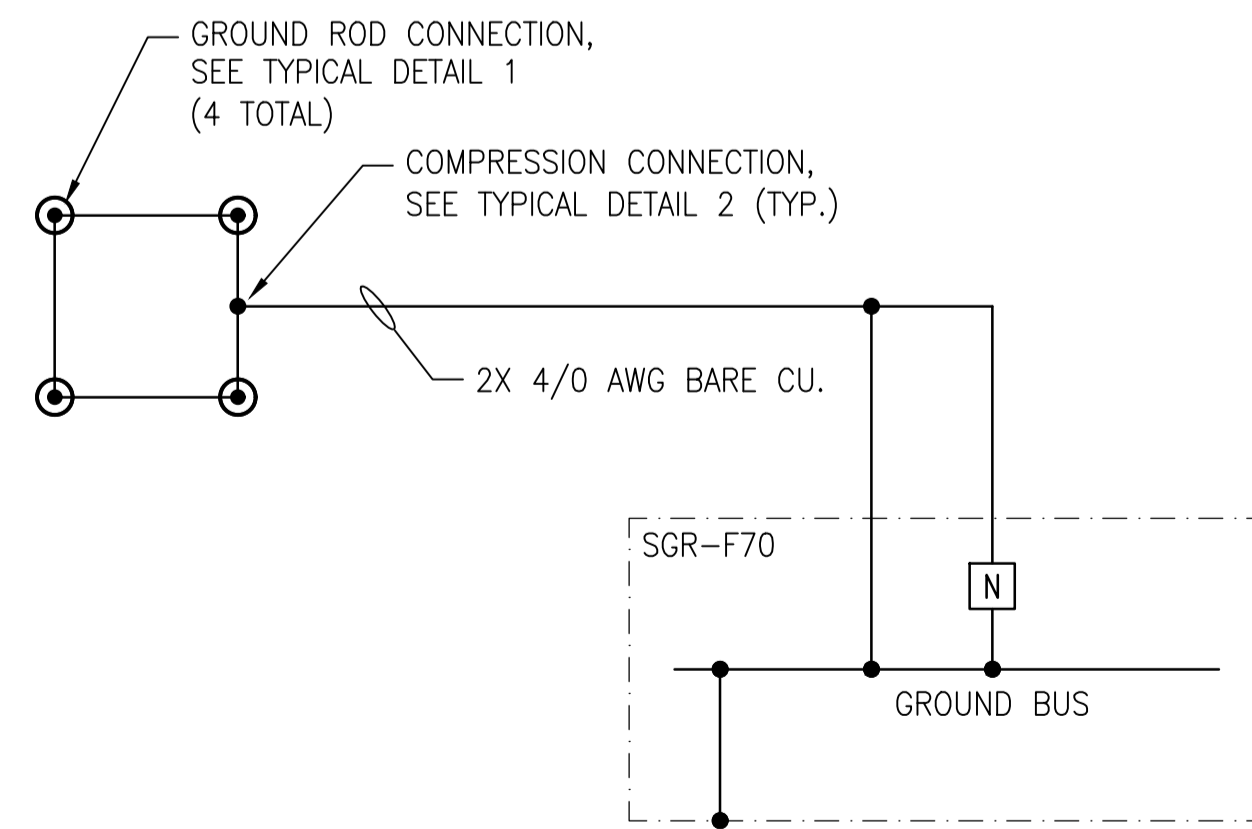
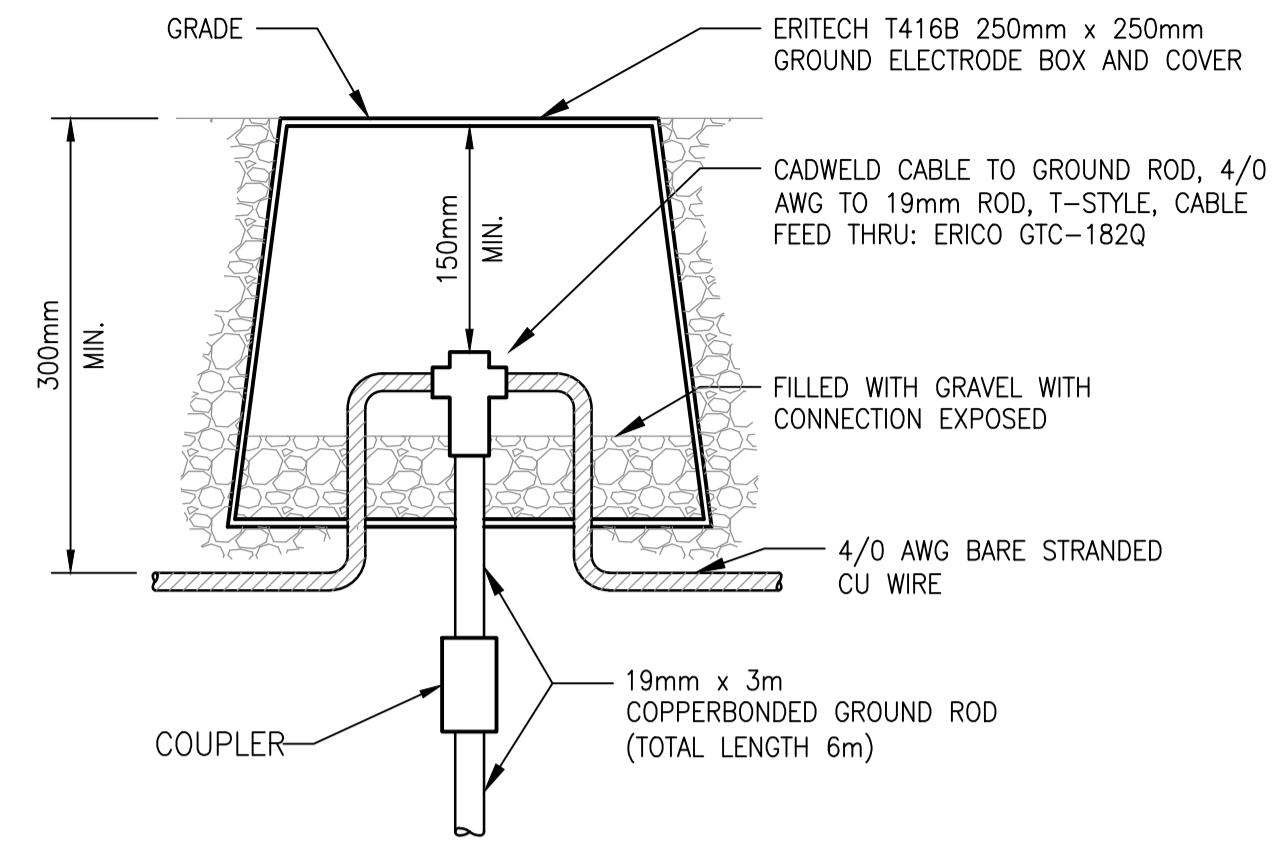
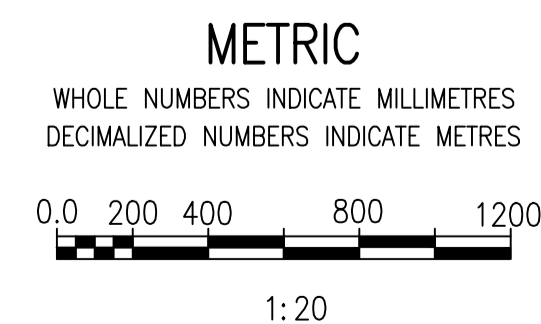


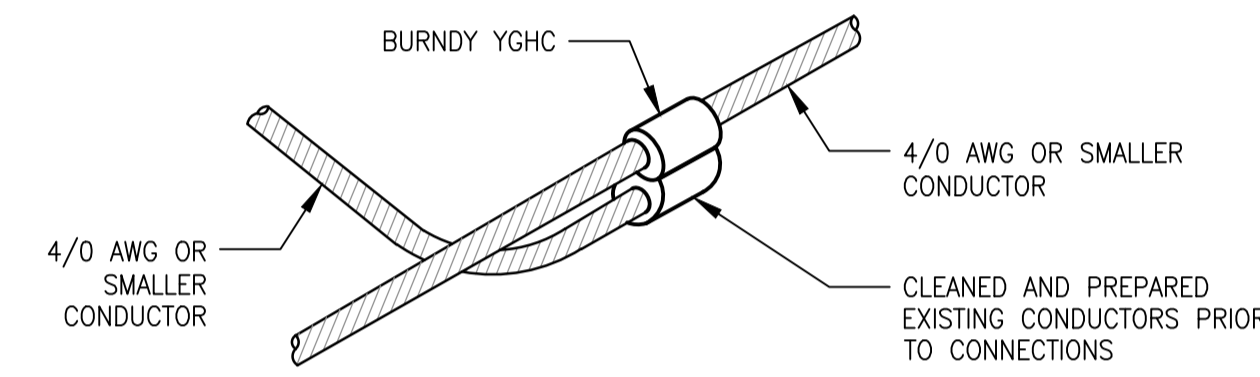
**SERVICE EQUIPMENT LAYOUT**  
SCALE: 1 : 20



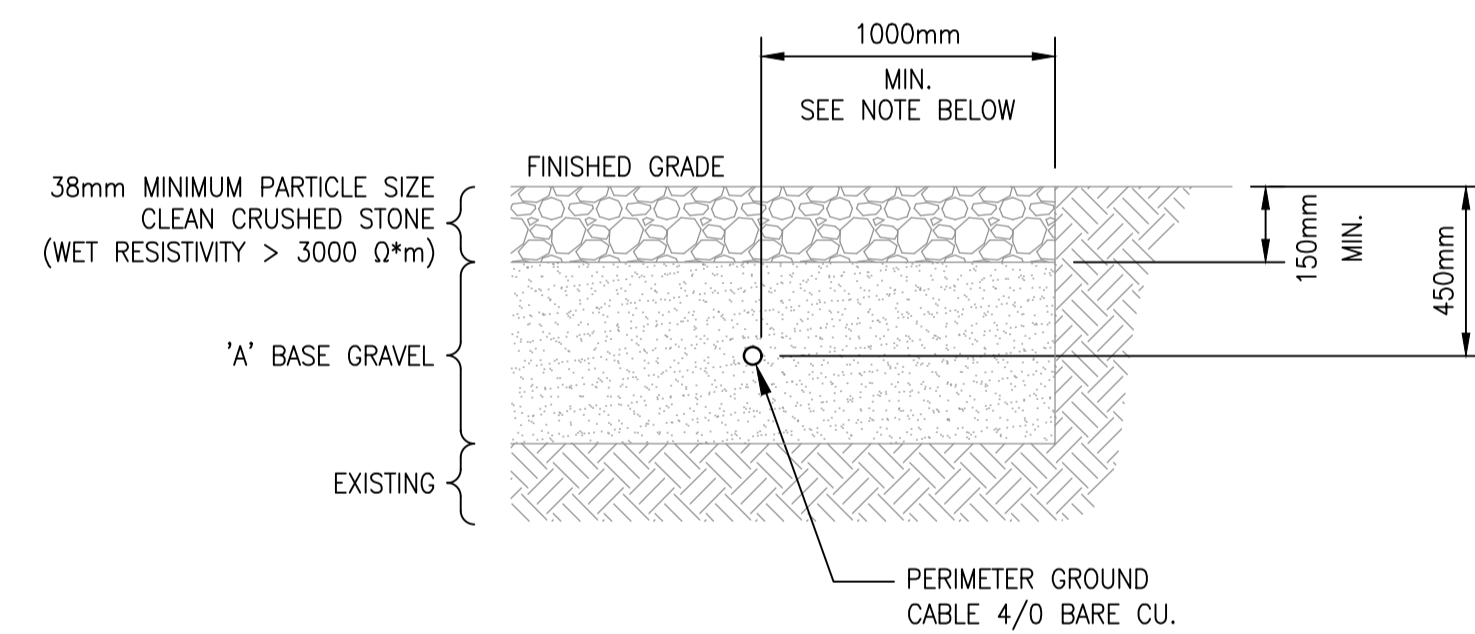
**LOW VOLTAGE EQUIPMENT GROUNDING**  
SCALE: N.T.S.



**1 GROUND ROD WITH GROUND WELL**  
SCALE: N.T.S



**2 GROUND CONDUCTOR SPLICE**  
SCALE: N.T.S



**3 PERIMETER GROUND CABLE INSTALLATION**  
SCALE: N.T.S

NOTE:  
CRUSHED STONE AND 'A' BASE MATERIAL TO EXTEND A MINIMUM OF 1000mm PAST PERIMETER GROUND CABLE.

**GENERAL NOTES:**

- COORDINATE EXACT LOCATION OF CONDUITS WITH EQUIPMENT SHOP DRAWINGS PRIOR TO CONCRETE POUR.
- TRANSFORMER CLEARANCES SHALL BE IN ACCORDANCE WITH CEC RULE 26-242(2)(b)(i).
- PERIMETER BURIED GROUND CABLE AND GROUND RODS SHALL BE INSTALLED AS PER DETAILS 1, 2 AND 3.
- ALL GROUND CABLES ARE BARE 4/0 AWG, COPPER, UNLESS OTHERWISE INDICATED.
- ALL SURFACE RUN CABLING SHALL BE PHYSICALLY PROTECTED BY EMBEDDING THE CABLE WITHIN THE CONCRETE SLAB, BY DIRECT BURIAL OR BY SURFACE RUN CONDUIT.
- EQUIPMENT DOOR OPENINGS ARE NOT SHOWN FOR CLARITY.
- ALL 4160 AND 600 VAC POWER CABLING AND CONDUIT IS NOT SHOWN FOR CLARITY. REFER TO OTHER DRAWINGS.

**CONSTRUCTION NOTES:**

- ALL PERIMETER GROUND CABLES SHALL BE BURIED BELOW FINISHED GRADE. ALL BELOW GRADE CONNECTIONS SHALL BE COMPRESSION OR CADWELDED.
- PROVIDE 4/0 AWG BARE COPPER GROUND RUN IN 53mmØ CONDUIT SLEEVE FROM ELECTRICAL EQUIPMENT TO GROUND GRID. PROVIDE TWO (2) SEPARATE GROUNDING CONNECTIONS FOR EACH PIECE OF EQUIPMENT. EQUIPMENT SHALL BE GROUNDED TO TWO (2) DIFFERENT GROUNDING CONDUCTOR RUNS.
- PROVIDE CONDUIT EMBEDDED IN CONCRETE SLAB FOR PRIMARY CABLE FROM THE 5KV SWITCHGEAR SGR-F70 FUSIBLE DISCONNECT TO TRANSFORMER XFMR-F70. EXACT LOCATIONS SHALL BE DETERMINED FROM THE SHOP DRAWINGS OF THE TRANSFORMER AND 5KV SWITCHGEAR. PROVIDE WATERPROOF SEALING OF CABLES AFTER INSTALLATION.
- THE CONDUIT SLEEVES FOR INCOMING AND OUTGOING CABLING SHALL BE EXTENDED 500mm PAST THE EDGE OF THE CONCRETE PAD AND SEALED AROUND THE CABLING.
- PROVIDE WARNING SIGNS IN ACCORDANCE WITH CSA 22.1, RULE 36-006.

**LEGEND:**

- 4/0 AWG BARE STRANDED COPPER GROUND CABLE
- 6000mm LONG (19mm Ø) COPPER CLAD GROUND ROD WITH GROUND WELL
- CABLE COMPRESSION CONNECTION
- CADWELD OR SERVIC CONNECTION

<p>148 Nature Park Way, Winnipeg, Manitoba Canada R3P 0X7 204-786-8080</p>				ENGINEER'S SEAL	
				<p>COLONY FLOOD PUMPING STATION 2025 TRANSFORMER REMEDIATION UPGRADES ELECTRICAL &amp; GROUNDING INSTALLATION DETAILS</p>	
DESIGNED BY: P. GILL		CHECKED BY: V. ELIMBAN		CITY DRAWING NUMBER 1-0128F-E0003	
DRAWN BY: K. MOHAMMED		APPROVED BY: D. BECKER			
SCALE: AS NOTED		ISSUED FOR CONSTRUCTION BY: B. SOLOWAY		REV. 00	SIZE A1
DATE: 2024/10/02		DATE: 2024/12/20		CONSULTANT NO.: 701408	
00	ISSUED FOR TENDER AND CONSTRUCTION	2024/12/20	PG	VE	
NO.	REVISIONS	DATE	DESIGN	CHECK	