

Drawing
No. **E-001**



SCALE: 1 : 1000

- | | |
|-----|---|
| 1. | WHERE DIMENSIONS ARE PROVIDED IN METRIC AND IN IMPERIAL UNITS, METRIC DIMENSIONS GOVERN. |
| 2. | EMERGENCY POWER FOR LIGHTING AND FIRE ALARM: MINIMUM 30 MINUTES (2012 CBC 2.7.4.1.1)(b)(iv) 30 MIN FOR ANY OTHER BUILDING). |
| 3. | FIRE ALARM INSTALLATION IN ACCORDANCE WITH CANULC-S524-14. |
| 4. | VERIFY FIRE ALARM SYSTEM IN ACCORDANCE WITH CANULC-S537-13. |
| 5. | COMMISSION INTERCONNECTED LIFE SAFETY SYSTEMS IN ACCORDANCE WITH CANULC-S101-11. |
| 6. | PROVIDE SEISMIC RESTRAINTS IN ACCORDANCE WITH SECTION 26 05 48. THIS IS A POST-DISASTER BUILDING. SEISMIC RESTRAINTS ARE REQUIRED PER 2012 CBC 4.1.8.18.(1) AND ARE NOT EXEMPT PER 2012 CBC 4.1.8.18.(2). |
| 8. | AVIATION OBSTRUCTION LIGHTS, FED FROM PANEL DP-02-42. |
| 9. | FATO LIGHTS ARE FED FROM HELIPORT LIGHTING CONTROLLER, PROVIDE 5C-12AWG-BND. |
| 10. | COORDINATE FINAL LOCATION OF EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION. |
| 11. | REFER TO AVIATION DRAWINGS FOR DETAILS OF AVIATION RELATED EQUIPMENT TO BE PROVIDED BY ELECTRICAL CONTRACTOR |

- KEYNOTE LEGEND**
- | | |
|---|--|
| 1 | 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). |
| 2 | 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. |

PARKIN

Parkin Architects Limited
1 VALLEYBROOK DRIVE, TORONTO, CANADA, M3B 2S7 416-467-8000



250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan

[illegible]

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
Scale: As indicated

Sheet
Title: ELECTRICAL SITE PLAN

Drawing
No.
E-100



SCALE: 1 : 500

2024-09-30 8:22:31 PM
Autodesk Docs//2402 - YRP Helicopter Hangar/TT-24-005-YRP-QCG ME Model_R24.rvt

A

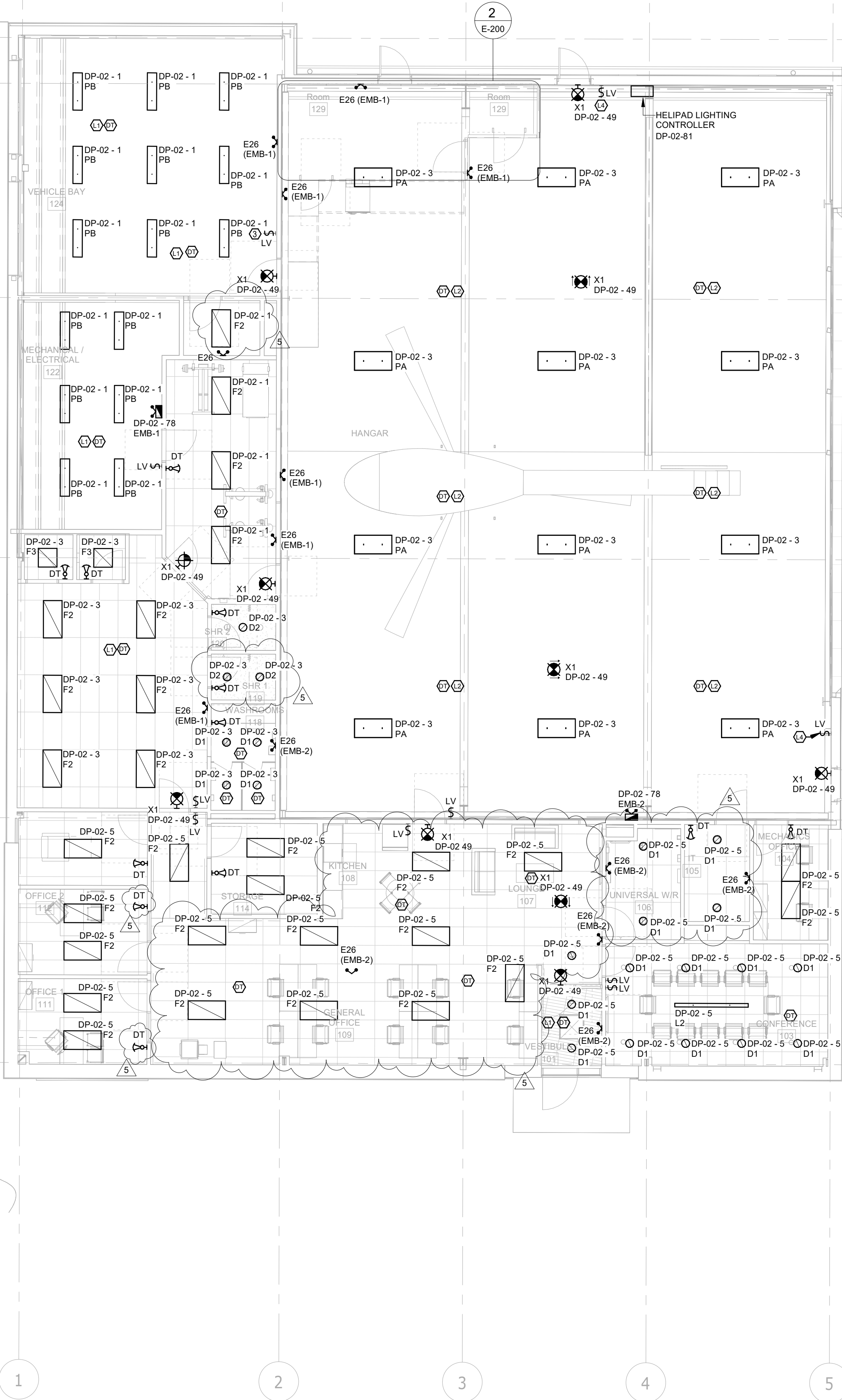
B

C

D

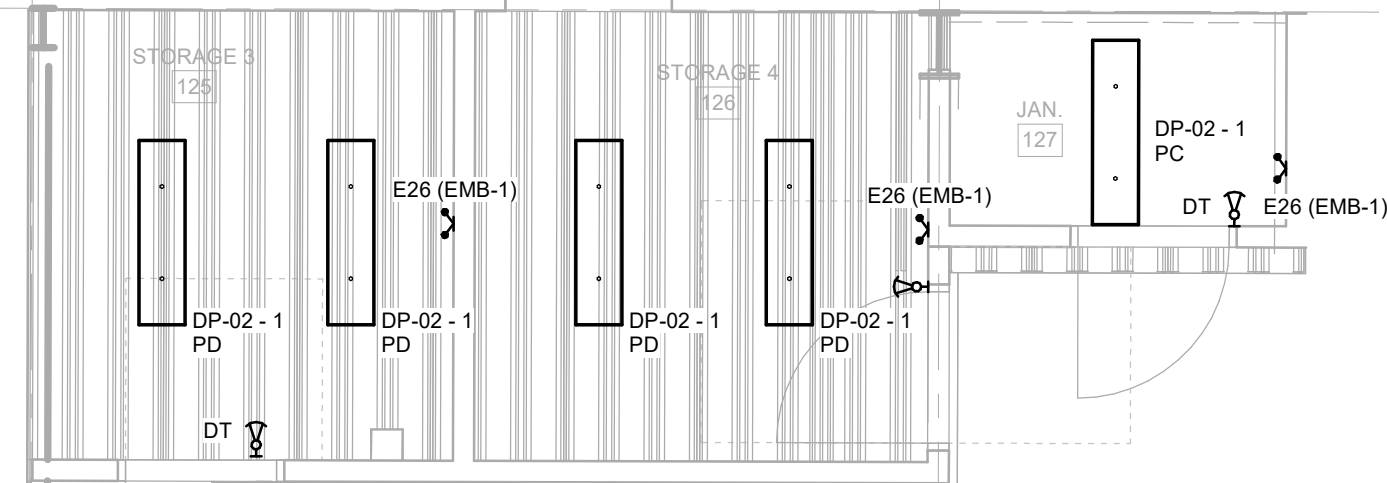
E

F



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.



LIGHTING PLAN - GROUND FLOOR
SCALE: 1 : 50

PARKIN

Parkin Architects Limited
1 VALLEYBROOK DRIVE, TORONTO, CANADA, M3B 2S7 416-467-8000



YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key
Plan

NO.	ISSUED	DATE
5	ISSUED FOR ADDENDUM 6	2024-09-30
4	ISSUED FOR ADDENDUM 3	2024-09-23
3	ISSUED FOR ADDENDUM 1	2024-09-16
2	ISSUED FOR TENDER	2024-09-09
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
Scale: As indicated

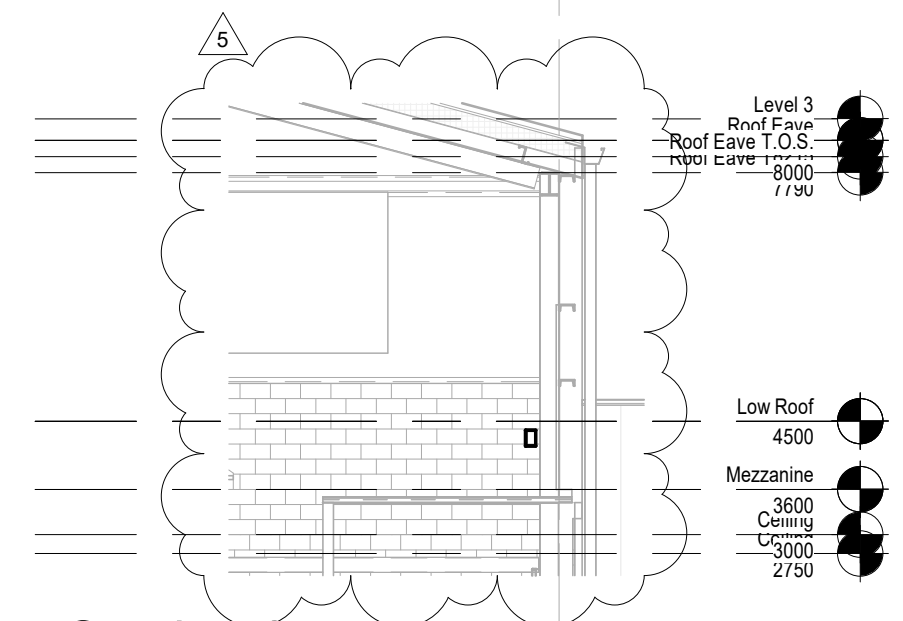
Sheet
Title:
LIGHTING NEW WORK -
GROUND FLOOR

Drawing
No.
E-200

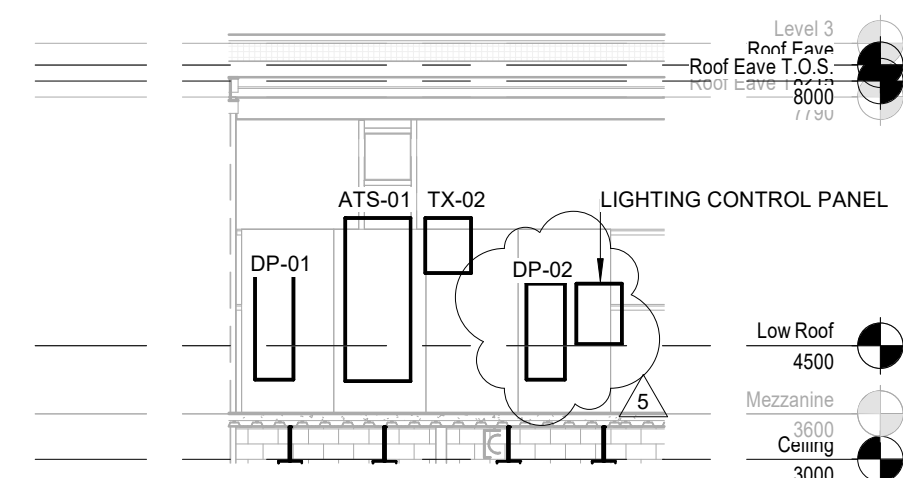
YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

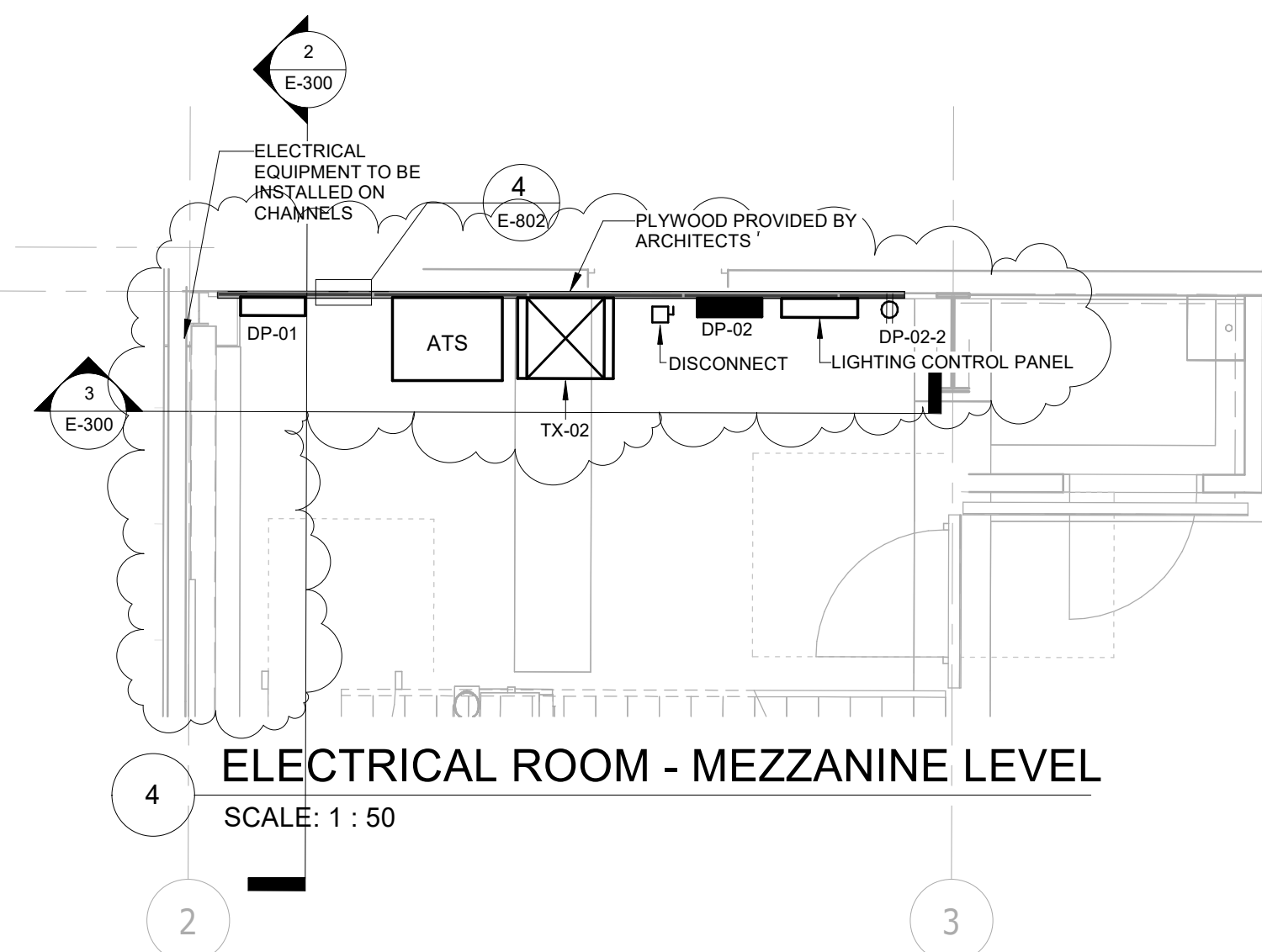
Key Plan



2 Section 3
SCALE: 1 : 100



3 Section 5
SCALE: 1 : 100



ELECTRICAL ROOM - MEZZANINE LEVEL

[illegible]

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
Scale: As indicated

Sheet
Title:
POWER AND SYSTEMS
NEW WORK - GROUND
FLOOR

Drawing
No.
E-300



350 GARFIELD WRIGHT
BOULEVARD
WYN OF EAST GWILLIMBURY

Sheet
Title:

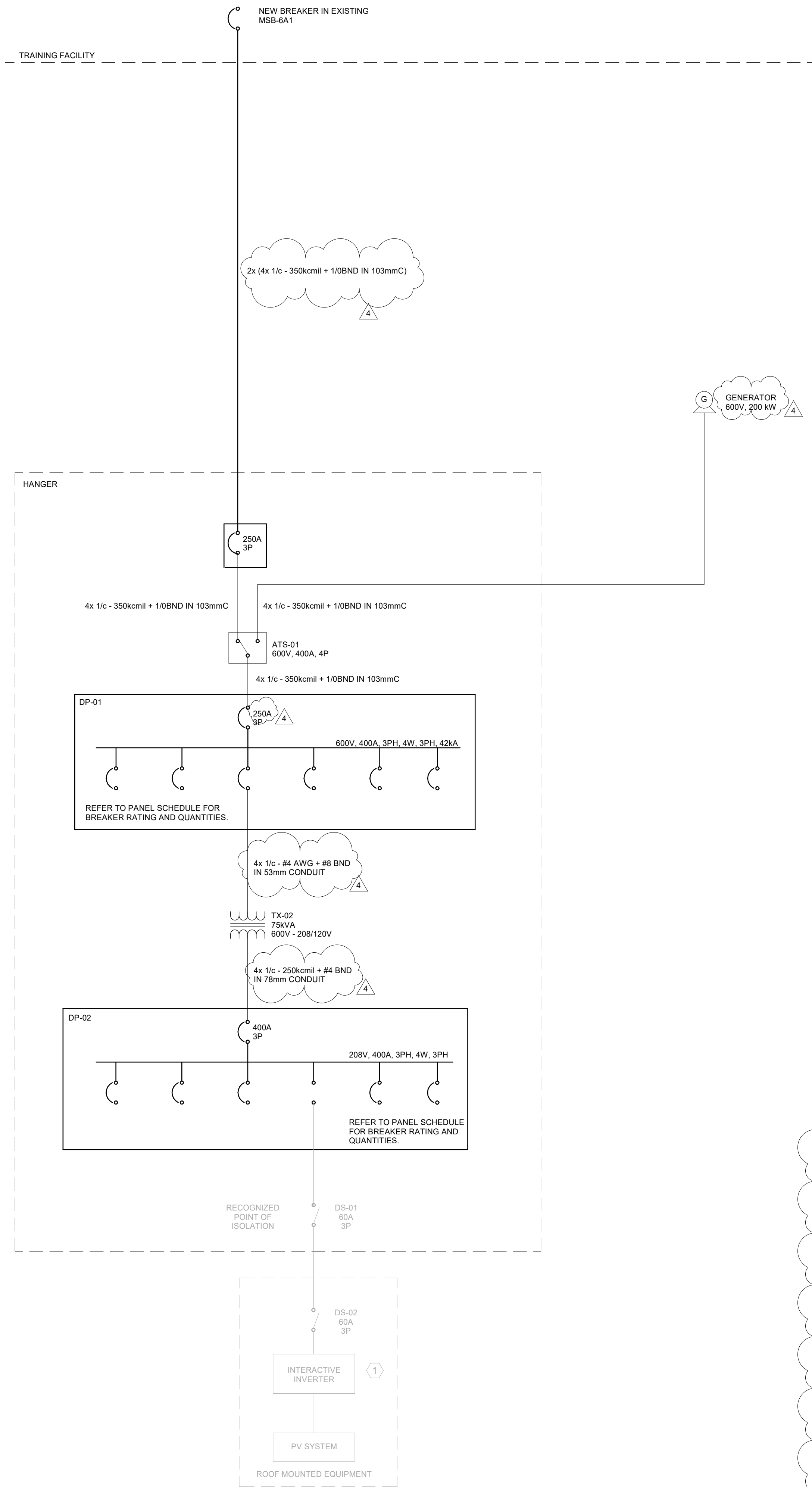
Drawing
No. **E-301**

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.



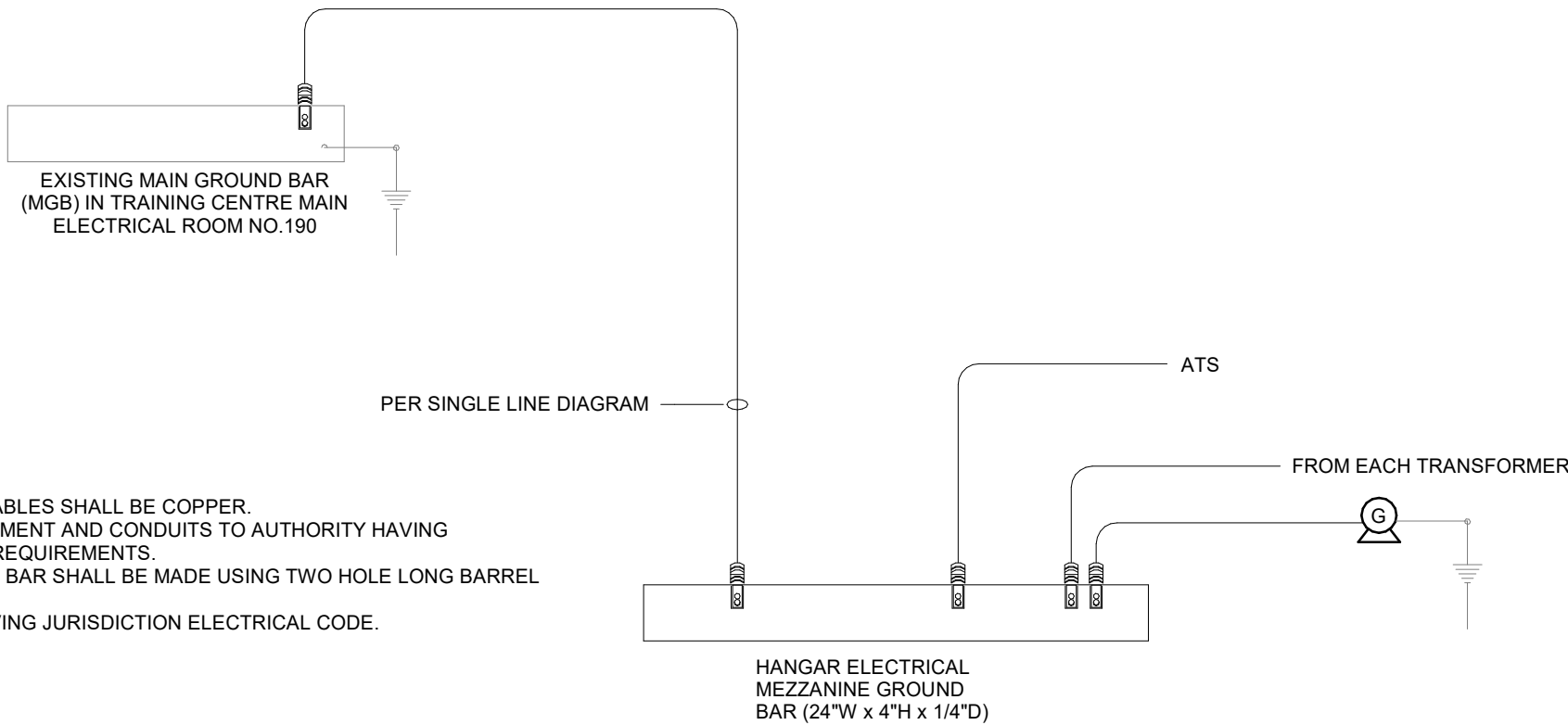
2024-09-30 8:22:35 PM
Autodesk Docs//2402 - YRP Helicopter Hanger/TT-24-005-YRP-QCG ME Model R24.rvt



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.

- LEGEND:
- MGB - MAIN GROUND BAR
GROUNDING RISER NOTES:
- REFER TO SECTION 26 05 26.
 - ALL GROUND BARS AND GROUND CABLES SHALL BE COPPER.
 - PROVIDE ALL GROUNDING TO EQUIPMENT AND CONDUITS TO AUTHORITY HAVING JURISDICTION'S ELECTRICAL CODE REQUIREMENTS.
 - ALL CONNECTIONS TO THE GROUND BAR SHALL BE MADE USING TWO HOLE LONG BARREL COMPRESSION LUGS.
 - WIRE SIZES AS PER AUTHORITY HAVING JURISDICTION ELECTRICAL CODE.



2
Grounding Riser
SCALE:N.T.S.

PARKIN

Parkin Architects Limited
1 VALLEYBROOK DRIVE, TORONTO, CANADA, M3B 2S7 416-467-8000



YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key
Plan

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

Issues

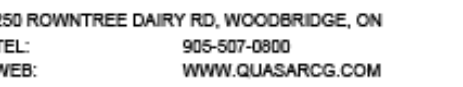
All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings

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

Sheet
Title:
ELECTRICAL SINGLE
LINE DIAGRAM

Drawing
No:
E-700



350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

[illegible]

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

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

Drawing
No. **E-701**

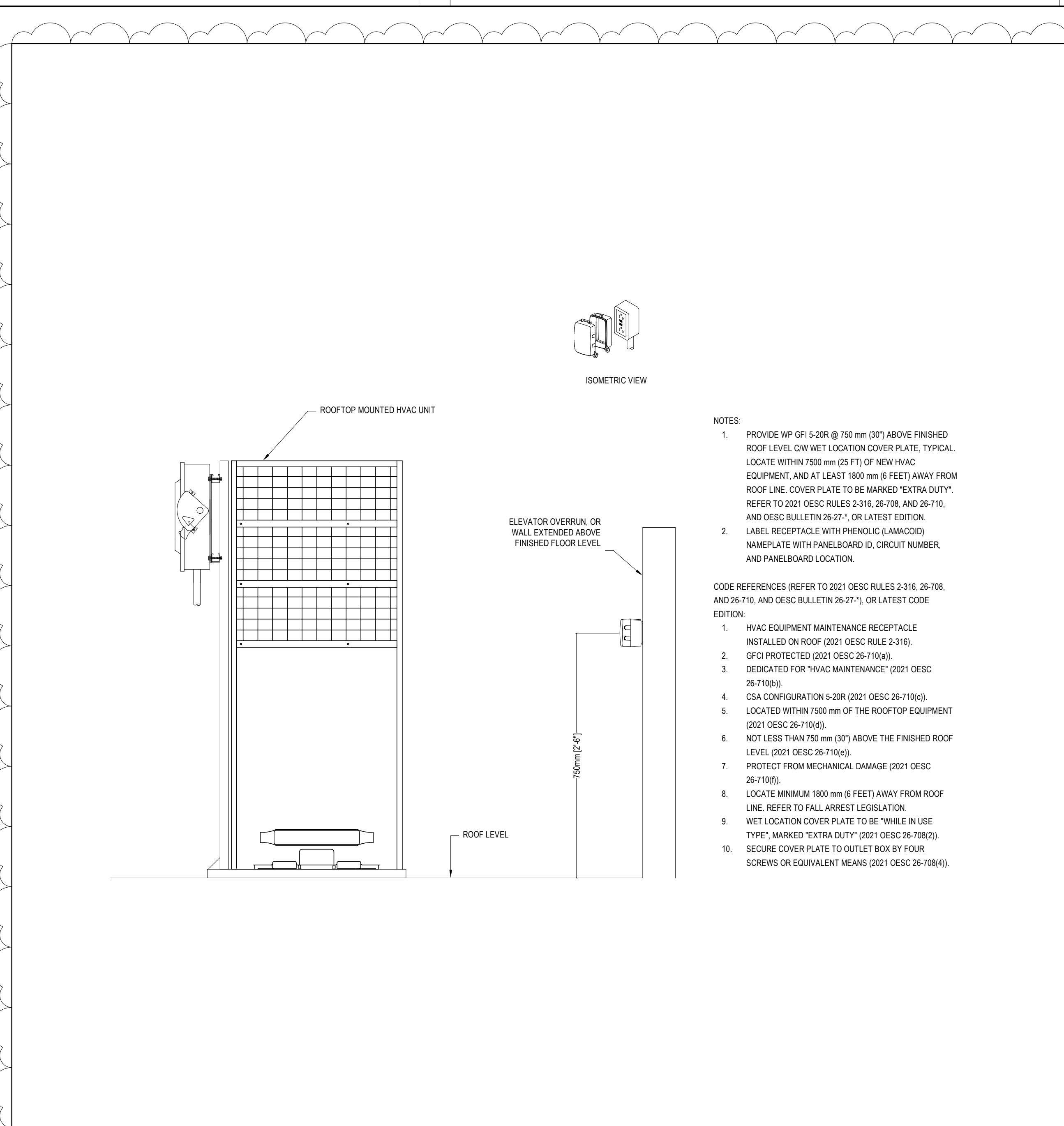
-

SCALE:N.T.S.

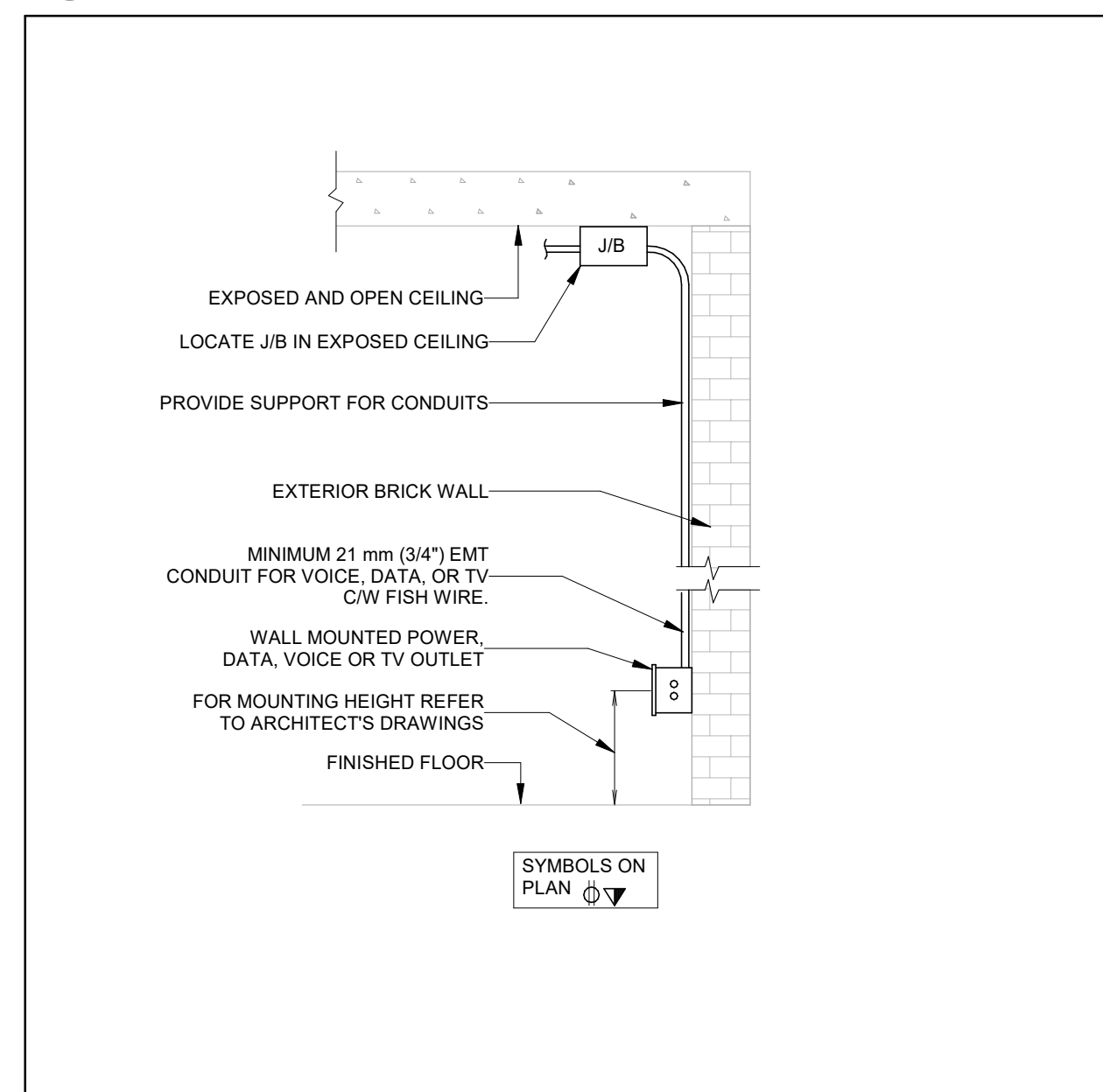
YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

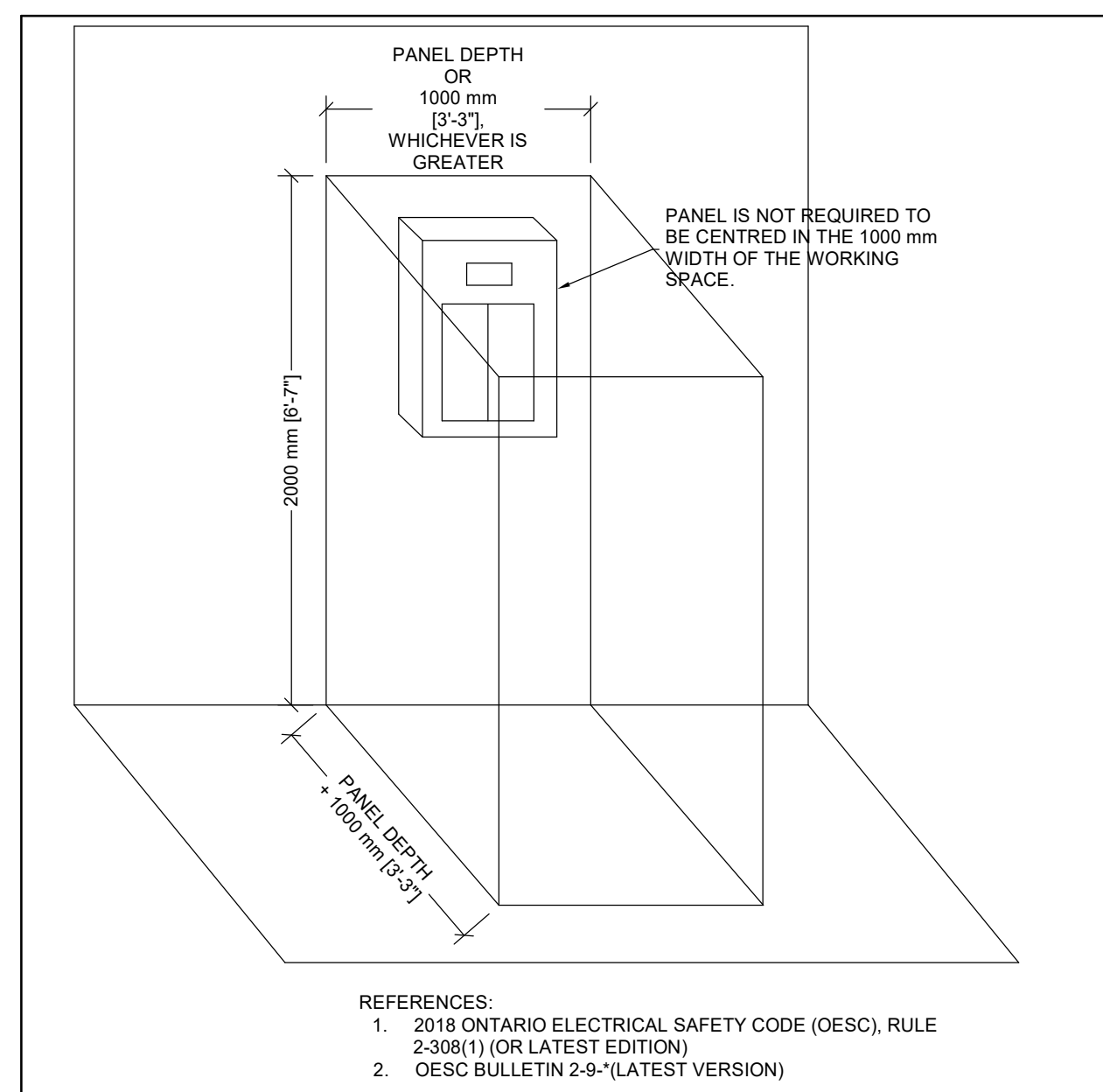
Key Plan



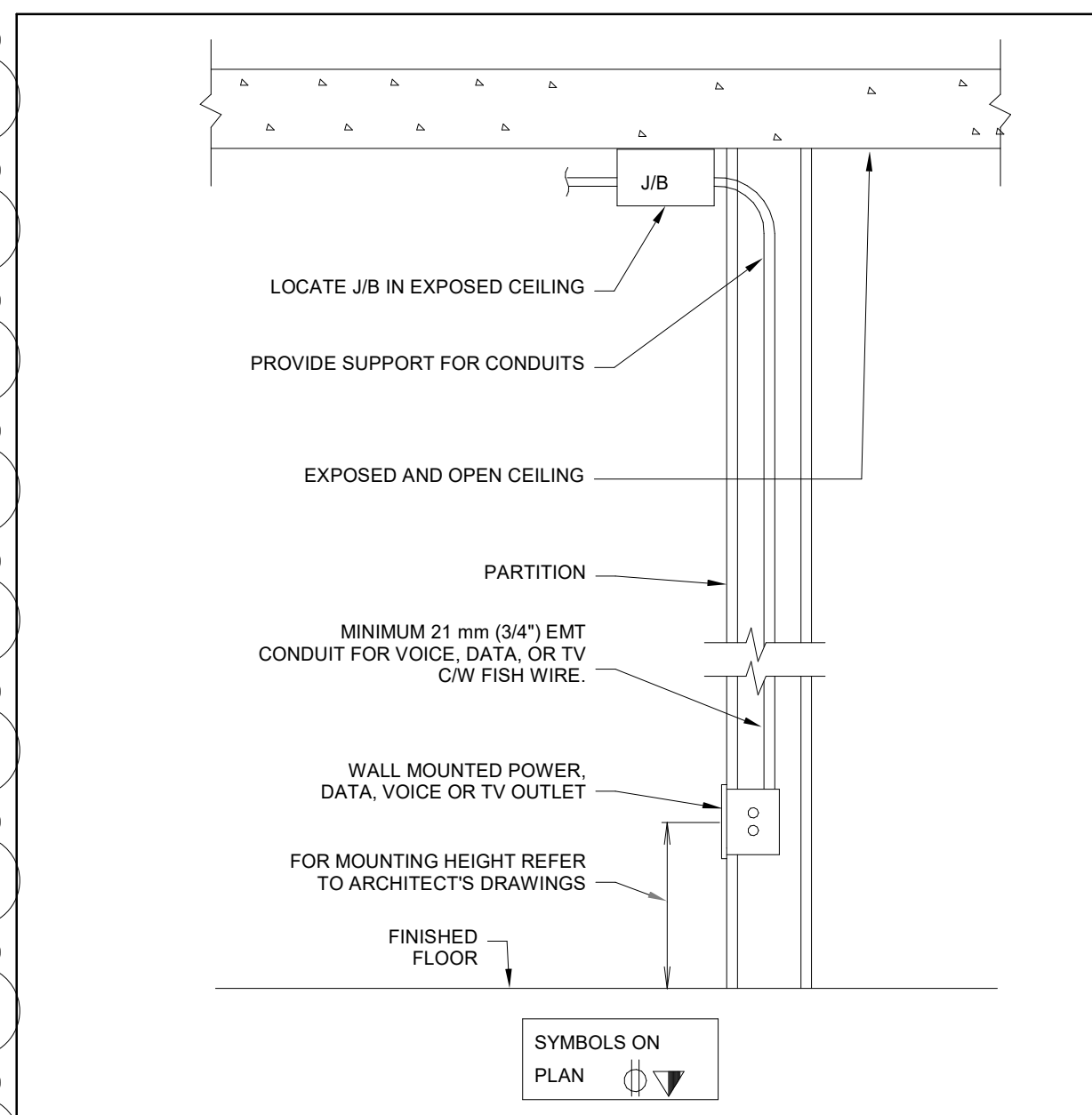
3 MAINTENANCE RECEPTACLE ROOF MOUNTED HVAC EQUIPMENT
SCALE: N.T.S.



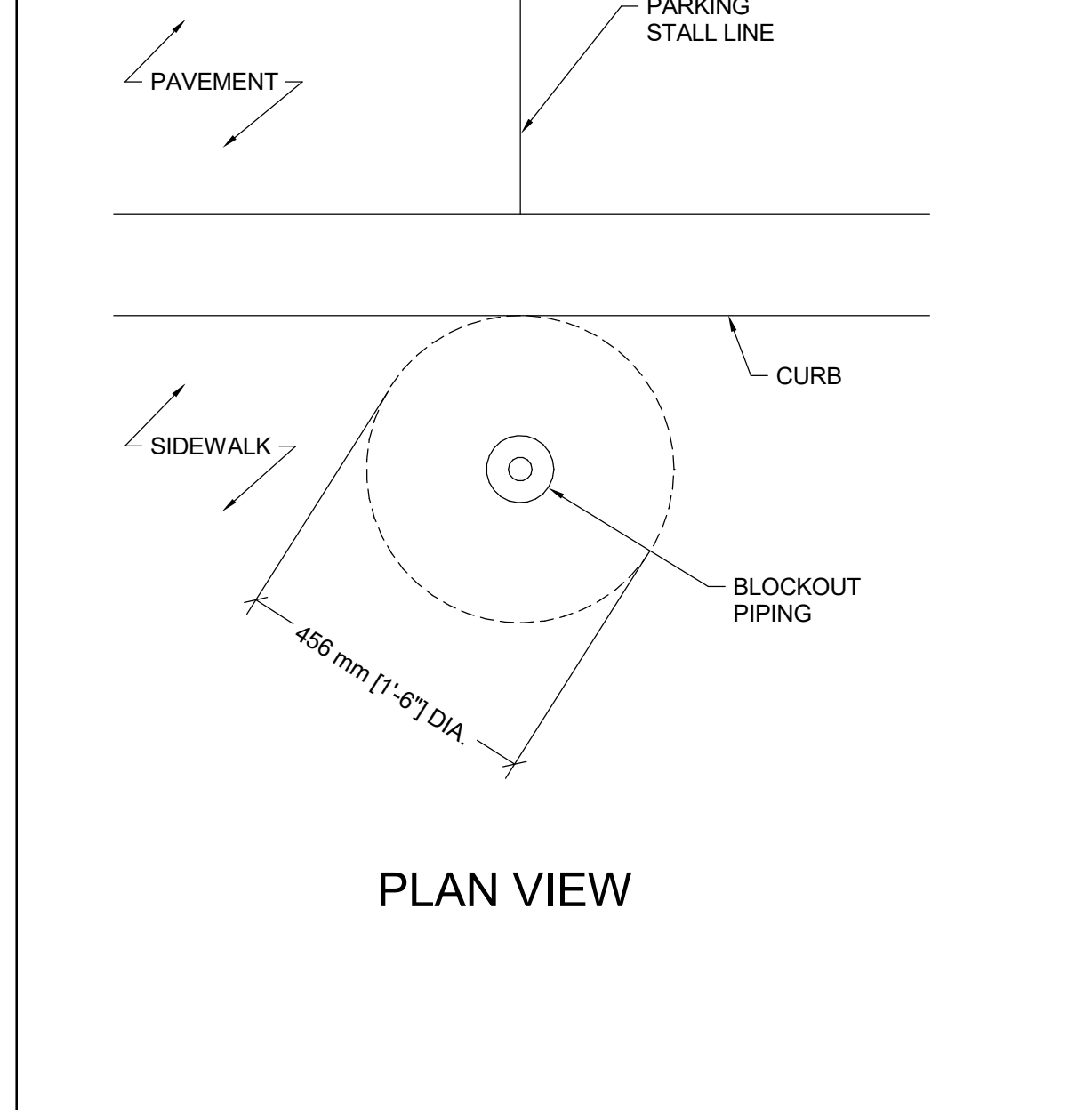
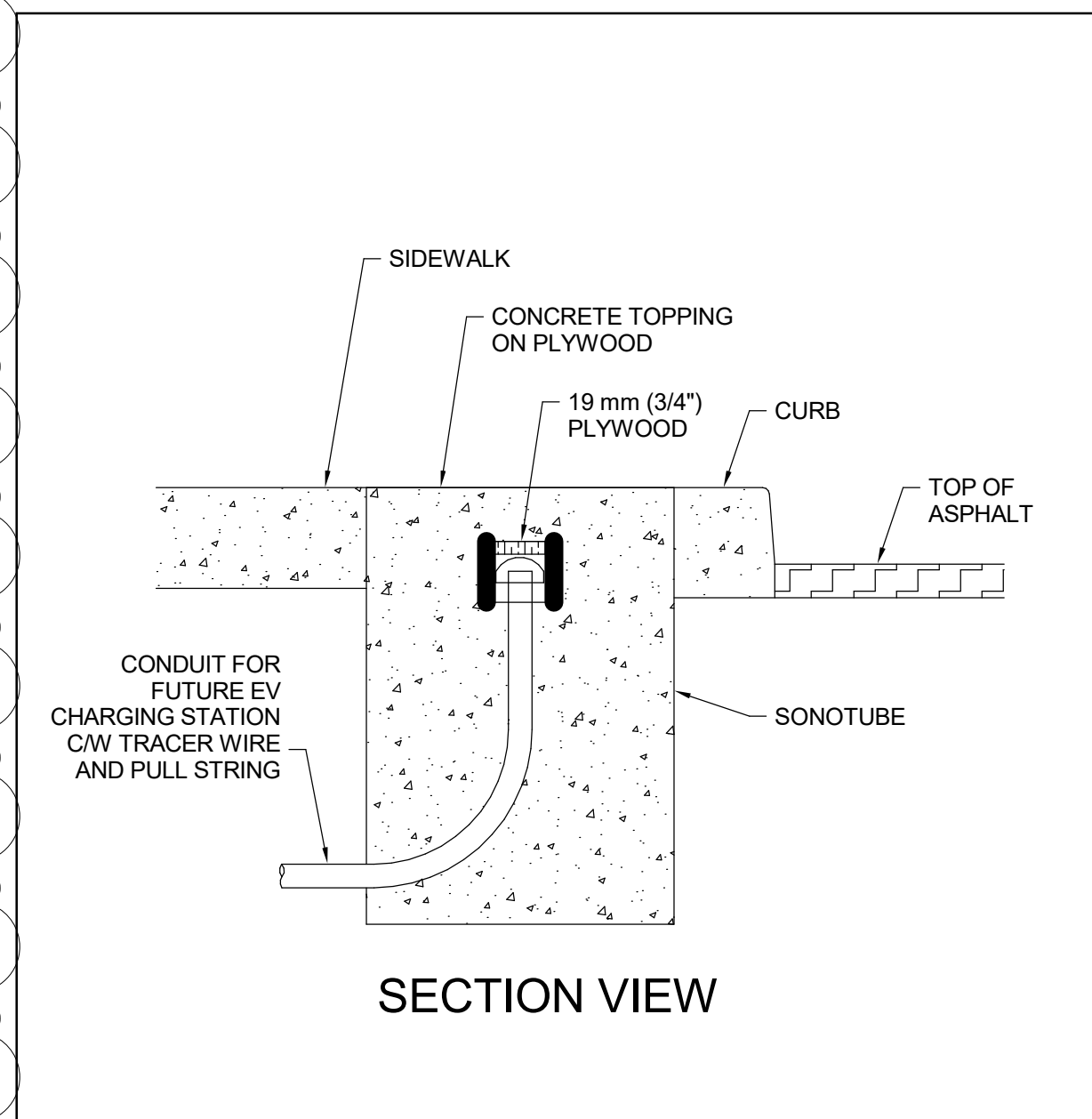
6 WALL MOUNTED OUTLET BOX (SURFACE)
SCALE:N.T.S.



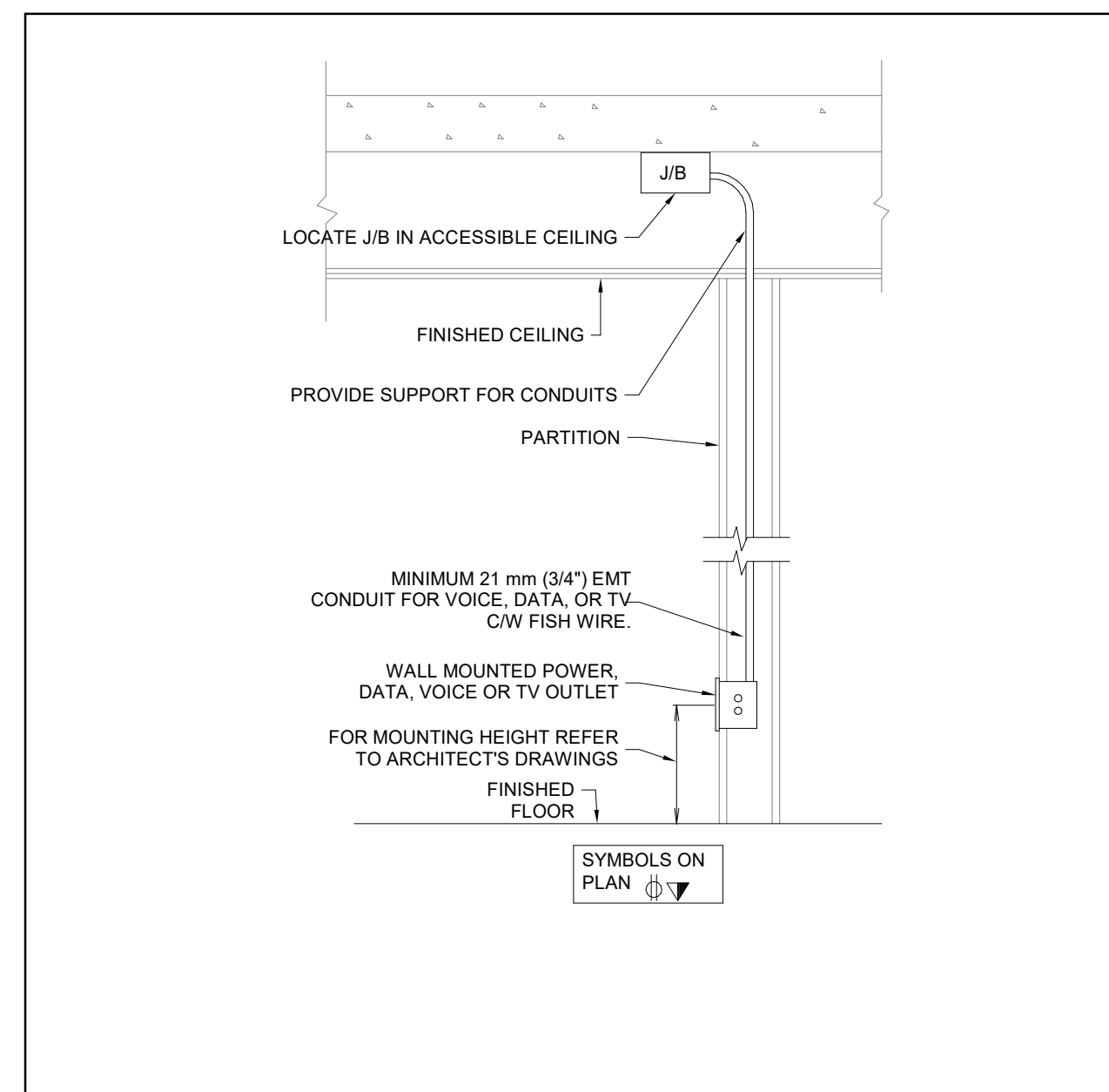
5 CLEAR SPACE AROUND PANELBOARDS
SCALE:N.T.S.



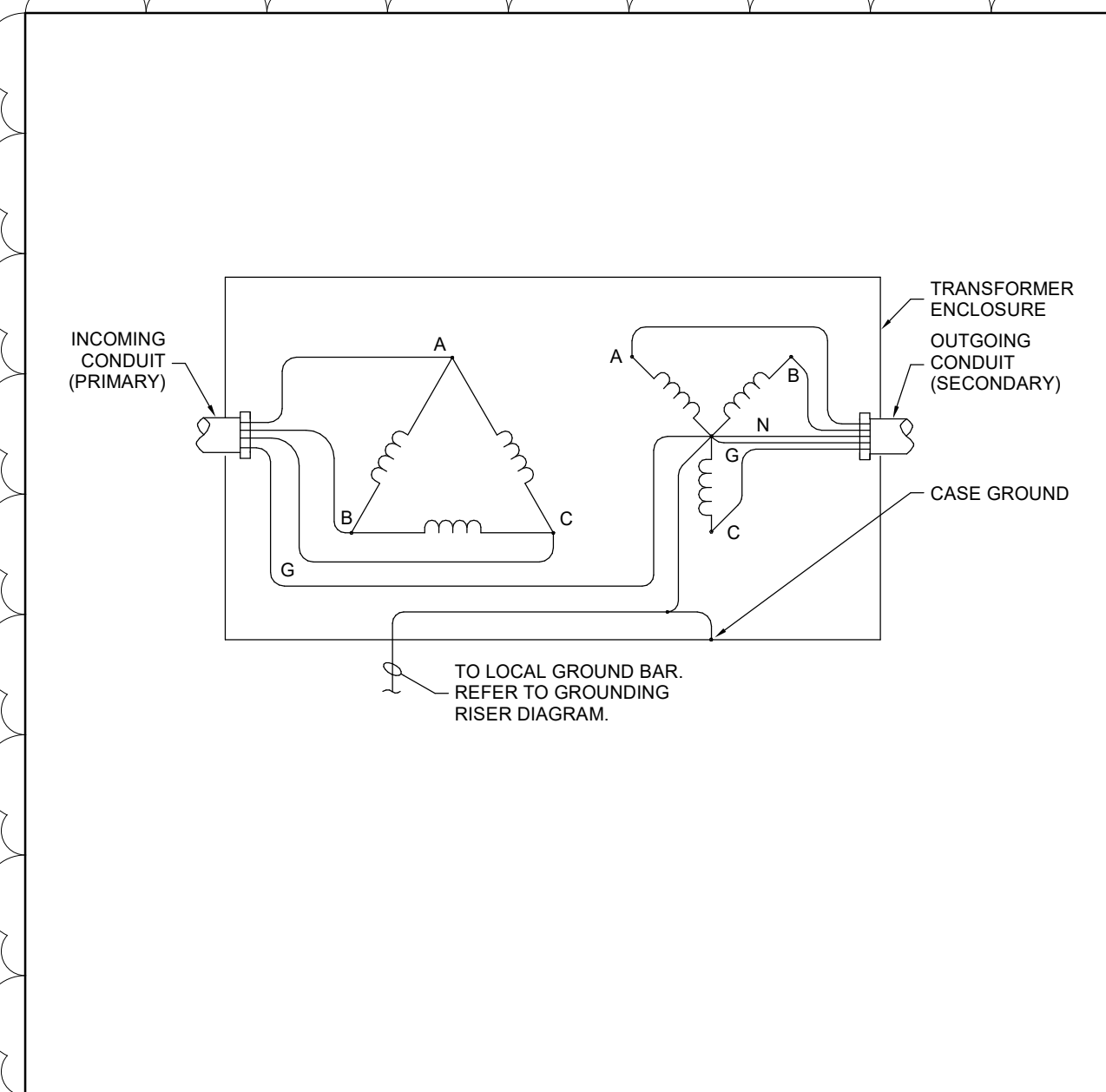
4 Wall Mounted Outlet Box Wall Recessed
SCALE:N.T.S.



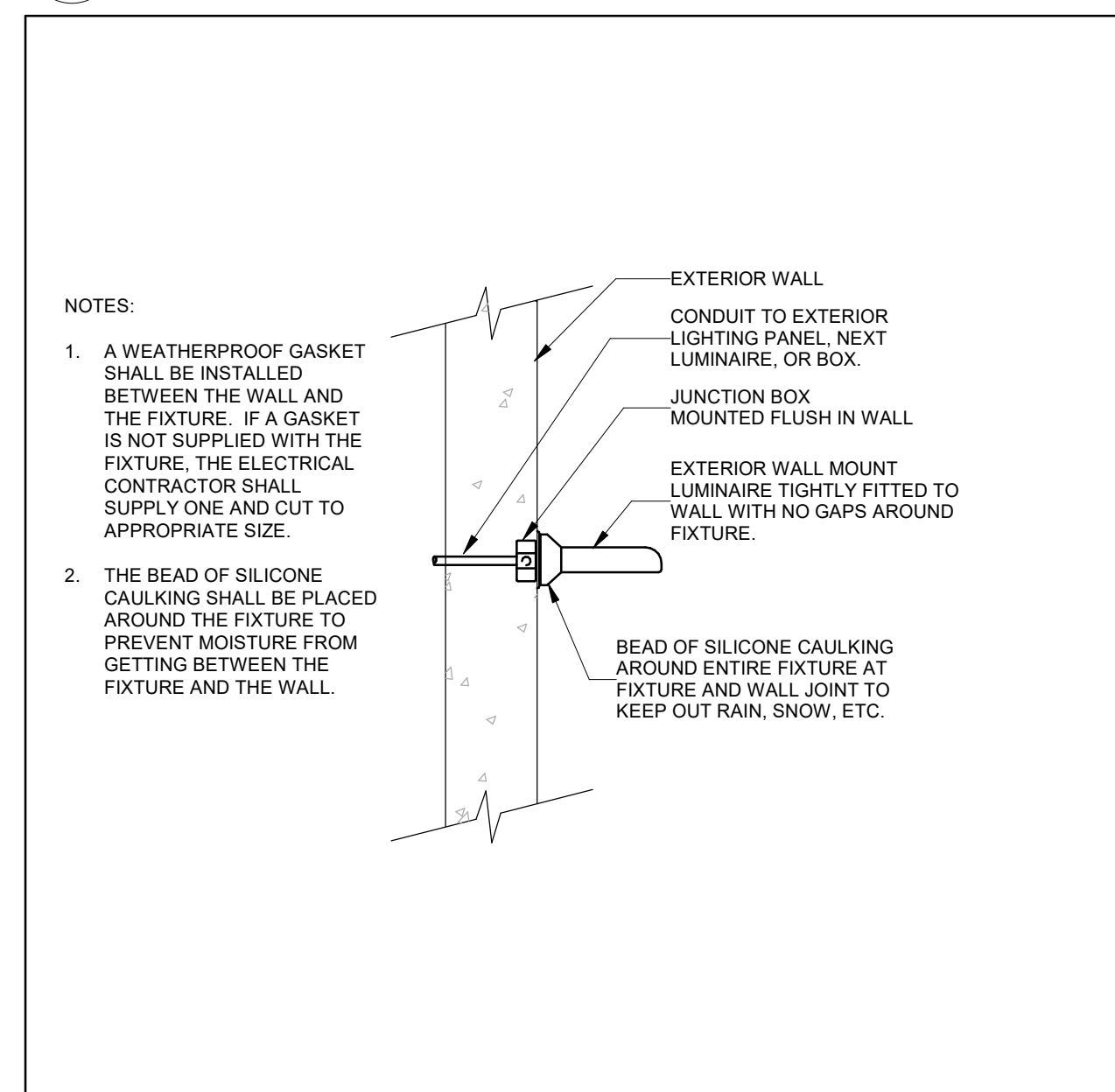
1 Future EV Charging Station Pedestal Rough-
SCALE: 1 : 10



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



8 TRANSFORMER GROUNDING SCALE: 1 : 50 4



7 Sealing of Wall Mounted Exterior Luminaires

[illegible]

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

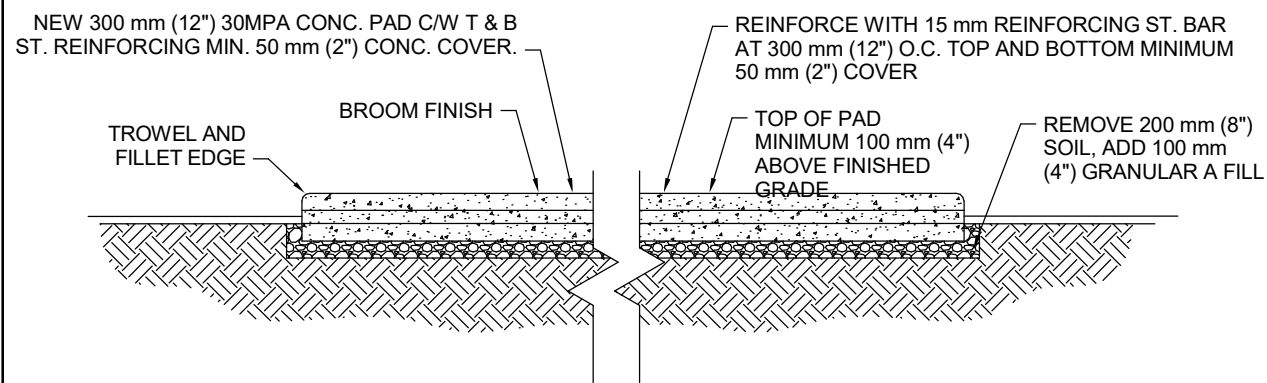
Sheet
Title: ELECTRICAL DETAILS

Drawing
No. **E-800**

YORK REGIONAL POLICE
HELICOPTER HANGAR

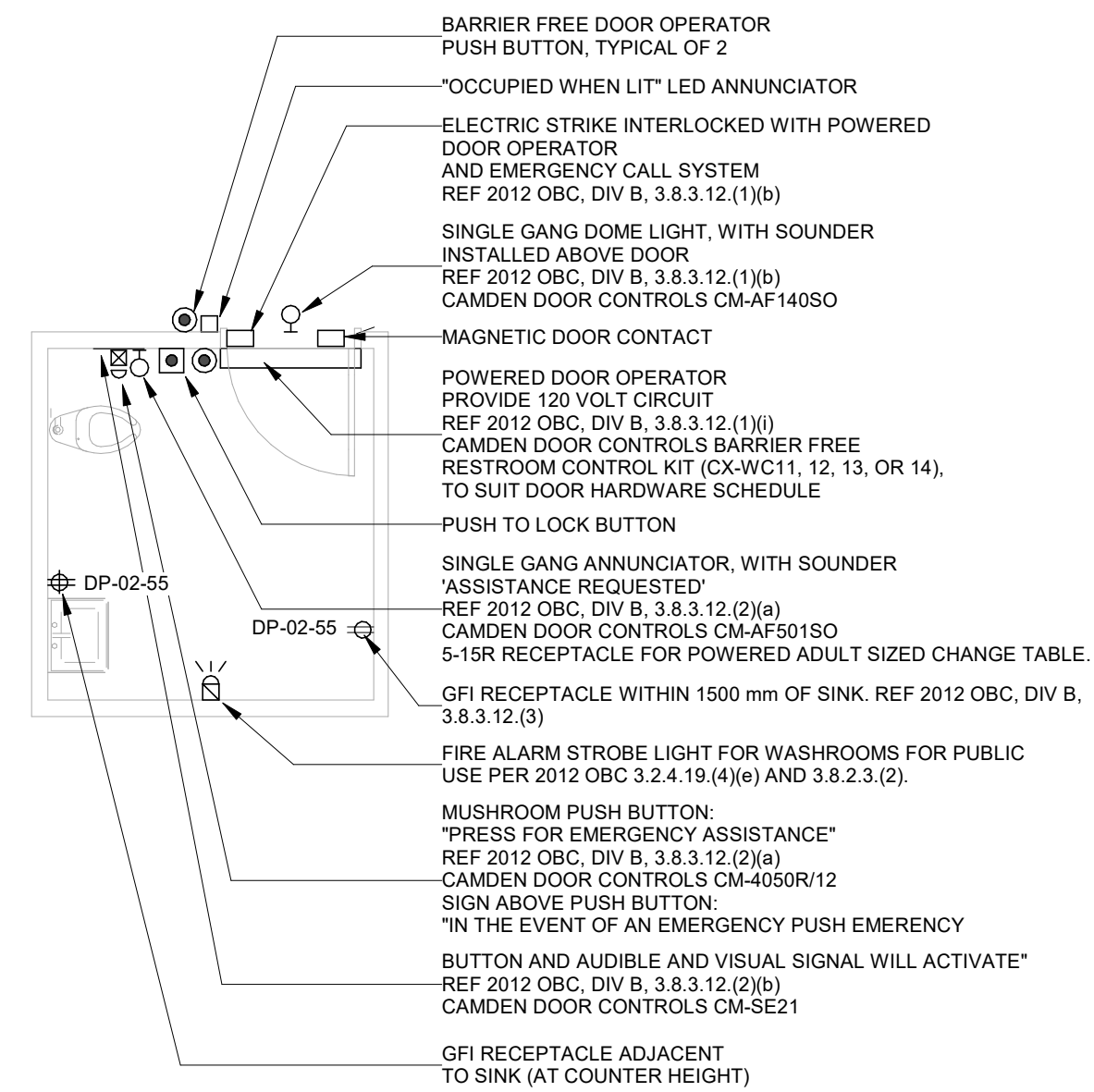
350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan



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:

1. CM-4050R12 SINGLE GAN GUSHMROOM PUSH BUTTON, 1/4" THICK BRUSHED ALUMINUM FACELATE AND RED BUTTON, MAINTAINED PUSH/PULL OPERATION WITH "PRESS FOR EMERGENCY ASSISTANCE" PERMANENTLY LASER ETCHED ON THE FACELATE.
2. CM-AF5050 SINGLE GAN LED ANNUNCIATOR WITH SOUNDER, RATED 85 db AT 100 mm, WEATHER AND VANDAL RESISTANT CONSTRUCTION, BRUSHED STAINLESS STEEL FACELATE, WITH "ASSISTANCE REQUIRED" MESSAGE TEXT, THAT IS NOT ILLUMINATED, LESS THE MESSAGE TEXT.
3. CM-AF14050 SINGLE GAN DOME LIGHT WITH PIEZO SOUNDER, RATED 93 db AT 1 METRE, BRUSHED STAINLESS STEEL FACELATE AND 24 V INCANDESCENT BULB, 150 WATT, 120 VOLT, 1500 HOURS, 1500 HOURS, 1500 HOURS, 381 mm Bx 381 mm Bx 381 mm (15" Bx 15" Bx 15"), FIRE RATED EXPANDED PVC WHITE, WITH 25 mm BLACK TEXTURE, TEXT SHALL BE: "IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE".
4. INTERCONNECTED TO THE EMERGENCY PUSH BUTTON AND DOOR OPERATOR, PUSH TO LOCK BUTTON, ELECTRIC STRIKE, DOOR CONTACT.

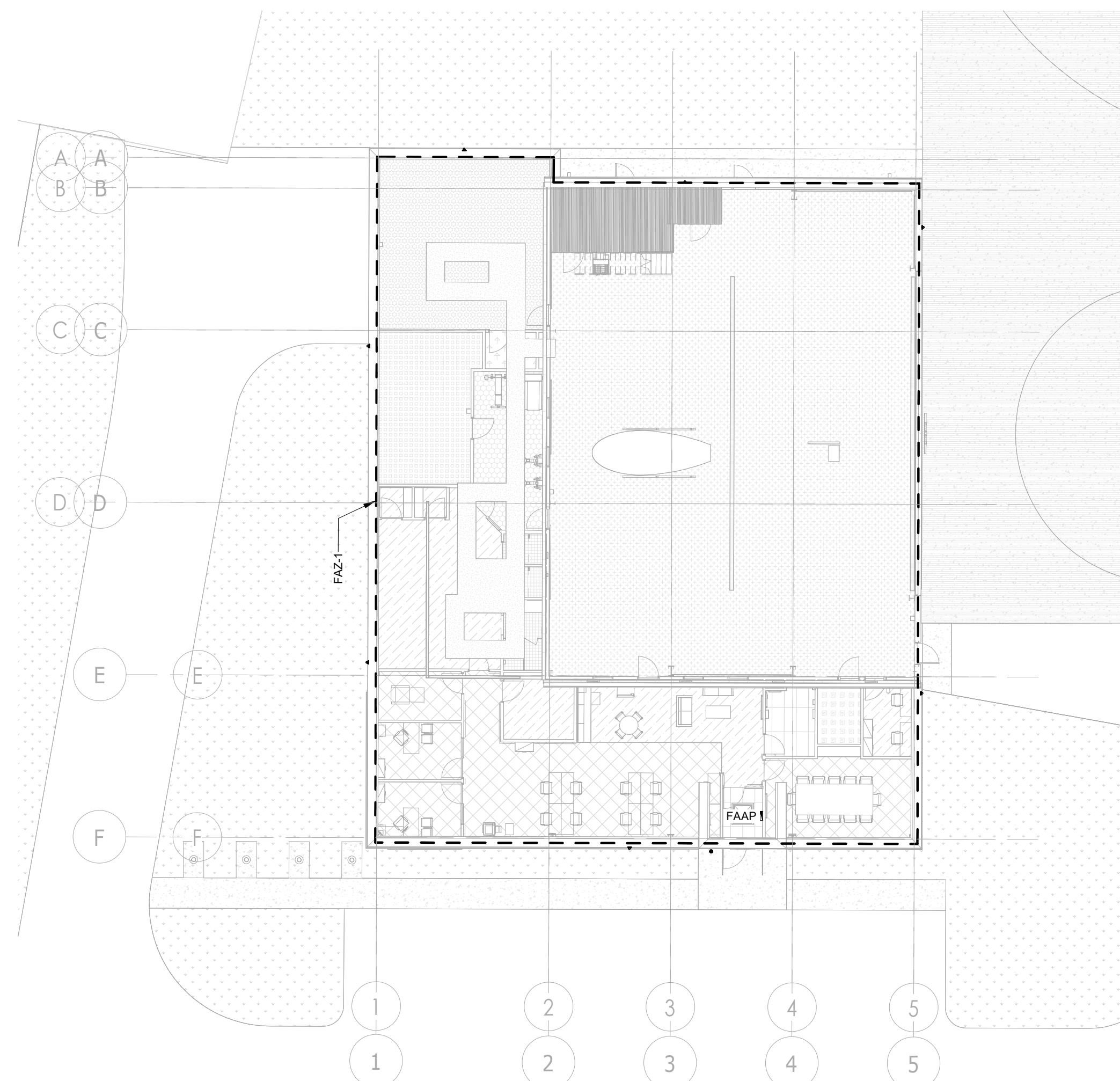
NOTES:

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

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

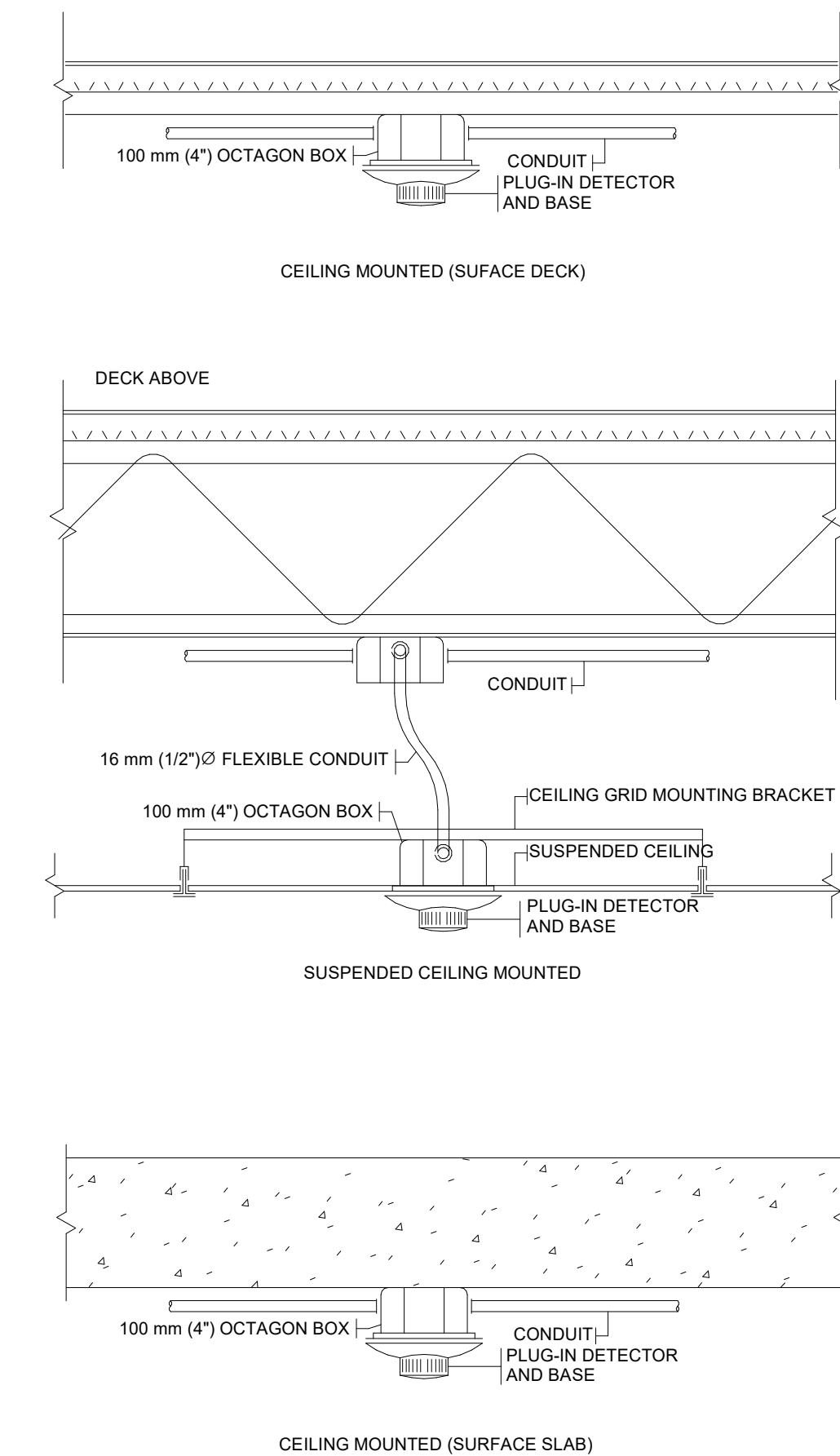
Universal Washroom Door Operator and Emergency Call System

SCALE:N.T.S.



FIRE ALARM ZONES

SCALE:N.T.S.



Typical Smoke Detector Installations

SCALE:N.T.S.

[illegible]

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
Scale: As indicated

Sheet
Title:

ELECTRICAL DETAILS

Drawing
No.
E-801

YORK REGIONAL POLICE HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

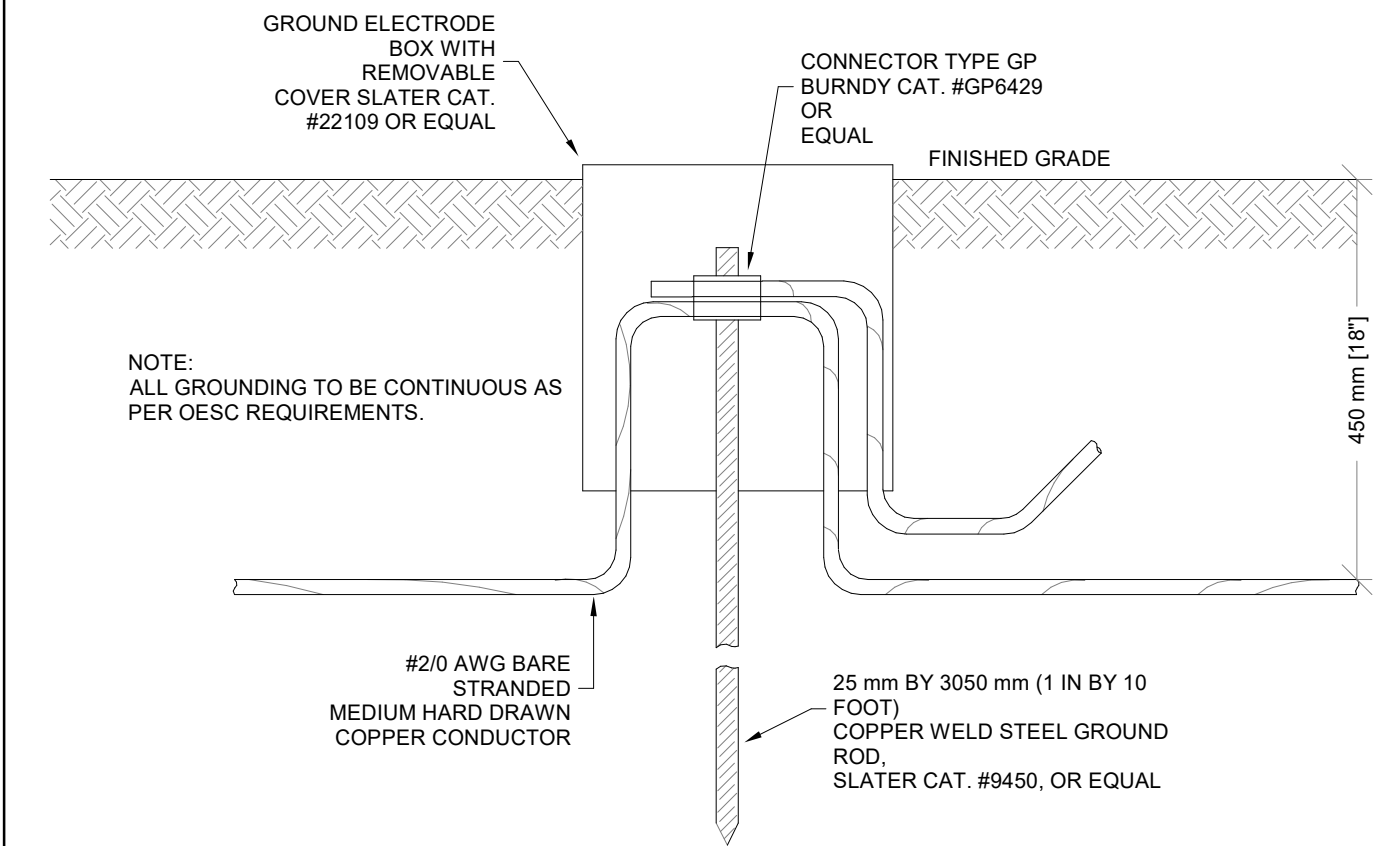
Key Plan

WIRE SIZE	BREAKER SIZE (AMPERES)	15	20	30	40	50	60	70	80	100
	MAX. LOAD AT 80% (AMPERES)	12	16	24	32	40	48	56	68	80
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	60.9
300 MCM	----	-----	-----	-----	-----	-----	-----	100.5	88.3	70.1

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

[illegible]

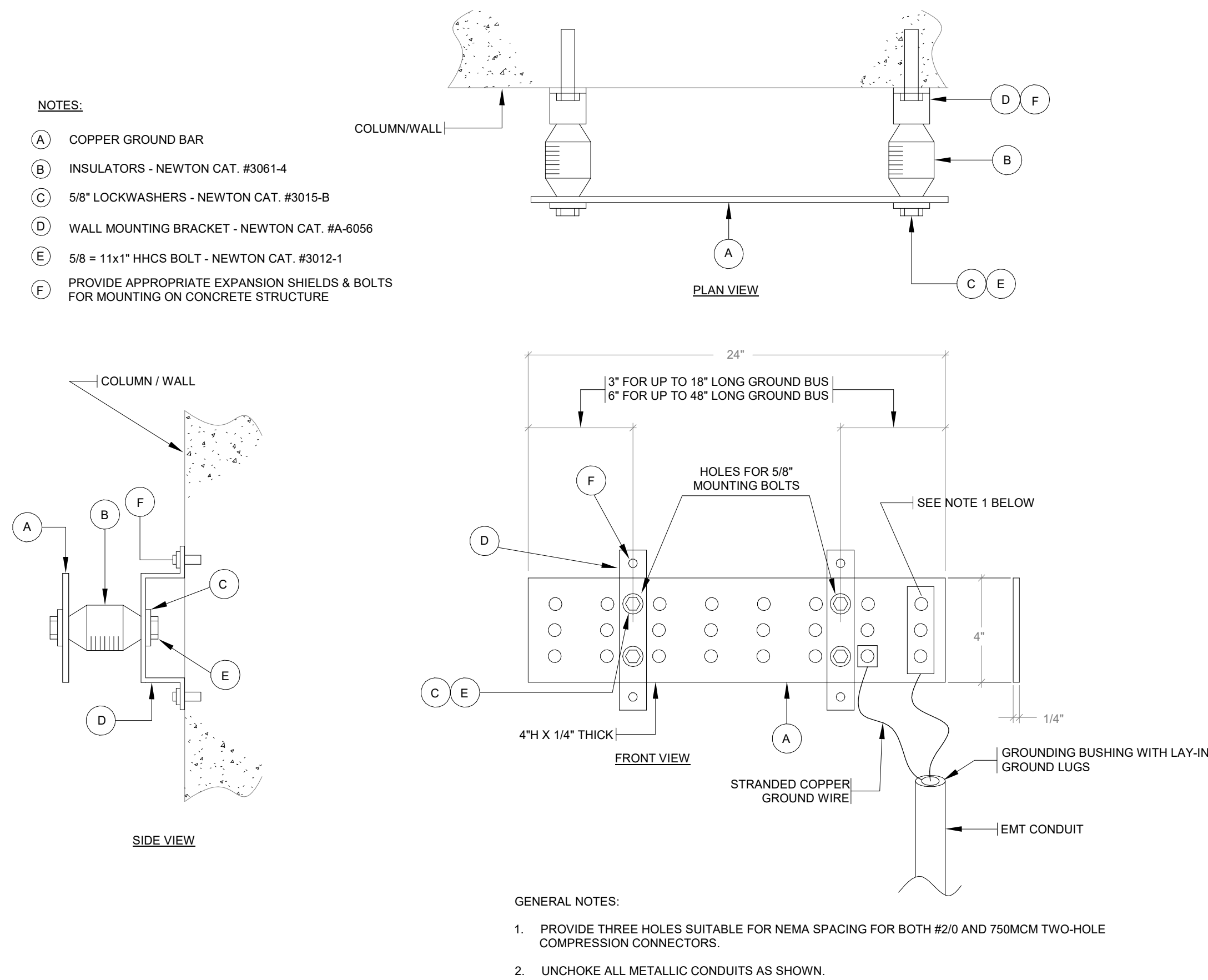
NOTE: DISTANCES INDICATED IN METRES FROM PANEL TO LOAD FOR SINGLE PHASE.



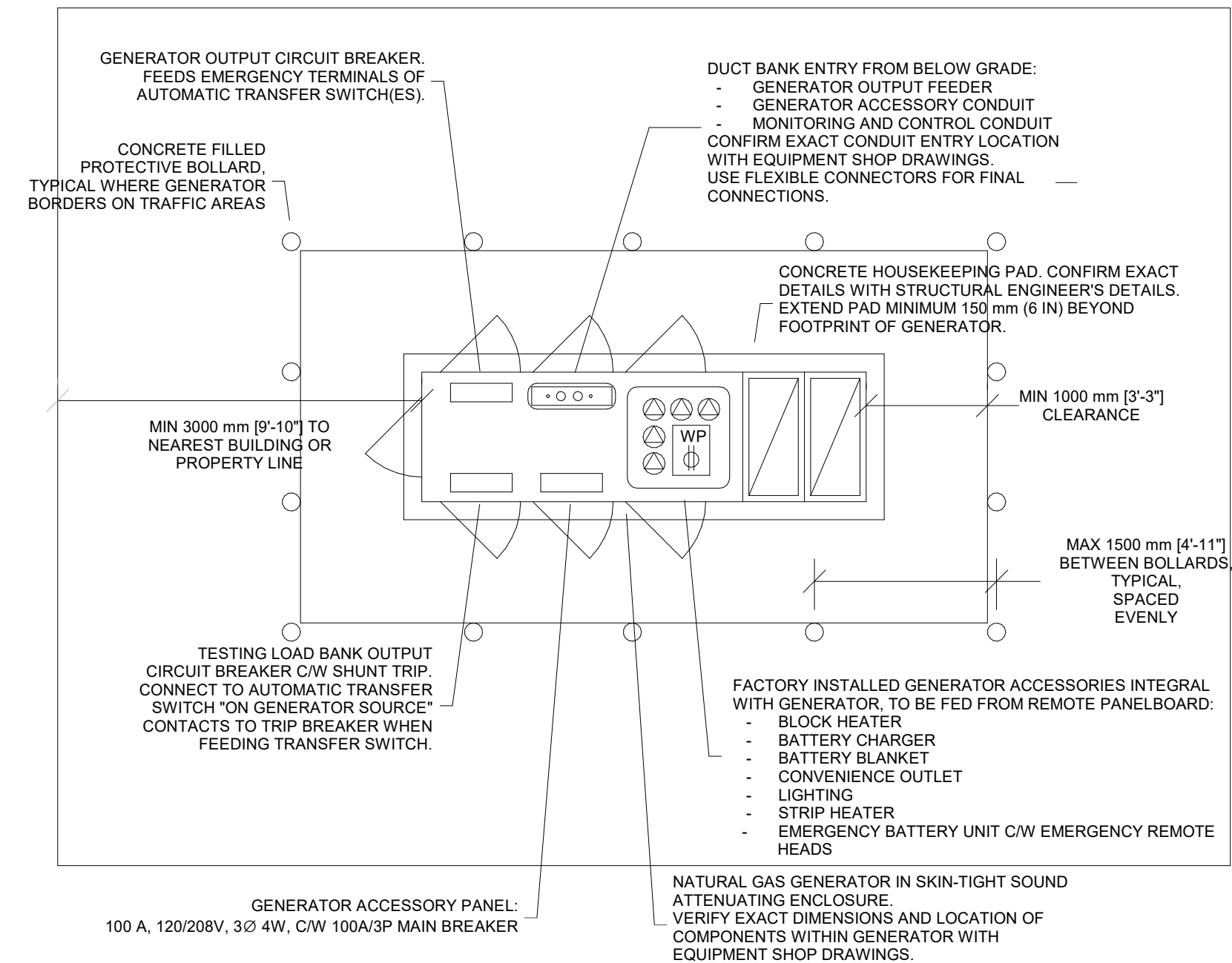
1 Max Branch Wiring Distance for 120 V System at 2% Voltage Drop
SCALE:N.T.S.

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.

[illegible]

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.

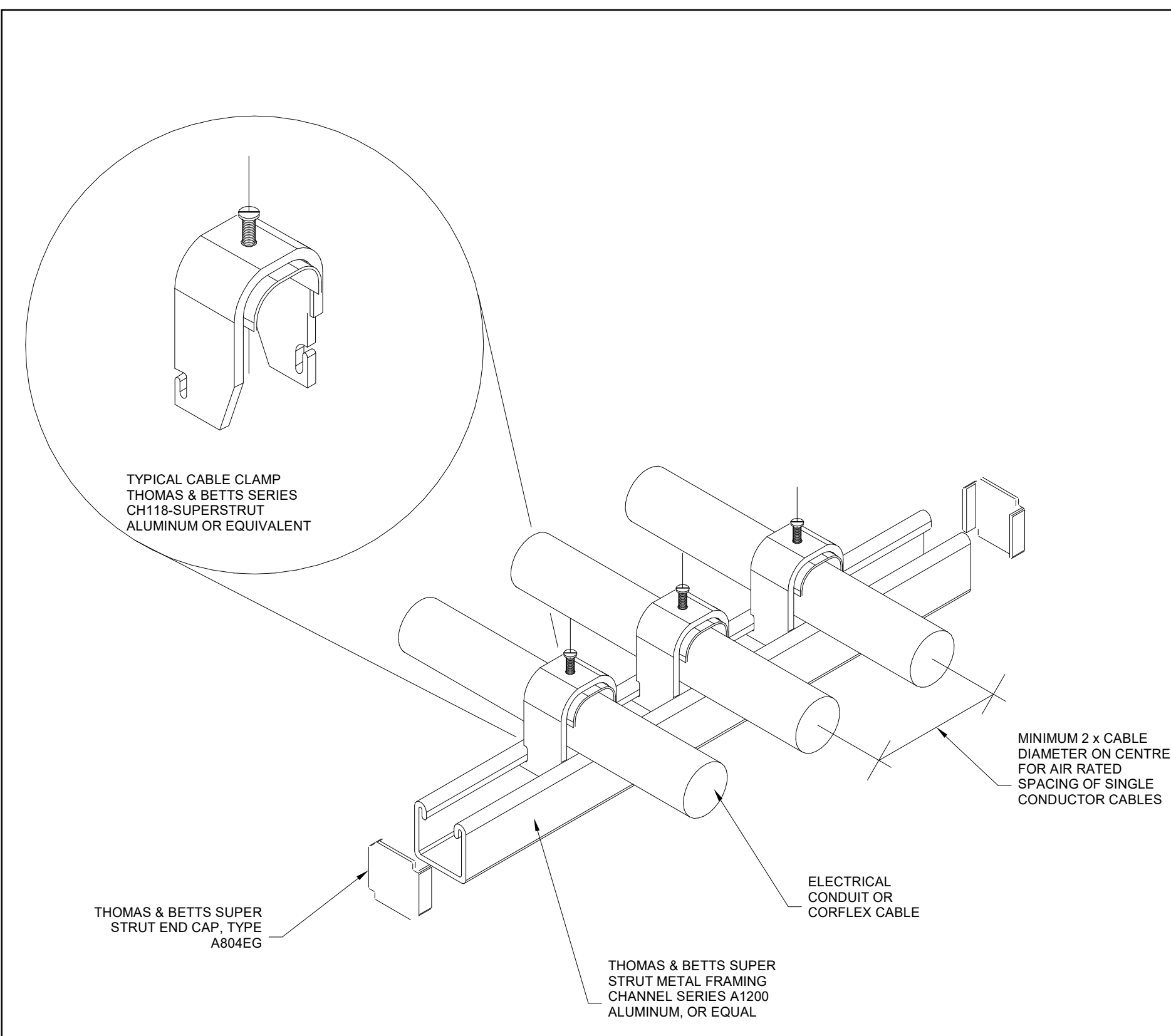
Sheet
Title: ELECTRICAL DETAILS

Drawing
No.
E-802

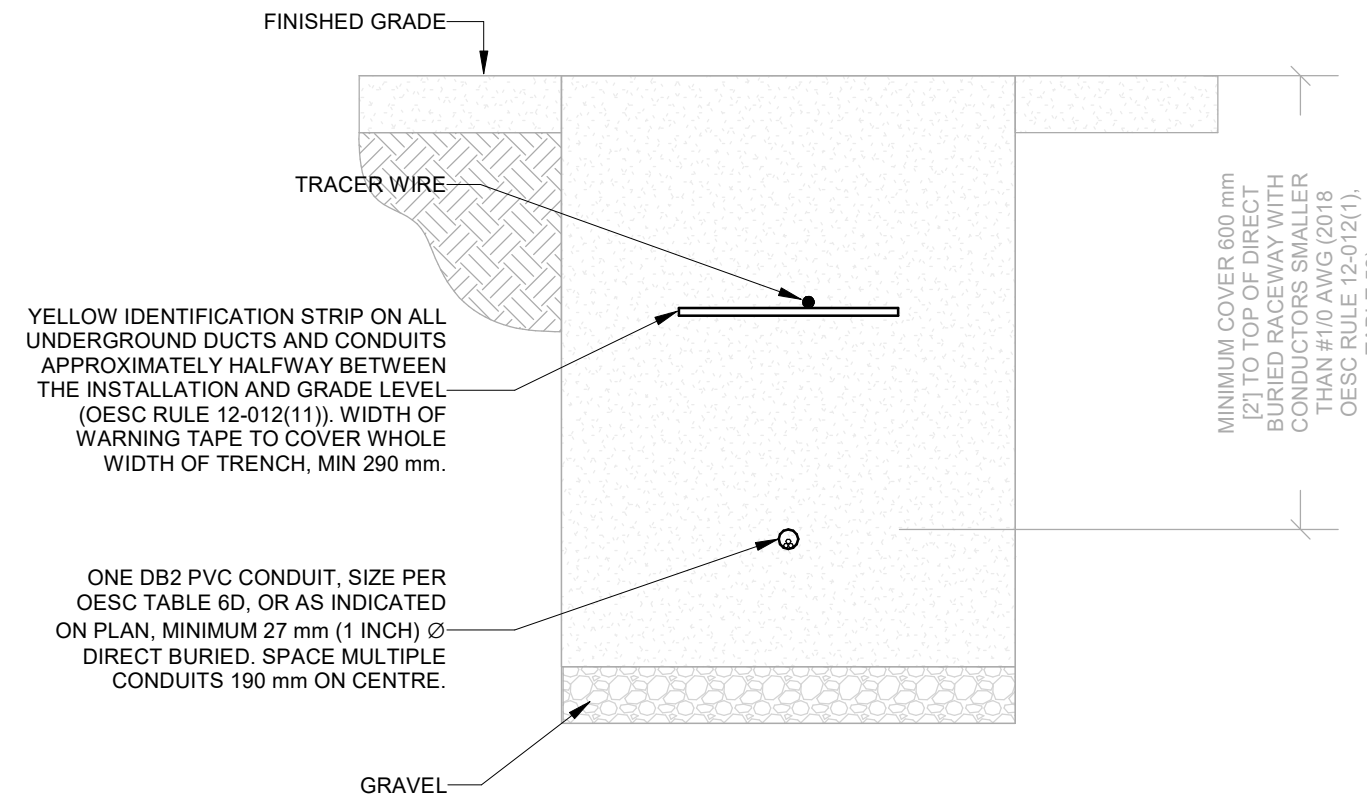
YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan



1 Strut Channel Suspension for Conduit and Cable
SCALE: 1 : 1

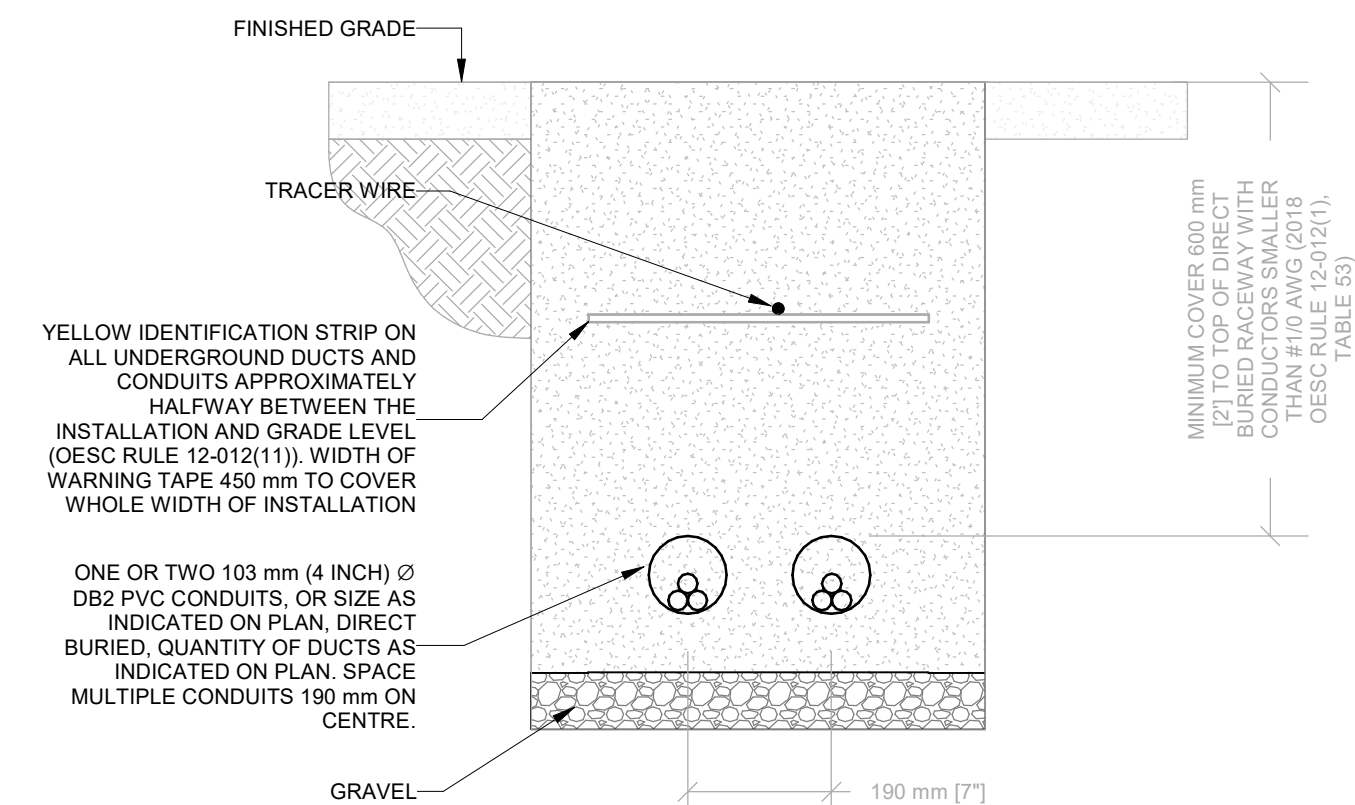


DIRECT BURIED RACEWAY SECTION, 750 V OR LESS

NOTES:

1. METRIC DIMENSIONS GOVERN.
2. DIRECT BURIED RACEWAY DUCTS TO BE IN COMPLIANCE WITH 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC), TABLE 53. MINIMUM COVER DEPTH MAY BE REDUCED BASED ON CRITERIA DESCRIBED IN TABLE 53.
3. DIRECT BURIED RACEWAY DUCTS TO BE INSPECTED PRIOR BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION (ESA) AND RECEIVE ALL NECESSARY APPROVALS.
4. THIS DETAIL DOES NOT APPLY WHERE CONDUCTOR SIZE IS #10 OR GREATER IN A DIRECT BURIED RACEWAY. PROVIDE AN AMPACITY CALCULATION IN ACCORDANCE WITH IEEE 835.

2 2018 OESC 1Wx1H x 1in Direct Buried Branch Circuit Ducts
SCALE:N.T.S.



DIRECT BURIED 2-DUCT RACEWAY SECTION, 750 V OR LESS

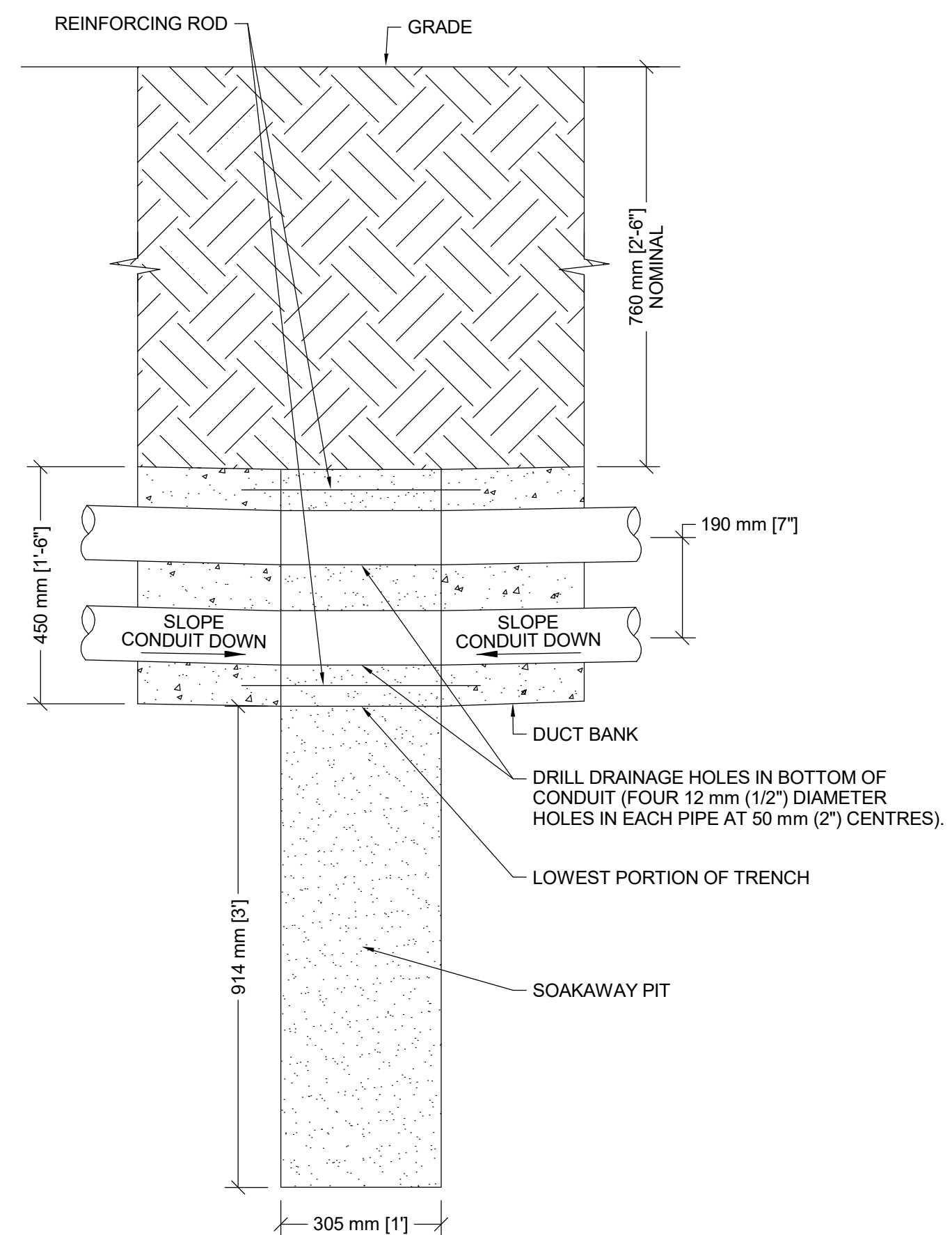
NOTES:

1. METRIC DIMENSIONS GOVERN.
2. DIRECT BURIED RACEWAY DUCTS TO BE IN COMPLIANCE WITH 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC), TABLE 53. MINIMUM COVER DEPTH MAY BE REDUCED BASED ON CRITERIA DESCRIBED IN TABLE 53.
3. DIRECT BURIED RACEWAY DUCTS TO BE INSPECTED PRIOR BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION (ESA) AND RECEIVE ALL NECESSARY APPROVALS.
4. THIS DETAIL DOES NOT APPLY WHERE CONDUCTOR SIZE IS #10 OR GREATER IN A DIRECT BURIED RACEWAY. PROVIDE AN AMPACITY CALCULATION IN ACCORDANCE WITH IEEE 835.

3 2018 OESC 1Wx1H x 4in Direct Buried Branch Circuit Ducts
SCALE:N.T.S.

ELECTRICAL ENERGY EFFICIENCY NOTES FOR PERMIT (ONTARIO BUILDING CODE SB-10)			
ITEM	DESCRIPTION	CODE REFERENCE	SPECIFICATION REFERENCE
1A.	FEEDER CONDUCTORS TO BE SIZED FOR MAXIMUM VOLTAGE DROP OF 2% AT DESIGN LOAD.	QBC SB-10 2017, ASHRAE 90-1-2013, 8.4.1.	26 05 19
1B.	BRAK CIRCUIT CONDUCTORS TO BE SIZED FOR MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD.	QBC SB-10 2017, ASHRAE 90-1-2013, 8.4.1.	26 05 19
2.	50% RECEPTACLE CIRCUIITS IN CONFERENCE ROOMS, COPY ROOMS, BREAK ROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS.	QBC SB-10 2017, ASHRAE 90-1-2013, 8.4.2.	26 09 23
3.	MEASUREMENT DEVICES ROUGHED IN TO MONITOR OR THE ELECTRICAL ENERGY USE FOR EACH OF THE FOLLOWING UNLESS EXEMPT: A. TOTAL ELECTRICAL ENERGY; B. HVAC; C. INTERIOR LIGHTING; D. EXTERIOR LIGHTING, E. RECEPTACLE CIRCUITS.	QBC SB-10 2017, ASHRAE 90-1-2013, 8.4.3.	26 27 13
4.	NEW LOW-VOLTAGE TRANSFORMERS TO MEET THE NOMINAL EFFICIENCIES SHOWN IN ASHRAE 90-1-2013, TABLE 8.4.4. UNLESS EXEMPT	QBC SB-10 2017, ASHRAE 90-1-2013, 8.4.4.	26 22 13
5.	PROVIDE LIGHTING CONTROL FUNCTIONS FOR EACH SPACE IN THE BUILDING PER PER ASHRAE 90-1-2013 TABLE 9.6.1. ASHRAE 90.1 EXEMPTIONS: -NORMALLY OFF EMERGENCY LIGHTING -DWELLING UNITS -LIFE SAFETY OR OTHER ORDINANCE	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.1.	26 09 23
5.1.	SPACES PROVIDED WITH READILY ACCESSIBLE LOCAL CONTROLS.	QBC SB-10 2017, ASHRAE 90-1-2017, 9.4.1.1A.	26 09 23
5.2.	MAXIMUM OCCUPANCY SENSOR TIMEOUT 20 MINUTES.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.1G, ASHRAE 90-1-2013, 9.4.1.1H.	26 09 23
6.1	PARKING GARAGE LIGHTING TO BE PROVIDED WITH AUTOMATIC CONTROLS PER ASHRAE 90-1-2017 SECTION 9.4.1.2.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.2.	
6.2	PARKING GARAGE LIGHTING TO AUTOMATICALLY REDUCE LIGHTING POWER BY AT LEAST 30% BASED ON OCCUPANCY.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.2.	
6.3	PARKING GARAGE DAYLIGHT TRANSITION ZONE TO BE ON A SEPARATE SCHEDULE.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.2.	
6.4	PARKING GARAGE LUMINAIRES TO BE PROVIDED WITH DAYLIGHT HARVESTING, IF NET OPENING-TO-WALL RATIO IS GREATER THAN 40% UNLESS EXEMPT.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.2.	
7.	PROVIDE ADDITIONAL CONTROLS FOR SPECIAL APPLICATIONS LISTED ASHRAE 90.1 SECTION 9.4.1.3.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.3.	26 09 23
8.	INTERIOR LIGHTING POWER COMPLIES WITH ASHRAE 90-1-2013 9.2.2.3 AS MODIFIED BY SB-10.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.2.2.3.	26 51 00
9.1	PROVIDE A PHOTOSENSOR FOR AUTOMATIC SHUTOFF OF EXTERIOR LIGHTS WHEN AVAILABLE DAYLIGHT IS SUFFICIENT.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.4.	26 09 23
9.2	PROVIDE A SHUTOFF FOR LANDSCAPE AND FACADE LIGHTING BETWEEN THE HOURS OF MIDNIGHT AND 6:00 A.M.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.4.	26 09 26
9.3	PROVIDE CONTROL TO REDUCE ILLUMINATED SIGNAGE POWER BY AT LEAST 30% BETWEEN MIDNIGHT AND 6:00 A.M.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.1.4.	26 09 26
10.	EXTERIOR LIGHTING POWER COMPLIES WITH ASHRAE 90-1-2013 9.4.2. AS MODIFIED BY SB-10.	QBC SB-10 2017, ASHRAE 90-1-2013, 9.4.2.	26 53 00
11.	LIGHTING CONTROLS MANUFACTURER'S REPRESENTATIVE TO PROVIDE FUNCTIONAL TESTING AND REPORT IN ACCORDANCE WITH ASHRAE 90-1-2013.	QBC SB-10, ASHRAE 90-1-2010, 9.4.4.	26 09 23

5 Electrical SB-10 Notes
SCALE: 1 : 1



6 Duct Bank Soakaway Pit
SCALE: 1 : 10

[illegible]

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: As indicated

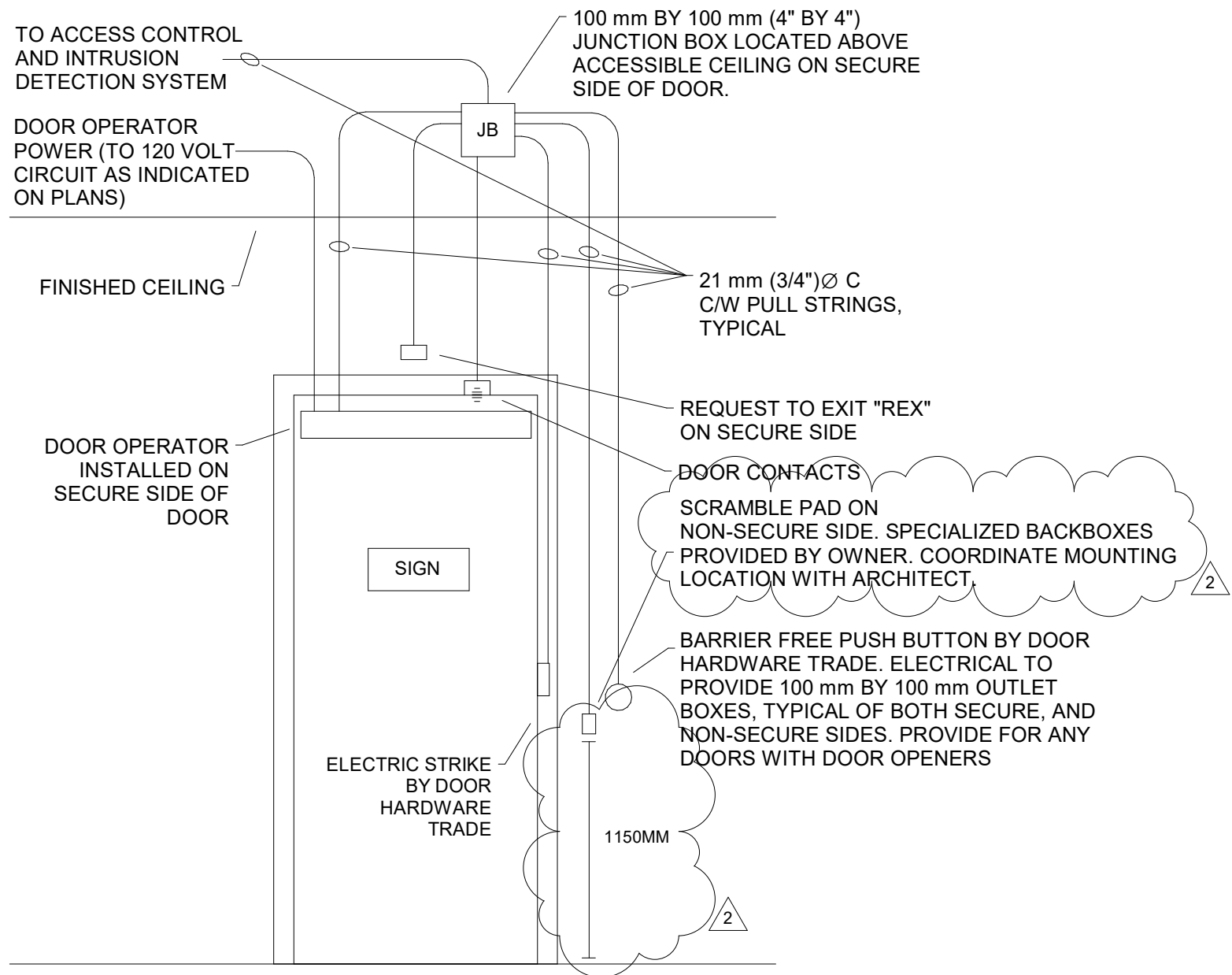
Sheet
Title: ELECTRICAL DETAILS

Drawing
No. **E-803**

YORK REGIONAL POLICE
HELICOPTER HANGAR

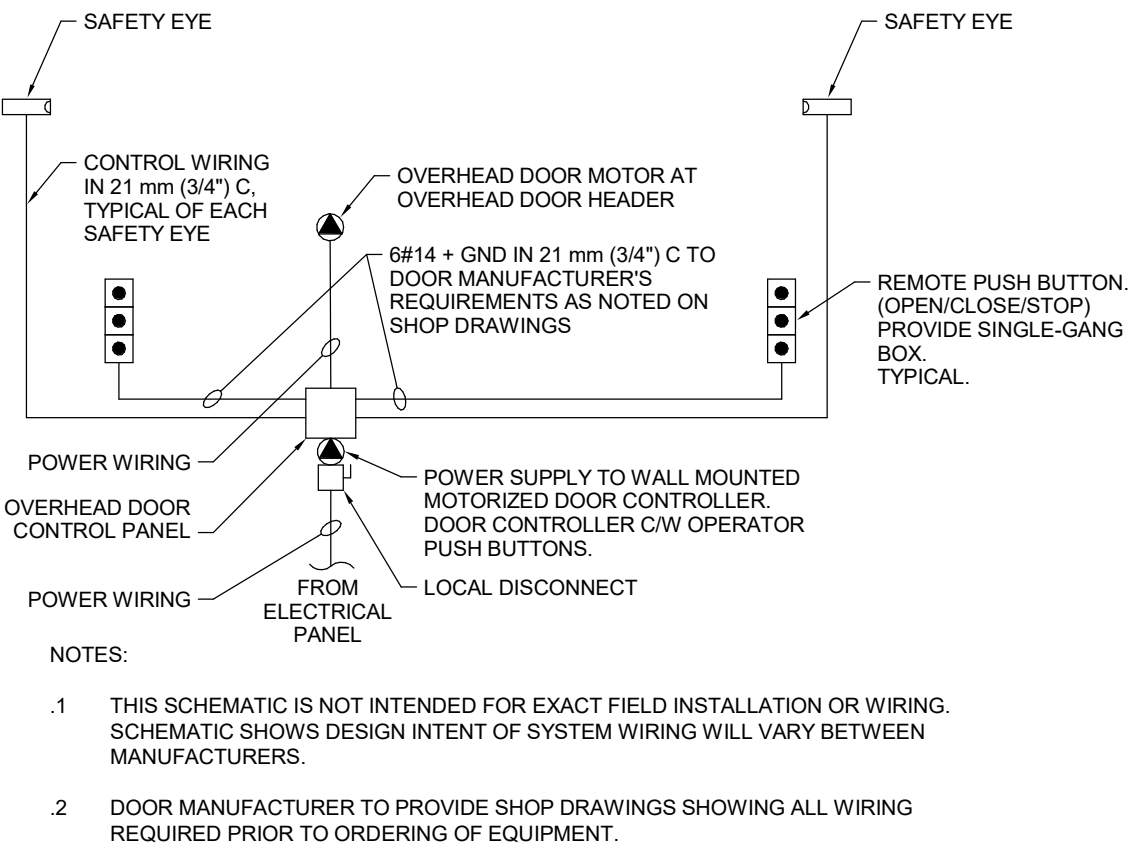
350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key
Plan



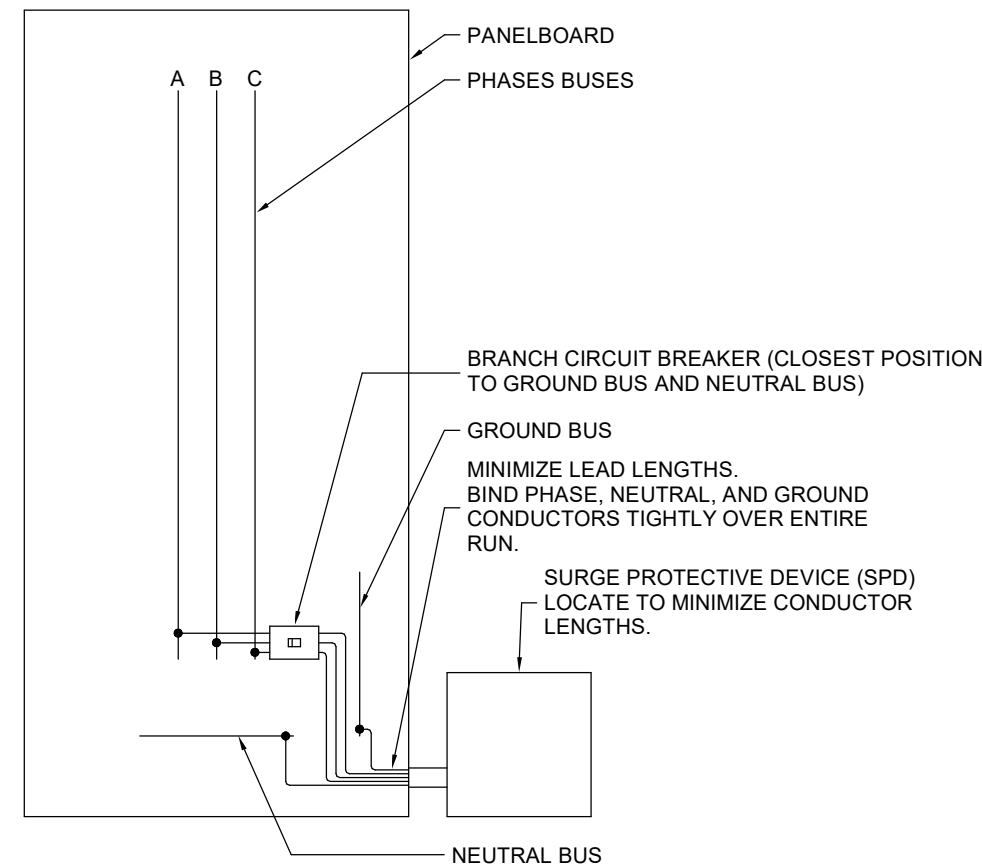
NOTES:

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.



Wiring Diagram for Overhead Doors

SCALE: 1 : 50

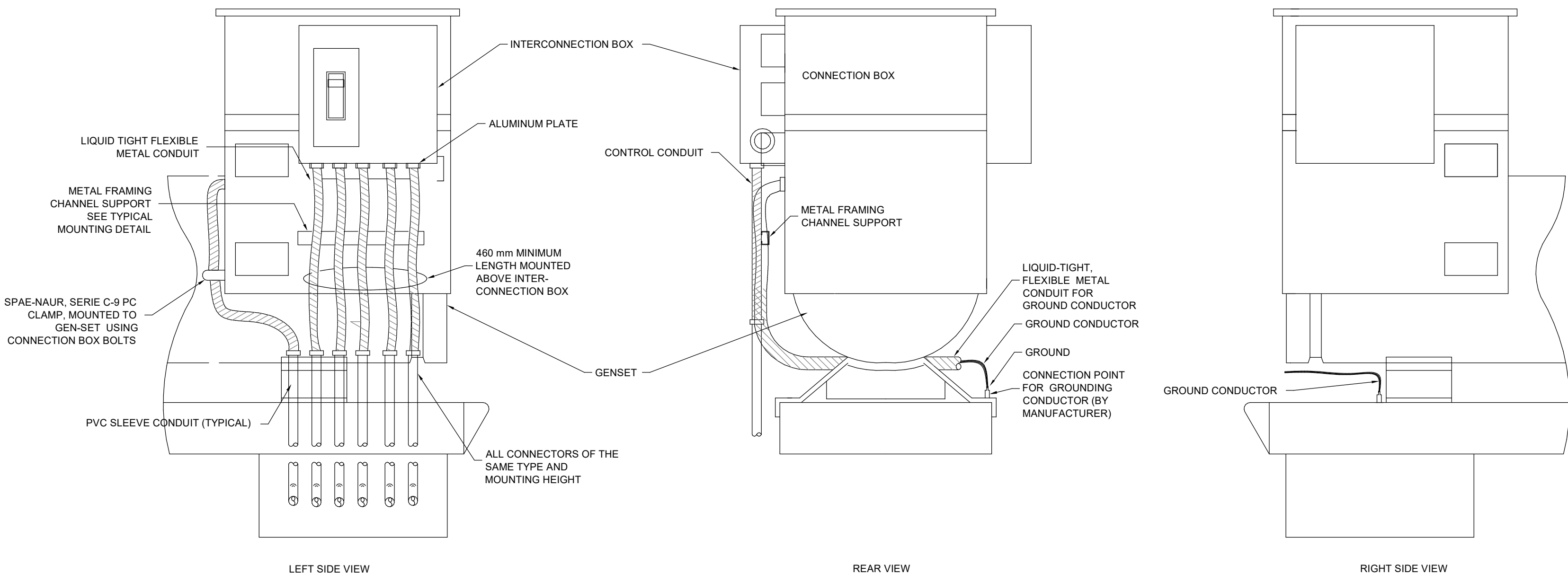


EXTERNALLY MOUNTED SURGE PROTECTION

SCALE: 1 : 50

Access Control Rough-In

SCALE: 1 : 1



ENGINE GENERATOR BOTTOM FEED

SCALE: N.T.S.

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: As indicated

Sheet
Title:
ELECTRICAL DETAILS

Drawing
No:
E-805

Grand total: 100

5

Grand total: 27

5

- MA

5

Issues

Sheet
Title:

Drawing
No. **E-900**

Branch Panel: DP-01															
Location: Room 129					Volts: 347/600V					A.I.C. Rating: 42 kA					
Supply From:					Phases: 3					Mains Type:					
Mounting: SURFACE					Wires: 4					Mains Rating: 400 A					
Enclosure: NEMA 3R										MCB Rating: 400 A					
Notes:															
CKT	Circuit Description	QTY	Trip	Poles	A	B	C	A	B	C	Poles	Trip	QTY	Circuit Description	CKT
1	SURGE PROTECTION DEVICE	--	60 A	3	0 VA			7967 VA			3	30 A	1	HANGAR BIFOLD DOOR CONTROLLER	2
					0 VA		7967 VA	4							
						0 VA		7967 VA	6						
7	RESERVED SPACE FOR FUTURE PV INVERTER SYSTEM	--	0 A	3	0 VA			167 VA			3	125 A	1	AIR SOURCE HEAT PUMP	8
					0 VA		167 VA	10							
						0 VA		167 VA	12						
13	RESERVED SPACE FOR FUTURE EV CHARGING	--	0 A	3	0 VA			433 VA			3	20 A	1	P2-R	14
					0 VA		433 VA	16							
						0 VA		433 VA	18						
19	P2	1	20 A	3	433 VA			433 VA			3	20 A	1	P3	20
					433 VA		433 VA	22							
						433 VA		433 VA	24						
25	P-4	1	20 A	3	433 VA			433 VA			3	20 A	1	P-5R	26
					433 VA		433 VA	28							
						433 VA		433 VA	30						
31	P-5	1	20 A	3	433 VA			433 VA			3	20 A	1	P-1	32
					433 VA		433 VA	34							
						433 VA		433 VA	36						
37	P-1R	1	20 A	3	433 VA										38
					433 VA				40						
						433 VA			42						
Total Load:					11600 VA		11600 VA		11600 VA						
Total Amps:					33 A		33 A		33 A						
Legend:															
Load Classification					Connected Load		Demand Factor		Estimated Demand		Panel Totals				
Other					34800 VA		100.00%		34800 VA						
											Total Conn. Load: 34800 VA				
											Total Est. Demand: 34800 VA				
											Total Conn.: 33 A				
											Total Est. Demand: 33 A				
Notes:															

Branch Panel: DP-02										Branch Panel: DP-02									
Location: Room 129					Volts: 120/208 Wye					A.I.C. Rating:									
Supply From:					Phases: 3					Mains Type:									
Mounting: SURFACE					Wires: 4					Mains Rating: 400 A									
Enclosure: NEMA 3R										MCB Rating: 400 A									
Notes:																			
CKT	Circuit Description	QTY	Trip	Pole s	A	B	C	Pole s	Trip	QTY	Circuit Description	CKT							
1	LIGHTING	24	15 A	1	2132...	180 VA			1	15 A	1	R: ELECTRICAL ROOM	2						
3	LIGHTING	27	15 A	1		2323...	700 VA			1	15 A	1	TSP-1	4					
5	LIGHTING	35	15 A	1			846 VA	1600...		1	15 A	3	EF-1, EF-2	6					
7	EF-4	1	15 A	1	1200...	1300...				1	20 A	1	B2	8					
9	EF-3	1	15 A	1		900 VA	1296...			1	15 A	6	UH-1 TO UH-6	10					
11	B1	1	20 A	1				1300...	1500...	1	15 A	3	AUTOMATIC DOOR OPERATORS...	12					
13	R: GENERAL OFFICE	2	15 A	1	360 VA	0 VA								14					
15	FCU-1 TO FCU-11	11	15 A	2		1500...	0 VA			3	100 A	--	GENERATOR ENCLOSURE PANEL	16					
17	R: VEHICLE BAY	2	15 A	1	360 VA	1200...			1500...	0 VA				18					
19	R: MECHANICAL ROOM	2	15 A	1		360 VA	180 VA			1	15 A	1	EF-4	20					
21	R: MECHANICAL ROOM	2	15 A	1			360 VA	180 VA		1	20 A	1	RECEPTACLE	22					
23	R: WASHROOM	2	15 A	1				360 VA	180 VA	1	20 A	1	RECEPTACLE	24					
25	R: LOUNGE AND TV	2	15 A	1	360 VA	360 VA				1	15 A	2	R: MECHANICS OFFICE	26					
27	R: QUARTERMASTER	1	15 A	1			180 VA	360 VA		1	15 A	1	R: IT ROOM	28					
29	R: HANGAR	8	20 A	1					1440...	360 VA	1	15 A	2	R: IT ROOM	30				
31	R: CONFERENCE ROOM	2	15 A	1	360 VA	720 VA				1	15 A	4	R: OFFICE 2	32					
33	R: RADIO	2	15 A	1			360 VA	167 VA						34					
35	R: OFFICE 1	3	15 A	1				540 VA	167 VA	3	50 A	1	RTU-1	36					
37					167 VA	167 VA								38					
39	RTU-2	1	40 A	3			167 VA	360 VA		1	20 A	2	R: MAINTENANCE	40					
41								167 VA	500 VA	1	15 A	1	AVIATION LIGHTING	42					
43	R: FITNESS	2	15 A	1	360 VA	180 VA				1	15 A	1	R: PRINTER	44					
45	R: FITNESS	2	15 A	1			360 VA	180 VA		1	15 A	1	R: FRIDGE	46					
47	R: RPAS	1	20 A	1				180 VA	180 VA	1	20 A	1	R: KITCHEN COUNTER	48					
49	EXIT SIGNS	11	20 A	1	285 VA	540 VA				1	15 A	3	R: CONFERENCE ROOM	50					
51	R: GARAGE DOOR	1	15 A	1			180 VA	167 VA						52					
53	R: GENERAL OFFICE	4	15 A	1				720 VA	167 VA	3	30 A	1	IT RACK	54					
55	R: UNIVERSAL WASHROOM	--	15 A	1	500 VA	167 VA								56					
57						167 VA	100 VA			2	20 A	1	ODU-2	58					
59	ODU-1	1	50 A	3				167 VA	100 VA					60					
61					167 VA	180 VA				1	15 A	1	R: DISHWASHER	62					
63	R: CRANE HOIST POWER	1	15 A	1			180 VA	500 VA		1	15 A	1	FAAP	64					
65								167 VA	500 VA	1	15 A	1	FACP	66					
67	AIR COMPRESSOR	1	25 A	3	167 VA	500 VA				1	15 A	1	FUEL TANK	68					
69						167 VA	360 VA			1	15 A	2	R: TV SECURITY DISPLAY	70					
71	FA MONITORING TRANSMITTER	1	15 A	1				500 VA	430 VA	1	20 A	2	R: CONFERENCE ROOM FLOOR...	72					
73	R: GARAGE DOOR	1	15 A	1	180 VA	218 VA				1	15 A	12	PARKING & SIGNAGE LIGHTING	74					
75							500 VA	1000...		1	15 A	2	WINDSOCK AND...	76					
77	GROUND POWER UNIT	2	20 A	2				500 VA	100 VA	1	15 A	2	EMERGENCY BATTERY PACK	78					
79	R: FITNESS TV	1	20 A	1	180 VA									80					
81	HELIPAD LIGHTING CONTROLLER	--	15 A	1		0 VA								82					
83														84					
Total...					12488 VA	12644 VA	14169 VA												
Total...					104 A	106 A	118 A												
Legend:																			
Load Classification					Connected Load	Demand Factor	Estimated Demand	Panel Totals											
Other					21556 VA	100.00%	21556 VA												
Spare					500 VA	100.00%	500 VA	Total Conn. Load: 39291 VA											
EMERGENCY BATTERY PACK					100 VA	100.00%	100 VA	Total Est. Demand: 39291 VA											
Lighting - Dwelling Unit					2044 VA	100.00%	2044 VA	Total Conn.: 109 A											
Receptacle					11160 VA	100.00%	11160 VA	Total Est. Demand: 109 A											
Notes:																			