

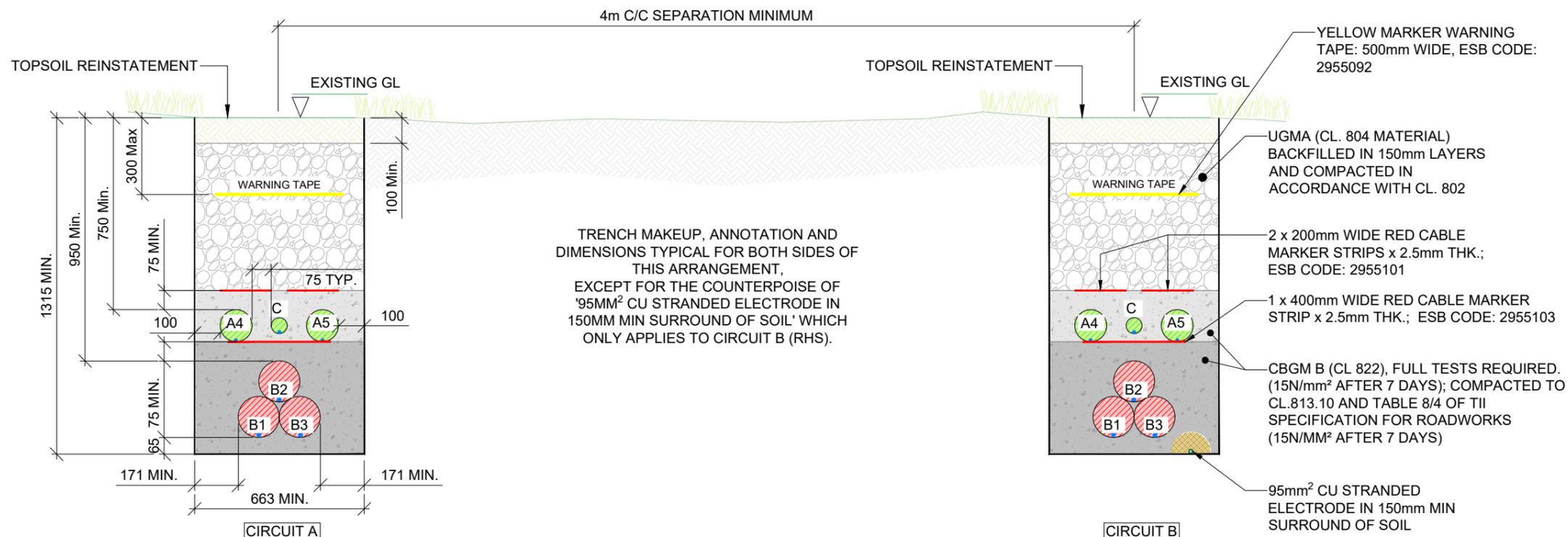
**NOTE HEALTH & SAFETY**

TEMPORARY WORKS DESIGN CERTIFICATE REQUIREMENTS FOR CABLE ROUTE:

ALL TEMPORARY WORKS ARE THE RESPONSIBILITY OF THE CONTRACTOR. HE SHALL PROCURE A TWDC AS REQUIRED BASED ON HIS PROPOSED WORKS METHODOLOGY. ON THE ASSUMPTION THAT BATTERING OF EXCAVATIONS WILL NOT OCCUR THEN A TWDC WILL BE REQUIRED FOR ALL TRENCH EXCAVATIONS. TWDCS WILL ALSO BE REQUIRED FOR THE USE OF TRENCH BOXES.

**NOTES:**

1. MARKER POSTS AS PER ESB NETWORKS SPECIFICATIONS TO BE PLACES AT EVERY WATER COURSE / CABLE CROSSINGS.
2. TEMPLATES ARE TO BE USED TO MAINTAIN STANDARD TRENCH ARRANGEMENT WHEN LAYING THE DUCTS. 2 TEMPLATES TO BE USED EVERY 6m.
3. A MINIMUM CLEARANCE OF 300mm FROM OUTERMOST POWER DUCT EDGE TO OTHER NORMAL SERVICE SHALL BE STRICTLY OBSERVED. A CLEARANCE OF 600mm FROM OUTER MOST POWER DUCT EDGE TO TRANSMISSION HIGH PRESSURE INFRASTRUCTURE SERVICES SHALL BE OBSERVED.
4. ENSURE THAT THERE IS A MINIMUM HORIZONTAL DISTANCE OF 500mm FROM THE EDGE OF THE CABLE TRENCH TO BOTTOM OF AN EXISTING EMBANKMENT.
5. ENSURE THAT THERE IS A MINIMUM HORIZONTAL DISTANCE OF 1000mm FROM THE EDGE OF THE CABLE TRENCH TO THE EDGE OF AN EXISTING ROADSIDE DRAIN.



TRENCH MAKEUP, ANNOTATION AND DIMENSIONS TYPICAL FOR BOTH SIDES OF THIS ARRANGEMENT, EXCEPT FOR THE COUNTERPOISE OF '95MM<sup>2</sup> CU STRANDED ELECTRODE IN 150MM MIN SURROUND OF SOIL' WHICH ONLY APPLIES TO CIRCUIT B (RHS).

A = 125mm OUTER DIAMETER HDPE ESB APPROVED DUCT WITH 12mm DIAMETER PULL ROPES, SDR = 17.6, ESB CODE: 9317553  
 B = 160mm OUTER DIAMETER HDPE ESB APPROVED DUCT WITH 12mm DIAMETER PULL ROPES, SDR = 21, ESB CODE: 9317709  
 C = 63mm OUTER DIAMETER HDPE ESB APPROVED DUCT WITH 12mm DIAMETER PULL ROPES

**TYPICAL DOUBLE 110kV CIRCUIT, TREFOIL ARRANGEMENT IN OPEN GROUND DETAIL**

SCALE 1:20

| P03                   | 05.06.2025 | ISSUED FOR INFORMATION | S.R. | I.B. |
|-----------------------|------------|------------------------|------|------|
| P02                   | 03.09.2024 | ISSUED FOR INFORMATION | S.S. | I.B. |
| P01                   | 16.05.2024 | ISSUED FOR INFORMATION | D.C. | I.B. |
| REV                   | DATE       | DESCRIPTION            | BY   | APP  |
| CLIENT                |            |                        |      |      |
| NORTH KILDARE WF LTD. |            |                        |      |      |

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|----------|----------------------------------------------------------------------------|
| PROJECT: | DREHID SUBSTATION                                                          |
| TITLE:   | DOUBLE 110kV CIRCUIT, TREFOIL DUCTS ARRANGEMENT IN SECTION FOR OPEN GROUND |

|                              |       |          |          |             |      |
|------------------------------|-------|----------|----------|-------------|------|
| DRAWN:                       | S.M.  | CHECKED: | D.C.     | APPROVED:   | I.B. |
| PROJECT NUMBER:              | 23727 | DATE:    | MAY 2024 | SCALE @ A3: | 1:20 |
| STATUS DESCRIPTION           |       |          |          | STATUS:     |      |
| FOR INFORMATION              |       |          |          | S2          |      |
| DRAWING NUMBER:              |       |          |          | REV:        |      |
| 23727 - MWP -GR-00-DR-C-2420 |       |          |          | P02         |      |