



250 ROWNTREE DAIRY RD, WOODBRIDGE, ON  
TEL: 905-507-0800  
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YORK REGIONAL POLICE  
HELICOPTER HANGAR

350 GARFIELD WRIGHT  
BOULEVARD  
TOWN OF EAST Gwillimbury

Key  
Plan

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for GENERATOR, AUTOMATIC TRANSFER SWITCH, and various fire detection devices.

ELECTRICAL DRAWING LIST  
DRAWING # DRAWING NAME  
E-001 ELECTRICAL LEGEND & DRAWING LIST  
E-100 ELECTRICAL SITE PLAN  
E-200 LIGHTING NEW WORK - GROUND FLOOR  
E-300 POWER AND SYSTEMS NEW WORK - GROUND FLOOR  
E-301 POWER AND SYSTEMS NEW WORK - ROOF PLAN  
E-700 ELECTRICAL SINGLE LINE DIAGRAM  
E-701 FIRE ALARM RISER  
E-800 ELECTRICAL DETAILS  
E-801 ELECTRICAL DETAILS  
E-802 ELECTRICAL DETAILS  
E-803 ELECTRICAL DETAILS  
E-804 ELECTRICAL DETAILS  
E-805 ELECTRICAL DETAILS  
E-900 ELECTRICAL SCHEDULES  
E-901 ELECTRICAL SCHEDULES

GENERAL NOTE:  
SYMBOLS WITHIN HATCHED AREA ARE ROUGH-IN ONLY. COORDINATE EXACT INSTALLATION LOCATION WITH OWNER. DEVICES TO BE INSTALLED BY OWNER.

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for NEW WORK, DEMOLISHED, REMOVED, and various electrical components like switches, outlets, and lighting fixtures.

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for SYSTEM FURNITURE WALL FEED, LIGHTING CONTROLS, DISTRIBUTION EQUIPMENT, and various electrical components like transformers, panelboards, and receptacles.

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for SPECIAL RECEPTACLE, LINEAR LUMINAIRE, EMERGENCY LIGHTING, and various electrical components like switches, outlets, and lighting fixtures.

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for WALL MOUNTED DATA OUTLET, VOICE DATA, TV OUTLET, and various electrical components like outlets, switches, and communication devices.

Table with 2 columns: SYMBOL, DESCRIPTION. Lists electrical symbols for FIRE DETECTION - INITIATION DEVICES, FIRE DETECTION AND ALARM - SUPERVISORY DEVICES, FIRE DETECTION AND ALARM - SIGNALLING DEVICES, and various fire alarm and detection components.

Table with 2 columns: NO., ISSUED. Lists revision numbers and dates for the drawing.

All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings  
Drawn by: ZK  
Checked by: AO  
Original Issue Date: 2024-07-31  
Project No: TT-24-005

Sheet  
Title:  
ELECTRICAL LEGEND &  
DRAWING LIST

Drawing  
No.  
E-001



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NO.	ISSUED	DATE
6	ISSUED FOR ADDENDUM 6	2024-09-30
5	ISSUED FOR ADDENDUM 3	2024-09-23
4	ISSUED FOR ADDENDUM 1	2024-09-16
3	ISSUED FOR TENDER	2024-09-09
2	ISSUED FOR SITE PLAN APPROVAL	2024-08-16
1	ISSUED FOR BUILDING PERMIT	2024-07-31

### Issues

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Checked by: AO  
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Scale: As indicated

Sheet  
Title:  
**ELECTRICAL SITE PLAN**

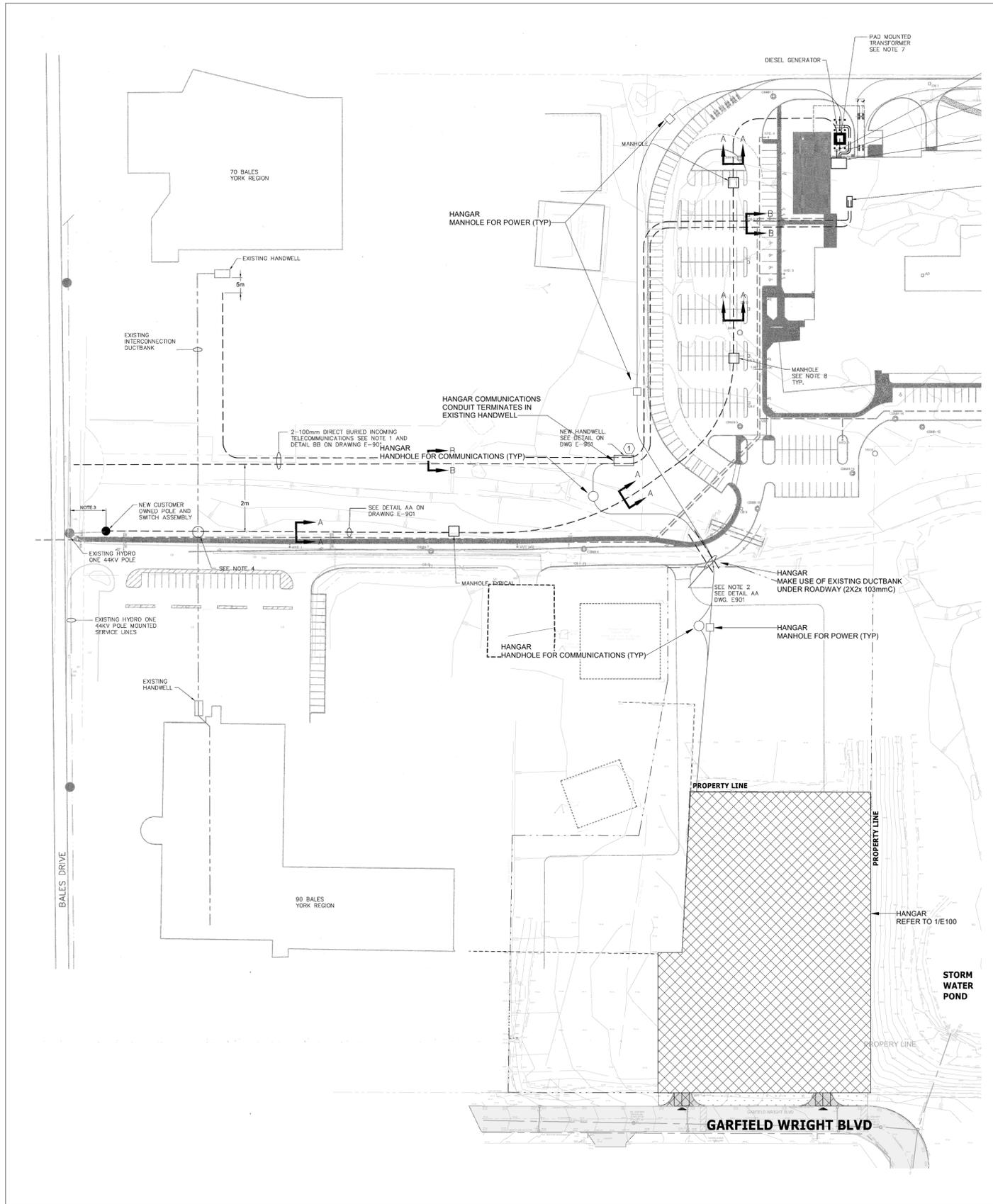
Drawing  
No:  
**E-100**

### GENERAL NOTES

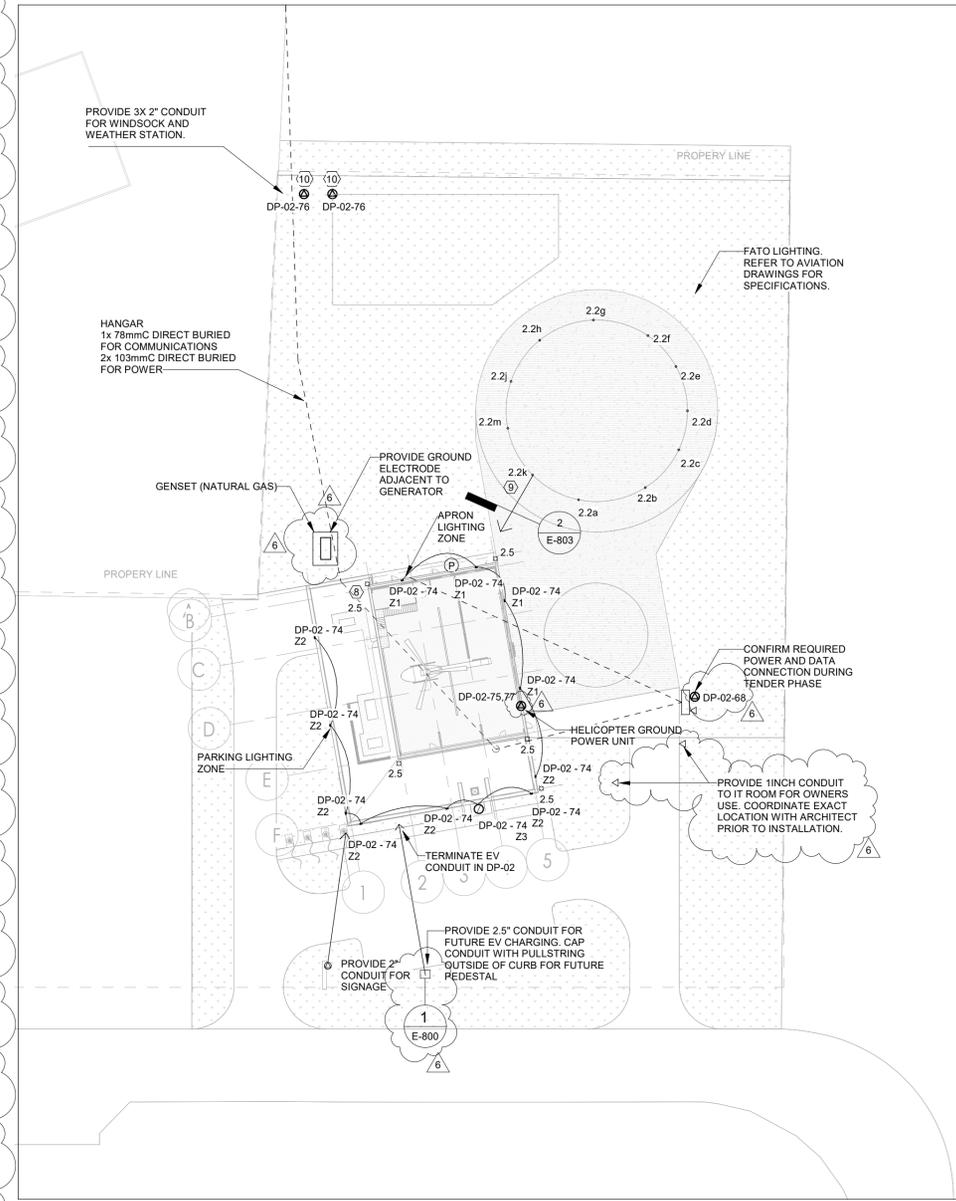
- WHERE DIMENSIONS ARE PROVIDED IN METRIC AND IN IMPERIAL UNITS, METRIC DIMENSIONS GOVERN.
- EMERGENCY POWER FOR LIGHTING AND FIRE ALARM: MINIMUM 30 MINUTES (2012 OBC 3.2.7.4.1)(b)(iv) 30 MIN FOR ANY OTHER BUILDING.
- FIRE ALARM INSTALLATION IN ACCORDANCE WITH CANULC-S524-14.
- VERIFY FIRE ALARM SYSTEM IN ACCORDANCE WITH CANULC-S537-13.
- COMMISSION INTERCONNECTED LIFE SAFETY SYSTEMS IN ACCORDANCE WITH CANULC-S1001-11.
- PROVIDE SEISMIC RESTRAINTS IN ACCORDANCE WITH SECTION 26 05 49. THIS IS A POST-DISASTER BUILDING. SEISMIC RESTRAINTS ARE REQUIRED PER 2012 OBC 4.1.8.18.(1) AND ARE NOT EXEMPT PER 2012 OBC 4.1.8.18.(2).
- AVIATION OBSTRUCTION LIGHTS. FED FROM PANEL DP-02-42.
- FATO LIGHTS ARE FED FROM HELIPORT LIGHTING CONTROLLER. PROVIDE 5/C-12AWG+BNL.
- COORDINATE FINAL LOCATION OF EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION.
- REFER TO AVIATION DRAWINGS FOR DETAILS OF AVIATION RELATED EQUIPMENT TO BE PROVIDED BY ELECTRICAL CONTRACTOR.

### KEYNOTE LEGEND

- TERMINATE NEW COMMUNICATIONS DUCT IN EXISTING COMMUNICATIONS HANDWELL. ENSURE NEW DUCT IS INSTALLED ON OPPOSITE FACES OF HANDWELL TO ALLOW FOR A STRAIGHT PULL (BY OWNER).
- OVERALL SITE PLAN (1:1000 SCALE) HAS BEEN DRAWN ON EXISTING SITE PLANS FROM OTHER PROJECTS. NOTES WRITTEN FOR THIS PROJECT ARE PREFIXED BY THE TERM "HANGAR". OTHER NOTES ARE INFORMATION ONLY.



2 **OVERALL SITE PLAN**  
SCALE: 1 : 1000



1 **SITE PLAN**  
SCALE: 1 : 500



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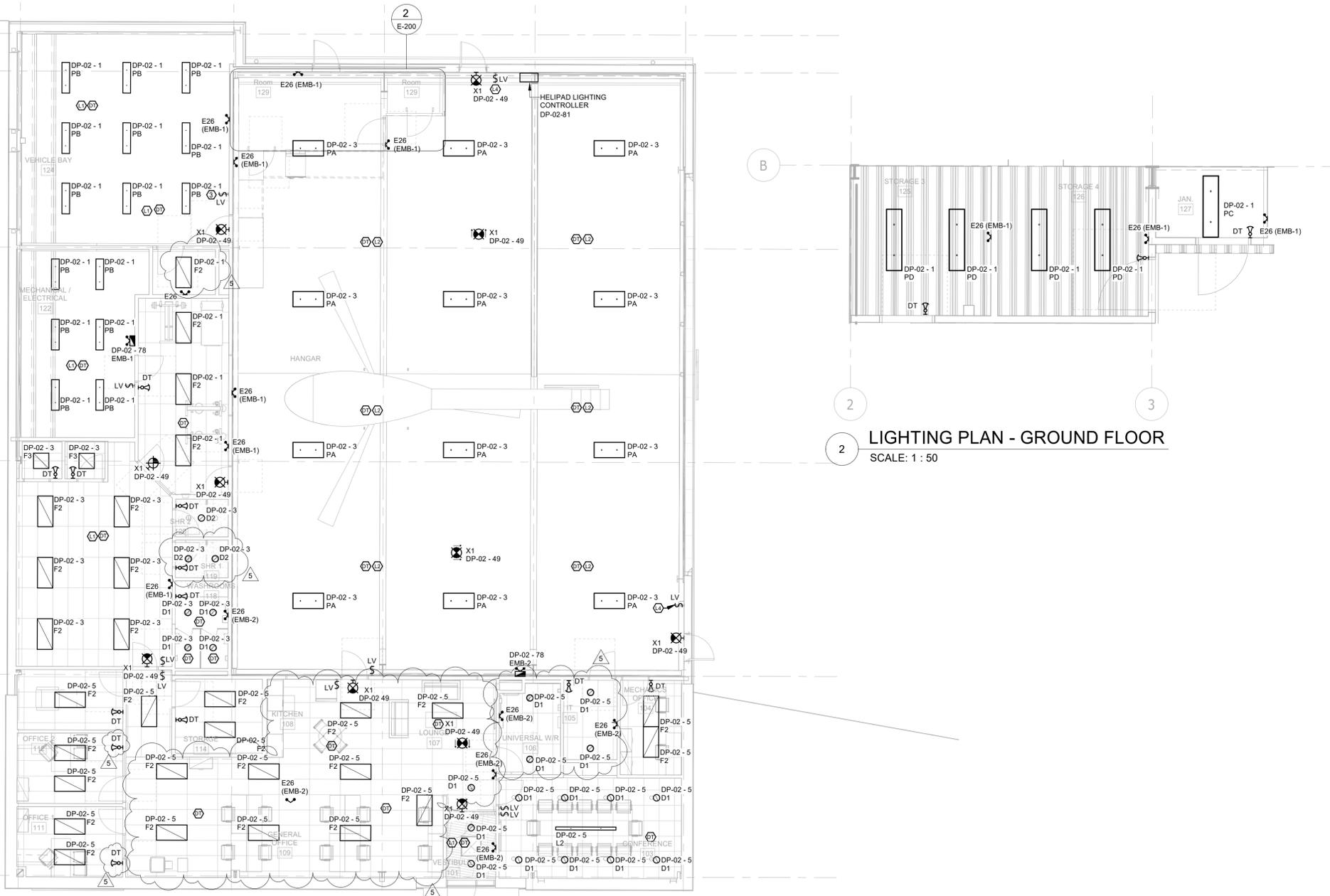
## YORK REGIONAL POLICE HELICOPTER HANGAR

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KEYNOTE LEGEND	
Key Value	Keynote Text
L1	COMBINATION OF ULTRASONIC (US) AND PASSIVE INFRARED (PIR) TECHNOLOGIES.
L2	WIRELESS HIGH MOUNT SENSOR FOR OCCUPANCY SENSING AND DAYLIGHT HARVESTING.
L4	DIGITAL SWITCH APRON LIGHTING OVERRIDE CONTROL.

- GENERAL NOTES:
- REFER TO POWER AND SIGNALS DRAWINGS FOR SWITCHED RECEPTACLES.



2 LIGHTING PLAN - GROUND FLOOR  
SCALE: 1 : 50

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**LIGHTING NEW WORK -  
 GROUND FLOOR**

Drawing  
 No:  
**E-200**



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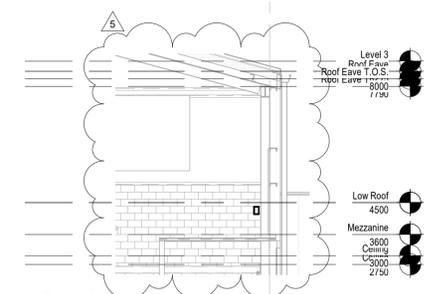
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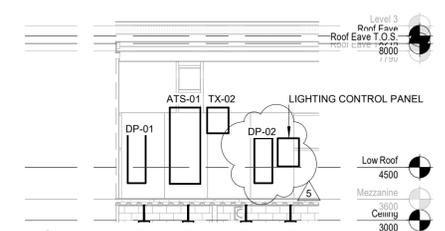
Key Value	Keynote Text
P1	CONDUIT TERMINATION FOR ANTENNA SYSTEM TO ROOF LEVEL. CONFIRM EXACT LOCATION ARCHITECT.
P2	P2 ANY EQUIPMENT INSTALLED UP TO 450mm AFF SHALL BE HAZARDOUS RATED ZONE 2 PER OESC 20-002 (2)
P3	P3 MOUNT BOTTOM OF RECEPTACLES MINIMUM 500mm AFF
P4	RADIO MOUNT 1100AFF. CONFIRM LOCATION WITH ARCHITECT PRIOR TO INSTALLATION
P5	INSTALL TV POWER AND DATA 18INCH BELOW CEILING. VERIFY EXACT MOUNTING LOCATION WITH OWNER PRIOR TO INSTALLATION.
P6	SCRAMBLEPAD
P7	INTRUSION DETECTION SYSTEM KEYPAD

**GENERAL NOTES:**

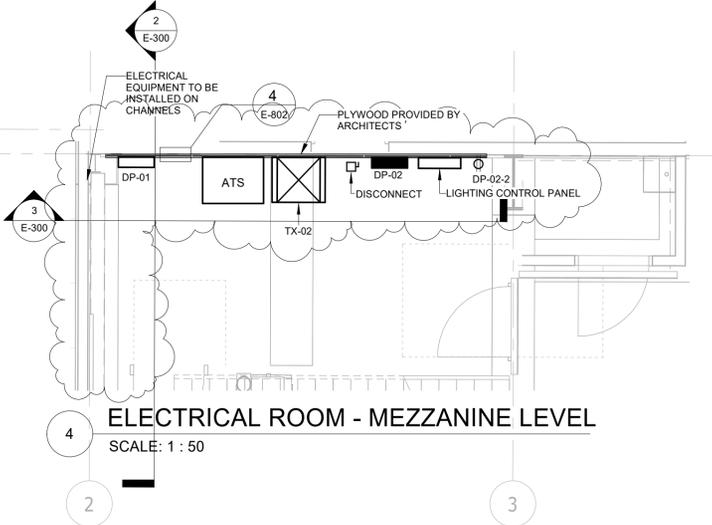
- CONCEAL ALL CONDUIT EXCEPT IN MECHANICAL ROOMS AND ELECTRICAL ROOMS, OR UNLESS OTHERWISE INDICATED IN THIS SPECIFICATION, OR NOTED ON THE DRAWINGS. SURFACE CONDUIT WORK IS NOT PERMITTED UNLESS SPECIFICALLY NOTED.



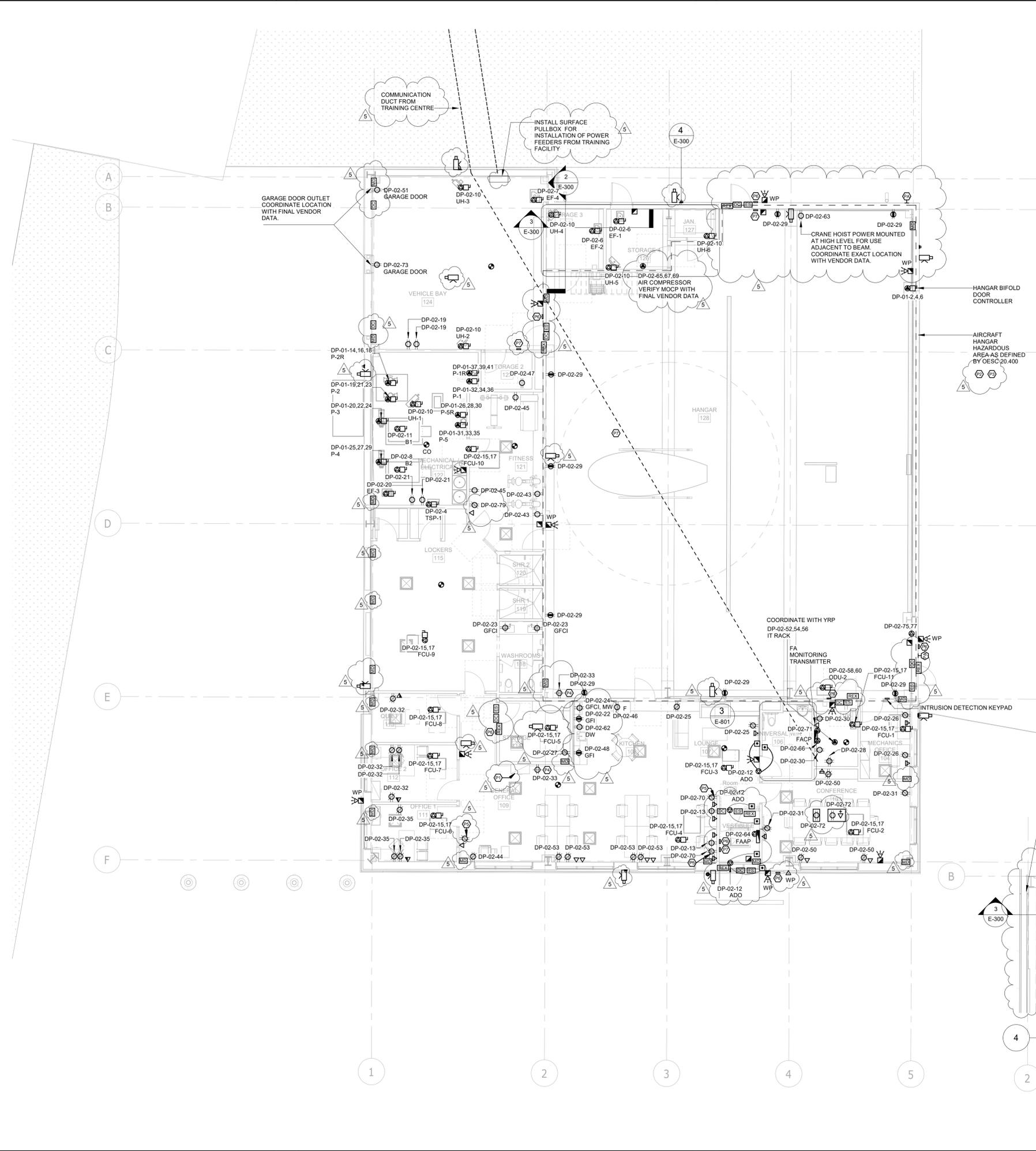
2 Section 3  
SCALE: 1 : 100



3 Section 5  
SCALE: 1 : 100



ELECTRICAL ROOM - MEZZANINE LEVEL  
SCALE: 1 : 50



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Sheet  
Title:  
**POWER AND SYSTEMS  
NEW WORK - GROUND  
FLOOR**

Drawing  
No.  
**E-300**



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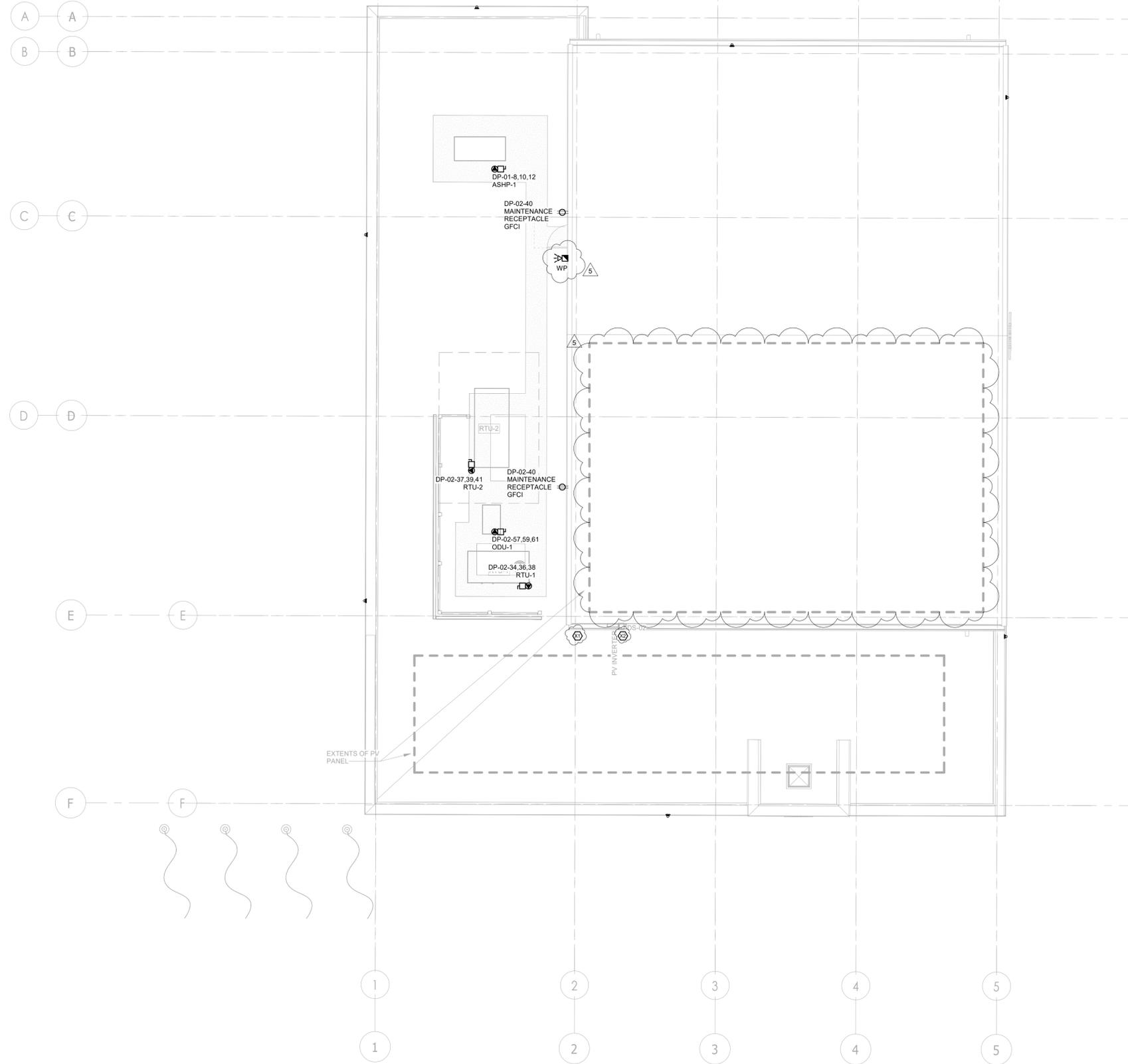
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KEYNOTE LEGEND	
Key Value	Keynote Text
X1	INSTALL 1 INCH CONDUIT FOR ANTENNA SYSTEM (CONFIRM CONDUIT SIZE AND LOCATION WITH OWNER PRIOR TO INSTALLATION)
X2	INSTALL CONDUIT FOR FUTURE PV SYSTEM.

GENERAL NOTE:  
ALL ROOF MOUNTED EQUIPMENT TO BE FED DIRECTLY FROM BELOW.  
NO CONDUIT TO BE RUN ALONG ROOF WHERE CAN BE AVOIDED.  
CONFIRM WITH ARCHITECT ALL CONDUIT INSTALLATIONS WHICH WILL BE EXPOSED PRIOR TO INSTALLATION.



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Sheet  
Title:  
**POWER AND SYSTEMS  
NEW WORK - ROOF  
PLAN**

Drawing  
No.  
**E-301**



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### Issues

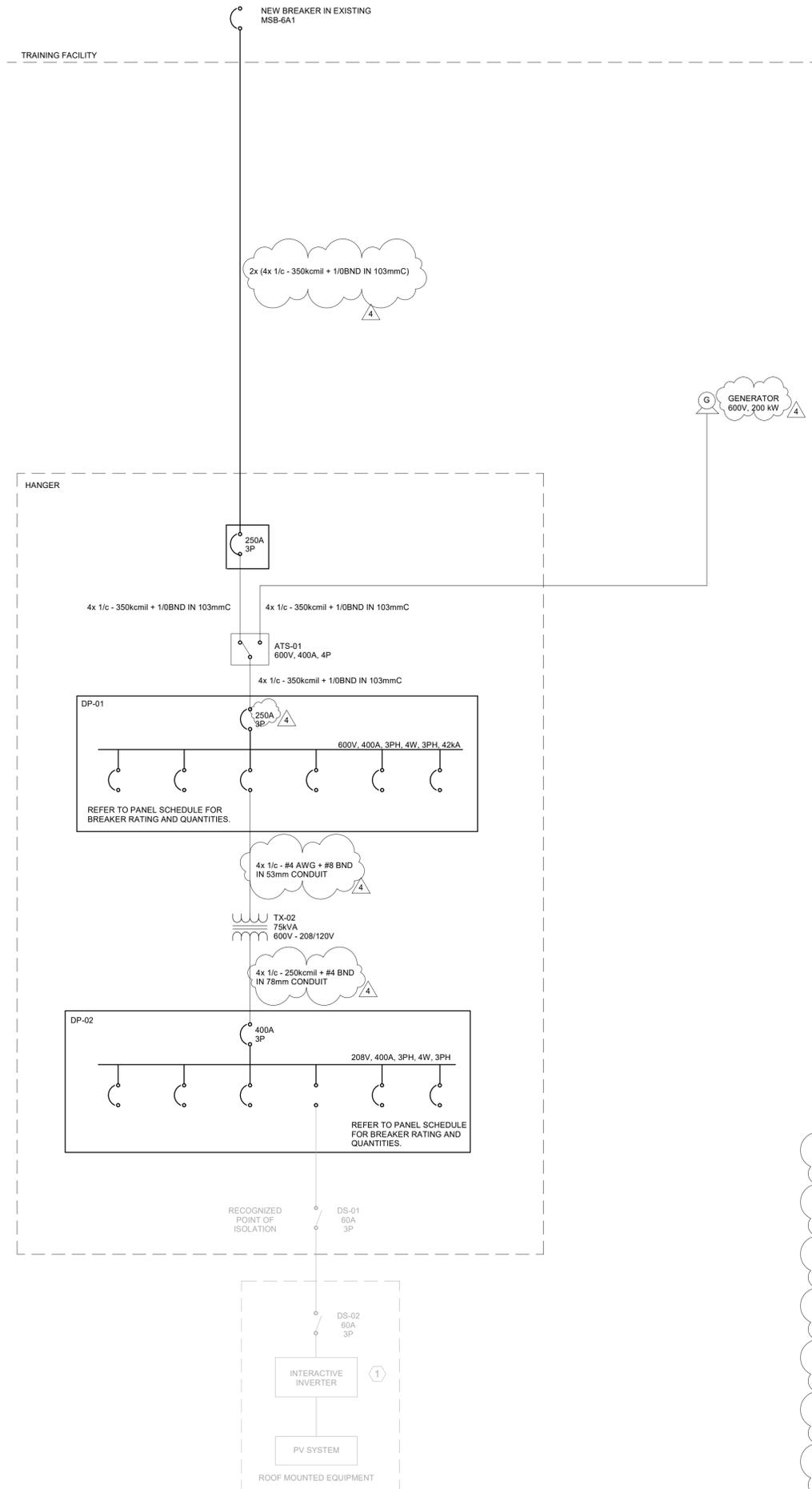
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Project No: TT-24-005

Sheet  
Title: **ELECTRICAL SINGLE  
LINE DIAGRAM**

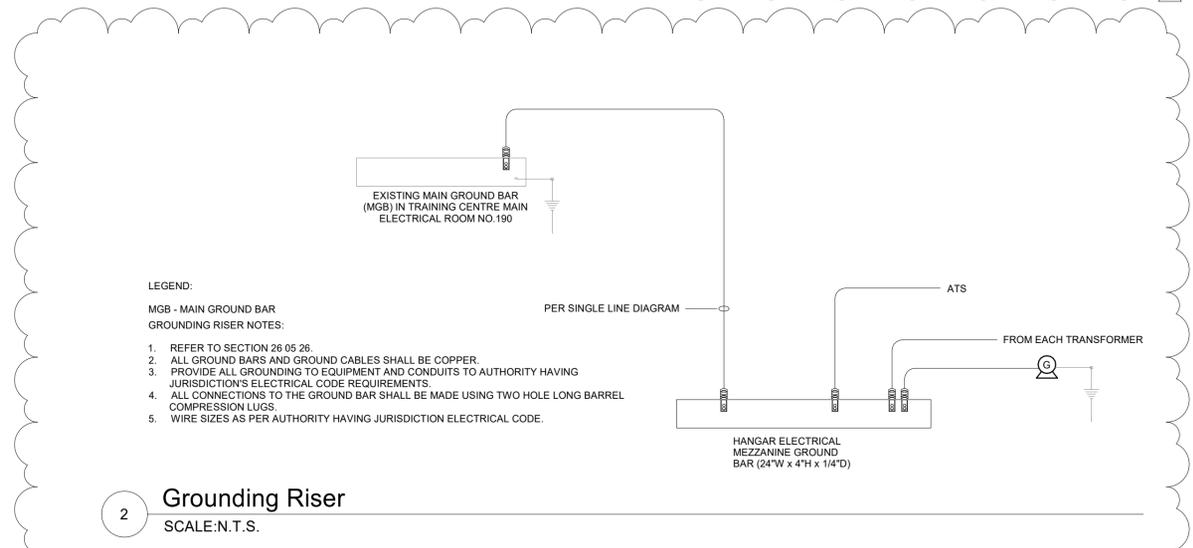
Drawing  
No: **E-700**



CABLE SCHEDULE	
LOAD TAG	CONDUCTOR SIZE
ODU-1	TBD
DO	4x 1/c - #8
P-3	3x 1/c - #8
P-5	3x 1/c - #12
ASHP-1	4x 1/c - #1
P-2	3x 1/c - #8
P-1	3x 1/c - #10
P-2R	3x 1/c - #8
P-1R	3x 1/c - #10
P-4	3x 1/c - #12
P-5R	3x 1/c - #12

### NOTES:

- 600V CABLE SIZES WHERE NOT SHOWN ON SINGLE LINE DIAGRAM.
- CABLE REQUIREMENTS TO BE CONFIRMED WITH EQUIPMENT REQUIREMENTS.



2 **Grounding Riser**  
SCALE: N.T.S.



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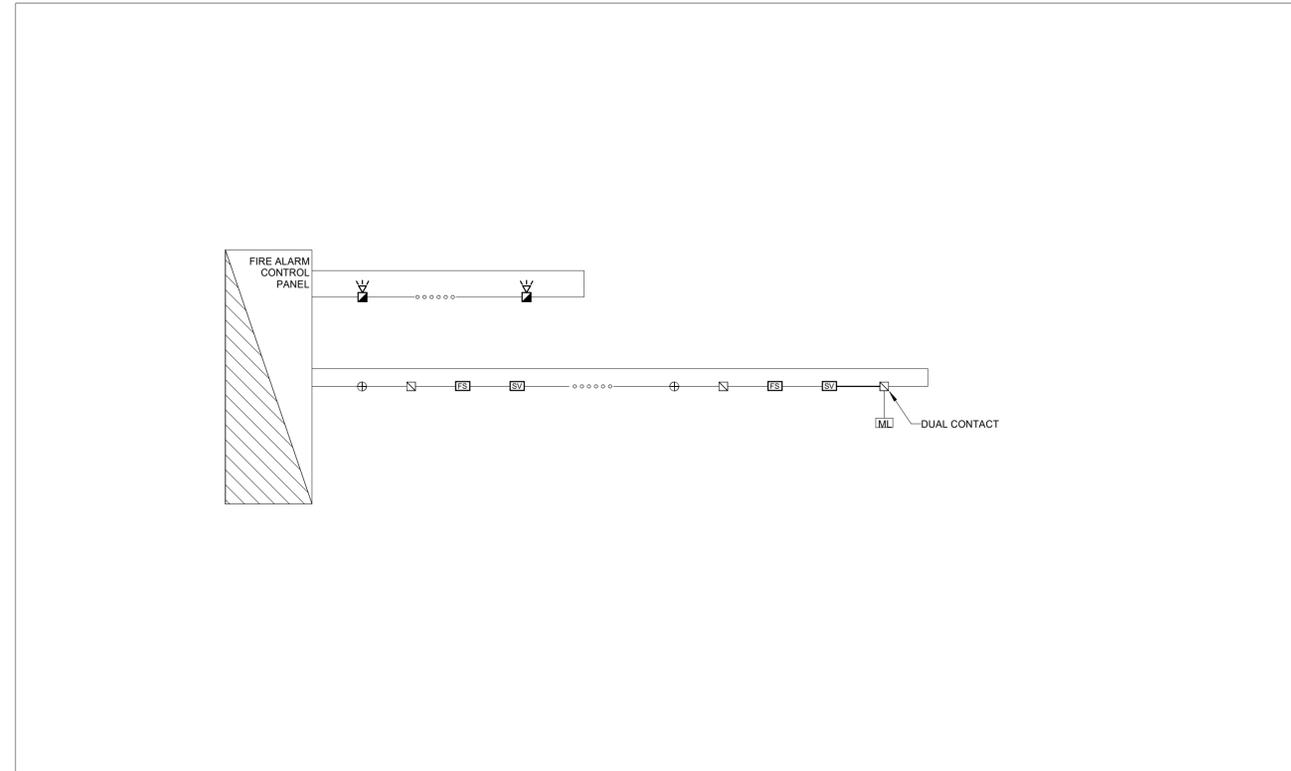
Do not scale drawings

Drawn by: ZK  
Checked by: AO  
Original Issue Date: 2024-07-31  
Project No: TT-24-005

Sheet  
Title: **FIRE ALARM RISER**

Drawing  
No: **E-701**

- GENERAL NOTES
- FOR EXACT QUANTITY AND LOCATION OF F/A DEVICES & ZONES, REFER TO FLOOR PLANS DRAWINGS AND/OR SCHEDULES FOR DETAILS. FLOOR PLANS TO GOVERN.
  - PROVIDE 1 h FIRE RATED CONDUCTORS FOR MAIN FIRE/ALARM CONTROL AND POWER FEEDERS AS SPECIFIED. WHERE BRANCH HORIZONTAL FEEDERS FOR A ZONE PASS THROUGH ANOTHER ZONE, MAINTAIN FIRE RATING SPECIFIED.
  - LOCATION OF FIRE ALARM DEVICES IN THE MECHANICAL ROOMS AND OTHER OPEN CEILING SPACE AREAS WILL BE DETERMINED DURING CONSTRUCTION AT THE SITE. THEY MUST BE VISIBLE AND ACCESSIBLE.
  - NO FOREIGN 120 VOLT WIRING WILL BE ALLOWED IN THE FIRE ALARM PANELS, EXCEPT THE MAIN POWER SUPPLY. WHERE AUXILIARY DEVICES OR SYSTEMS ARE CONNECTED TO THE FIRE ALARM SYSTEM (EX. FAN SHUTDOWN, DAMPER CONTROL, ELEVATOR CONTROL, MAGNETIC LOCKS, DOOR HOLDERS, ETC.) THEY ARE TO BE CONNECTED THROUGH DOUBLE VOLTAGE RELAYS. THE FIRE ALARM SIDE TO BE 24 VOLT.
  - INSTALL DUCT TYPE SMOKE DETECTOR INCLUDING SAMPLING TUBES WHERE SHOWN ON MECHANICAL DRAWINGS. IT WILL BE THE RESPONSIBILITY OF THE MANUFACTURER TO PROVIDE LOCATION OF DETECTORS FOR THEIR CORRECT OPERATION.
  - AT BUILDING EXPANSION JOINTS PROVIDE CONDUITS ON BOTH SIDES OF THE JOINT AND CONNECT THEM WITH FLEXIBLE METAL CONDUITS AND GROUND WIRE.
  - THE LOCATIONS OF DEVICES SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT LOCATIONS ARE TO BE DETERMINED ON SITE DURING CONSTRUCTION.
  - ALL ELECTROMAGNETIC LOCK DEVICES ARE TO RELEASE IMMEDIATELY UPON LOSS OF POWER CONTROLLING THE ELECTROMAGNETIC LOCKING MECHANISM AND ASSOCIATED AUXILIARY CONTROLS. ALSO UPON A FAULT BEING DETECTED IN THE ELECTRICAL CIRCUIT BETWEEN THE FIRE ALARM TRANSPONDER PANEL (FATP) AND THE CONTROLLER OF LOCKING DEVICE, AND OPERATION OF MANUAL FIRE ALARM PULL STATION LOCATED NOT MORE THAN 600mm FROM THE DOOR. PROVIDE A MANUALLY OPERATED SWITCH AS NOTED ON DRAWING TO RELEASE ALL ELECTROMAGNETIC LOCKING DEVICES. UPON RELEASE THE LOCKING DEVICES MUST BE RESET MANUALLY BY THE ACTUATION OF THE ABOVE SWITCH, AS PER OBC 3.4.6.16. ALSO PROVIDE A BYPASS SWITCH FOR TESTING OF THE FIRE ALARM SYSTEM.
  - A LEGIBLE SIGN CONTAINING THE WORDS "EMERGENCY EXIT UNLOCKED BY FIRE ALARM" SHALL BE PERMANENTLY MOUNTED ON THE DOORS CONTROLLED BY THE MAGLOCKS. THE LETTERING ON THE SIGN TO BE AT LEAST 25mm HIGH WITH A 5mm STROKE, AS PER OBC 3.4.6.16(4). THE SIGN TO BE RED LAMACOID WITH WHITE LETTERING.
  - THE OPERATION OF ANY BY-PASS SWITCH, WHERE PROVIDED FOR TESTING OF THE FIRE ALARM SYSTEM, IS TO CAUSE AN AUDIBLE SIGNAL AND A VISUAL SIGNAL TO BE INITIATED AT THE FIRE ALARM TRANSPONDER PANEL AND AT THE MONITORING STATION.



1 **FIRE ALARM RISER**  
SCALE: N.T.S.

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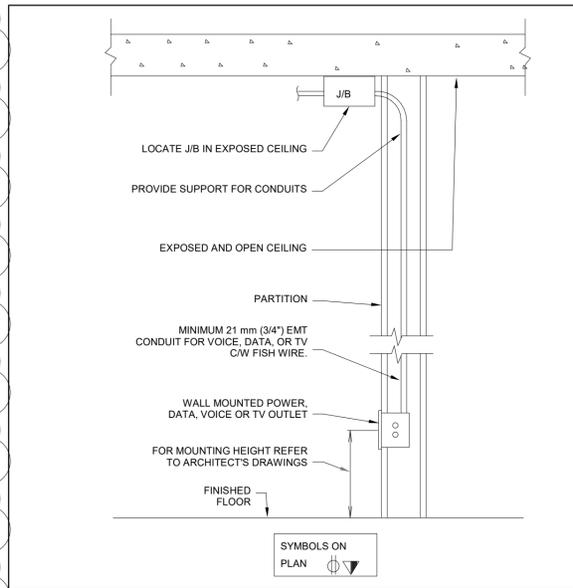
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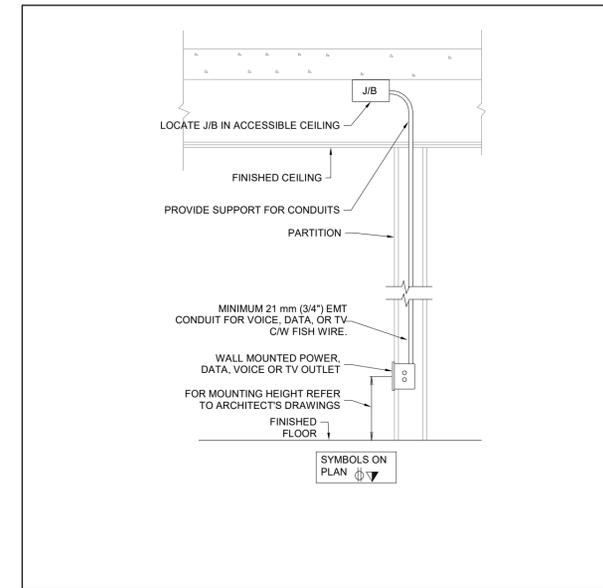
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**ELECTRICAL DETAILS**

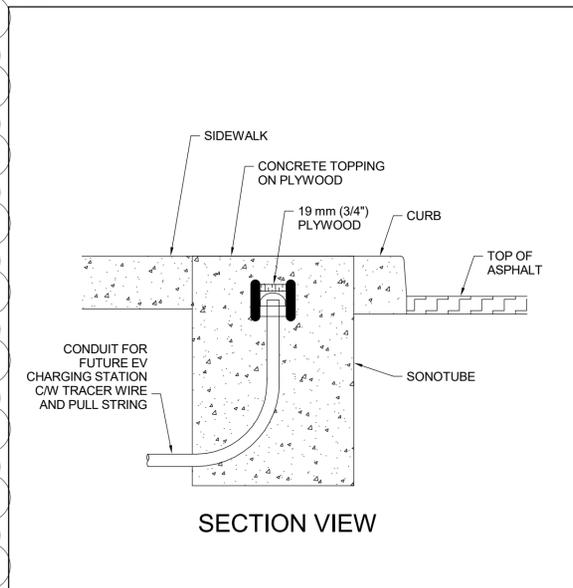
Drawing  
No.  
**E-800**



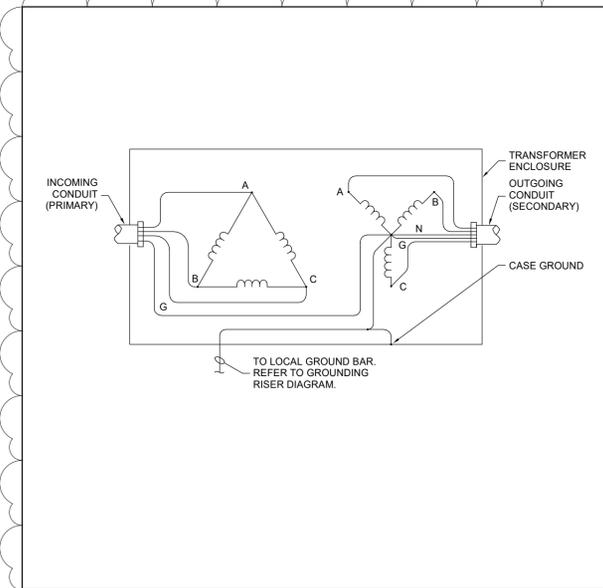
4 Wall Mounted Outlet Box Wall Recessed  
SCALE: N.T.S.



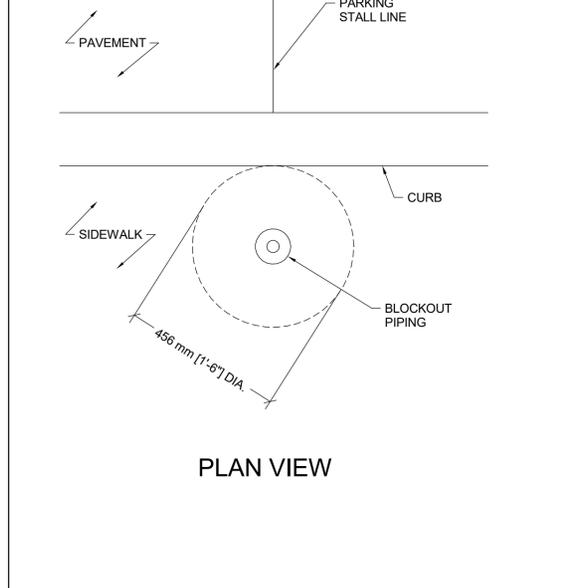
2 Wall Mounted Outlet Box Wall Recessed Ceiling  
SCALE: N.T.S.



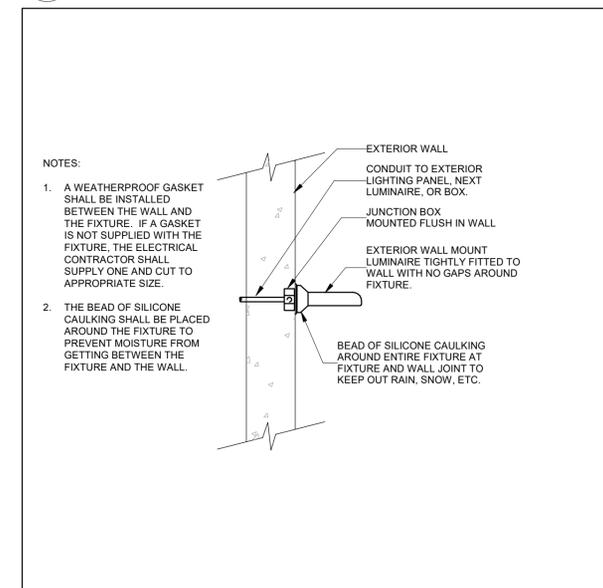
1 Future EV Charging Station Pedestal Rough-In  
SCALE: 1 : 10



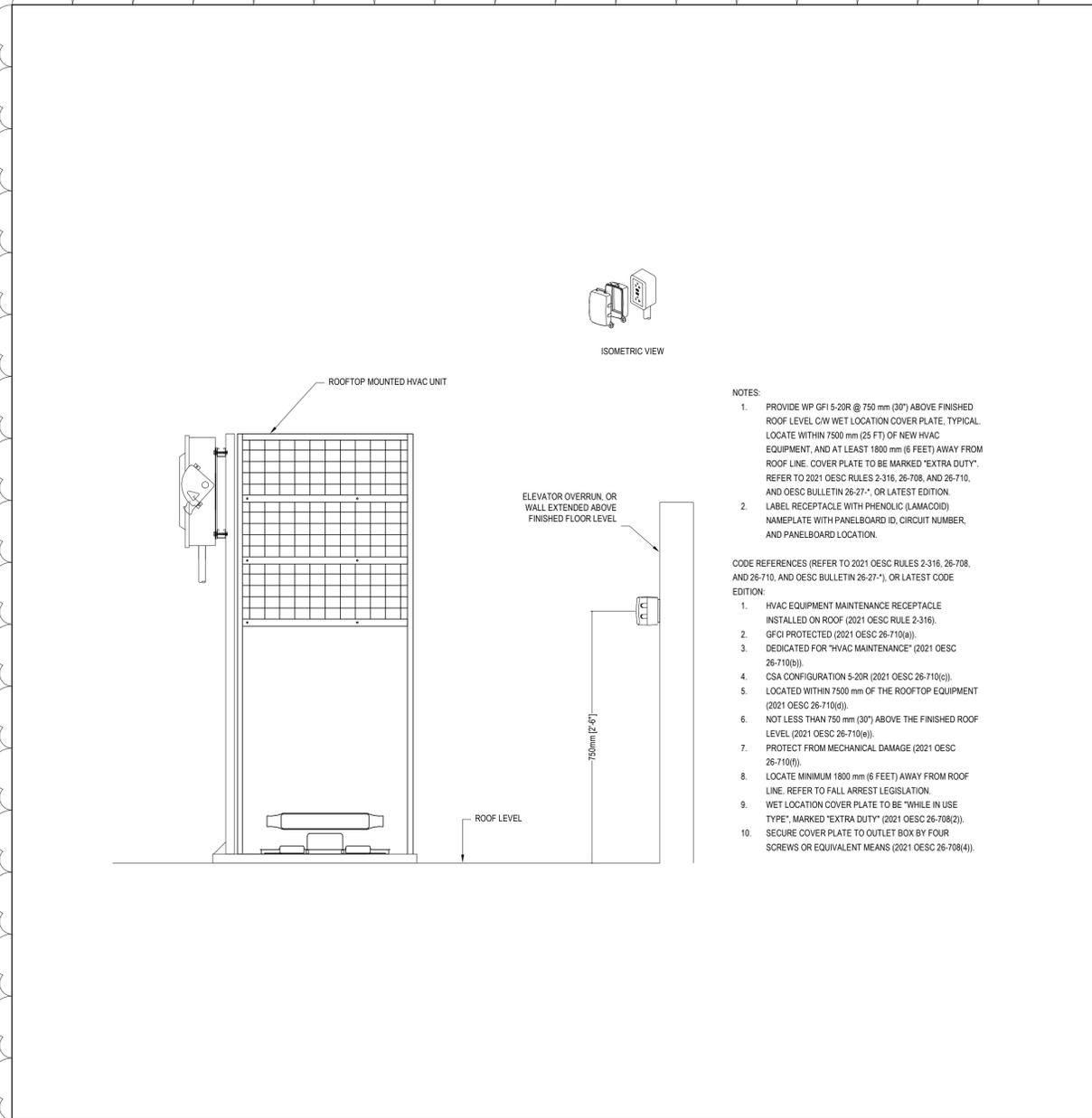
8 TRANSFORMER GROUNDING  
SCALE: 1 : 50



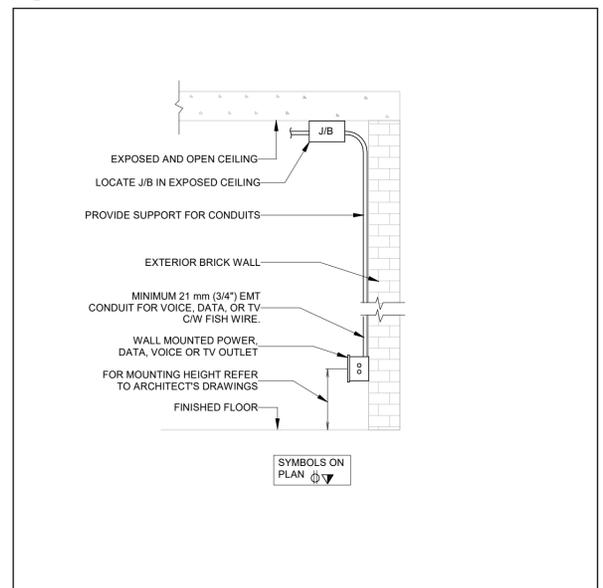
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SCALE: 1 : 10



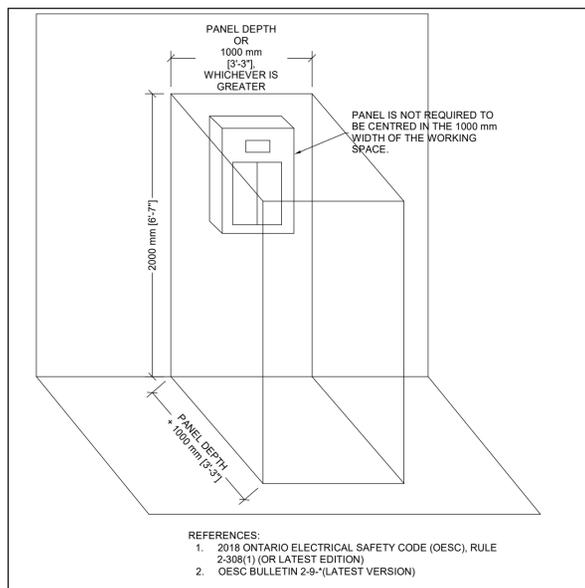
7 Sealing of Wall Mounted Exterior Luminaires  
SCALE: N.T.S.



3 MAINTENANCE RECEPTACLE ROOF MOUNTED HVAC EQUIPMENT  
SCALE: N.T.S.



6 WALL MOUNTED OUTLET BOX (SURFACE)  
SCALE: N.T.S.



5 CLEAR SPACE AROUND PANELBOARDS  
SCALE: N.T.S.

- NOTES:
1. PROVIDE WP GFI 5-20R @ 750 mm (30") ABOVE FINISHED ROOF LEVEL C/W WET LOCATION COVER PLATE, TYPICAL. LOCATE WITHIN 7500 mm (25 FT) OF NEW HVAC EQUIPMENT, AND AT LEAST 1800 mm (6 FEET) AWAY FROM ROOF LINE. COVER PLATE TO BE MARKED "EXTRA DUTY". REFER TO 2021 OESC RULES 2-316, 26-708, AND 26-710, AND OESC BULLETIN 26-27-1, OR LATEST EDITION.
  2. LABEL RECEPTACLE WITH PHENOLIC (LAMACOID) NAMEPLATE WITH PANELBOARD ID, CIRCUIT NUMBER, AND PANELBOARD LOCATION.
- CODE REFERENCES (REFER TO 2021 OESC RULES 2-316, 26-708, AND 26-710, AND OESC BULLETIN 26-27-1), OR LATEST CODE EDITION:
1. HVAC EQUIPMENT MAINTENANCE RECEPTACLE INSTALLED ON ROOF (2021 OESC RULE 2-316).
  2. GFCI PROTECTED (2021 OESC 26-710(a)).
  3. DEDICATED FOR "HVAC MAINTENANCE" (2021 OESC 26-710(b)).
  4. CSA CONFIGURATION 5-20R (2021 OESC 26-710(c)).
  5. LOCATED WITHIN 7500 mm OF THE ROOFTOP EQUIPMENT (2021 OESC 26-710(d)).
  6. NOT LESS THAN 750 mm (30") ABOVE THE FINISHED ROOF LEVEL (2021 OESC 26-710(e)).
  7. PROTECT FROM MECHANICAL DAMAGE (2021 OESC 26-710(f)).
  8. LOCATE MINIMUM 1800 mm (6 FEET) AWAY FROM ROOF LINE. REFER TO FALL ARREST LEGISLATION.
  9. WET LOCATION COVER PLATE TO BE "WHILE IN USE TYPE", MARKED "EXTRA DUTY" (2021 OESC 26-708(2)).
  10. SECURE COVER PLATE TO OUTLET BOX BY FOUR SCREWS OR EQUIVALENT MEANS (2021 OESC 26-708(4)).

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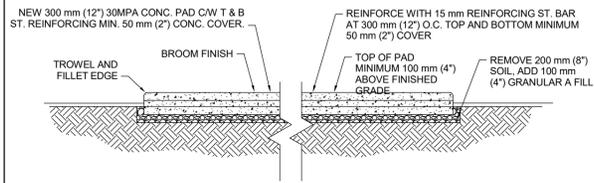
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Project No: TT-24-005  
Scale: As indicated

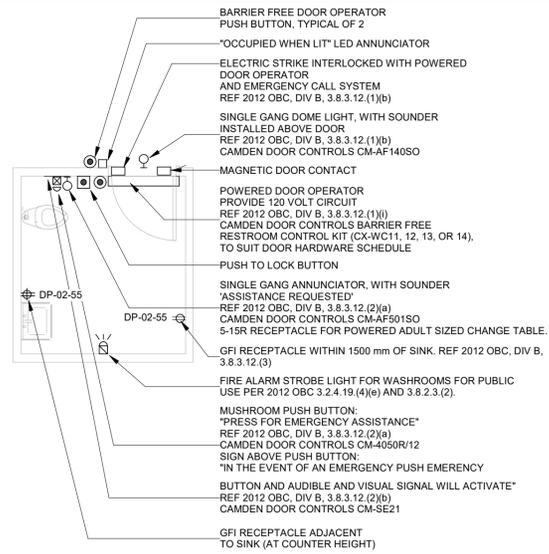
Sheet  
Title:  
**ELECTRICAL DETAILS**

Drawing  
No:  
**E-801**



### 4 Cast-In-Place Concrete Generator Pad

SCALE: 1 : 50



UNIVERSAL RESTROOM "EMERGENCY ASSISTANCE" SIGNAL ACTIVATION, ANNUNCIATION AND SUPPORTING SIGNAGE SHALL BE CAMDEN DOOR CONTROLS MODEL CX-WEC10/CX-WEC-11 UNIVERSAL RESTROOM CONTROL KIT.

KIT SHALL INCLUDE:

- CM-4050R/12 SINGLE GANG MUSHROOM PUSH BUTTON, 1/4" THICK BRUSHED ALUMINUM FACEPLATE AND RED BUTTON, MAINTAINED PUSH/PULL OPERATION WITH "PRESS FOR EMERGENCY ASSISTANCE" PERMANENTLY LASER ETCHED ON THE FACEPLATE.
- CM-AF50SO SINGLE GANG LED ANNUNCIATOR WITH SOUNDER, RATED 85 dB AT 100 mm, WEATHER AND VANDAL RESISTANT CONSTRUCTION, BRUSHED STAINLESS STEEL FACEPLATE, WITH "ASSISTANCE REQUIRED" MESSAGE TEXT, THAT IS NOT LEGIBLE UNLESS THE ANNUNCIATOR IS ENERGIZED.
- CM-AF140SO SINGLE GANG DOME LIGHT WITH PIEZO SOUNDER, RATED 93 dB AT 1 METRE, BRUSHED STAINLESS STEEL FACEPLATE AND 24 V INCANDESCENT BULB.
- CM-SE21 SIGN, TO BE LOCATED ABOVE THE ACTIVATION SWITCH, 1.6 mm (1/16"), 381 mm BY 381 mm (15" BY 15"), FIRE RATED EXPANDED PVC WHITE, WITH 25 mm BLACK LETTERING. TEXT SHALL BE: "IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE"
- INTERCONNECTED WITH DOOR HARDWARE, INCLUDING DOOR OPERATOR, PUSH TO LOCK BUTTON, ELECTRIC STRIKE, DOOR CONTACT.

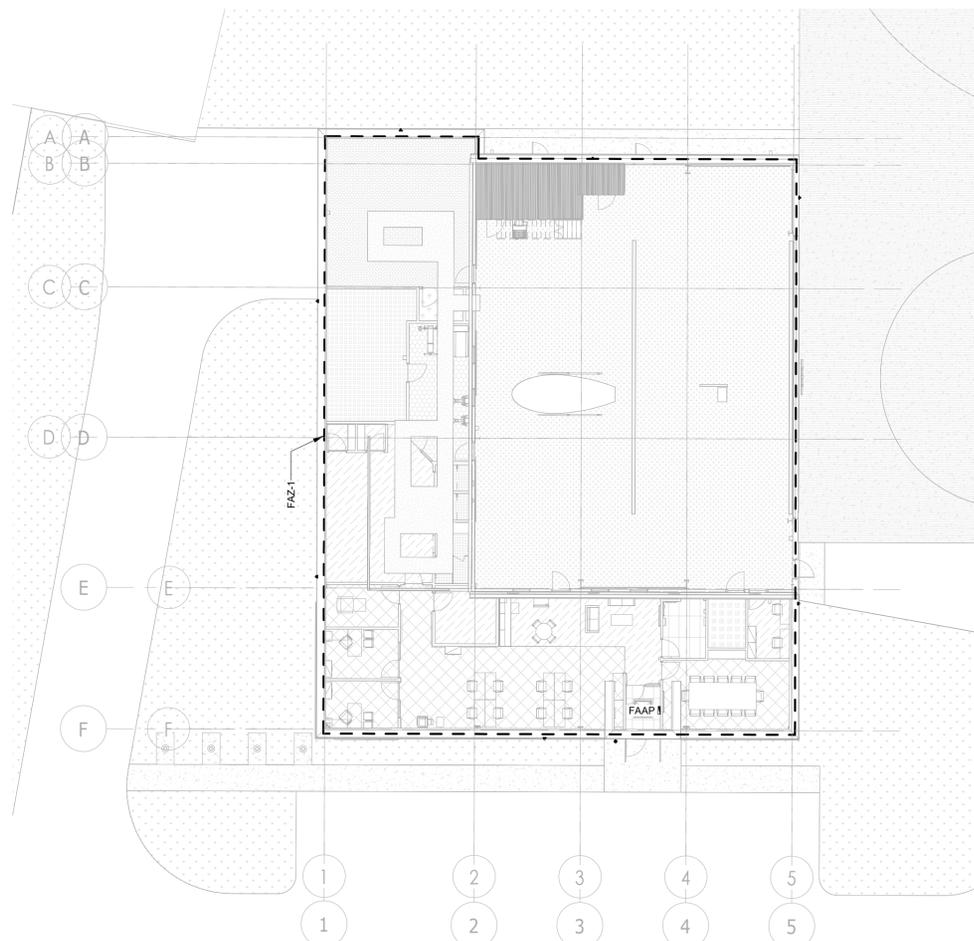
### NOTES:

- CONFIRM EXACT HARDWARE AND ROUGH-IN REQUIREMENTS WITH EMERGENCY CALL SYSTEM VENDOR.
- CONFIRM EXACT EQUIPMENT LOCATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.

28 26 23 - UNIVERSAL WASHROOM DOOR OPERATOR AND EMERGENCY CALL SYSTEM

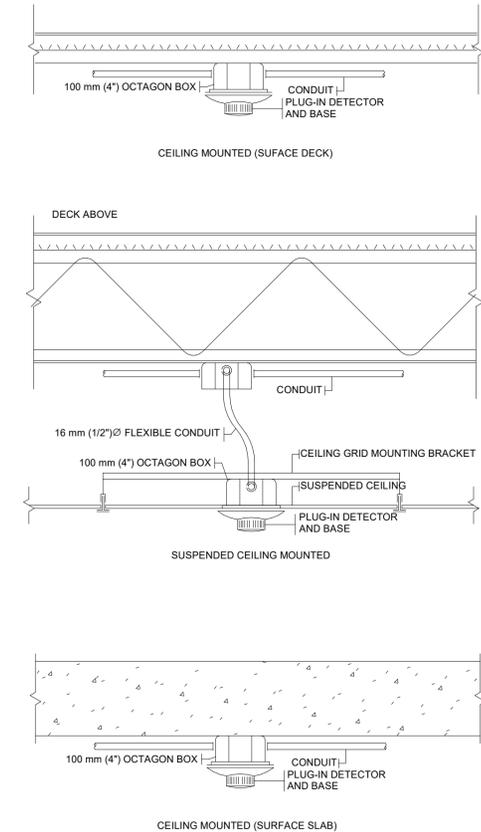
### 3 Universal Washroom Door Operator and Emergency Call System

SCALE:N.T.S.



### 2 FIRE ALARM ZONES

SCALE:N.T.S.



### 1 Typical Smoke Detector Installations

SCALE:N.T.S.

## YORK REGIONAL POLICE HELICOPTER HANGAR

350 GARFIELD WRIGHT  
BOULEVARD  
TOWN OF EAST GWILLIMBURY

Key  
Plan

### MAXIMUM BRANCH WIRING DISTANCE FOR 120 V SYSTEM AT 2% VOLTAGE DROP

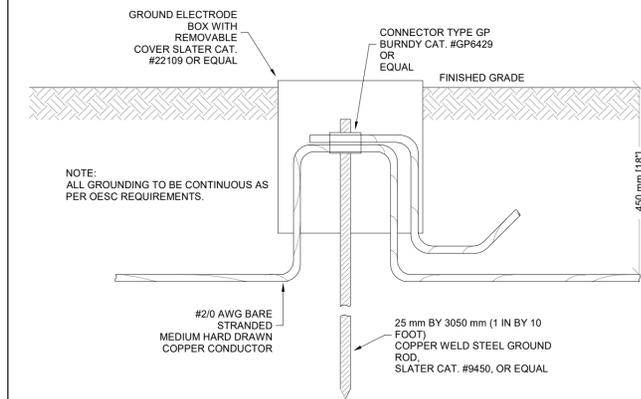
WIRE SIZE	BREAKER SIZE (AMPERES)	MAX. LOAD AT 80% (AMPERES)									
		15	20	30	40	50	60	70	80	100	
NO.12	----	16.8	12.2	-----	-----	-----	-----	-----	-----	-----	-----
NO.10	----	25.9	19.0	12.9	-----	-----	-----	-----	-----	-----	-----
NO.8	----	39.6	30.4	20.5	15.2	-----	-----	-----	-----	-----	-----
NO.6	----	62.4	47.2	32.0	23.6	19.0	16.0	-----	-----	-----	-----
NO.4	----	99.0	73.1	50.2	38.1	30.4	24.3	21.3	19.0	-----	-----
NO.2	----	-----	114.3	77.2	57.9	47.2	38.8	33.5	28.9	22.8	-----
NO.1	----	-----	-----	96.0	73.1	57.9	47.2	42.6	36.5	27.4	-----
NO.1/0	----	-----	-----	-----	85.3	68.5	56.3	48.7	41.9	33.5	-----
NO.2/0	----	-----	-----	-----	-----	102.8	80.7	67.0	57.9	50.2	40.3
NO.3/0	----	-----	-----	-----	-----	-----	95.2	79.2	68.5	59.4	47.2
NO.4/0	----	-----	-----	-----	-----	-----	-----	92.9	79.2	70.1	56.3
250 MCM	----	-----	-----	-----	-----	-----	-----	-----	102.8	86.8	76.2
300 MCM	----	-----	-----	-----	-----	-----	-----	-----	-----	100.5	88.3

NOTE: DISTANCES INDICATED IN METRES FROM PANEL TO LOAD FOR SINGLE PHASE.

### MAXIMUM BRANCH WIRING DISTANCE FOR 120 V SYSTEM AT 3% VOLTAGE DROP

WIRE SIZE	BREAKER SIZE (AMPERES)	MAX. LOAD AT 80% (AMPERES)									
		15	20	30	40	50	60	70	80	100	
NO.12	----	24.4	18.3	-----	-----	-----	-----	-----	-----	-----	-----
NO.10	----	38.1	29.0	19.1	-----	-----	-----	-----	-----	-----	-----
NO.8	----	59.4	44.2	30.5	22.9	-----	-----	-----	-----	-----	-----
NO.6	----	91.4	70.1	47.2	35.1	28.2	23.6	-----	-----	-----	-----
NO.4	----	-----	109.7	73.2	54.9	42.7	38.1	32.0	27.4	-----	-----
NO.2	----	-----	-----	114.3	85.3	68.6	57.9	50.3	41.1	35.0	-----
NO.1	----	-----	-----	-----	103.6	85.3	73.2	61.0	54.9	43.4	-----
NO.1/0	----	-----	-----	-----	-----	128.0	102.9	85.3	73.2	64.0	48.8
NO.2/0	----	-----	-----	-----	-----	-----	121.9	100.6	86.9	74.7	60.9
NO.3/0	----	-----	-----	-----	-----	-----	-----	118.1	102.1	88.4	70.1
NO.4/0	----	-----	-----	-----	-----	-----	-----	-----	120.4	102.9	83.8
250 MCM	----	-----	-----	-----	-----	-----	-----	-----	-----	114.3	91.4
300 MCM	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	103.6

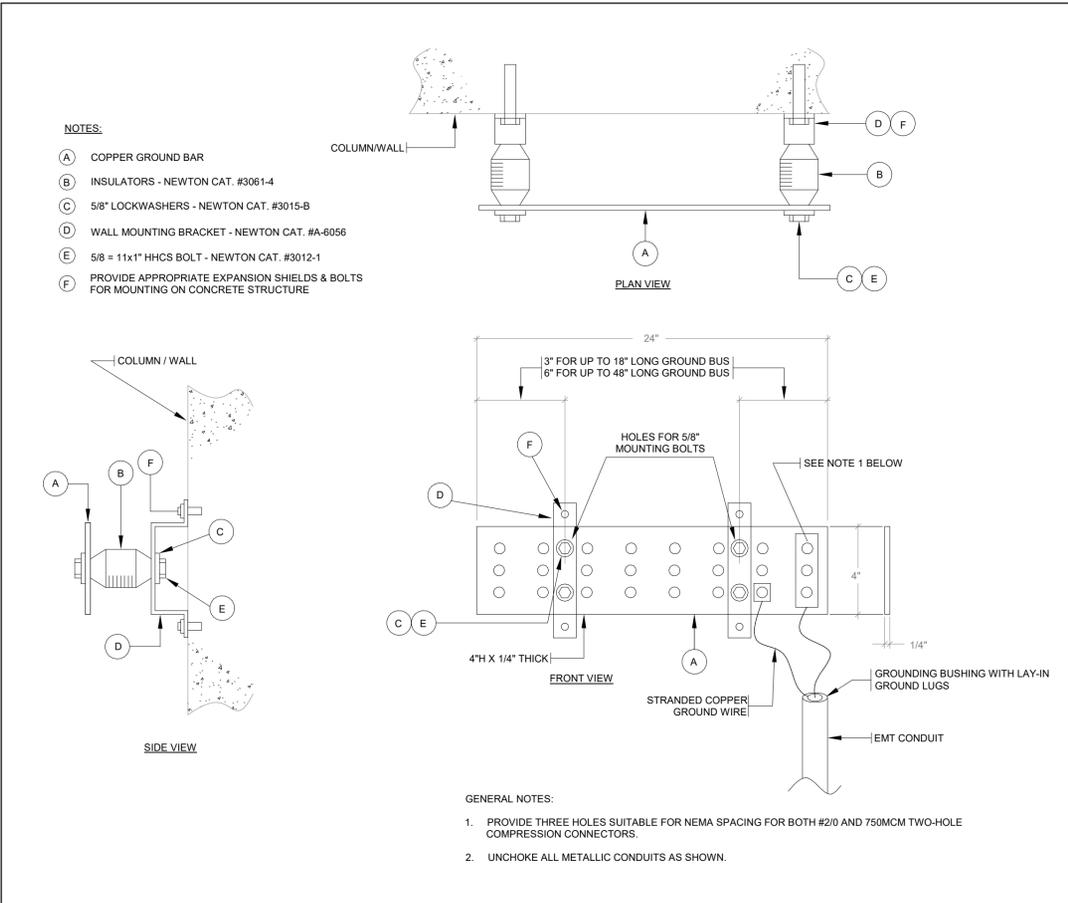
NOTE: DISTANCES INDICATED IN METRES FROM PANEL TO LOAD FOR SINGLE PHASE.



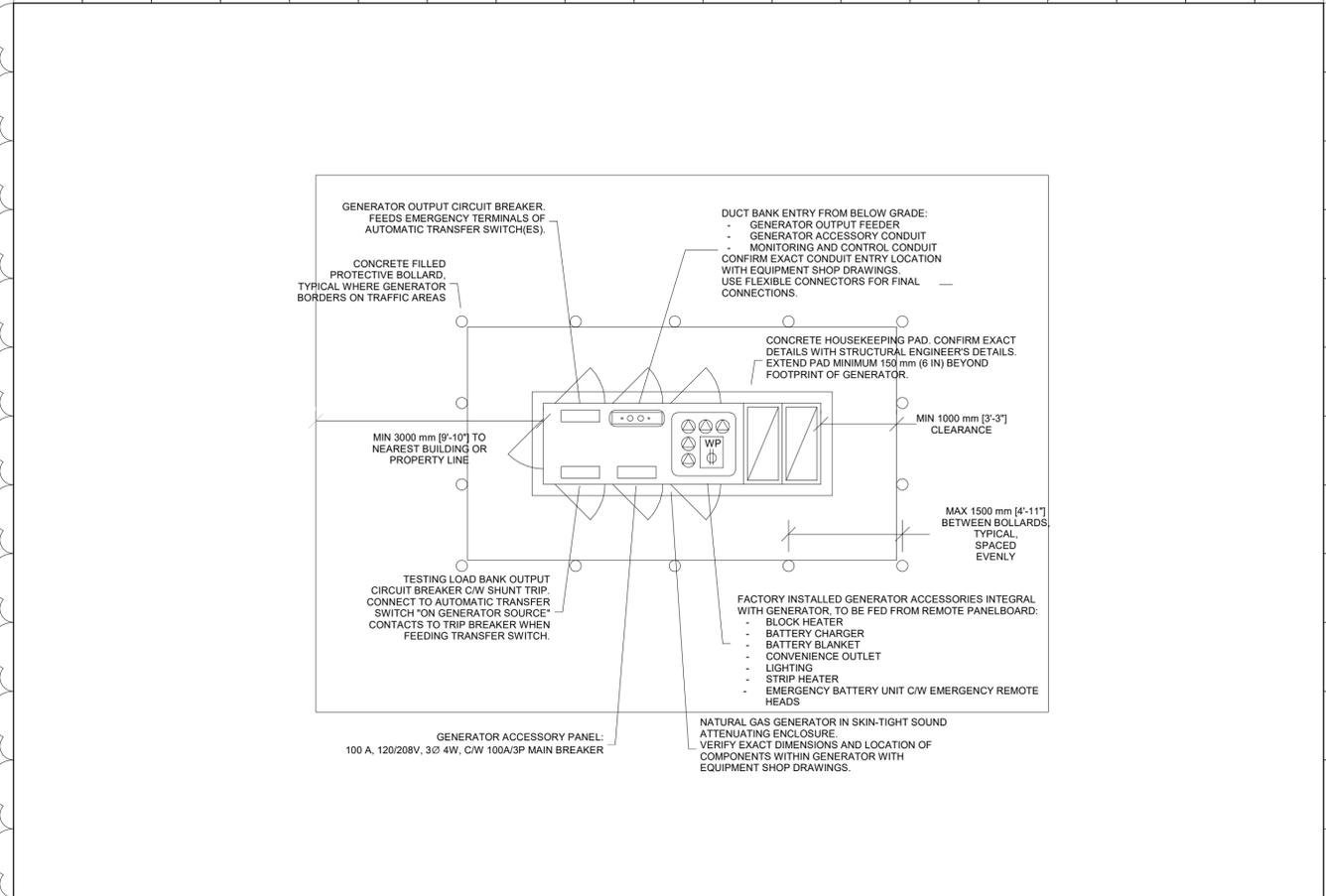
1 Max Branch Wiring Distance for 120 V System at 2% Voltage Drop  
SCALE: N.T.S.

2 Max Branch Wiring Distance for 120 V System at 3% Voltage Drop  
SCALE: N.T.S.

3 Ground Rod  
SCALE: N.T.S.



4 Grounding Bar Detail  
SCALE: N.T.S.



5 Skintight Gas Generator Plan  
SCALE: N.T.S.

NO.	ISSUED	DATE
2	ISSUED FOR ADDENDUM 6	2024-09-30
1	ISSUED FOR TENDER	2024-09-09

Issues

All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings  
Drawn by: Author  
Checked by: Checker  
Original Issue Date: 2024-07-31  
Project No: TT-24-005  
Scale: N.T.S.

Sheet Title:  
ELECTRICAL DETAILS

Drawing No:  
E-802





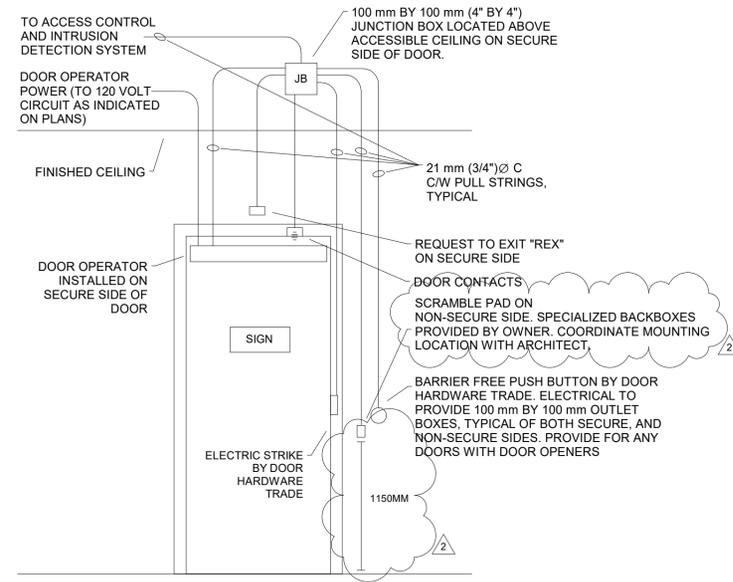


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## YORK REGIONAL POLICE HELICOPTER HANGAR

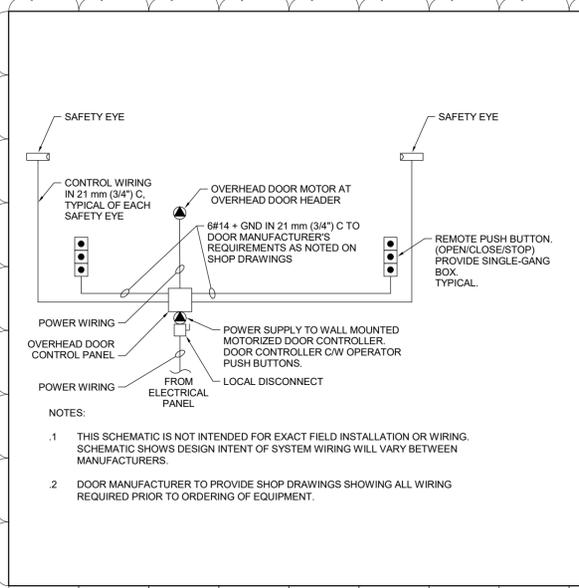
350 GARFIELD WRIGHT  
BOULEVARD  
TOWN OF EAST GWILLIMBURY

Key  
Plan



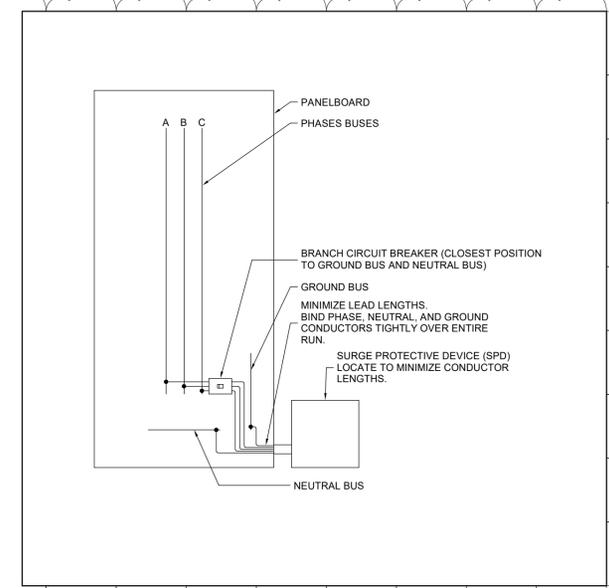
**NOTES:**

1. REFER TO DETAIL "MOUNTING HEIGHTS FOR ACCESSIBLE DESIGN" FOR EXACT MOUNTING HEIGHTS OF DEVICES AND APPLICABLE CODE REFERENCES.
2. REFER TO DOOR HARDWARE SCHEDULE FOR EXACT SCHEDULE OF DEVICES AT DOOR. COORDINATE EXACT ROUGH-IN DETAILS WITH DOOR HARDWARE TRADE.
3. INTERLOCK OPERATION OF DOOR OPERATOR WITH SCRAMBLE PAD ON THE NON-SECURE SIDE.



2 **Wiring Diagram for Overhead Doors**

SCALE: 1 : 50

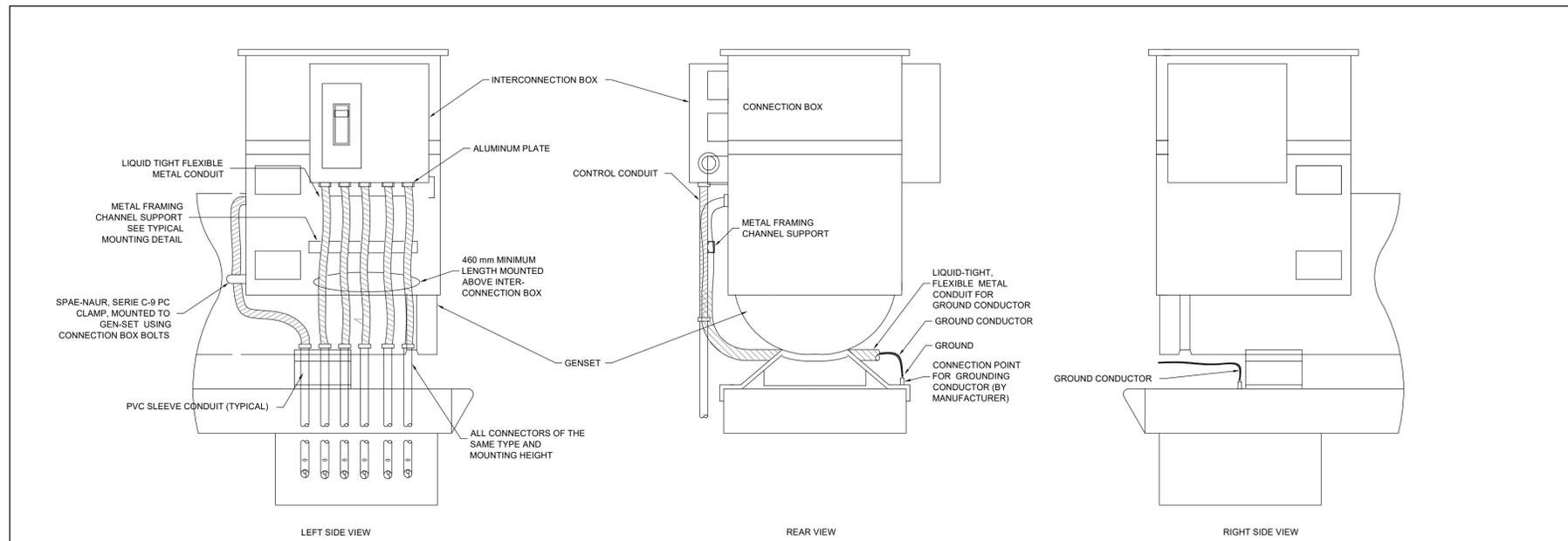


4 **EXTERNALLY MOUNTED SURGE PROTECTION**

SCALE: 1 : 50

3 **Access Control Rough-In**

SCALE: 1 : 1



1 **ENGINE GENERATOR BOTTOM FEED**

SCALE: N.T.S.

NO.	ISSUED	DATE
2	ISSUED FOR ADDENDUM 6	2024-09-30
1	ISSUED FOR ADDENDUM 3	2024-09-23

**Issues**

All measurements are to be checked and verified on site by the contractor before proceeding with work

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Checked by: Checker  
Original Issue Date: 2024-07-31  
Project No: TT-24-005  
Scale: As indicated

Sheet  
Title:  
**ELECTRICAL DETAILS**

Drawing  
No:  
**E-805**



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350 GARFIELD WRIGHT  
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Key  
Plan

NO.	ISSUED	DATE
5	ISSUED FOR ADDENDUM 6	2024-09-30
4	ISSUED FOR ADDENDUM 3	2024-09-23
3	ISSUED FOR TENDER	2024-09-09
2	ISSUED FOR SITE PLAN APPROVAL	2024-08-16
1	ISSUED FOR BUILDING PERMIT	2024-07-31

### Issues

All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings

Drawn by: ZK  
Checked by: AO  
Original Issue Date: 2024-07-31  
Project No: TT-24-005

Sheet  
Title:

## ELECTRICAL SCHEDULES

Drawing  
No. E-900

### LIGHT FIXTURE SCHEDULE

	TYPE	MANUFACTURER	DESCRIPTION	MOUNTING	VOLTAGE	WATTS	LUMENS	DIMMABLE	CCT	MOUNTING HEIGHT	Count	
D1	LFR-4RD-M-15L35K8WD-DM1	LFR-4RD-T-CL-S	PRESCOLITE	LITEFRAME 4" ROUND DOWNLIGHT	RECESSED	120 V	12 W	1404	0-10V	3500K	<varies>	19
D2	LFR-4RD-M-20L35K8-DM1	LFR-4RD-T-SH-WT	PRESCOLITE	LITEFRAME 4" ROUND DOWNLIGHT	RECESSED	120 V	15 W	1238	0-10V	3500K	<varies>	3
F2	SDL-3-1ACF-22G-40-35K-MV		PEERLESS-ELECTRIC	2' x 4' LED luminaire for recessed installation in an exposed flat	RECESSED	120 V	32 W	3968	0-10V	3500K	<varies>	29
F3	SDL-3-1ACF-22G-40-35K-MV		PEERLESS-ELECTRIC	2' x 2' LED luminaire for recessed installation in an exposed flat	RECESSED	120 V	37 W	4070	0-10V	3500K	3m	2
FL1	NOT USED					120 V	22 W	Modify name as required				1
L2	LXD1-40-6LM-4-80-35K-FA-W		PEERLESS-ELECTRIC	LED luminaire for suspended (with aircraft cables)	SUSPEND	120 V	64 W	3225		3500K	2.4m	1
PA	AP4-HB-4-200-35K-A6		PEERLESS-ELECTRIC	LED luminaire for surface mounting with brackets	SURFACE	120 V	165 W	20000	0-10V	3500K	<varies>	12
PB	AP4-HB-4-150-35K-A6		PEERLESS-ELECTRIC	LED luminaire for surface mounting with brackets	SURFACE	120 V	119 W	15000	0-10V	3500K	1.2m	15
PC	AP2W-4-42-35K-A2		PEERLESS-ELECTRIC	LED luminaire for surface mounting with brackets	SUSPENDED	120 V	35 W	4200	0-10V	3500K	3m	1
PD	HEM4-35ML-DFA-EU		PEERLESS-ELECTRIC	LED luminaire for surface mounting with brackets	SUSPENDED	120 V	46 W	5425	0-10V	3500K	3m	4
Z1	VPW3-160L-95-3K7-4		BEACON VIPER WALL	Exterior Wall-mounted Low profile LED luminaireN	WALL	120 V	95 W	12595	0-10V	3000K	8m	5
Z2	VPW3-160L-95-3K7-4		BEACON VIPER WALL	Exterior Wall-mounted Low profile LED luminaire	WALL	120 V	95 W	12595	0-10V	3000K	4.1m	7
Z3	LFR-4RD-M-10L30K8XW-DM1	LFR-4RD-T-CL-S	PRESCOLITE	LITEFRAME 4" ROUND DOWNLIGHT	RECESSED	120 V	8 W	903	0-10V	3000K	2.75m	1
Grand total: 100												

### EMERGENCY LIGHTING WIRING MAX VOLTAGE DROP

LOAD (WATTS)	WIRE SIZE	LENGTH OF WIRE RUN (FEET)															
		13	18	25	30	35	50	60	75	100	150	200	250	300	400		
6	12	41	30	21	18	15	11	9	8	6	4	-	-	-	-		
	10	65	47	32	28	24	17	14	11	9	6	-	-	-	-		
8	12	110	75	54	45	39	27	22	18	14	9	7	-	-	-		
	10	260	190	136	112	97	68	52	45	34	23	17	14	11	-		
12	12	165	110	85	71	61	42	35	29	21	14	10	8	-	-		
	10	415	300	215	180	154	108	90	72	54	36	27	21	18	-		
24	12	660	440	340	284	244	168	140	116	84	56	40	32	26	21		
	10	1040	760	544	448	388	272	208	180	136	92	68	52	44	34		
8	12	1668	1200	860	720	616	432	360	288	216	144	108	84	72	54		
	10																

### EMERGENCY LIGHTING DEVICE SCHEDULE

Type	Description	Manufacturer	VOLTAGE
E26	WATER-PROOF COMPACT REMOTE UNIT WITH DOUBLE HEAD LAMPS: MR16 LED LAMP, 12V, 6W, 540 LUMEN, 25 DEGREE BEAM ANGLE, FACTORY WHITE FINISH	STANPRO "M SERIES": CAT# M1-1V6 LA WH OR APPROVED EQUAL (BEGHELLI, EMERGH-LITE, LUXNET, AMLITE).	120 V
EMB-1	12V EMERGENCY LIGHTING BATTERY UNIT C/W AUTO TEST, TWO REMOTE HEADS	12V EMERGENCY LIGHTING BATTERY UNIT C/W AUTO TEST, FACTORY WHITE FINISH, UNIVERSAL 120/347VAC INPUT, AND SIX-ZONE DELTA VOLTAGE SENSING RELAY OPTION TWO LAMPS: MR16 LED LAMP, 12V, 6W, 540 LUMEN, 25 DEGREE BEAM ANGLE -LUMACELL RC12S-(360)-2 -LD10-AT-VSR STANPRO SLC SERIES -EMERGLITE ESL SERIES	120 V
EMB-2	LIGHTING BATTERY UNIT C/W AUTO TEST, TWO REMOTE HEADS	SAME AS EMB-1	120 V
X1	SELF-POWERED SLIM EDGE-LIT LED ILLUMINATED PICTOGRAM EXIT SIGN - SINGLE FACE C/W WHITE FINISH RECESSED HOUSING AND AUTOMATIC TEST SELF-DIAGNOSTIC	STANPRO "RMTE SERIES": CAT# RMTE-1-UM-WH-IB/AT OR APPROVED EQUAL (BEGHELLI, EMERGH-LITE, LUXNET, AMLITE).	120 V
Grand total: 27			

### LIGHTING CONTROL MATRIX 1

ROOM NAME	ROOM NUMBER	CONTROLS PHILOSOPHY		LOCAL CONTROL (ASHRAE 90.1-2013 9.4.1.1a)		OCCUPANCY SENSOR		TIME SCHEDULE	DAYLIGHT SENSOR	OTHER	REMARKS	
		CONTROLS INTEGRATED INTO LUMINAIRES	STANDALONE CONTROL DEVICES	MANUAL (ON/OFF) ONE ZONE ONLY FOR SPACE	MANUAL (ON/OFF) a, b, ZONED SWITCHING	MANUAL DIMMING CONTROL	KEY SWITCH (KS)					SCENE CONTROL (SC) OR GRAPHIC TOUCHSCREEN
VESTIBULE	101		X		X							
CONFERENCE ROOM	103		X		X						X	
OFFICE 4	104		X		X						X	
IT ROOM	105		X		X							
UNIVERSAL WASHROOM	106		X		X							
LOUNGE	107		X		X						X	
KITCHEN	108		X		X							
GENERAL OFFICE	109		X		X						X	
OFFICE 1	111		X		X						X	
OFFICE 2	112		X		X						X	
OFFICE 3	113		X		X						X	
STORAGE	114		X		X						X	
LOCKERS	115		X		X							
EXTERIOR - PARKING LIGHTING ZONE	116	X			X				X	X	X	
EXTERIOR - APRON LIGHTING ZONE	117	X			X				X	X	X	
WASHROOMS	118		X		X							
SHR1	119		X		X							
SHR2	120		X		X							
MECHANICAL/ELECTRICAL	122		X		X							
STORAGE 2	123		X		X							
VEHICLE BAY	124		X		X							
STORAGE 3	125		X		X							
STORAGE 4	126		X		X							
JANITOR ROOM	127		X		X							
HANGAR	128		X		X			50%	20		X 30	

### APRON LIGHTING CONTROL ZONE FUNCTIONAL REQUIREMENTS:

- TURN ON/OFF BASED ON PHOTOCELL HELIPORT OVERRIDE OFF:
  - OFF WHEN HELIPORT LIGHTING CONTROLLER (HLC) AUXILIARY DRY-CONTACT (MAX RATING 240VAC, 8A) CLOSSES (CORRESPONDS TO FATO LIGHTING TURNING ON, BY HLC)
  - AFTER HLC DEFINED TIME LIMIT, DRY-CONTACT WILL OPEN. APRON LIGHTING TO RESUME NORMAL FUNCTION CONTROLLED BY PHOTOCELL
- MANUAL OVERRIDE ON:
  - APRON LIGHTING CAN BE MANUALLY TURNED ON TO OVERRIDE THE HLC CONTACT AND RESUME OPERATION BASED ON PHOTOCELL

### KEYNOTE LEGEND

Keynote Value	Keynote Text
1.	FLOOR PLANS TAKE PRECEDENCE. COUNT IS PROVIDED FOR INFORMATION ONLY AND DOES NOT DICTATE THE DESIGN REQUIREMENTS.
2.	TO BE DEFINED BY OWNER DURING CONSTRUCTION.

