

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	+	10 lux	31 lux	3 lux	10.3:1	3.3:1
Property Line	+	3 lux	4 lux	0 lux	N/A	N/A

PROVIDE 3-100mm DIRECT BURIED PVC DUCTS C/W PULL STRING 760mm BELOW GRADE FOR FUTURE PORTABLES ELECTRICAL, DATA, FIRE ALARM, SECURITY AND TELEPHONE/PA ARRANGEMENTS

COORDINATE EXACT LOCATION OF MANHOLES WITH ARCHITECTURAL DRAWINGS AND FINAL NUMBER OF PVC DUCTS WITH SCHOOL BOARD TO ENSURE SERVICE AVAILABILITY FOR FUTURE PORTABLES

- MANHOLE FOR COMMUNICATION SERVICES
- MANHOLE FOR FIRE ALARM SERVICES
- MANHOLE FOR ELECTRICAL SERVICES

REFER TO USI UTILITY PRODUCTS OR EQUIVALENT FOR MANHOLES C/W COVERS

- SPECIFIC NOTES:**
- PADMOUNT TRANSFORMER BY HYDRO ONE. PROVIDE TRANSFORMER BASE TO HYDRO ONE STANDARDS. PRECAST TRANSFORMER BASE AND BOLLARDS BY GENERAL CONTRACTOR. REFER TO 'SITE DETAILS' DRAWINGS FOR ADDITIONAL INFORMATION.
 - PROVIDE 4-100mm CONCRETE ENCASED PVC DUCTS 1000mm BELOW GRADE FOR HYDRO ONE PRIMARY CABLES. SEE 'SITE DETAILS' DRAWINGS FOR ADDITIONAL INFORMATION.
 - THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO INSTALL THE GROUNDING SYSTEM OF THE TRANSFORMER AS PER HYDRO ONE REQUIREMENTS & TO ACHIEVE A GROUNDING RESISTANCE OF LESS THAN 5 OHMS. ANY ROCK MATERIAL CLOSE TO THE SURFACE SHOULD BE EXCAVATED AND BACKFILLED WITH A SOIL MATERIAL THAT WILL HELP RETAIN MOISTURE.
 - PROVIDE DIRECT BURIED SECONDARY FEEDERS IN PVC DUCTS. REFER TO 'SINGLE LINE DIAGRAM' DRAWING FOR ADDITIONAL INFORMATION. SECONDARY FEEDERS REQUIRE COMPRESSION TYPE CONNECTORS AT THE PADMOUNT TRANSFORMER.
 - CONNECT TO NEW HYDRO INFRASTRUCTURE IN ACCORDANCE WITH HYDRO ONE REQUIREMENTS. SITE PLAN DRAWING TO BE READ IN CONJUNCTION WITH HYDRO ONE DISTRIBUTION PROPOSAL AND DETAILS.
 - PROVIDE 2-100mm DIRECT BURIED PVC DUCTS 760mm BELOW GRADE FOR TELEPHONE SERVICE FROM PROPERTY LINE TO BACKBOARD IN SALLE ELECTRIQUE. PROVIDE LONG SWEEP BENDS FOR COMMUNICATION DUCTS.
 - 2-100mm DIRECT BURIED PVC DUCTS TO TERMINATE AT PROPERTY BOUNDARY FOR BELL COMMUNICATION NODE/PEDESTAL. COORDINATE ALL THE SCOPE TO INTERCEPT SUBDUCT AND EXACT LOCATION WITH BELL CANADA AT TIME OF CONSTRUCTION. EXISTING BELL PEDESTAL IS APPROXIMATELY LOCATED BETWEEN 730 AND 730 JEROME JODOIN DRIVE.
 - APPROX. LOCATION OF GROUND FLOOR 'SALLE ELECTRIQUE' ROOM. REFER TO 'DETAILS' DRAWING.
 - TYPICAL - SEE 'SITE DETAILS' DRAWING E101 FOR CONCRETE BASE FOR LIGHT STANDARD. COORDINATE LIGHT POLE LOCATION WITH CATCH BASINS.
 - ALL EXTERIOR BUILDING MOUNTED AND POLE LIGHTING SHALL BE CONTROLLED BY PHOTOCELL / MOTION SENSOR AND SHALL AUTOMATICALLY 'TURN-OFF' THE LIGHTING WHEN SUFFICIENT DAYLIGHT IS AVAILABLE AND REDUCE CONNECTED LIGHTING POWER BY AT LEAST 30% DURING ANY PERIOD WHEN NO ACTIVITY HAS BEEN DETECTED FOR A TIME OF 15 MINUTES.
 - PROVIDE PHOTOCELL ON NORTH SIDE OF BUILDING.
 - INSTALL TYPE CC1 LIGHT FIXTURES APPROX. 4.87m ABOVE GRADE ON STONE FACADE. COORDINATE WITH ARCHITECTURAL ELEVATIONS DETAILS. LIGHT FIXTURES DO NOT REQUIRE DIMMING / MOTION SENSORS AND SHALL BE CONTROLLED BY PHOTOCELL ONLY.
 - PROVISIONS FOR ELECTRICAL CAR CHARGING STATIONS. PROVIDE DEDICATED 100mm DIRECT BURIED PVC DUCT TO EACH FUTURE STATION. INSTALL CONDUITS 760mm BELOW GRADE.

1 SITE PLAN
E100
SCALE: 1:250



CONSULTANT:



CLIENT REF: # N/A

PROJECT:
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675 MONARDIA WAY
OTTAWA, ONTARIO

CONSEIL DES ÉCOLES PUBLIQUES
DE L'EST DE L'ONTARIO
2445 BOUL. ST-LAURENT, OTTAWA, ON

KEY PLAN:

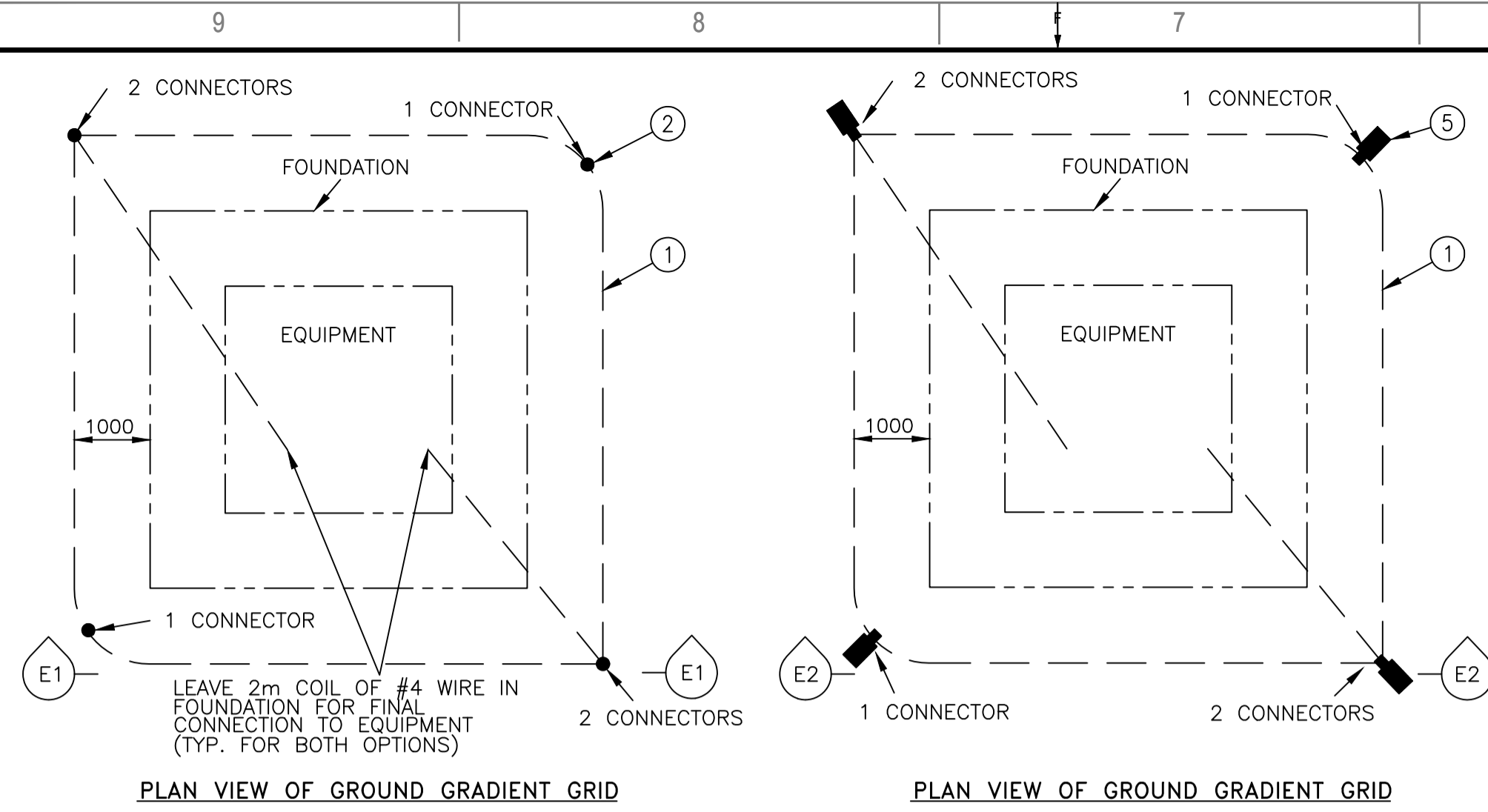
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IS	RE	DATE	DESCRIPTION
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4	-	2023-11-24	ISSUED FOR PHASE 3 SITE PLAN APPLICATION
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2	-	2023-09-21	ISSUED FOR SITE PLAN CONTROL
1	-	2023-07-19	ISSUED FOR SITE PLAN CONTROL

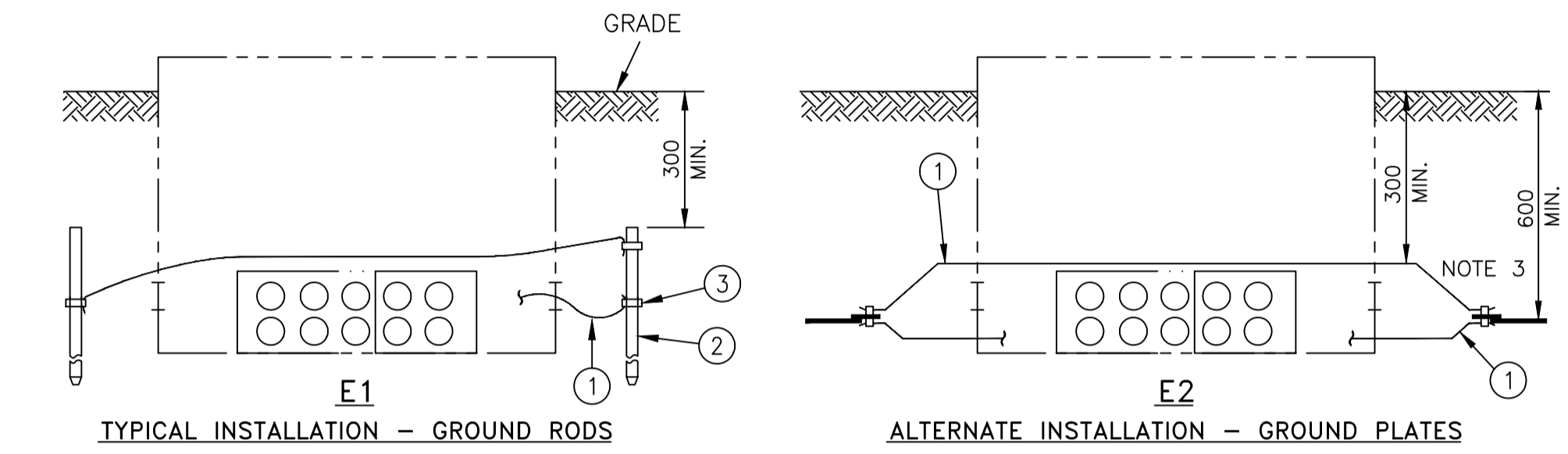
PROJECT NO:	DATE:
CA0003850.9668	JUNE 2023
ORIGINAL SCALE:	
AS SHOWN	IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
DESIGNED BY:	M.O.
DRAWN BY:	M.O.
CHECKED BY:	S.S.

DISCIPLINE:	TITLE:
ELECTRICAL	SITE PLAN
SHEET NUMBER:	E100
1 OF 3	
ISSUE:	ISSUED FOR SITE PLAN CONTROL
DATE OF:	2024-01-17



PLAN VIEW OF GROUND GRADIENT GRID

PLAN VIEW OF GROUND GRADIENT GRID



TYPICAL INSTALLATION - GROUND RODS

ALTERNATE INSTALLATION - GROUND PLATES

PARTS LIST			
PART No.	MM No.	DESCRIPTION	QTY.
1	30014488	BARE CONDUCTOR, COPPER, #4 AWG	A/R
2	30014142	ROD, GROUND, 19mm x 3m, GALV.	4
3	30006646	CONNECTOR, GRD. WEDGE, GROUND ROD TO #4 COPPER WIRE	6
4	30025402	GROUND ENHANCING MATERIAL (G.E.M.)	A/R
5	30025401	GROUND PLATE	4

MM# = REFER TO SECTION 16 ONLY / A/R = AS REQUIRED

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
- GAS PIPE LINES SHALL MAINTAIN MINIMUM 300mm (PREFERRED 600mm) SEPARATION FROM HYDRO ONE EQUIPMENT GROUND GRID.
- GROUND RODS MAY BE SUBSTITUTED WITH GROUND PLATES ONLY IF GROUND RODS CANNOT BE DRIVEN DUE TO ROCKY GROUND CONDITIONS. MAINTAIN 600mm MINIMUM NATIVE SOIL COVER OVER PLATES AND 300mm OVER GROUND WIRE(S). PLATES INSTALLED AT REDUCED DEPTH MUST BE INSTALLED PER 'INSET' D1.
- MECHANICAL PROTECTION (75mm 21 MPa CONCRETE) IS REQUIRED OVER PLATES AND GROUND WIRES FOR BURIAL DEPTHS LESS THAN 300mm.

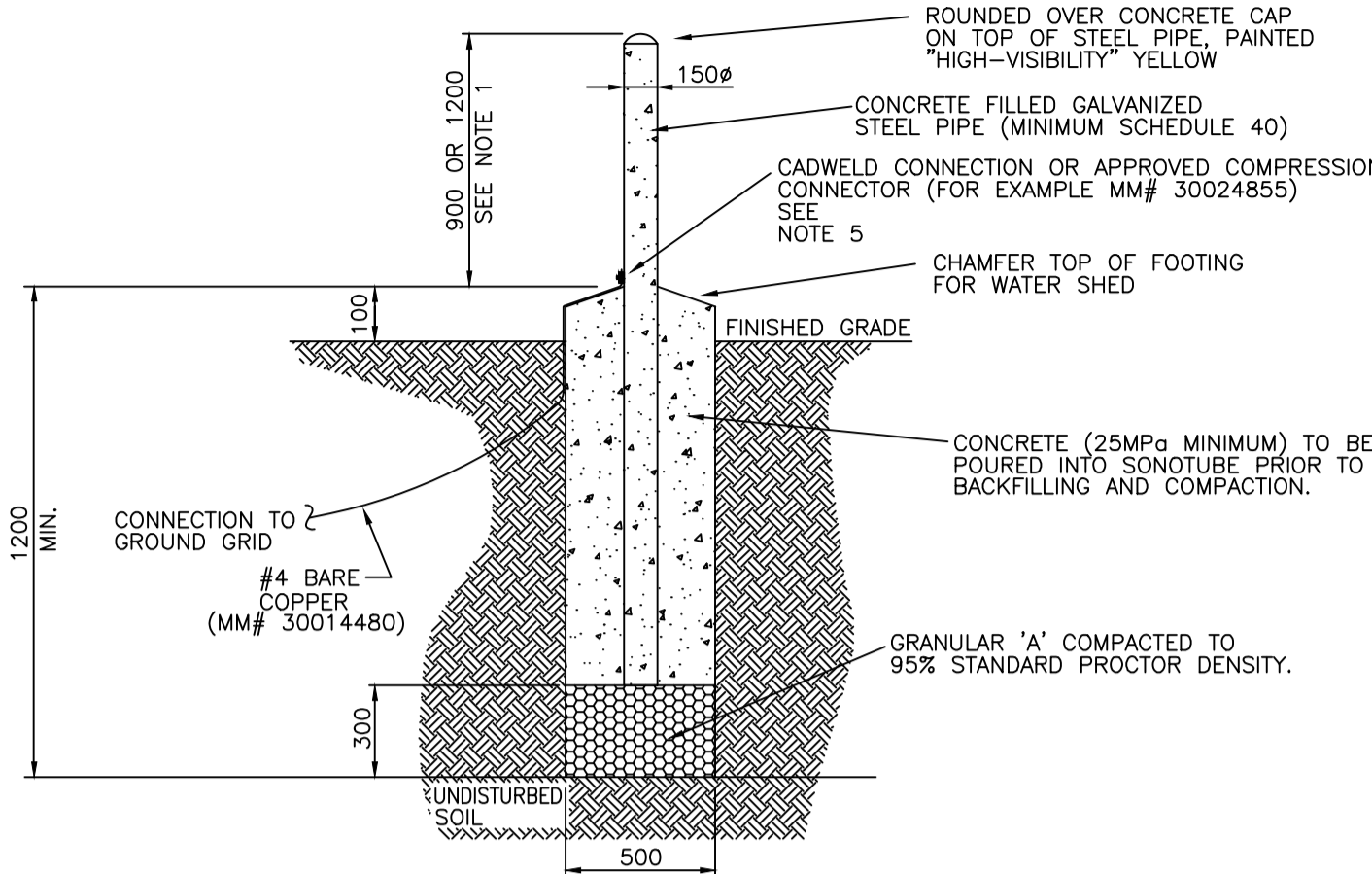
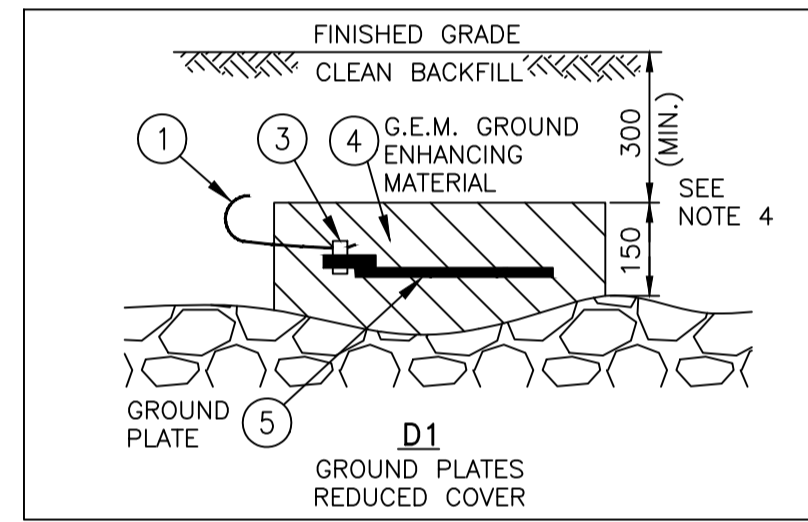


FIG.1 SECTION A-A ELEVATION VIEW

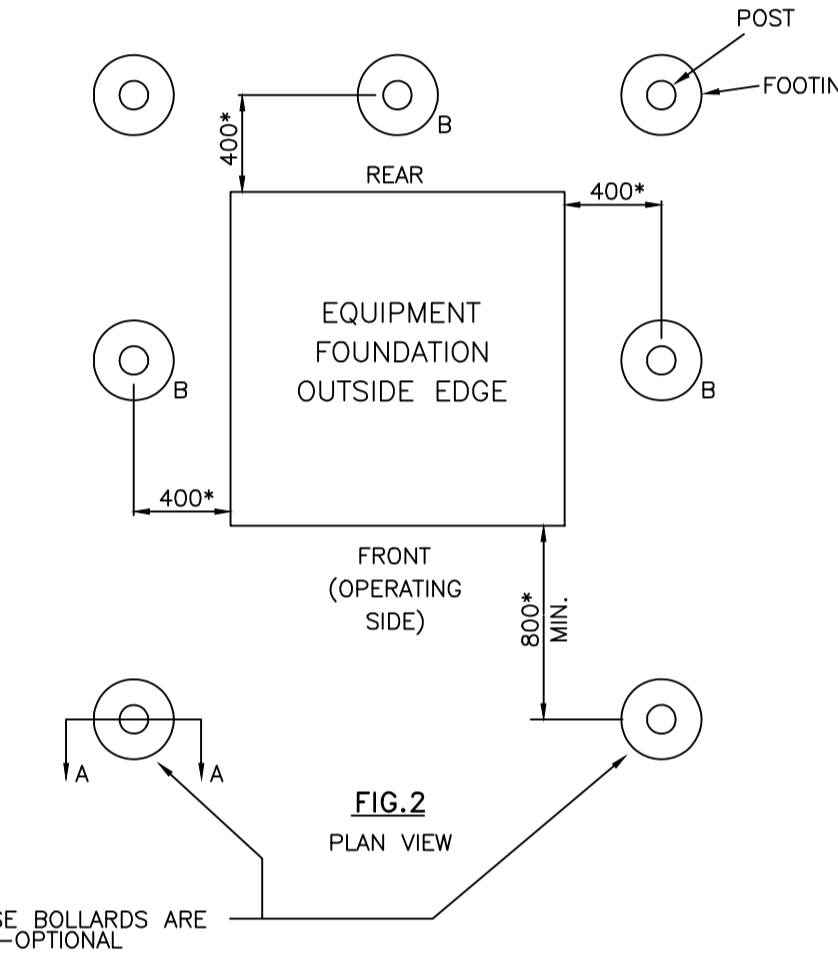
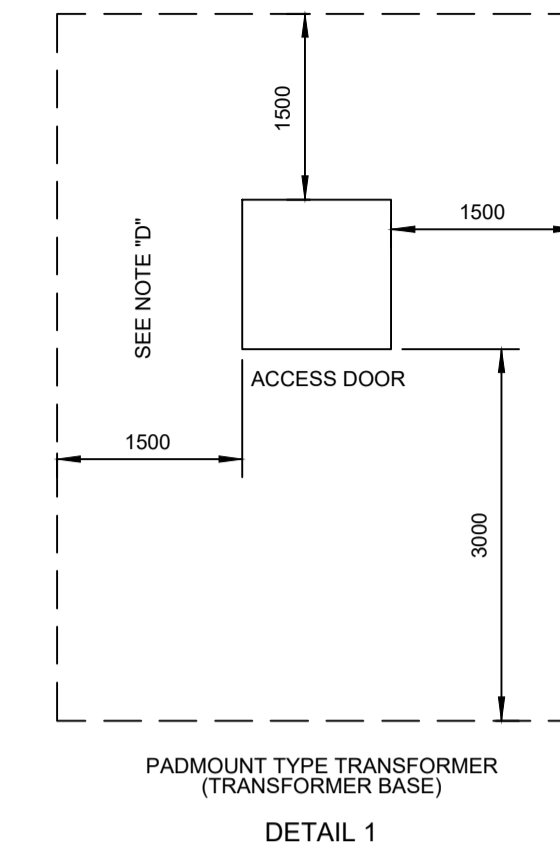


FIG.2 PLAN VIEW

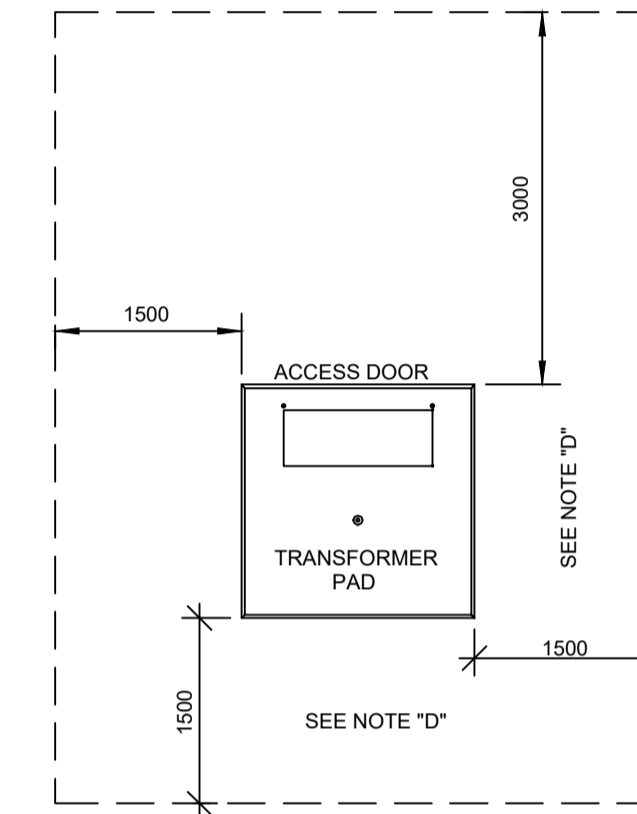
NOTES:

- PROTECTIVE BOLLARD HEIGHT ABOVE GRADE: FOR SINGLE PHASE EQUIPMENT - 900mm FOR THREE PHASE EQUIPMENT - 1200mm
- BOLLARDS SHALL BE PROVIDED AS SHOWN ON DESIGN DRAWINGS.
- BOLLARDS AT 'B' ARE OPTIONAL AND WOULD ONLY BE REQUIRED FOR HIGH TRAFFIC AREAS AND LARGE SIZED EQUIPMENT. BOLLARDS AT 'B' ARE GENERALLY NOT REQUIRED FOR SINGLE PHASE EQUIPMENT DUE TO THEIR SMALL SIZE. ALSO BOLLARDS AT THE REAR AND SIDE OF THE EQUIPMENT MAY BE OMITTED AT LOCAL DISCRETION IF THE LIKELIHOOD OF DAMAGE/IMPACT IS LOW.
- LOCATION OF BOLLARDS SHOULD NOT OBSTRUCT EQUIPMENT OPERATION, MAINTENANCE AND REPLACEMENT.
- WHEN USING COMPRESSION CONNECTOR DRILL THROUGH HOLE IN THE PIPE AND REMOVE PAINT FROM CONNECTION AREA OF THE PIPE.
- DIMENSIONS WITH * ARE PREFERRED TO BE 1500mm WHERE POSSIBLE

THESE BOLLARDS ARE NON-OPTIONAL SEE NOTE 3
ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED



DETAIL 1



PADMOUNT TRANSFORMER (TRANSFORMER BASE)

NOTES:

- ALL UNITS IN MILLIMETRES UNLESS OTHERWISE INDICATED.
- CLEARANCE REQUIRED FOR OPERATING/MAINTENANCE AND COOLING OF PADMOUNTED EQUIPMENT.
- NO PLANTING OR PERMANENT/TEMPORARY STRUCTURES INSIDE CLEARANCE AREA. MATURE GROWTH OF PLANTING SHALL NOT EXTEND INTO CLEARANCE AREA.
- FOR ALL SIDES WITH ACCESS DOORS, 3000mm CLEARANCE IS REQUIRED.
- ALL METAL FENCES OR CONDUCTIVE STRUCTURES WITHIN 2400mm OF EQUIPMENT SHALL BE BONDED TO GROUND.

1 HYDRO ONE DETAIL DU-14-101
SCALE: N.T.S.

2 HYDRO ONE DETAIL DU-03-212-0550
SCALE: N.T.S.

3 TRANSFORMER CLEARANCES DETAIL
SCALE: N.T.S.



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CONSULTANT:



CLIENT:
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CONSEIL DES ÉCOLES PUBLIQUES DE L'EST DE L'ONTARIO
2445 BOUL. ST-LAURENT, OTTAWA, ON

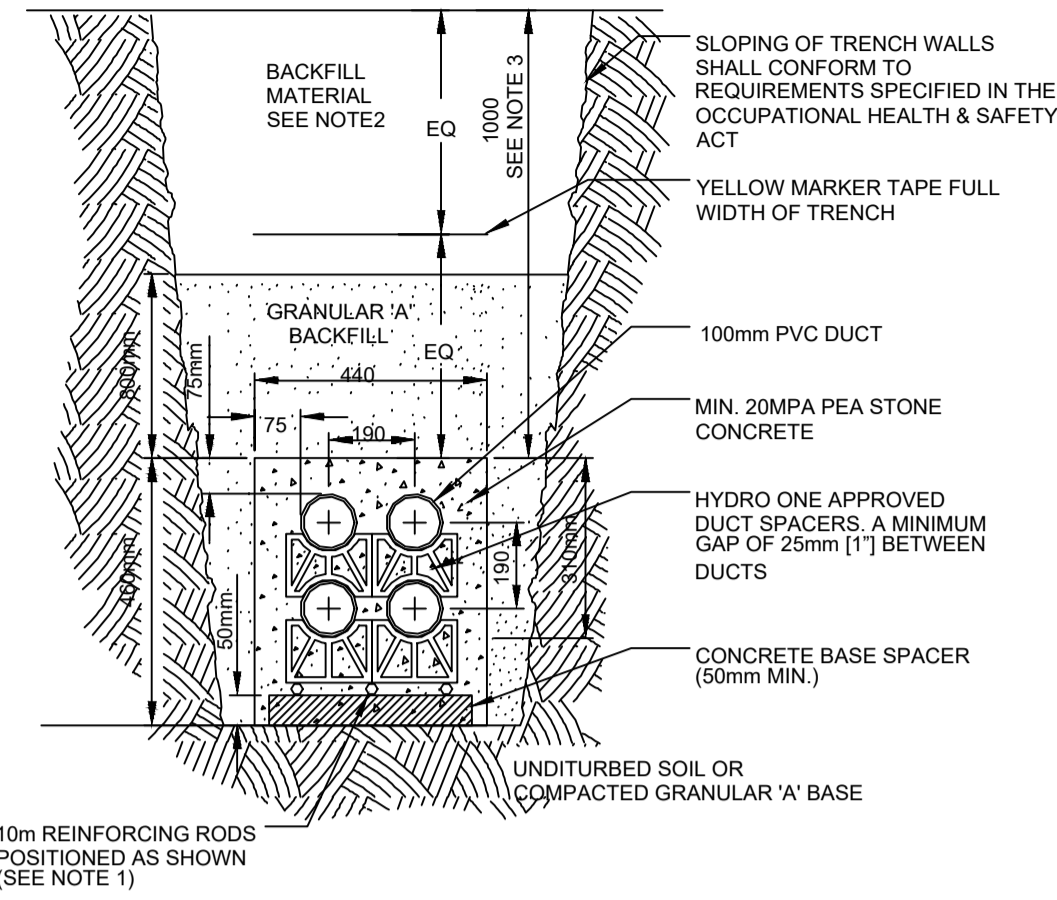
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PROJECT NO: CA0003850.9668	DATE: JUNE 2023
ORIGINAL SCALE: AS SHOWN	IF THIS BAR IS NOT 25mm LONG, ADJUST YOUR PLOTTING SCALE.
DESIGNED BY: M.O.	25mm
DRAWN BY: M.O.	
CHECKED BY: S.S.	

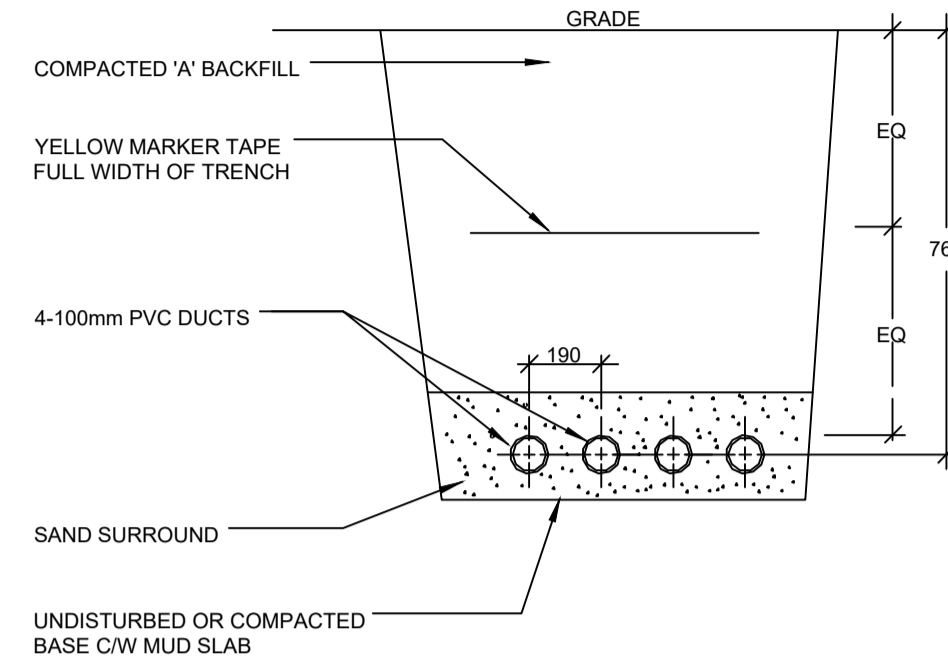
DISCIPLINE: ELECTRICAL
TITLE: SITE DETAILS
SHEET NUMBER: E101
ISSUE: ISSUED FOR SITE PLAN CONTROL
DATE OF: 2024-01-17



DETAIL NOTES:

1. REINFORCING RODS FULL LENGTH OF CONCRETE ENCASED DUCTS. OVERLAP JOINTS BY 150mm ON BASE SPACERS AND TIE BOTH ENDS. DRILL AND DOWEL RODS 65mm INTO WALL(S) OF CONCRETE STRUCTURE.
2. ALL BACKFILL MATERIAL MUST BE APPROVED BY HYDRO ONE INSPECTOR. FOR ACCEPTABLE BACKFILL MATERIAL.
3. STEEL PLATES ARE TO BE USED IF THE COVER OVER THE DUCT BANK IS LESS THAN 450mm. THE PLATES ARE TO BE 6.5mm (1/4") IN THICKNESS AND THE WIDTH OF THE DUCT BANK BEING COVERED. ANY DEVIATION FROM THE STANDARD COVER PF 760mm MUST BE APPROVED BY THE HYDRO ONE INSPECTOR.

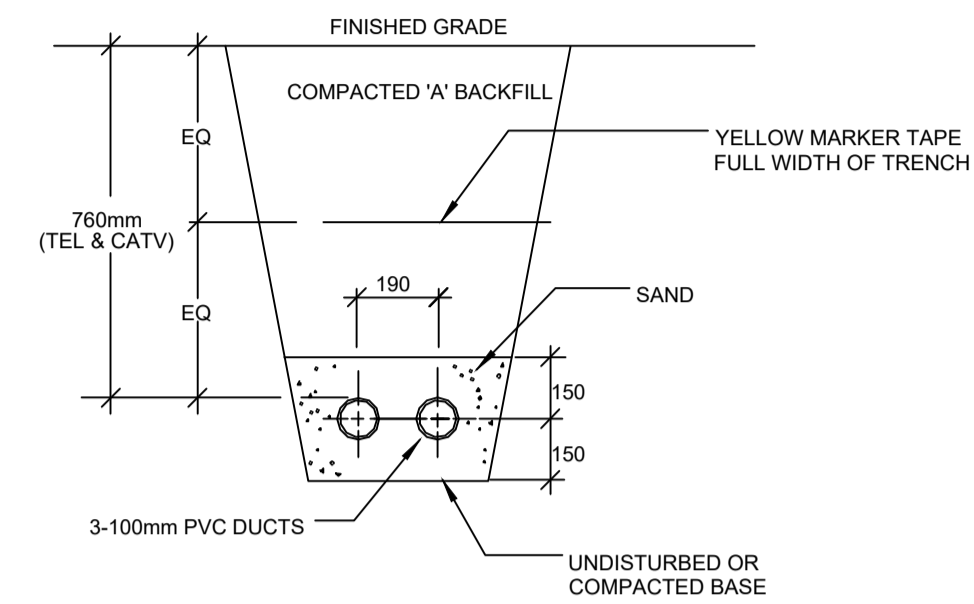
4 PRIMARY TRANSFORMER DUCT BANK SECTION
E102 SCALE: N.T.S.



DETAIL NOTES:

1. TRENCH AND DUCTS TO BE INSPECTED PRIOR TO SAND FILL BEING PLACED.
2. MAKE PROVISIONS FOR WORKING IN SANDY TERRAIN.
3. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
4. ALL DUCTS MUST BE CLEANED AND RODDED, AND A NYLON ROPE TO BE LEFT IN EACH DUCT.
5. FROM OESC DIAGRAM D10, DETAIL 4.

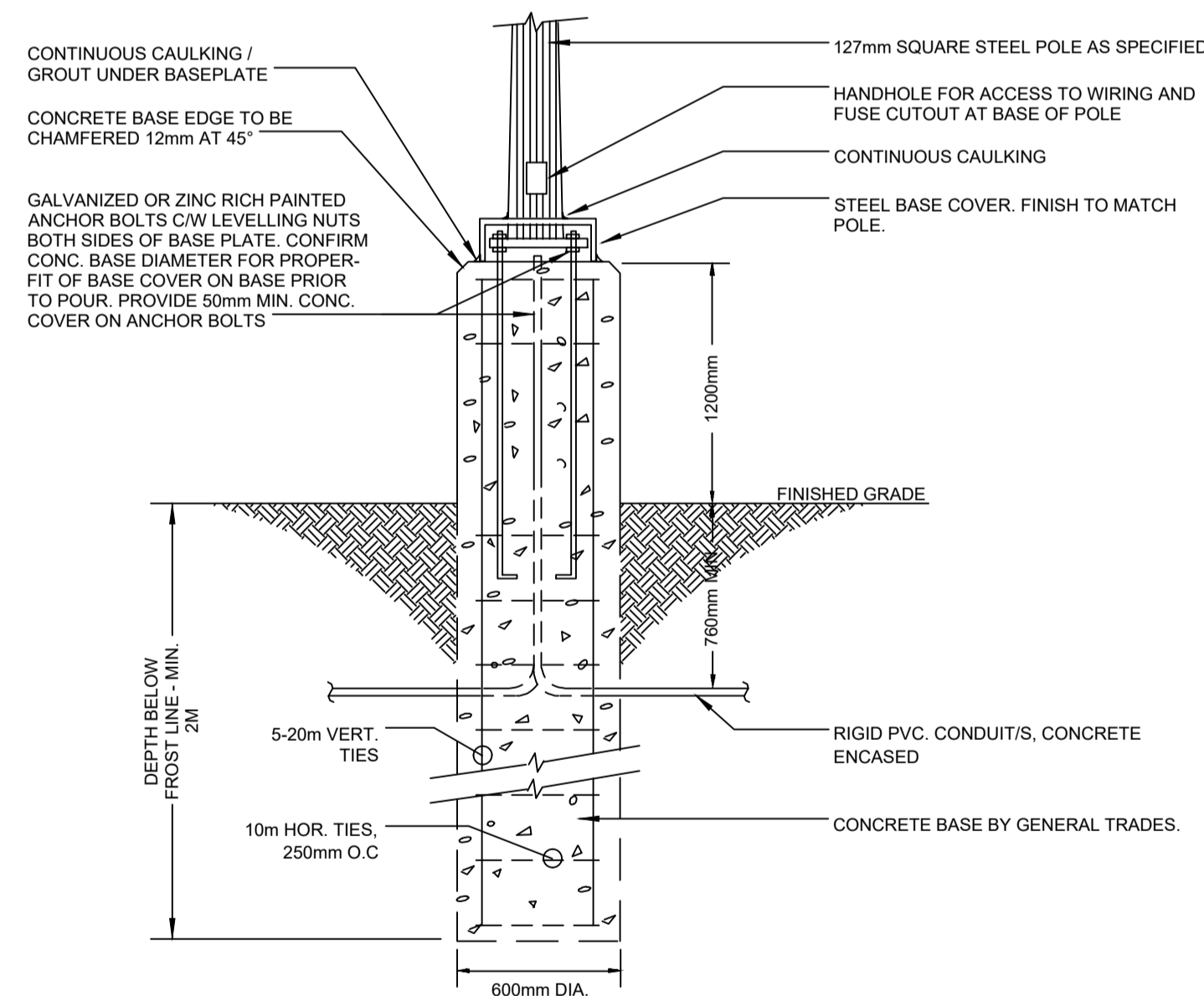
5 SECONDARY DUCT SECTION DETAIL
E102 SCALE: N.T.S.



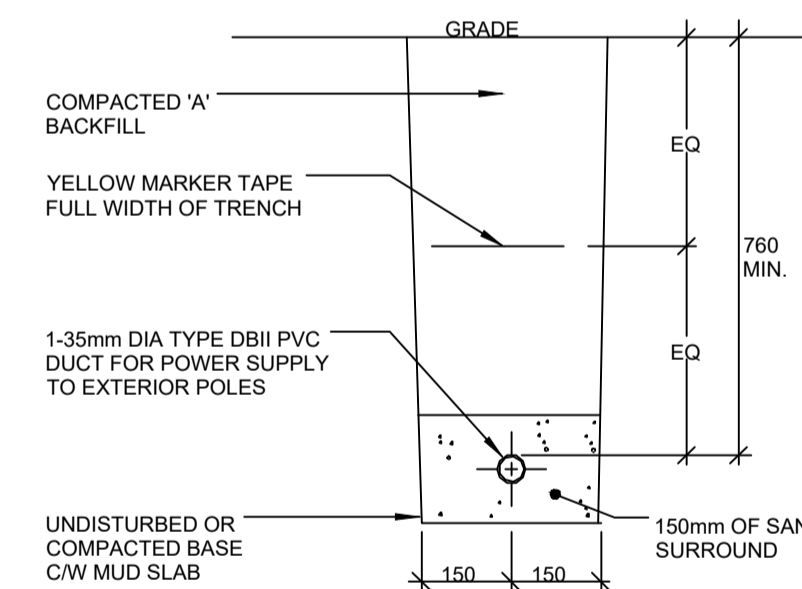
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2. MAKE PROVISIONS FOR WORKING IN SANDY TERRAIN.
3. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
4. ALL DUCTS MUST BE CLEANED AND RODDED, AND A NYLON ROPE TO BE LEFT IN EACH DUCT.

6 COMMUNICATIONS DUCT SECTION DETAIL
E102 SCALE: N.T.S.



7 EXTERIOR LIGHT STANDARD BASE DETAIL
E102 SCALE: N.T.S.



DETAIL NOTES:

1. TRENCH AND DUCTS TO BE INSPECTED PRIOR TO SAND FILL BEING PLACED.
2. MAKE PROVISIONS FOR WORKING IN SANDY TERRAIN.
3. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
4. ALL DUCTS MUST BE CLEANED AND RODDED, AND A NYLON ROPE TO BE LEFT IN EACH DUCT.

8 SERVICE TO LIGHT STANDARD DUCT SECTION
E102 SCALE: N.T.S.



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CONSULTANT:

SEAL:



CLIENT:



CLIENT REF. # N/A

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DRAWN BY: M.O.	
CHECKED BY: S.S.	

DISCIPLINE: ELECTRICAL

TITLE: SITE DETAILS

SHEET NUMBER: E102

SHEET # 3 OF 3

ISSUE: ISSUED FOR SITE PLAN CONTROL

DATE OF: 2024-01-17

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