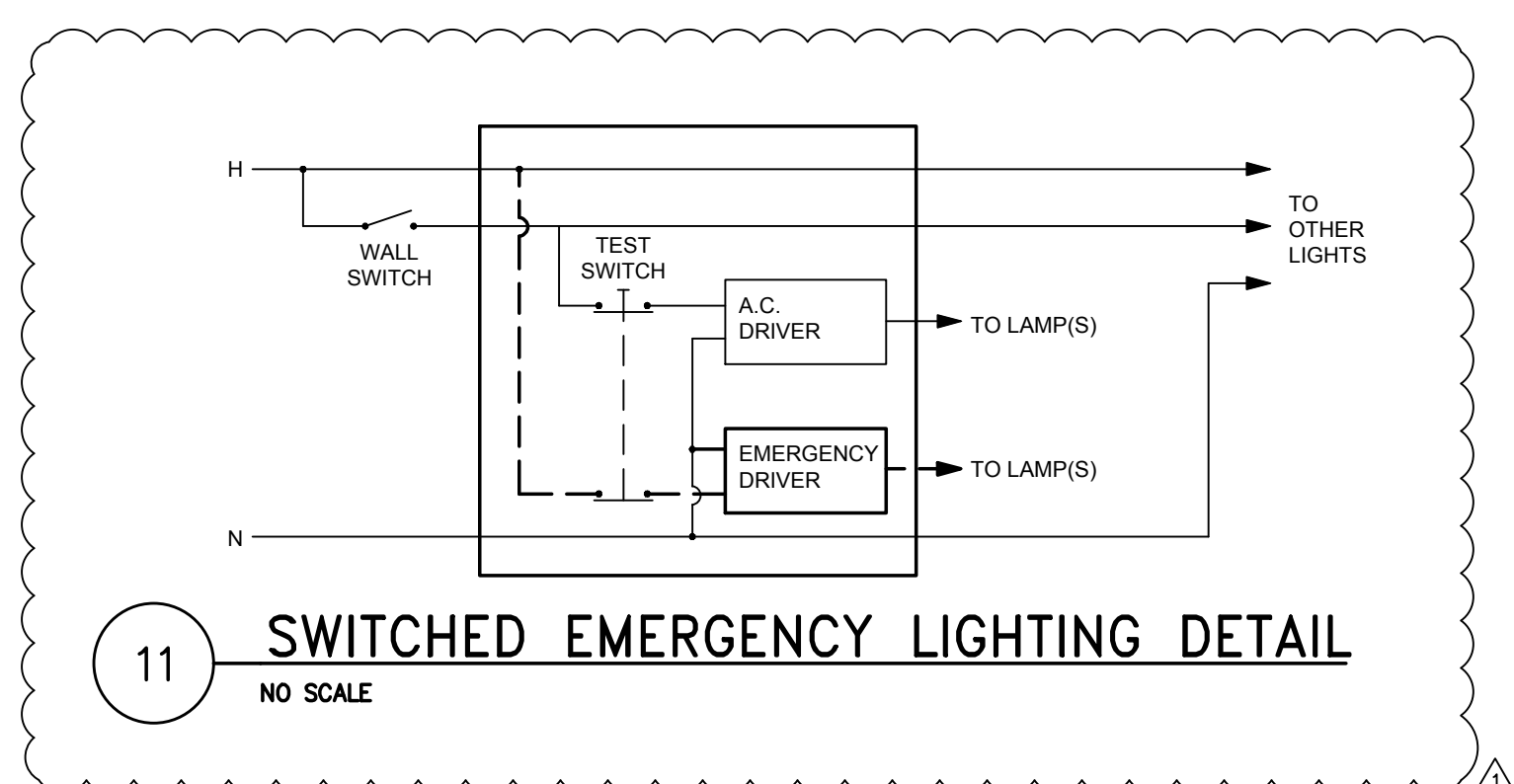
6 **SERVICE GROUND DETAIL**
NOT TO SCALE



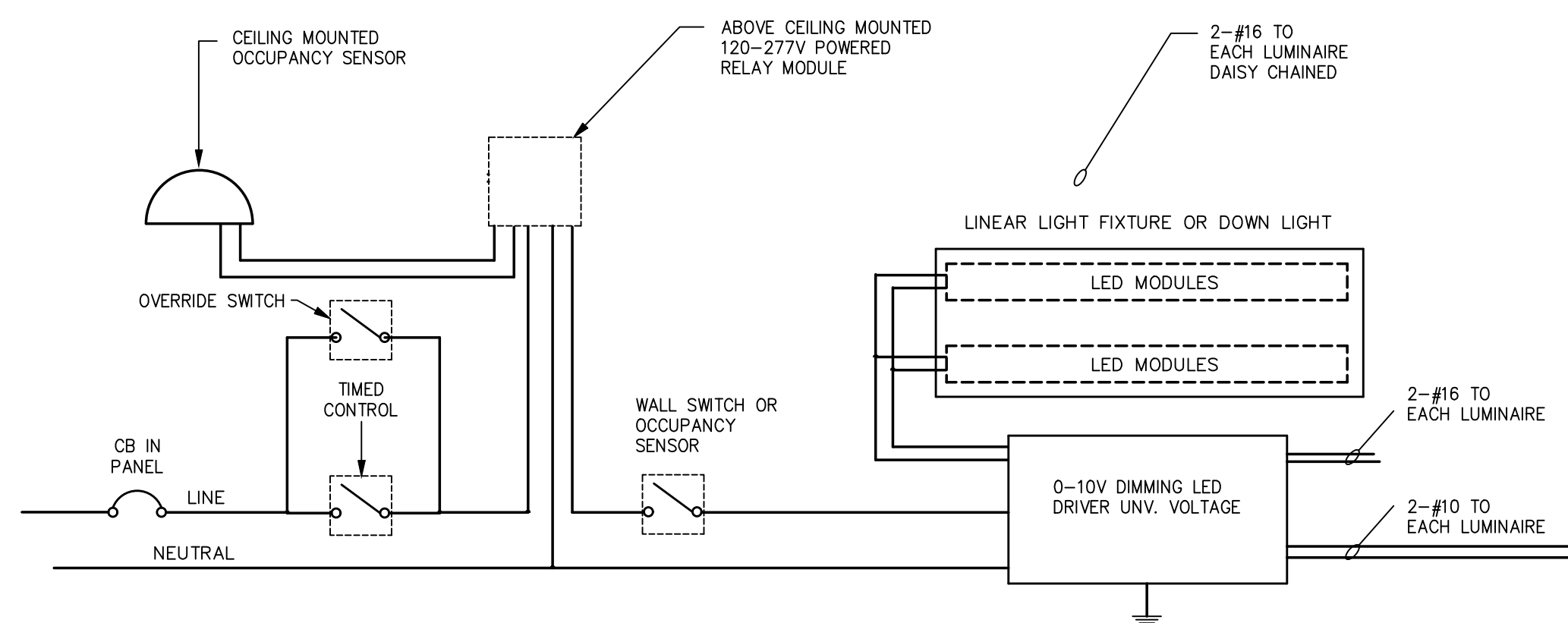
7 **EXTERIOR PHOTOCELL LIGHTING CONTROLS**
DIAGRAMMATIC



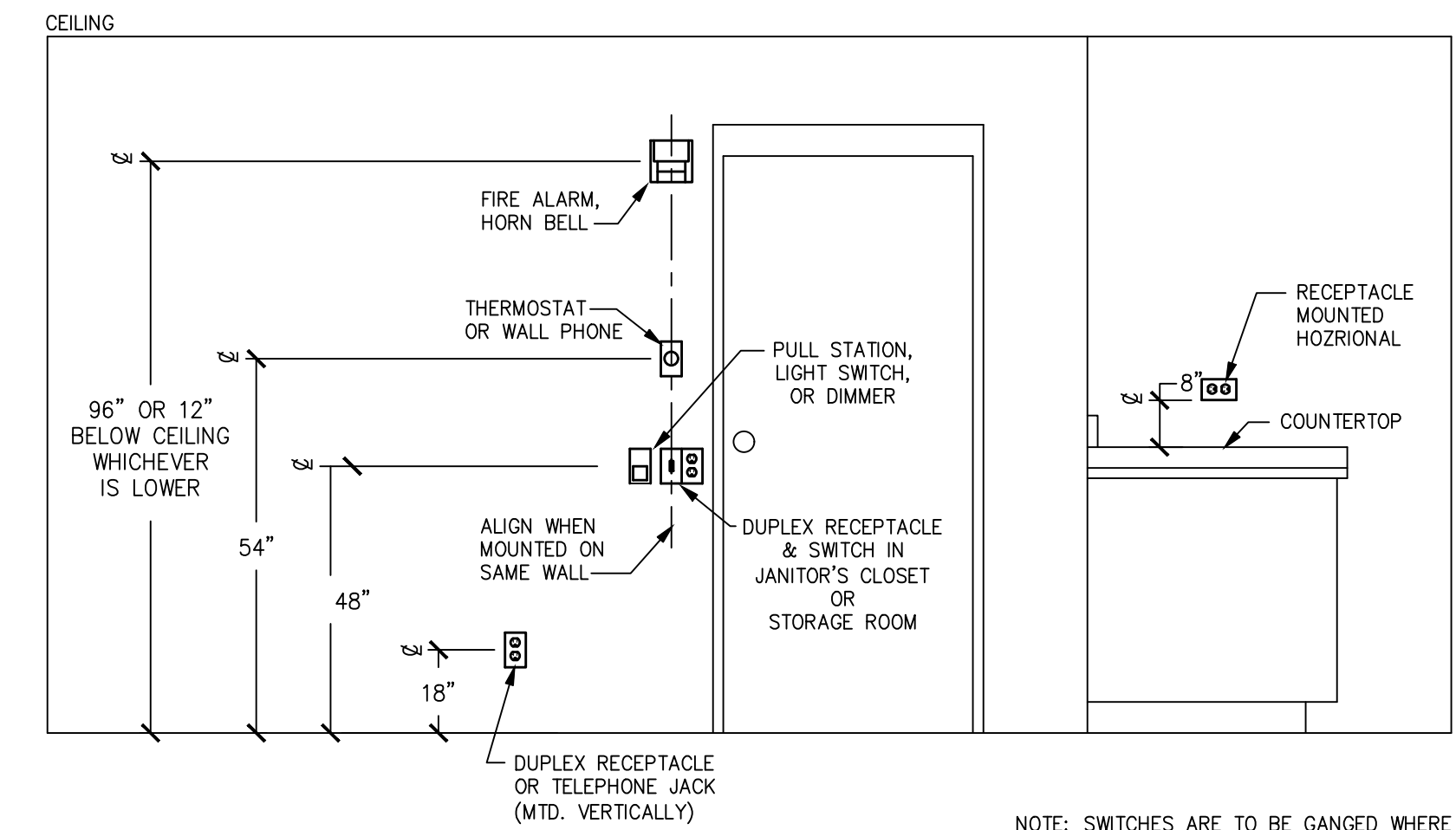
8 **TELEPHONE RISER DIAGRAM**
DIAGRAMMATIC



11 **SWITCHED EMERGENCY LIGHTING DETAIL**
NO SCALE



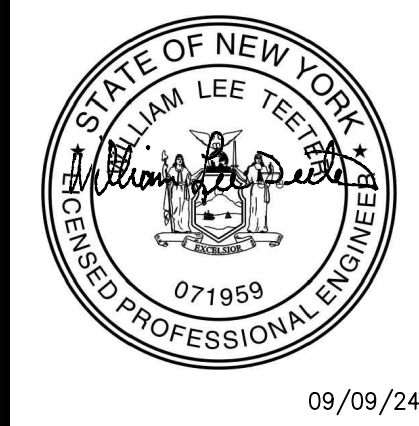
10 **LED DRIVER WIRING DETAIL**
NOT TO SCALE



9 **TYPICAL MOUNTING HEIGHTS**
NOT TO SCALE

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ELECTRICAL DETAILS			
REV.#	DATE	COMMENTS	
1	08/09/2024	ADDENDUM 2	
REVISION:			
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REVISION:			

REVIEWS	
INITIALS	
BDA DSGN. REV.	
BDA TECH REV.	

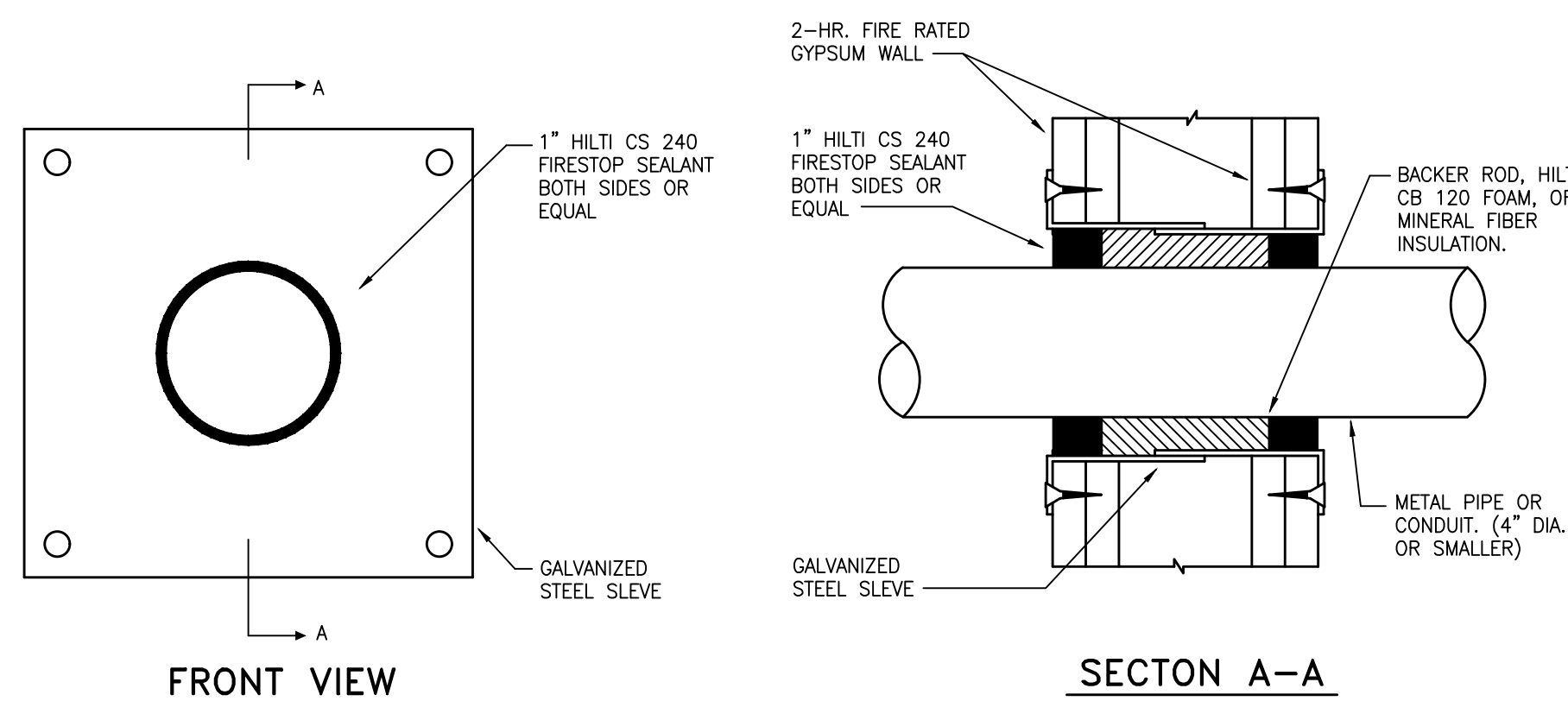
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PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

WALL PENETRATION

FLOOR PENETRATION

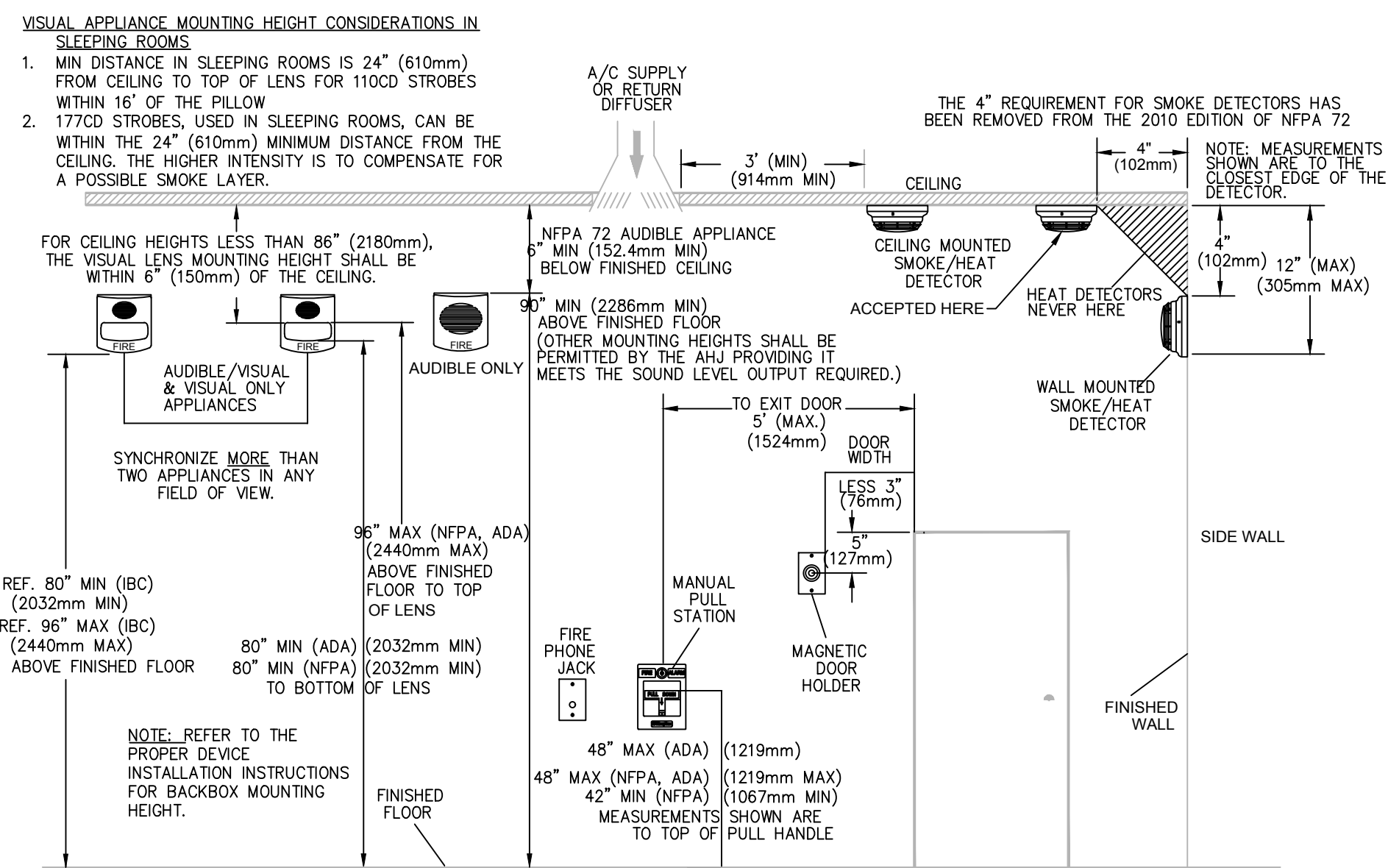
FIRESTOP DETAIL THRU CONCRETE/MASONRY

NOT TO SCALE



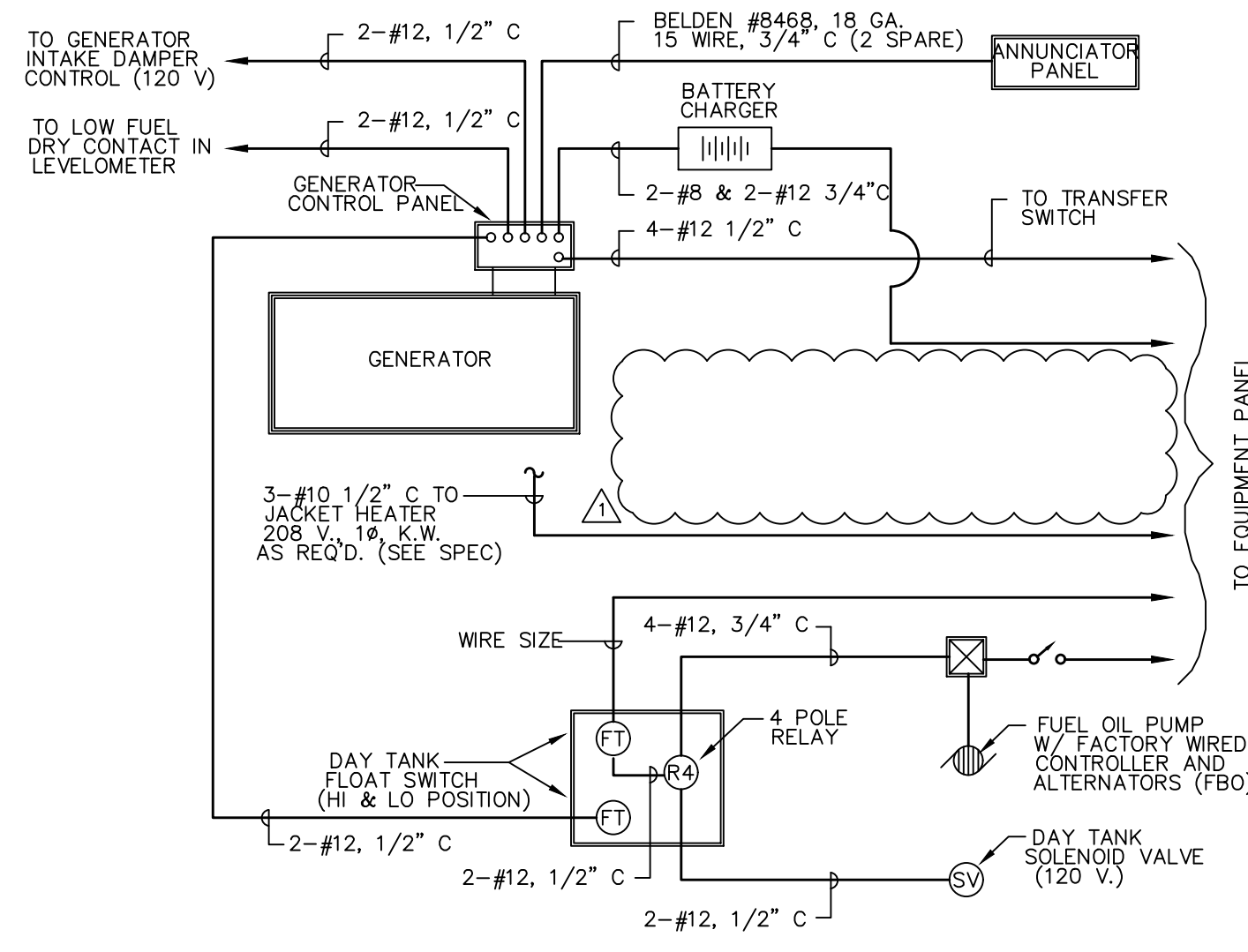
FIRESTOP DETAIL THRU GYPSUM WALL

NOT TO SCALE



DEVICE MOUNTING HEIGHT DETAIL (NFPA 72)

DIAGRAMMATIC



EMERGENCY DIESEL GENERATOR SYSTEM INTERLOCKING DIAGRAM

NOT TO SCALE

EMERGENCY POWER SYSTEM

CONTRACTOR SHALL FURNISH AND INSTALL, AS INDICATED ON THE PLANS AND AS HEREIN SPECIFIED, A COMPLETE SYSTEM FOR THE GENERATION, CONTROL AND DISTRIBUTION OF ELECTRICAL POWER UPON FAILURE OF NORMAL SOURCE.

SYSTEM SHALL INCLUDE ENGINE-GENERATOR UNIT(S), AUTOMATIC TRANSFER SWITCH(ES), DIESEL FUEL SUPPLY SYSTEM AND ALL OTHER WIRING, RACKWAYS, EQUIPMENT, HARDWARE, ETC., NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING SYSTEM, WHETHER OR NOT EVERY SUCH ITEM IS SPECIFICALLY SHOWN OR MENTIONED.

SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 110 AND 37, NEC ARTICLE 700, UL 2200, STATE BUILDING CODE, AND ALL LOCAL CODES AND REQUIREMENTS.

UPON FAILURE TO NORMAL POWER SOURCE TO THE AUTOMATIC TRANSFER SWITCH, SYSTEM SHALL FUNCTION AUTOMATICALLY TO RESTORE POWER TO DESIGNATED LOADS FROM THE ENGINE-GENERATOR SET WITHIN 10 SECONDS.

POWER RATING OF THE DIESEL ENGINE-GENERATOR SET SHALL BE BASED ON OPERATION AT 1800 RPM WHEN EQUIPPED WITH ALL NECESSARY OPERATION ACCESSORIES SUCH AS AIR CLEANERS, LUBRICATING OIL PUMP, JACKET WATER PUMP, GOVERNOR, ALTERNATING CURRENT GENERATOR, AND EXCITER REGULATOR. RADIATOR FAN SHALL BE INCLUDED AS NECESSARY OPERATING ACCESSORY. RATING SHALL APPLY AT SITE CONDITIONS.

THE ENGINE SHALL BE WATER-COOLED, IN-LINE TYPE, WITH FOUR STROKE ENGINE. THE ENGINE SHALL BE COMPRESSION IGNITION DIESEL WHICH MEETS SPECIFICATIONS FOR OPERATING ON NO. 2 FUEL OIL.

THE ENGINE SHALL BE EQUIPPED WITH FUEL LUBE OIL, INTAKE AIR FILTERS, LUBE OIL COOLER, FUEL TRANSFER PUMP, FUEL PRIMING PUMP, RUNNING TIME METER, CHARGING ALTERNATOR, GEAR-DRIVEN WATER PUMP, AND INSTRUMENTS, INCLUDING A FUEL PRESSURE GAUGE, WATER TEMPERATURE GAUGE, LUBRICATING OIL PRESSURE GAUGE AS HEREIN SPECIFIED.

AN AUTOMATIC VOLTS PER HERTZ TYPE, SOLID STATE EXCITER/REGULATOR, MANUFACTURED BY THE GENERATOR MANUFACTURER, SHALL BE INCLUDED AND SHOCK MOUNTED INSIDE THE GENERATOR. VOLTAGE REGULATION SHALL BE +1% FROM NO LOAD TO FULL RATED LOAD. READILY ACCESSIBLE VOLTAGE DROOP, VOLTAGE LEVEL, AND VOLTAGE GAIN CONTROLS SHALL BE INCLUDED IN THE MODULE. VOLTAGE LEVEL ADJUSTMENTS SHALL BE MINIMUM OF +10%. THE MODULE SHALL INCLUDE THE FOLLOWING PROTECTIVE FEATURES:

VOLTAGE REGULATOR SHALL BE THREE PHASE SENSING. SINGLE SENSING SHALL NOT BE ACCEPTABLE.

AN ENGINE MOUNTED RADIATOR WITH BLOWER-TYPE FAN SHALL BE PROVIDED TO MAINTAIN SAFE OPERATION AT 100 DEGREES F (+43 DEGREES C) AMBIENT TEMPERATURE. TOTAL AIR FLOW RESTRICTION TO AND FROM THE RADIATOR SHALL NOT EXCEED 0.5 IN. H₂O (12 KPA).

THE ENGINE COOLING SYSTEM SHALL BE PRETREATED BY THE ENGINE SUPPLIER FOR THE INHIBITION OF INTERNAL CORROSION. IN ADDITION, A SOLUTION OF 50% ETHYLENE GLYCOL SHALL BE ADDED, TO PREVENT FREEZING OF SYSTEM DUE TO EXTREME TEMPERATURES.

A CRITICAL EXHAUST SILENCER, AND ALL REQUIRED ACCESSORIES AND FITTINGS, SHALL BE PROVIDED. MOUNTING SHALL BE ON THE WEATHERPROOF ENCLOSURE. THE SILENCER SHALL BE MOUNTED SO THAT ITS WEIGHT IS NOT SUPPORTED BY THE ENGINE NOR WILL EXHAUST SYSTEM GROWTH, DUE TO THERMAL EXPANSION, BE IMPOSED ON THE ENGINE. EXHAUST PIPE SIZE SHALL BE SUFFICIENT TO ENSURE THAT EXHAUST BACKPRESSURE DOES NOT EXCEED THE MAXIMUM LIMITATIONS SPECIFIED BY THE ENGINE MANUFACTURER.

THE EXHAUST SILENCER SHALL BE MOUNTED DIRECTLY ON THE EXHAUST ELBOW OF THE ENGINE AND SHALL PROVIDE THROUGH THE ENCLOSURE. A RAINCAP SHALL ALSO BE PROVIDED.

FULLY AUTOMATIC GENERATOR SET START-STOP CONTROLS IN THE GENERATOR CONTROL PANEL SHALL BE PROVIDED. CONTROLS SHALL PROVIDE SHUTDOWN FOR LOW OIL PRESSURE, HIGH WATER TEMPERATURE, OVERSPEED, OVERCRANK, AND ONE AUXILIARY CONTACT FOR ACTIVATING ACCESSORY ITEMS. CONTROLS SHALL INCLUDE ONE 30-SECOND CRANKING CYCLE WITH LOCKOUT AND MANUAL RESET FEATURE.

AN ENGINE-MOUNTED THERMAL CIRCULATION TANK-TYPE IMMERSION WATER HEATER INCORPORATING AN ADJUSTABLE THERMOSTATIC SWITCH SHALL BE FURNISHED TO MAINTAIN ENGINE JACKET WATER TO 90 DEGREES F (32.2 DEGREES C) IN A STILL AIR, AMBIENT TEMPERATURE OF 30 DEGREES F (-1.1 DEGREES C). THE HEATER SHALL BE 120 VOLT, SINGLE PHASE, 1.5KW, 60HZ.

THE ENGINE SHALL BE EQUIPPED WITH A 24V ELECTRIC STARTING SYSTEM WITH POSITIVE ENGAGEMENT DRIVE, AND OF SUFFICIENT CAPACITY TO CRANK THE ENGINE AT A SPEED WHICH WILL START THE ENGINE. UNDER OPERATING CONDITIONS, THE STARTING PINION WILL DISENGAGE AUTOMATICALLY WHEN THE ENGINE STARTS. THE STARTING SYSTEM SHALL INCORPORATE AN AUTOMATICALLY RESET CIRCUIT BREAKER FOR ANTI-REBOUND ENGAGEMENT.

A LEAD-ACID STORAGE BATTERY SET OF THE HEAVY-DUTY DIESEL STARTING TYPE SHALL BE PROVIDED. BATTERY VOLTAGE SHALL BE COMPATIBLE WITH THE STARTING SYSTEM. THE BATTERY SET SHALL BE RATED NO LESS THAN 220 AMPERE HOURS. A BATTERY RACK CONSTRUCTED IN CONFORMANCE WITH NEC REQUIREMENTS AND NECESSARY CABLES AND CLAMPS SHALL BE PROVIDED. BATTERIES SHALL BE CAPABLE OF CRANKING ENGINE AT RATED AMBIENT FOR MINIMUM OF FIVE MINUTES.

BATTERIES SHALL FIT INSIDE ENCLOSURE AND ALONG SIDE THE ENGINE. (BATTERIES UNDER THE GENERATOR ARE NOT ACCEPTABLE).

A CURRENT LIMITING, FLOAT-EQUALIZE CHARGER SHALL BE FURNISHED TO AUTOMATICALLY RECHARGE BATTERIES. THE CHARGER SHALL FLOAT AT 2.17 VOLTS PER CELL AND EQUALIZE AT 2.33 VOLTS PER CELL. IT SHOULD INCLUDE OVERLOAD PROTECTION, SILICON DIODE FULL WAVE RECTIFIERS, VOLTAGE SURGE SUPPRESSERS, DC AMMETER, AND FUSED C OUTPUT. AC INPUT VOLTAGE SHALL BE 120 VOLTS, SINGLE PHASE. AMPERAGE OUTPUT SHALL BE NO LESS THAN 5 AMPERES. CHARGER SHALL BE WALL MOUNTING TYPE IN NEMA 3R ENCLOSURE OR IN GENERATOR ENCLOSURE.

MAIN LINE MOLDED CASE, THREE-POLE, SINGLE THROW CIRCUIT BREAKER(S) RATED AS INDICATED ON THE DRAWINGS, AT 104 DEGREES F (40 DEGREES C) AMBIENT TEMPERATURE SHALL BE INSTALLED FOR THREE PHASE OVERLOADS AND/OR SHORT CIRCUIT PROTECTION. THESE RATINGS SHALL INCLUDE AT LEAST 10% ADDITIONAL CAPACITY FOR OVERLOAD AND OPERATING TEMPERATURE RISE OVER 104 DEGREES F (40 DEGREES C). IT SHALL OPERATE BOTH MANUALLY FOR NORMAL SWITCHING FUNCTIONS AND AUTOMATICALLY DURING OVERLOAD AND SHORT CIRCUIT CONDITIONS.

WEATHERPROOF, SOUND ATTENUATED (LEVEL II) ENCLOSURE FOR GENERATOR AND ALL OTHER ITEMS TO BE DESIGNED AND BUILT BY ENGINE MANUFACTURER AS AN INTEGRAL PART OF THE GENERATOR SET AND BE DESIGNED TO PERFORM WITHOUT OVERHEATING IN THE AMBIENT TEMPERATURE SPECIFIED.

CONSTRUCTED OF 16 GAUGE CORROSION RESISTANT SHEET METAL, SUITABLY REINFORCED TO BE VIBRATION FREE IN THE OPERATING MODE. ROOF TO BE PEAKED TO ALLOW DRAINAGE OF RAIN WATER.

UNIT SHALL HAVE SUFFICIENT GUARDS TO PREVENT ENTRANCE BY SMALL ANIMALS. EACH GUARD DRAIN LINE IS TO HAVE A HIGH QUALITY VALVE LOCATED NEAR THE FLUID SOURCE.

FUEL TANK CAPACITY SHALL BE AS NOTED ON THE POWER RISER DIAGRAM.

PROVIDE UL LISTED BASE MOUNTED TANK WITH RUPTURE BASIN AND LEAK ALARM CONNECTED TO REMOTE STATUS MONITOR AND CONTROL PANEL. VERIFY STATUS AND CONTROL PANEL LOCATION.

PROVIDE LOW-FUEL ALARM INDICATOR, ANALOG TYPE, VERIFY LOCATION.

TANK SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEMA, UL AND ASTM STANDARDS.

THE GENERATOR ASSEMBLY SHALL BE MOUNTED SECURELY TO THE CONCRETE HOUSEKEEPING PAD. THE CONCRETE PAD SHALL BE 6\"/>

BASE-TANK STORAGE REQUIREMENTS

CONTROL OF SPILLAGE FROM ABOVEGROUND TANKS. FACILITIES SHALL BE PROVIDED SO THAT ANY ACCIDENTAL DISCHARGE OF ANY CLASS I, II, OR IIIA LIQUIDS WILL BE PREVENTED FROM ENDANGERING IMPORTANT FACILITIES, AND ADJOINING PROPERTY, OR REACHING WATERWAYS.

EXCEPTION NO. 1: TANKS STORING CLASS IIB LIQUIDS DO NOT REQUIRE SPECIAL DRAINAGE OR DIKING PROVISIONS FOR FIRE PROTECTION PURPOSES.

EXCEPTION NO. 2: ABOVEGROUND SECONDARY CONTAINMENT-TYPE TANKS NEED NOT MEET THE REQUIREMENTS OF 2-3.4 IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

(A) THE CAPACITY OF THE TANK SHALL NOT EXCEED 12,000 GAL (45,420 L).

(B) ALL PIPING CONNECTIONS TO THE TANK SHALL BE MADE ABOVE THE NORMAL MAXIMUM LIQUID LEVEL.

(C) MEANS SHALL BE PROVIDED TO PREVENT THE RELEASE OF LIQUID FROM THE TANK. THIS MEANS SHALL BE ACCESSIBLE TO THE DELIVERY OPERATOR.

(D) MEANS SHALL BE PROVIDED FOR DETERMINING THE LEVEL OF LIQUID IN THE TANK. THIS MEANS SHALL BE ACCESSIBLE TO THE DELIVERY OPERATOR.

(E) MEANS SHALL BE PROVIDED TO PREVENT OVERFILLING BY SOUNDING AN ALARM WHEN THE LIQUID LEVEL IN THE TANK REACHES 90 PERCENT OF CAPACITY AND BY AUTOMATICALLY STOPPING DELIVERY OF LIQUID TO THE TANK WHEN THE LIQUID LEVEL IN THE TANK REACHES 95 PERCENT OF CAPACITY. IN NO CASE SHALL THESE PROVISIONS RESTRICT OR INTERFERE WITH THE PROPER FUNCTIONING OF THE NORMAL VENT OR THE EMERGENCY VENT.

(F) SPACING BETWEEN ADJACENT TANKS SHALL BE NOT LESS THAN 3 FT (0.9 M).

(G) THE TANK SHALL BE CAPABLE OF RESISTING THE DAMAGE FROM THE IMPACT OF A MOTOR VEHICLE OR SUITABLE COLLISION BARRIERS SHALL BE PROVIDED.

(H) WHERE THE INTERSTITIAL SPACE IS ENCLOSED, IT SHALL BE PROVIDED WITH EMERGENCY VENTING IN ACCORDANCE WITH 2-3.6.

(I) MEANS SHALL BE PROVIDED TO ESTABLISH THE INTEGRITY OF THE SECONDARY CONTAINMENT, FOR TESTING OF SECONDARY CONTAINMENT-TYPE TANKS.

PROVIDE AND INSTALL AUTOMATIC TRANSFER SWITCH TO OPERATE ON A 3 PHASE, 4 WIRE, 60 HZ SYSTEM. VOLTAGE AND AMPERAGE AS NOTED ON DRAWINGS. TRANSFER SWITCH SHALL BE 3 POLE WITH SOLID NEUTRAL UNLESS INDICATED AS 4-POLE ON THE POWER RISER DIAGRAM. THE ENTIRE ASSEMBLY SHALL BE UL LISTED UNDER UL-1008 AND COMPLY WITH NATIONAL ELECTRICAL CODE REQUIREMENTS. THE TRANSFER SWITCH SHALL BE DOUBLE THROW, ACTIVATED BY A SINGLE ELECTRICAL OPERATOR, MOMENTARILY ENERGIZED; AND CONNECTED TO THE TRANSFER MECHANISM BY A SINGLE OVER-CENTER TYPE LINKAGE WITH A TOTAL TRANSFER TIME NOT TO EXCEED ONE-HALF SECOND.

THE TRANSFER SWITCH SHALL BE CAPABLE OF TRANSFERRING SUCCESSFULLY IN EITHER DIRECTION WITH 70% OF RATED VOLTAGE APPLIED TO THE SWITCH TERMINALS.

PROVIDE WITH EXERCISER CLOCK WHICH SHALL VIRTUALLY EXERCISE THE GENERATOR SET WITHOUT TRANSFERRING THE LOAD.

THE NORMAL AND EMERGENCY CONTACTS SHALL BE POSITIVELY INTERLOCKED MECHANICALLY AND ELECTRICALLY TO PREVENT SIMULTANEOUS CLOSING. MAIN CONTACTS SHALL BE MECHANICALLY LOCKED IN POSITION IN BOTH THE NORMAL AND EMERGENCY POSITIONS WITHOUT THE USE OF HOOKS, LATCHES, MAGNETS OR SPRINGS AND SHALL BE SILVER ALLOY. SEPARATE ARcing CONTACTS WITH MAGNETIC BLOWOUTS, SHALL BE PROVIDED ON ALL TRANSFER SWITCHES. INTERLOCKED MOLDED CASE CIRCUIT BREAKERS OR CONTACTORS ARE NOT ACCEPTABLE. THE TRANSFER SHALL BE EQUIPPED WITH A PERMANENTLY ATTACHED SAFE MANUAL OPERATOR DESIGNED TO PREVENT INJURY TO OPERATING PERSONNEL.

THE MANUAL OPERATOR SHALL PROVIDE A SAME CONTACT-TO CONTACT TRANSFER SPEED AS THE ELECTRICAL OPERATOR TO PREVENT A FLASHOVER FROM SWITCHING THE MAIN CONTACTS SLOWLY.

TEST ATS FUNCTIONS PRIOR TO CONNECTING LOAD CHECK NORMAL AND EMERGENCY INPUT FEEDERS, PRIOR TO CONNECTION, FOR INSULATION BREAKAGE, OPENS, SHORTS, OR GROUNDS.

THE GENERATOR SET SHALL BE TESTED AT THE EQUIPMENT MANUFACTURER'S FACILITY PRIOR TO SHIPMENT. ALL TESTS SHALL BE RECORDED AND SUBMITTED TO THE ARCHITECT/ENGINEER. MINIMUM TESTING TO INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:

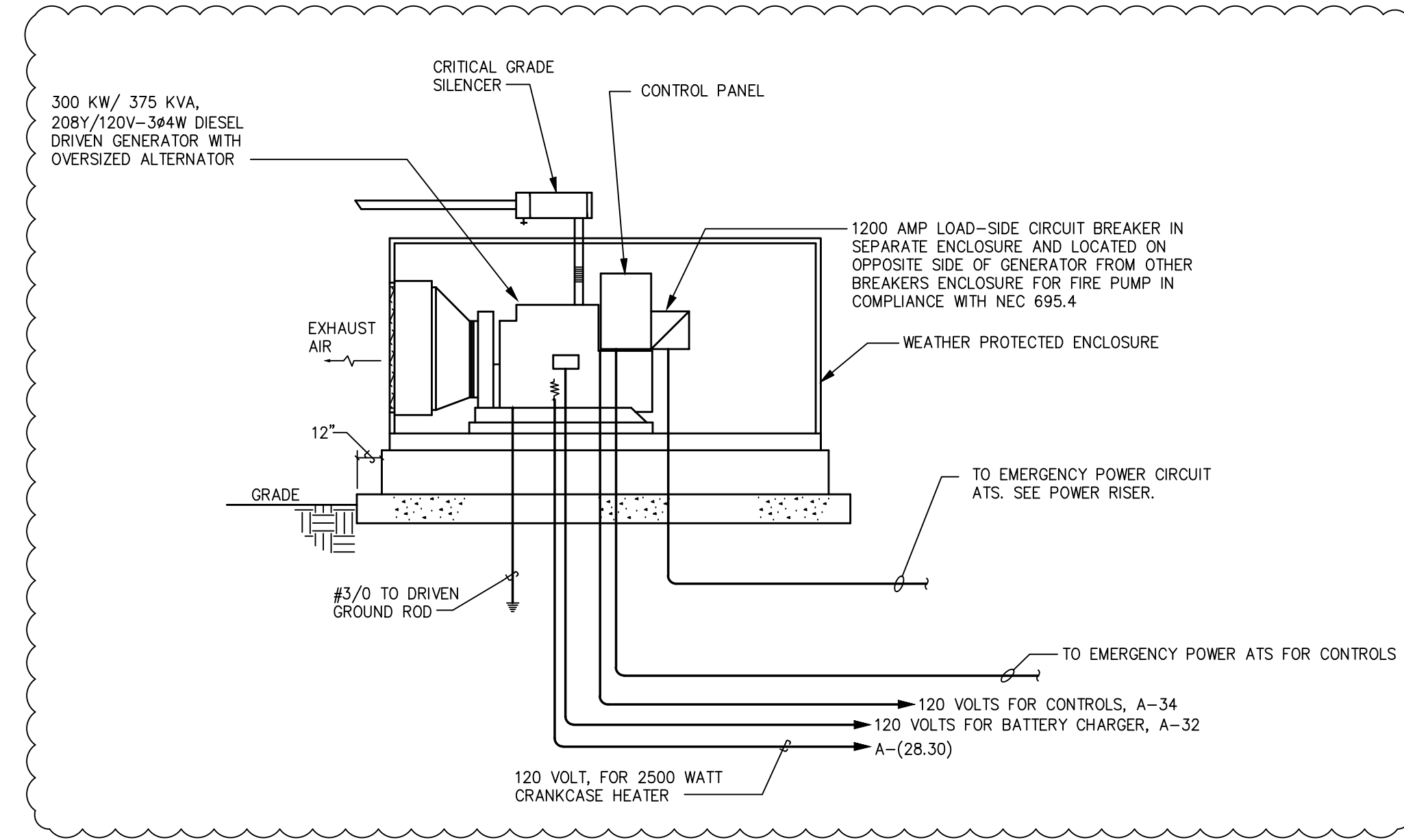
1. TRANSIENT RESPONSE.
2. VOLTAGE DIP AT 50, 75, AND 100% LOAD.
3. FREQUENCY DIP.
4. RECOVERY TIME.

ON COMPLETION OF THE INSTALLATION, START-UP SHALL BE PERFORMED BY THE GENERATOR SET MANUFACTURER, A TRAINED DEALER SERVICE REPRESENTATIVE. PARTS BOOKS COVERING THE ENGINE, GENERATOR, AND MAJOR AUXILIARY EQUIPMENT SHALL BE PROVIDED TO THE OWNER AT THIS TIME. PROCEDURES ON OPERATING AND MAINTENANCE OF THE STANDBY POWER SYSTEM SHALL BE EXPLAINED TO OPERATING PERSONNEL.

EQUIPMENT FURNISHED UNDER THESE SPECIFICATIONS SHALL BE GUARANTEED AGAINST DEFECTIVE PARTS AND WORKMANSHIP UNDER TERMS OF THE MANUFACTURER'S AND DEALER'S STANDARD WARRANTY. BUT, IN NO EVENT, SHALL IT BE FOR A PERIOD OF LESS THAN TWO YEARS FROM DATE OF INITIAL START-UP OF THE SYSTEM AND SHALL INCLUDE LABOR AND TRAVEL TIME FOR NECESSARY REPAIRS AT THE JOB SITE. RUNNING HOURS SHALL NOT BE A LIMITING FACTOR FOR THE SYSTEM WARRANTY.

GENERATOR DEATIL

NOT TO SCALE



ROCKLAND GREEN CENTER FOR ANIMAL RESCUE AND EDUCATIONAL SERVICES, INC.
R.G. C.A.R.E.S. ANIMAL SHELTER
427 BEACH RD. LOCATED IN THE TOWN OF HARVERSTRAW, NY 10993

ELECTRICAL DETAILS

REV.#	DATE	COMMENTS
1	08/09/2024	ADDENDUM 2
REVISION:		
REVISION:		
REVISION:		

INITIALS	REVIEWS
	BDA DSGN. REV.
	BDA TECH REV.

RGAS
PROJECT NO.: 23077
DRAWN: ZLT
DATE: 07/08/2024

E403

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