

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

2. MINIMUM DIRECT EMBEDMENT DEPTHS FOR VARIOUS POLES ARE CALCULATED BASED ON HORIZONTAL FORCES ON THE TIP OF THE POLE (SERVICEABILITY STRENGTH), HEIGHT ABOVE GROUND, BEARING STRENGTH OF SOIL (fb) 150kPa AND EFFECTIVE WIDTH OF FOOTING (b) 0.6m. FOR FURTHER DETAILS, PLEASE REFER TO OVERHEAD LINE DESIGN MANUAL – PO07132.

3. SOIL CLASSIFICATION MUST BE CONFIRMED BY INSPECTION DURING CONSTRUCTION.

TABLE 1: SOIL CLASSIFICATION FIELD GUIDE

CLASS	DESCRIPTION	BEARING STRENGTH (kPa)	FIELD GUIDE
VERY SOFT	SILTY CLAYS AND SANDS; LOOSE DRY SANDS	$fb \leq 60$	EXUDES BETWEEN FINGERS WHEN SQUEEZED BY HAND
SOFT	WET CLAYS: SILTY LOAMS; WET OR LOOSE SANDS	$60 < fb \leq 100$	CAN BE MOULDED BY LIGHT FINGER PRESSURE
FIRM	DAMP CLAYS; SANFY CLAYS; DAMP SANDS	$100 < fb \leq 150$	CAN BE MOULDED BY STRONG FINGER PRESSURE
VERY FIRM	DRY CLAYS; CLAYEY SANDS; COARSE SANDS; COMPACTED SANDS	$150 < fb \leq 240$	CANNOT BE MOULDED BY FINGERS, CAN BE INDENTED BY THUMB.
HARD	GRAVELS; DRY CLAYS	$240 < fb$	CAN BE INDENTED WITH DIFFICULTY BY THUMB NAIL

4. ALL HOLES MUST BORED VERTICALLY TO MEET THE DEPTH (L) AND WIDTH (b) OF 0.6m SPECIFIED IN THIS DRAWING AND TABLE 2. (USE A LARGER DIAMETER AUGER FOR POOR BEARING SOILS OR VISE VERSA).

TABLE 2: MINIMUM EMBEDMENT DEPTHS

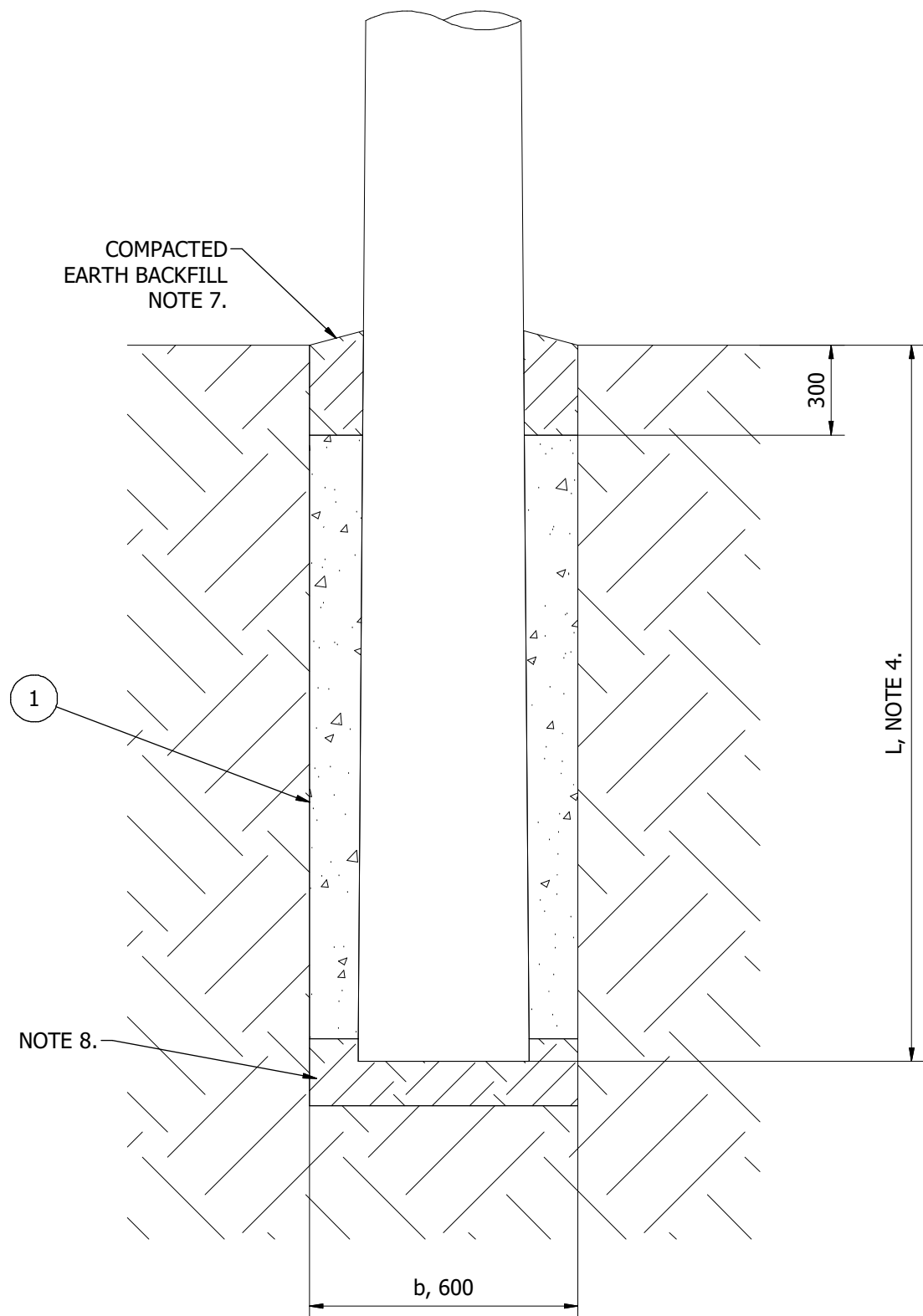
APPLICATION AND HOLE TYPE	POLE HEIGHT (m)	HORIZONTAL FORCE Hr (kN)	EMBEDMENT DEPTH 'L' (m)
LV - TYPE 1	9.5	8	1.6
LV - TYPE 1	9.5	12	2.0
LV - TYPE 1	11	8	1.8
HV/LV - TYPE 4/4C (SWITCHGEAR)	12.5	8	2.0
HV/LV - TYPE 4	12.5	12	2.3
HV/LV - TYPE 3C (SUBSTATION)	12.5	8	2.2
HV/LV - TYPE 4S	14	8	2.8
HV/LV - TYPE 4S	15.5	8	2.1

5. ALL HOLES MUST BE CLEANED OF DEBRIS & SOIL REMOVED FROM THE HOLE & HOLE EDGES.

6. BACKFILL MATERIAL MUST BE FINE CRUSHED ROCK "DGB20 ROAD BASE" TO EVOENERGY SPECIFICATION QUARRY PRODUCTS AND RAW MATERIALS - PO07330.

7. THE BACKFILL IS TO BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 200mm LOOSE THICKNESS, TO A DENSITY NOT LESS THAN 90% MODIFIED MAXIMUM DRY DENSITY, UP TO A DEPTH OF 300mm FROM GROUND LEVEL.

8. FOR EARTHING CONNECTION, EARTH BUTT PLATE OR EARTH STAKE MUST MAKE FIRM CONNECTION WITH NATURAL GROUND, AVOID CONNECTION WITH CRUSHED ROCK BACKFILL.



ITEM	UA TYPE	DESCRIPTION	STOCK CODE	QTY	DRAWING NO
1	P	FINE CRUSHED ROCK (ROAD BASE) DELIVERED	-	0.4m ³	D109-0002

No.	DESCRIPTION	CKD	AUTH	DATE
D	GOOD EARTH REMOVED FROM MODEL- BOM UPDATED	NAA	WJC	12/07/2021
F	MINOR UPDATE TO TABLE 1	MTS	NAA	8/08/2022
G	ADDED FRC POLE DETAIL	NAA	WJC	13/01/2023
H	NOTATION AND TABLES REVISED	NAA	WJC	31/01/2024

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Branch Manager:	
Old Drawing No. and Revision:	Rev

STANDARD CONSTRUCTION, DISTRIBUTION OVERHEAD, CONDUCTORS AND ACCESSORIES, SA, POLE FOUNDATION, CONCRETE AND FIBRE REINFORCED CEMENT POLES

Scale:	NTS	Date:	5/03/2014	Sheet No.:	
Project No.:		Stock Code:			
Status:	Current				
A2	D204-0014			Rev	H