

**ELECTRICAL ADDENDUM EA-1
CITY OF VAUGHAN FIRE STATION NO. 7 - 12
PROJECT NO. 2104
JSC PROJECT NO. 21-237
MAY 23, 2024**

The following document is hereby made a part of the Contract Documents.

The following revisions and/or additions shall be made to Drawings and/or specifications and the cost shall be included in Tender Price.

REVISIONS TO DRAWINGS

DRAWING E1.0

1. Revise General Notes as per attached Drawing E1.0.

DRAWING E1.1

1. Revise Site Plan – Electrical as per attached Drawing E1.1.


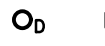



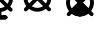







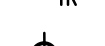








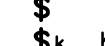
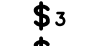
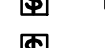
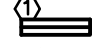

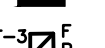












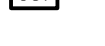








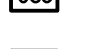







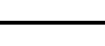


DRAWING E3.1




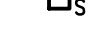







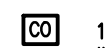





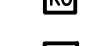










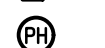
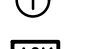




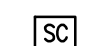
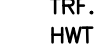

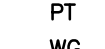

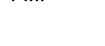
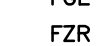
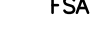

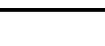


1. Revise Power & Systems Layout as per attached Drawing E3.1.

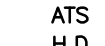
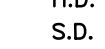
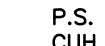
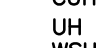
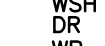
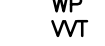
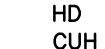
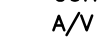
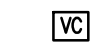

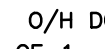
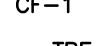
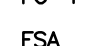

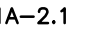
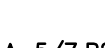
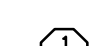


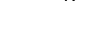
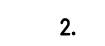
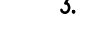
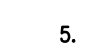



DRAWING E4.0




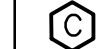






1. Revise Single Line Diagram as per attached Drawing E4.0.

END

LEGEND	
	LED LIGHT FIXTURE - LETTER DENOTES TYPE
	LED, CEILING FIXTURE - LETTER DENOTES TYPE
	LED, LIGHT FIXTURE 24/7 'ON' NIGHT LIGHT FIXTURE
	LIGHT STANDARD
	LED WALL FIXTURE - LETTER DENOTES TYPE
	EXIT LIGHT FIXTURE WALL OR CEILING MOUNTED, PICTOGRAM TYPE - SHADED AREA DENOTES FACE
	EMERGENCY LIGHTING TYPE 1 (SINGLE HEAD)& TYPE 2 (DOUBLE HEADS), LED, 24V, 7W PER HEAD, BAGHELLI# BTMR-MR16-LED-7W/HEAD-24V OR APPROVED EQUAL EXCEPT FOR APPARATUS BAY & EMS BAY AREAS. BAGHELLI# SEA SERIES-MR16-LED-7W/HEAD-WEATHERPROOF-NEMA 4X OR APPROVED EQUAL SUITABLE FOR WET LOCATIONS SHALL BE PROVIDED FOR APPARATUS BAY & EMS BAY AREAS.
	EMERGENCY LIGHTING TYPE 1 (SINGLE HEAD)& TYPE 2 (DOUBLE HEADS), LED, 24V, 7W PER HEAD, WEATHERPROOF, BAGHELLI# SEA SERIES-MR16-LED-7W/HEAD-WEATHERPROOF-NEMA 4X OR APPROVED EQUAL SUITABLE FOR WET LOCATIONS.
	EMERGENCY LIGHTING BATTERY UNIT, 24V, (BAGHELLI#NOVA-NV-24-WATTAGE AS SHOWN ON DRAWINGS OR APPROVED EQUAL), SUITABLE FOR 120V INPUT VOLTAGE UNLESS NOTED OTHERWISE.
	STANDARD 15A 120V 1P DUPLEX RECEPTACLE. 'TR' DENOTES TAMPER RESISTANT TYPE.
	STANDARD DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER. 'TR' DENOTES TAMPER RESISTANT TYPE.
	STANDARD DUPLEX RECEPTACLE (SPLIT FEED) MOUNTED ABOVE COUNTER.
	G.F.J DUPLEX RECEPTACLE. 'TR' DENOTES TAMPER RESISTANT TYPE.
	G.F.J DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER. 'TR' DENOTES TAMPER RESISTANT TYPE.
	15A QUAD. RECEPTACLE WITH SEPARATE NEUTRAL AND GROUND WIRE PER CIRCUIT. 'TR' DENOTES TAMPER RESISTANT.
	G.F.J QUAD. RECEPTACLE MOUNTED ABOVE COUNTER. 'TR' DENOTES TAMPER RESISTANT.
	CEILING MOUNTED DUPLEX RECEPTACLE
	15A/20A T-SLOT RECEPTACLE ON 20A CIRCUIT. 'TR' DENOTES TAMPER RESISTANT.
	LS-20R TWIST LOCK RECEPTACLE BLACK IN COLOUR WITH SEPARATE NEUTRAL AND GROUND WIRE PER CIRCUIT FOR FEEDING POWER TO UPS OF I.T. RACK.
	LS-20RA, 20A RECEPTACLE BLACK IN COLOUR WITH SEPARATE NEUTRAL AND GROUND WIRE PER CIRCUIT FOR FEEDING POWER TO UPS OF I.T. RACK.
	120V, 15A CEILING MOUNTED EXTENSION CORD REEL C/W DUPLEX RECEPTACLE AND OUTLET BOX (HUBBELL# HBL45123R + HBL52520V) C/W SUPPORTING SYSTEM. CO-ORDINATE ON SITE FOR EXACT LOCATION/ MORE INFORMATION AND PROCEED ACCORDINGLY.
	TAMPER RESISTANT USB CHARGER HUB RECEPTACLE, 125W, 15A, 2-POLE,3W, 5-15R (HUBBELL# USB 15X2 OR ATION DART (COOPER# TR7745)
	3-POLE, 250V RECEPTACLE 14-20R FOR UPS RACK
	3-POLE, 250V RECEPTACLE 14-30R FOR DRIVER
	3-POLE, 250V RECEPTACLE 14-50R FOR RANGE
	SPECIAL OUTLET AS NOTED
	SINGLE POLE LIGHT SWITCH UNLESS NOTED OTHERWISE.
	KEYED SWITCH TO OPEN WASHROOM DOOR IN CASE OF EMERGENCY
	THREE WAY LIGHT SWITCH
	FOUR WAY LIGHT SWITCH
	1-BUTTON LOW VOLTAGE DLM TYPE LIGHT SWITCH (TYP.) UNLESS NOTED OTHERWISE.
	4-BUTTON LOW VOLTAGE DLM TYPE LIGHT SWITCH (TYP.)
	ELECTRIC HEATING UNIT, NO. DENOTES TYPE
	DOOR OPERATOR PUSH BUTTON UNLESS NOTED OTHERWISE
	REQUEST TO EXIT DEVICE
	PUSH TO LOCK BUTTON
	PANELBOARD
	MOTOR STARTER. LETTER F DENOTES FLUSH MTD, P= PILOT LIGHT, S=SURFACE MTD. EF-3 = EQUIPMENT CONTROLLED BY STARTER
	DISCONNECT SWITCH - WP DENOTES WEATHERPROOF
	COMBINATION MOTOR STARTER AND DISCONNECT
	MOTOR OUTLET AS NOTED
	MOTOR & DISCONNECT SWITCH TO SUIT
	RECESSED P.A. SPEAKER RECESSED, WALL MOUNTED. REFER SCHEMATIC DIAGRAMS FOR MORE INFORMATION.
	SURFACE MOUNTED P.A. SPEAKER. REFER SCHEMATIC DIAGRAMS FOR MORE INFORMATION.
	EXTERIOR TYPE P.A. SPEAKER, WALL MOUNTED. REFER SCHEMATIC DIAGRAMS FOR MORE INFORMATION.
	PA CONSOLE/MICROPHONE. REFER SCHEMATIC DIAGRAMS FOR MORE INFORMATION.
	MICROPHONE OUTLET
	WATT STOPPER LMDX-100 OCCUPANCY/VACANCY SENSOR, DUAL TECH WALL CORNER MOUNT/CEILING MOUNT C/W ROOM CONTROLLERS AS REQUIRED. LIGHTING CONTROL TO BE MANUAL-ON, AUTO-OFF.
	WATT STOPPER DW-100-120 DUAL TECHNOLOGY WALLSWITCH SENSOR LINE VOLTAGE (AUTO-ON, AUTO-OFF).
	WATT STOPPER LMUC-100 OCCUPANCY SENSOR, ULTRA SONIC CEILING MOUNT C/W ROOM CONTROLLERS AS REQUIRED.
	WALL MOUNTED DUAL TECHNOLOGY TWO RELAY LINE VOLTAGE OCCUPANCY SENSOR, WATT STOPPER DW-200-120 (MANUAL-ON, AUTO-OFF)
	WATT STOPPER LMDC-100 OCCUPANCY/VACANCY SENSOR, DUAL TECH CEILING MOUNT, 360 DEGREES C/W ROOM CONTROLLERS AS REQUIRED. LIGHTING CONTROL TO BE MANUAL-ON, AUTO-OFF.
	WATT STOPPER LMDX-100 VACANCY SENSOR, DUAL TECH WALL CORNER MOUNT/CEILING MOUNT C/W ROOM CONTROLLERS AS REQUIRED.
	WATT STOPPER LMDC-100 OCCUPANCY/VACANCY SENSOR, DUAL TECH CEILING MOUNT, 360 DEGREES C/W ROOM CONTROLLERS AS REQUIRED. LIGHTING CONTROL TO BE AUTO-ON, AUTO-OFF.
	WATT STOPPER LMLS-500 OPEN LOOP DAYLIGHT SENSOR.
	BATTERY OPERATED CLOCK (12" DIA. SEMI FLUSH, BATTERY OPERATED, BLACK/RED 24 HOUR DIA. AND GREY CASE WITH SYMMETRY HANDS. EDWARDS MODEL# 1185SA SERIES OR SIMPLX.
	CEILING MOUNTED A/V OUTLET FOR PROJECTOR
	VGA MONITOR OUTLET C/W 21 mmC. TO CEILING MOUNTED AV OUTLET.
	CABLE TV OUTLET C/W 21MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR.
	COUNTDOWN CLOCK-FIRE STATION ALERT SYSTEM

LEGEND (CONTD.)	
	RECESSED FLOOR BOX C/W COVER AND DEVICES AS PER LAYOUT DWGS. WIREMOLD RFB-SS SERIES, FINISH TO ARCHITECT SELECTION.
	EMERGENCY PUSH BUTTON (CAMDEN 5/8" MUSHROOM, STAINLESS STEEL, FACEPLATE, PUSH/PULL, "PRESS FOR ASSISTANCE". CM-450R/12) OF CALL FOR ASSISTANCE SYSTEM (CALL FOR ASSISTANCE SYSTEM SHALL BE CAMDEN# CX-WEC10). THE EMERGENCY PUSH BUTTON SHALL BE MOUNTED ON A SINGLE GANG BOX. REFER FLOOR PLAN DWGS. FOR MORE INFORMATION.
	SINGLE GANG LED ANNUNCIATOR C/W SOUNDER, 'ASSISTANCE REQUESTED' (CAMDEN: CM-AF50150) OF CALL FOR ASSISTANCE SYSTEM (CALL FOR ASSISTANCE SYSTEM SHALL BE CAMDEN# CX-WEC10). REFER FLOOR PLAN DWGS. FOR MORE INFORMATION.
	SINGLE GANG DOME LIGHT WITH SOUNDER, 'ASSISTANCE REQUIRED' (CAMDEN: CM-AF14050) OF CALL FOR ASSISTANCE SYSTEM (CALL FOR ASSISTANCE SYSTEM SHALL BE CAMDEN# CX-WEC10). REFER FLOOR PLAN DWGS. FOR MORE INFORMATION.
	FIRE ALARM MANUAL STATION C/W PLASTIC COVER WITH LOCAL HORN - LETTERS WG DENOTES C/W WIREGUARD
	AUTOMATIC FIRE DETECTOR RATE OF RISE 135 DEG. F. UNLESS NOTED OTHERWISE - NUMBER DENOTES ZONE, LETTER G DENOTES GUARD
	AUTOMATIC FIRE DETECTOR - FIXED TEMPERATURE AS NOTED FIRE ALARM HORN 'S' DENOTES C/W STROBE LIGHT, WG - WIRE GUARD
	PHOTO ELECTRIC SMOKE DETECTOR
	ALARM DUCT TYPE SMOKE DETECTOR
	120V AC 3-IN-1 LED STROBE SMOKE ALARM/CO (THREE IN ONE) C/W STROBE & 10 YEAR SEALED BATTERY BACK-UP (MIDDEP#4010ACLS050CA).
	END-OF-LINE RESISTOR
	FIRE ALARM HORN. 'S' DENOTES C/W STROBE LIGHT.
	FIRE ALARM STROBE.
	FLOW SWITCH-SPRINKLER SYSTEM
	SUPERVISORY ZONE SWITCH-SPRINKLER SYSTEM
	120V CARBON MONOXIDE DETECTOR C/W BATTERY BACK-UP AND AUXILIARY CONTACTS TO INITIATE A DEDICATED SUPERVISORY ZONE IN FIRE ALARM SYSTEM.
	TELEPHONE/DATA OUTLET C/W JACK & CABLE & 21mm EMT CONDUIT TO I.T. ROOM AT MEZZANINE LEVEL. REFER SPECIFICATIONS FOR MORE INFORMATION.
	DATA OUTLET C/W JACK & CABLE & 21mm EMT CONDUIT TO I.T. ROOM AT MEZZANINE LEVEL. NO. DENOTES NUMBER OF DATA DROPS. REFER SPECIFICATIONS FOR MORE INFORMATION.
	TELEPHONE OUTLET C/W JACK & CABLE & 21mm EMT CONDUIT TO I.T. ROOM AT MEZZANINE LEVEL. REFER SPECIFICATIONS FOR MORE INFORMATION.
	CEILING MOUNTED WIRELESS ACCESS POINT CONSISTING OF A DATA DROP C/W 27MM CONDUIT & WIRING TO I.T. ROOM AT MEZZANINE LEVEL. REFER SPECIFICATIONS FOR MORE INFORMATION.
	DOOR ELECTRIC STRIKE
	KEY OVERRIDE SWITCH TO OVERRIDE ELECTRIC STRIKE
	SECURITY KEY PAD C/W 16MM CONDUIT SECURITY PANEL IN I.T. ROOM.
	CARD READER C/W 16MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR UNLESS NOTED OTHERWISE.
	CCTV CAMERA C/W 27mm CONDUIT UPTO I.T. ROOM
	CCTV MONITOR C/W 27mm CONDUIT UPTO DVR PANEL/CCTV RACK
	SECURITY SYSTEM- MOTION SENSOR, WALL MOUNTED C/W 27MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR
	SECURITY SYSTEM- MOTION SENSOR/GLASS BREAK COMBO, 360 DEGREE CEILING MOUNTED, WALL MOUNTED C/W 27MM CONDUIT UPTO SECURITY PANEL
	DOOR HOLD OPEN DEVICE C/W CONDUIT AND WIRING
	SECURITY SYSTEM DOOR CONTACT C/W 16MM CONDUIT UPTO SECURITY PANEL VIA A JUNCTION BOX IN NEAREST ACCESSIBLE CEILING SPACE
	SECURITY SYSTEM ROOF HATCH DOOR CONTACT C/W 27MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR
	SECURITY SYSTEM OVERHEAD DOOR CONTACT C/W 16MM CONDUIT UPTO SECURITY PANEL VIA A JUNCTION BOX IN NEAREST ACCESSIBLE CEILING SPACE.
	PUSH BUTTON FOR DOOR BELL, (ST) STOPPER STATION SERIES, NO TEXT, SS2Y0, UNIVERSAL STOPPER LABEL BELT, MOMENTARY (ILLUMINATED), ENGLISH, C/W ACCESSORIES AS REQUIRED.
	120V DOOR BELL (EDWARDS# STRAP MOUNTED BELL/BUZZER, MODEL-762, 590 SERIES TRANSFORMER, #593 MOUNTING PLATES FOR 590 SERIES TRANSFORMERS, TRANSFORMER MOUNTING PLATES, SINGLE AND MULTIPLE GANG UTILITY BOXES & ALL ACCESSORIES REQUIRED FOR MOUNTING & FULLY OPERATIONAL. SYSTEM.
	ARMING BUTTON C/W 27MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR
	SECURITY SYSTEM BUZZER C/W 27MM CONDUIT UPTO CABLE TRAY IN NEAREST CORRIDOR
	PHOTOCELL
	THERMOSTAT
	ACKNOWLEDGE FIRE-ALARM-FIRE ALERT SYSTEM.
	COUNTDOWN CLOCK-FIRE ALERT SYSTEM.
	REQUEST TO EXIT PUSH BUTTON/BAR: SHALL RELEASE ELECTRIC STRIKE OF RESPECTIVE DOOR.
	MAINTAINED TWIST RELEASE RED COLORED MUSHROOM KEYLESS TYPE EMERGENCY PUSH BUTTON FOR SHUT DOWN OF POWER FOR GAS SOLENOID VALVE IN CASE OF EMERGENCY. PROVIDE SUITABLE LABEL ON THE PUSH BUTTON.
	WALL MOUNTED J-HOOK IN CEILING
	53 mm(2") CONDUIT SLEEVE THRU WALL ABOVE CEILING
	SPEED CONTROLLER OF CEILING FAN
	DENOTES TRANSFORMER
	DENOTES DOMESTIC HOT WATER TANK
	DENOTES RANGE HOOD
	DENOTES RANGE
	DENOTES DISHWASHER
	DENOTES MICROWAVE
	DENOTES MOTORIZED DAMPER
	DENOTES PIPE HEAT TRACING
	DENOTES WIRE GUARD
	DENOTES FIRE ALARM CONTROL PANEL
	DENOTES RECESSED LED TYPE OF FIRE ALARM ANNUNCIATOR PANEL C/W PASSIVE GRAPHICS
	DENOTES RECESSED FIRE ALARM MONITORING PANEL. PROVIDE A DEDICATED PHONE LINE FOR THIS MONITORING PANEL AND PROVIDE 1-21MM CONDUIT FROM THIS PANEL TO FACP.
	DENOTES DOOR OPERATOR
	DENOTES FREEZER
	DENOTES FRIDGE
	DENOTES FREEZER
	DENOTES POWER FOR ELECTRONIC FAUCET/PLUMBING FIXTURES
	DENOTES FIRE STATION ALERT SYSTEM

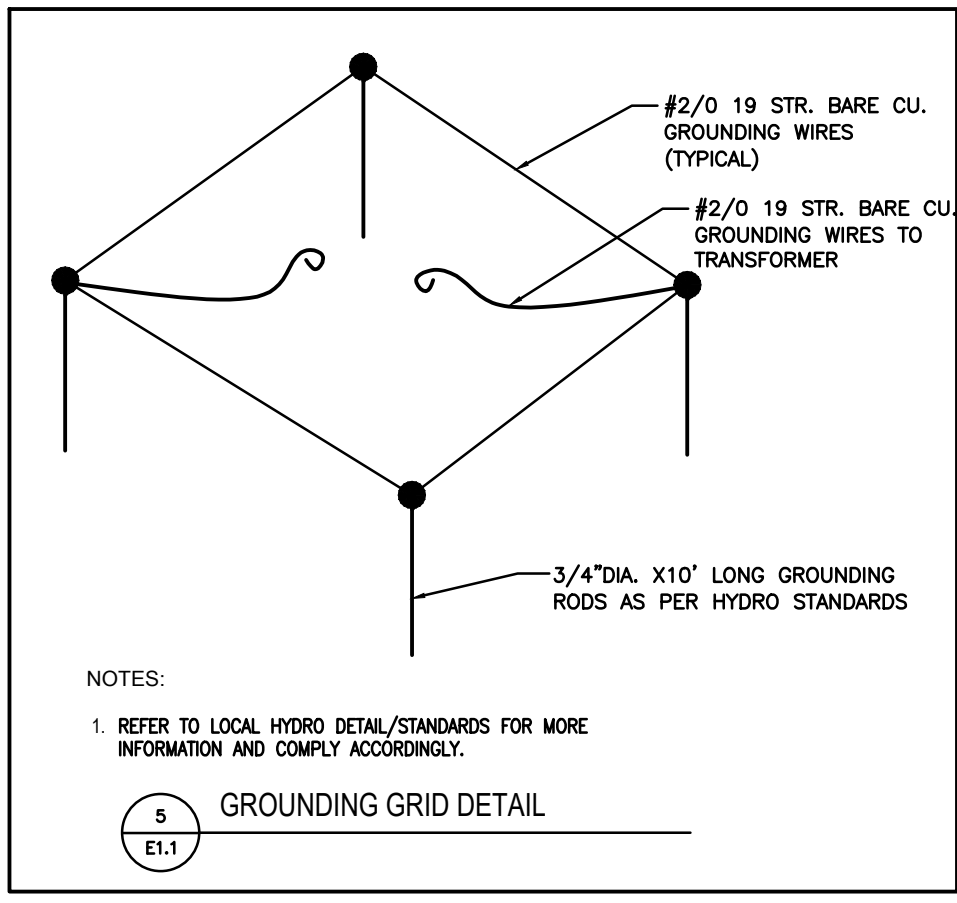
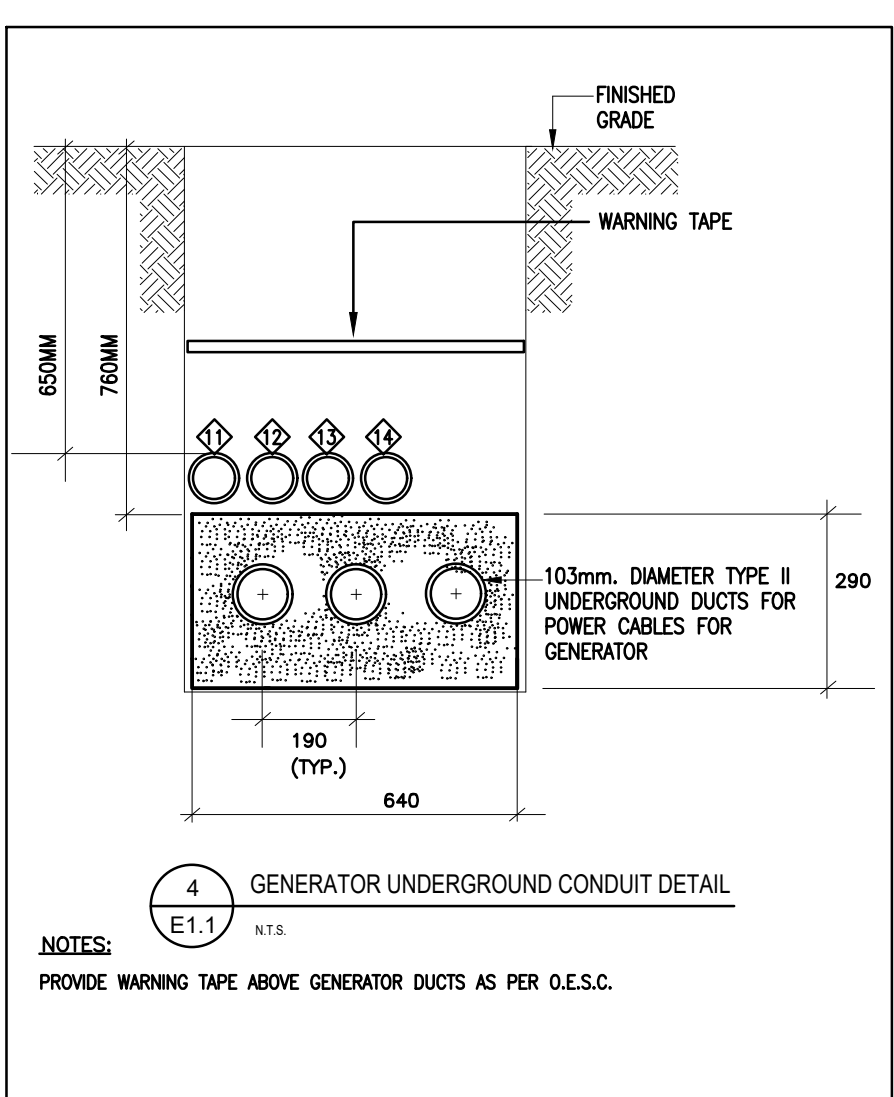
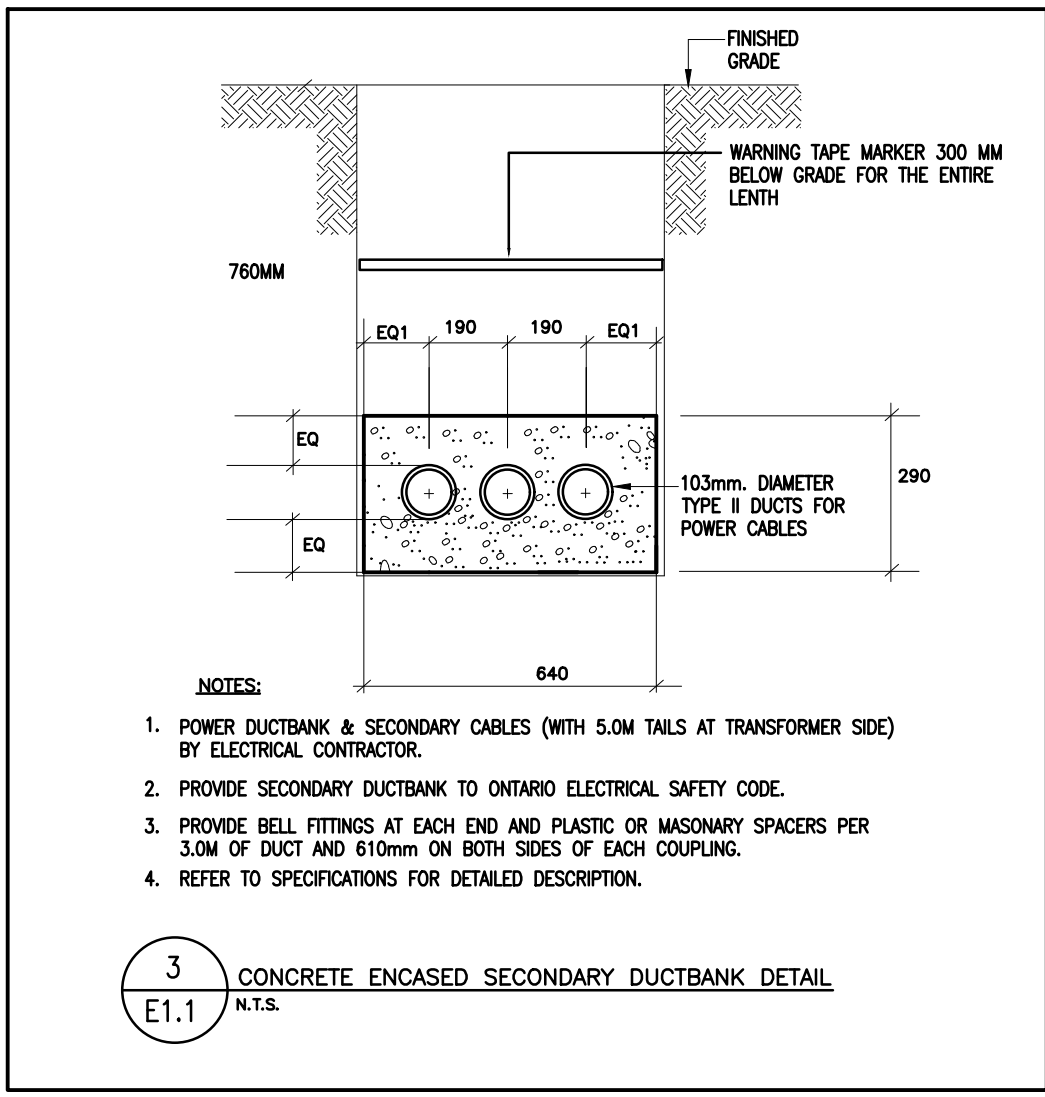
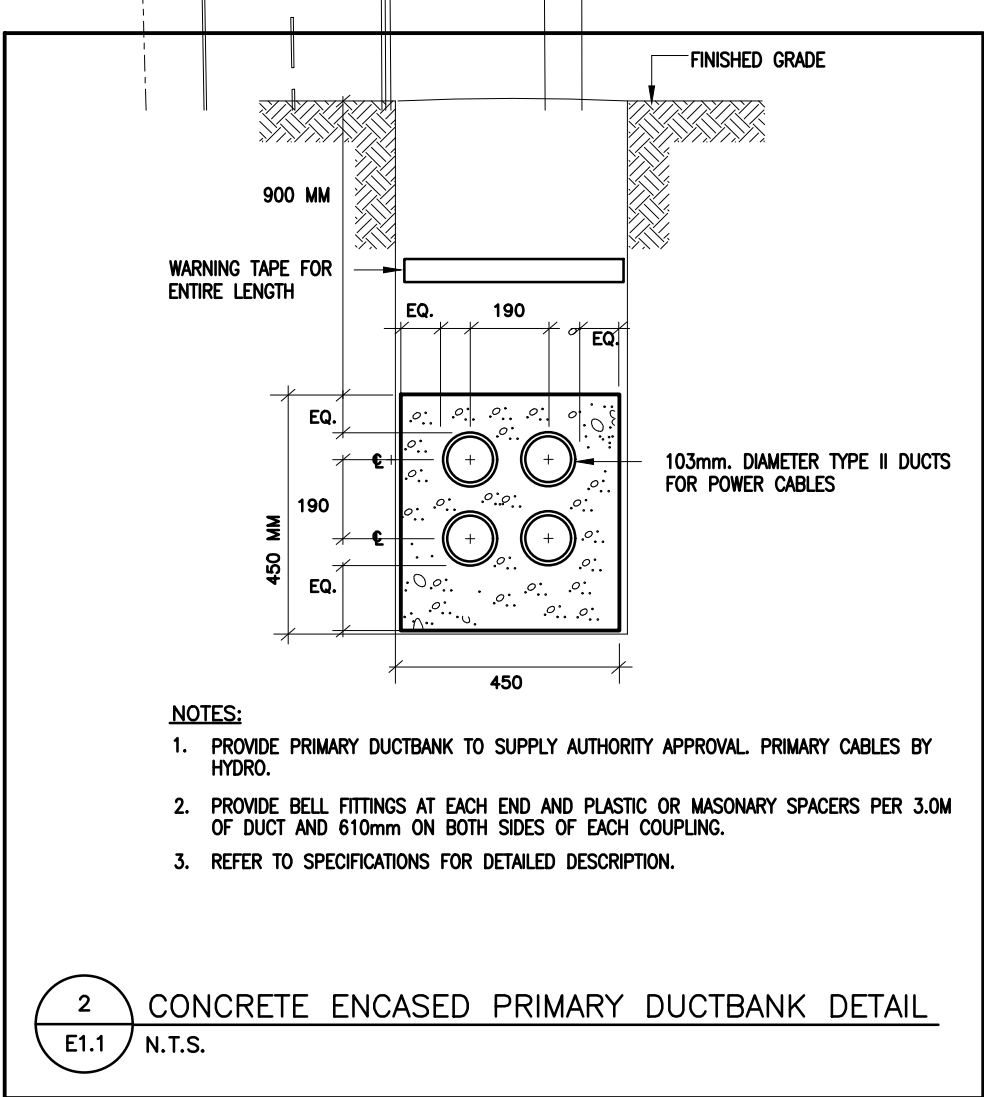
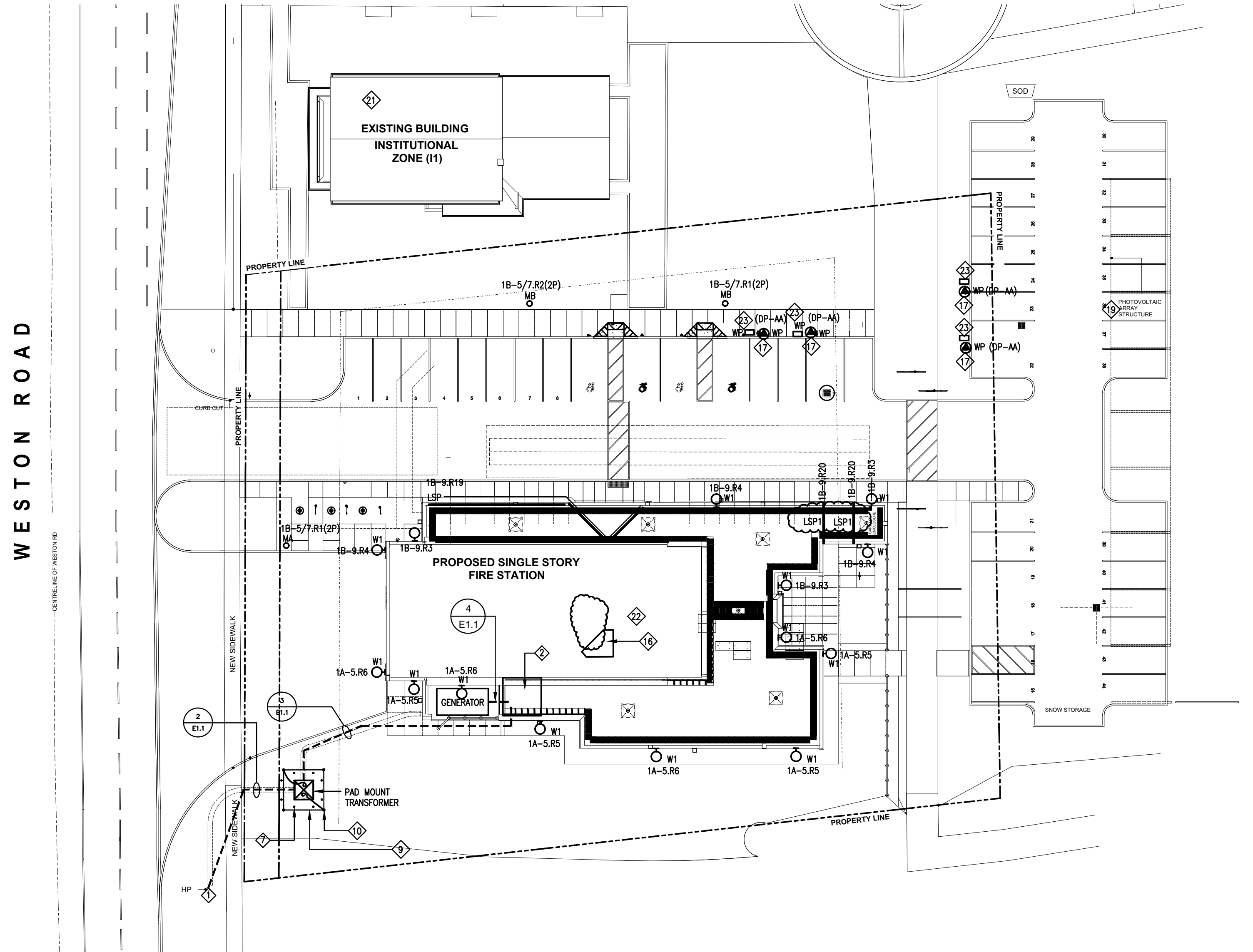
LEGEND (CONTD.)	
	DENOTES AUTOMATIC TRANSFER SWITCH
	DENOTES HEAT DETECTOR
	DENOTES SMOKE DETECTOR
	DENOTES PULL STATION
	DENOTES CABINET UNIT HEATER
	DENOTES UNIT HEATER
	DENOTES WASHER
	DENOTES WEATHER PROOF.
	DENOTES VARIABLE VOLUME TEMPERATURE.
	DENOTES HAND DRYER
	DENOTES CABINET UNIT HEATER
	DENOTES AUDIO/VISUAL SYSTEM
	DENOTES LOCAL VOLUME CONTROL OF P.A. SPEAKERS
	DENOTES METERING & VERIFICATION SYSTEM
	DENOTES OVERHEAD DOOR
	DENOTES CEILING FAN#1 (TYP.)
	DENOTES TRANSFORMER
	DENOTES FAN COIL#1 (TYP.)
	DENOTES FIRE STATION ALERT SYSTEM
	DENOTES LV MASTER SWITCH PANEL
	DENOTES EQUIPMENT FED FROM PANEL '1A' AND BREAKER #1
	DENOTES EQUIPMENT FED FROM PANEL '1A' AND BREAKER #2 AND CONTROLLED BY SWITCH #1
	DENOTES EQUIPMENT FED FROM PANEL '1A' AND BREAKER #3 AND CONTROLLED VIA RELAY-R1.
	DENOTES EQUIPMENT FED FROM PANEL '1A' AND 2-POLE BREAKER #5/7 AND CONTROLLED VIA 2-POLE RELAY-R2.
	DETAIL 1 ON DRAWING E101
	NOTE PERTAINING TO SPECIFIC ITEM OR AREA
NOTES FOR LEGEND:	
1. THE WEATHERPROOF RECEPTABLES SHALL BE PROVIDED WITH COVER PLATES SUITABLE FOR WET LOCATIONS WHETHER OR NOT A PLUG IS INSERTED INTO THE RECEPTACLE (N-USE COVER PLATE) AND MARKED 'X' EXTRA DUTY' AS PER RULE 26-702(2) OF OESC.	
2. 'T' INDICATED BESIDE SYMBOL OF A DUPLEX RECEPTACLE DENOTES THAT THE RECEPTACLE SHALL BE T-SLOT ON 20A CCT.	
3. 'C' INDICATED BESIDE SYMBOL OF A DEVICE DENOTES THAT THE DEVICE SHALL BE CEILING MOUNTED.	
4. 'TR' INDICATED BESIDE SYMBOL OF A DUPLEX RECEPTACLE DENOTES THAT THE RECEPTACLE SHALL BE TAMPER RESISTANT TYPE OF RECEPTACLE.	
5. SLASH LINE SHOWN ON SYMBOL OF A DEVICE (RECEPTACLE, DATA OUTLET, TELEPHONE OUTLET OR DATA/PHONE OUTLET) MEANS THAT THE DEVICE/OUTLET IS TO BE LOCATED ABOVE COUNTER.	

HEATER SCHEDULE	
TYPE	DESCRIPTION
	500W 120V BASEBOARD HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # AFG6205 STELPRO, QUELLETT
	750W 120V BASEBOARD HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # AFG6307 STELPRO, QUELLETT
	1250W 120V BASEBOARD HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # AFG6512 STELPRO, QUELLETT
	2000W, 208V, 1-PH, BASEBOARD HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # AFG6820 STELPRO, QUELLETT
	2250W 208V, 1-PH, SURFACE MOUNTED FLOW HEATER C/W REMOTE THERMOSTAT. DIMPLEX CAT. # RFB30031-RFPB0CW STELPRO, QUELLETT
	2250W 208V, 1-PH, SEMI RECESSED FORCED FLOW HEATER TO BE MOUNTED IN T-BAR CEILING C/W MOUNTING ACCESSORIES, BRACKETS, SUPPORTS, HARDWARE & REMOTE THERMOSTAT. DIMPLEX CAT. # RFB30031 STELPRO, QUELLETT
	3000W 208V, 1-PH, SEMI RECESSED FORCED FLOW HEATER C/W REMOTE THERMOSTAT. DIMPLEX CAT. # RFB40031 STELPRO, QUELLETT
	6000W 208V, 1-PH, SURFACE MOUNTED FORCED FLOW HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # RFFB6021-RFFPB0CW STELPRO, QUELLETT
	1000W 120V BASEBOARD HEATER C/W BUILT-IN THERMOSTAT CHROMALOX CAT. # AFG410 STELPRO, QUELLETT
	3000W 208V, 1-PH, WALL SURFACE MOUNTED FORCED FLOW HEATER C/W REMOTE THERMOSTAT DIMPLEX CAT. # RFB40031-RFPB0W STELPRO, QUELLETT
UH-1	25.0KW 208V, 3-PH, ELECTRICAL INDUSTRIAL UNIT HEATER, SUSPENDED FROM CEILING TYPE (WAREHOUSE TYPE) C/W REMOTE THERMOSTAT & COMPLETE MOUNTING ACCESSORIES AS REQUIRED. QUELLETT# QAS25038-MOUNTING ACCESSORIES STELPRO, DIMPLEX
UH-2	25.0KW 208V, 3-PH, ELECTRICAL INDUSTRIAL UNIT HEATER, SUSPENDED FROM CEILING TYPE (WAREHOUSE TYPE) C/W REMOTE THERMOSTAT & COMPLETE MOUNTING ACCESSORIES AS REQUIRED. QUELLETT# QAS25038-MOUNTING ACCESSORIES STELPRO, DIMPLEX
NOTES:	
1. COORDINATE WITH MECHANICAL DRAWINGS/MECHANICAL TRADE FOR EXACT LOCATION OF REMOTE THERMOSTATS PRIOR TO ROUGH-INS.	

LUMINAIRE SCHEDULE	
L2	120V, 4" DIA LED DOWN LIGHT FIXTURE, 7.0W, 801 LUMENS, 3000K, DIMMING DRIVER, WET LOCATION C/W MOUNTING ACCESSORIES AS REQUIRED. ORBIT# RIM-R-30K-7W-60D-WH-NC-120V-WET SENSIO ARTEMIS, COOPER, ACUTY
L2A	6" HIGH, 3" WIDE, 1" DEEP WALL RECESSED LED (RED LIGHT EMITTING LIGHT FIXTURE), 3.0W, 352 LUMENS, 120V DRIVER. FINISH TO ARCHITECT'S SELECTION. SOLERA# DOMI-RED LIGHT EMISSION-3WLED-120V-R-CPL-120V AXIS

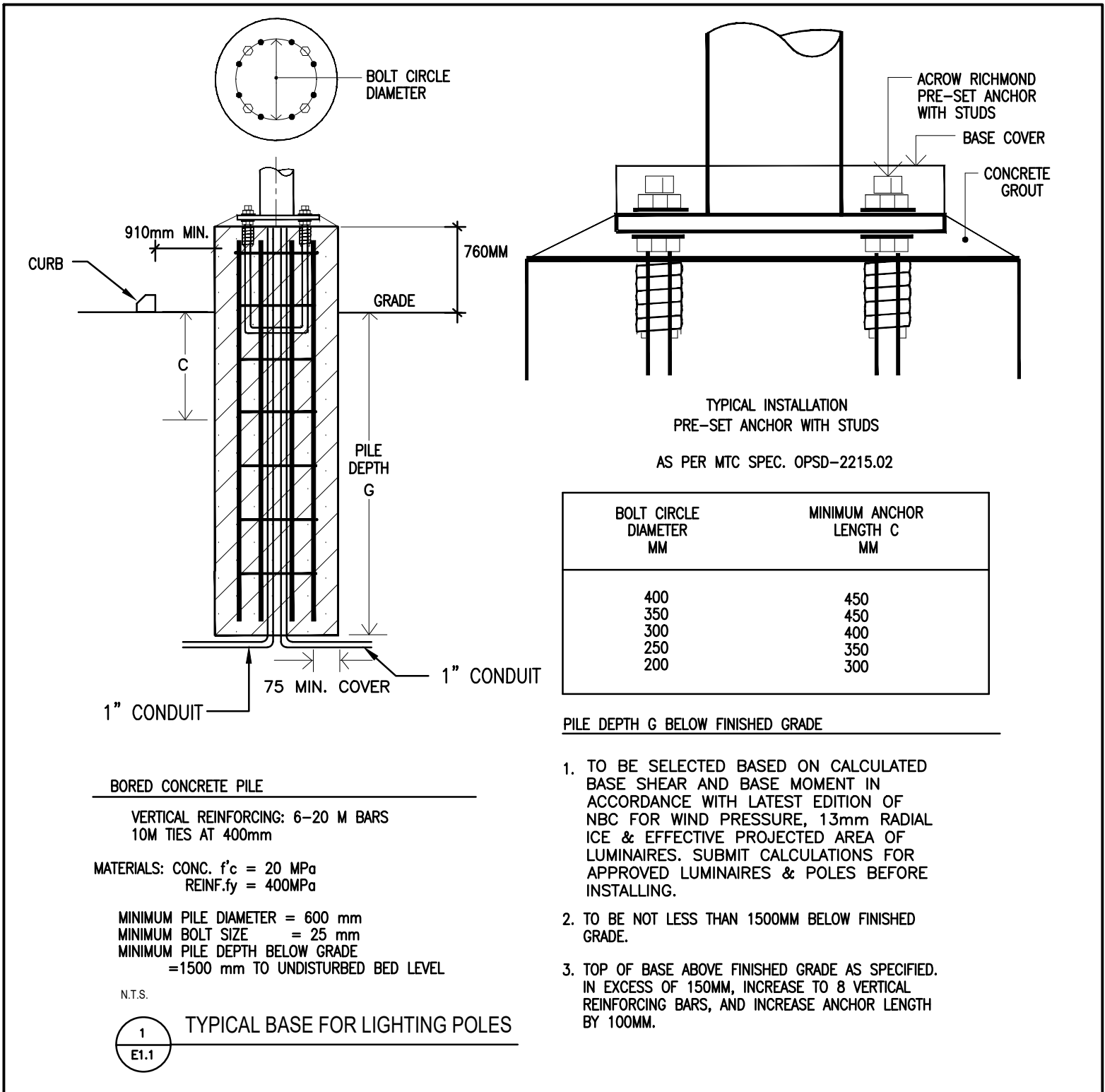
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Property Line	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.
V F Stn site	Illuminance	Fc	0.66	17.6	0.0	N.A.	N.A.

Light levels are Maintained at Grade and 3m on ctrs
All luminaires have a U rating of 0



DRAWING NOTES:

- PRIMARY DUCT BANK SHALL BE TERMINATED AT HYDRO POLE. CO-ORDINATE WITH HYDRO FOR EXACT LOCATION OF THE HYDRO POLE & TERMINATION OF THE PRIMARY DUCT BANK PRIOR TO ROUGH-IN.
- APPROXIMATE LOCATION OF MAIN ELECTRICAL ROOM AT GROUND FLOOR.
- RESERVED.
- THE WARNING TAPES SHOWN/DESCRIBED ON THIS DRAWING SHALL COMPLY WITH RULE 12-012(11) OF OESC. THE TAPE MUST BE BURIED APPROXIMATELY HALFWAY BETWEEN THE INSTALLATION AND GRADE LEVEL, COVERING THE WIDTH OF THE RACEWAYS OR CABLES FOR THE ENTIRE LENGTH & SHALL BE INSTALLED AS PER BULLETIN 12-2 OF OESC.
- ALL EXTERIOR LIGHTING CIRCUITS SHALL BE CARRIED OUT WITH #10 AWG CONDUCTOR.
- ANY METAL (I.E. METAL FENCES, BOLLARDS, PROTECTIVE BARRIERS, ETC.) LOCATED WITHIN 2.4M OF THE PAD MOUNTED TRANSFORMER SHALL BE BONDED TO STATION GROUND ELECTRODE WITH 2/0 AWG COPPER CONDUCTORS AS PER RULE 36-308 & BULLETIN 36-10 OF LATEST OESC.
- PROVIDE PROTECTIVE BOLLARDS (TYP.). CO-ORDINATE WITH HYDRO FOR EXACT LOCATIONS, QUANTITIES OF THE BOLLARDS AND MOUNTING DETAIL OF BOLLARDS PRIOR TO ROUGH-IN AND COMPLY ACCORDINGLY.
- PROVIDE POWER & DATA OUTLET FOR PYLON SIGNAGE. COORDINATE ON SITE FOR EXACT LOCATION PRIOR TO ROUGH-IN.
- PROVIDE GROUNDING LOOP TO TRANSFORMER AS PER HYDRO STANDARDS (TYP.). REFER DETAILS ON DWG. E1.1 FOR MORE INFORMATION.
- PROVIDE GROUNDING RODS, QUANTITIES, LOCATIONS, TYPE TO BE AS PER HYDRO REQUIREMENTS/HYDRO STANDARDS. COORDINATE WITH HYDRO & PROCEED ACCORDINGLY.
- PROVIDE 1-53MM UNDERGROUND CONDUIT C/W WIRING TO GENERATOR ANNUNCIATOR PANEL.
- PROVIDE 1-41MM UNDERGROUND CONDUIT C/W WIRING FOR GEN. PANEL FROM PANEL-1A.
- PROVIDE 1-27MM UNDERGROUND CONDUIT C/W WIRING TO ATS-1 FOR START OPTION.
- PROVIDE 1-27MM UNDERGROUND CONDUIT C/W WIRING TO ATS-1 FOR TRIPPING GENERATOR LOAD TESTING BREAKER-G2.
- PROVIDE PROTECTIVE BOLLARDS (TYP.) FOR GENERATOR. COORDINATE ON SITE FOR EXACT LOCATION & QUANTITIES PRIOR TO ROUGH-INS.
- APPROXIMATE LOCATION OF I.T. ROOM-140 AT MEZZANINE LEVEL.
- PROVIDE DATA OUTLET & POWER FOR EV CHARGING STATION (TO BE FED FROM DP-AA FROM 40A/2P BREAKER, REFER DWG. E4.0 FOR MORE INFORMATION) COORDINATE ON SITE FOR EXACT LOCATION PRIOR TO ROUGH-IN.
- RESERVED.
- PROVIDE 2-3" CONDUITS FROM THIS LOCATION TO MAIN ELECTRICAL ROOM-133 FOR PHOTOVOLTAIC SYSTEM. COORDINATE ON SITE FOR EXACT LOCATION OF TERMINATION OF CONDUITS PRIOR TO ROUGH-INS. BOTH ENDS OF THE CONDUITS TO BE SEALED SUITABLE TO AVOID ENTRY OF WATER/FOREIGN MATERIAL INTO THE CONDUITS.
- REFER DWG. E4.1 FOR HYDRO DETAILS & COMPLY ACCORDINGLY.
- PROVIDE 2-103 mm CONDUITS FOR TEL/CABLE/FIBRE FROM I.T. ROOM OF EXISTING BUILDING INSTITUTIONAL ZONE (VELLORE HALL) TO I.T. ROOM AT MEZZANINE LEVEL (IDENTIFIED BY DWG. NOTE-16) FOR COMMUNICATION WIRING. COORDINATE ON SITE FOR EXACT POINTS OF TERMINATION & ROUTE OF THE CONDUIT PRIOR TO ROUGH-INS. THE CONDUITS SHALL BE RUN AS FOLLOWS:
2-103 mm ENT CONDUITS FROM EXISTING I.T. ROOM IN VELLORE HALL TO RUN IN CEILING SPACE UP TO EXTERIOR WALL OF VELLORE HALL BUILDING. THEN 2-103 mm RIGID PVC CONDUITS DOWN THE EXTERIOR WALL. THEN 2-103 mm RIGID PVC UNDERGROUND CONDUITS TO I.T. ROOM AT MEZZANINE LEVEL OF 7-12 VAUGHAN FIRE STATION. THE UNDERGROUND CONDUITS SHALL BE C/W WARNING TAPES AS PER OESC TO BE LOCATED BELOW GRADE AS PER TABLE-53 OF LATEST OESC REQUIREMENTS.
- PROVIDE 2-3" CONDUITS FROM THIS LOCATION AT ROOF TO MAIN ELECTRICAL ROOM-133 FOR PHOTOVOLTAIC SYSTEM. COORDINATE ON SITE FOR EXACT LOCATION OF TERMINATION OF CONDUITS PRIOR TO ROUGH-INS. BOTH ENDS OF THE CONDUITS TO BE SEALED SUITABLE TO AVOID ENTRY OF WATER/FOREIGN MATERIAL INTO THE CONDUITS.
- PROVIDE 2" CONDUIT FROM EV CHARGING STATION TO I.T. ROOM AT MEZZANINE LEVEL FOR COMMUNICATION WIRING. COORDINATE ON SITE FOR EXACT LOCATION OF THE CONDUIT.



LUMINAIRE SCHEDULE	
MA	960MM HIGH, LANTERN TYPE LED LIGHTING STANDARD (56.0W, 3522 LUMENS) C/W 3.47M HIGH STEEL STRAIGHT POLE ON 760MM ABOVE GRADE CONCRETE BASE (TOTAL HEIGHT OF THE LIGHT STANDARD TO BE 5.49M ABOVE GRADE), SINGLE HEAD C/W 208V DRIVER, 3000K. POLE AND LUMINAIRE SHALL HAVE FINISH AS PER ARCHITECT SELECTION. NLS# DMR-1-13-MO-32L-53-30K8-HSS-RO-AM-PT. B0-U0-G1 ACUTY, COOPER, SIGNIFY
MB	960MM HIGH, LANTERN TYPE LED LIGHTING STANDARD (56.0W, 3529 LUMENS) C/W 3.47M HIGH STEEL STRAIGHT POLE ON 760MM ABOVE GRADE CONCRETE BASE (TOTAL HEIGHT OF THE LIGHT STANDARD TO BE 5.49M ABOVE GRADE), SINGLE HEAD C/W 208V DRIVER, 3000K. POLE AND LUMINAIRE SHALL HAVE FINISH AS PER ARCHITECT SELECTION. NLS# DMR-1-14-MO-32L-53-30K8-HSS-RO-AM-PT. B0-U0-G1 ACUTY, COOPER, SIGNIFY
WI	LED WALL PACK (9.4W, 1064 LUMENS), MOUNTED @ 3.1M, C/W 120V DRIVER, 3000K. FINISH TO ARCHITECT'S SELECTION. SOLERA# SREK-4-D-30K-U0. B1-U0-G0 ACUTY, COOPER, SIGNIFY
LSP	1.0M LONG, LED LINEAR LED LIGHT FIXTURE, IP65 (TO BE MOUNTED AS RECESSED IN CHANNEL C/W LENS), 3000K, FOR LIGHTING METAL FACADE, 4.2M/FT., 512 LUMENS/FT. LENGTH & QUANTITIES TO SUIT SITE CONDITIONS (VERIFY ON SITE FOR EXACT EXTENT OF APPLICATION). FINISH TO ARCHITECT'S SELECTION. 120V DRIVER, MOUNTED @ 3.2M A.F.F. DIODE# D1-24V-VLS-30K-W016-D1-CPCHB-16-120V. TOTAL LENGTH AS PER SITE CONDITIONS ACUTY, COOPER, SIGNIFY

PROVIDE 2-103 mm UNDERGROUND CONDUITS (C/W WARNING TAPES AS PER OESC) FOR TEL/CABLE/FIBRE TO BE LOCATED BELOW GRADE AS PER TABLE-53 OF LATEST OESC REQUIREMENTS FROM I.T. ROOM OF EXISTING BUILDING INSTITUTIONAL ZONE (VELLORE HALL) TO I.T. ROOM AT MEZZANINE LEVEL (IDENTIFIED BY DWG. NOTE-16) FOR COMMUNICATION WIRING. COORDINATE ON SITE FOR EXACT POINTS OF TERMINATION & ROUTE OF THE CONDUIT PRIOR TO ROUGH-INS.

ISSUE OR REVISION		
NO.	ISSUED FOR	DATE (M.D.Y)
1	ISSUED FOR SPA	05.03.22
2	RE-ISSUED FOR SPA	06.03.22
3	DESIGN DEVELOPMENT FOR COSTING	07.07.22
4	RE-ISSUED FOR SPA	05.16.23
5	RE-ISSUED FOR SPA	06.12.23
6	RE-ISSUED FOR SPA	06.20.23
7	ISSUED FOR PERMIT	09.07.23
8	RE-ISSUED FOR SPA	09.20.23
9	ISSUED FOR REVIEW	02.13.24
10	ISSUED FOR TENDER	04.18.24
11	ISSUED FOR ADD#1	05.23.24

CITY OF VAUGHAN FIRE
STATION 7-12

CLIENT

MEP

Jain

7405 EAST DANBRO CRESCENT
MISSISSAUGA, ONTARIO, L5N 6P8
TEL. 905 285 9900, FAX 905 567 5246
Email : meh@jainconsultants.com

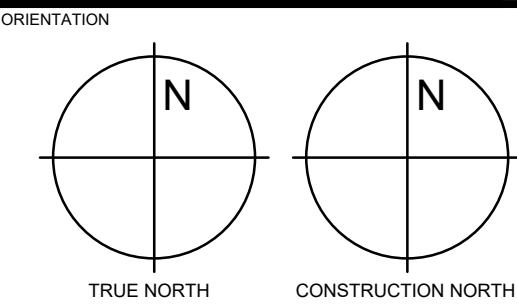
PROFESSIONAL SEAL

D. JAIN

21-237

DWG TITLE

SITE PLAN - ELECTRICAL



DATE	SCALE	1 : 300	DRAWN BY	CY	CHECKED BY	RH
DWG STATUS :						
PROJECT NO.						
DRAWING NO.	E1.1					
REVISION						

