

PROJECT

Clondardis 110kV
 Substation

CLIENT



CONSULTANTS



NOTES: -

LEGEND: -

ISSUE/REVISION

NO	DATE	DESCRIPTION
PO0	07.03.23	Issued for Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER

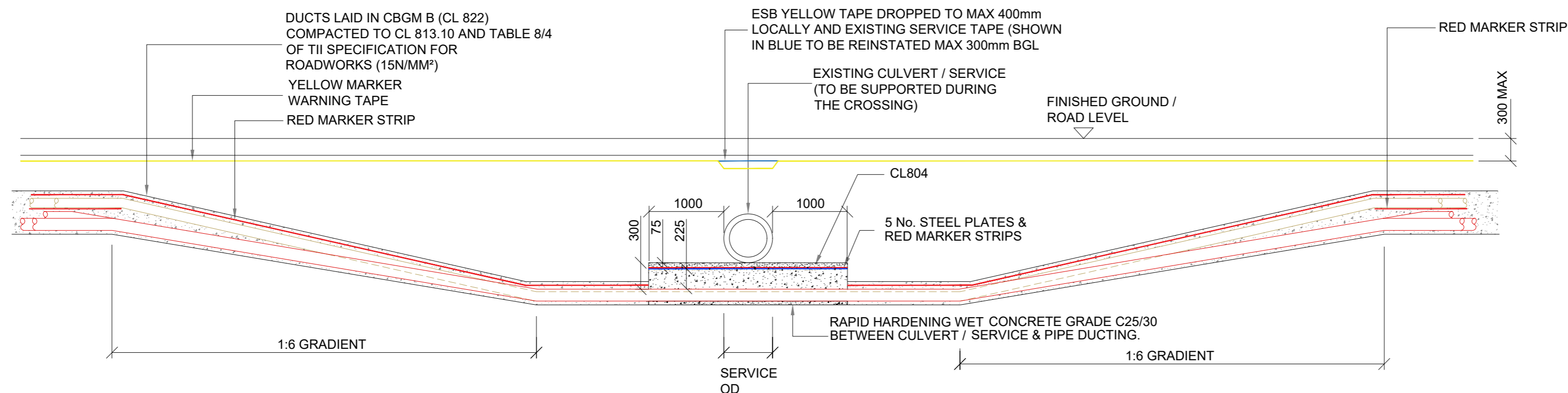
05-916

SHEET TITLE

Trench Sections For Crossing
 Existing Culverts / Services
 Undercrossing

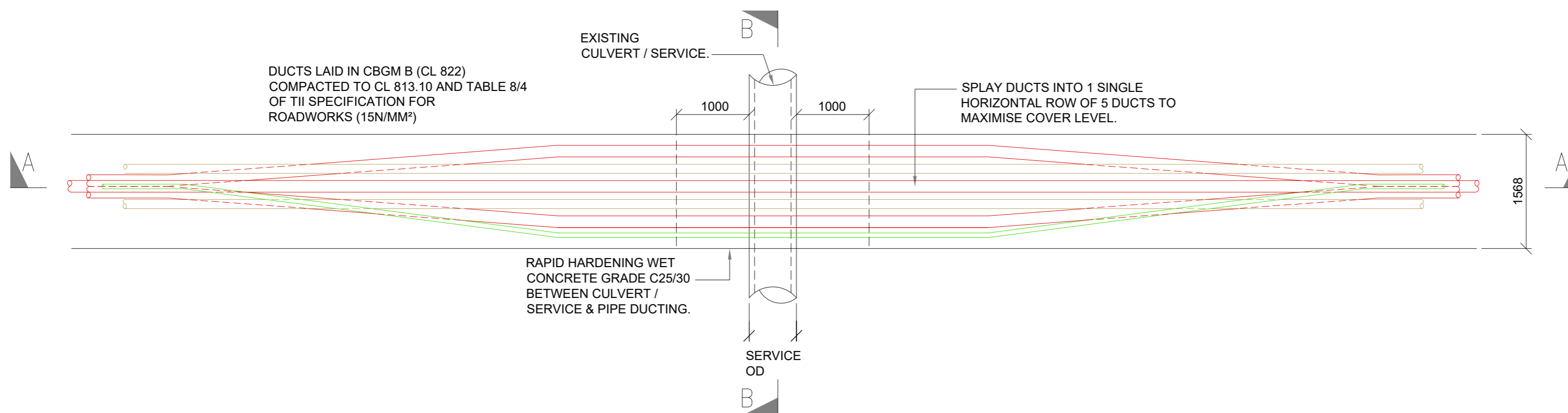
SHEET NUMBER

05916-DR-219



SECTION A-A

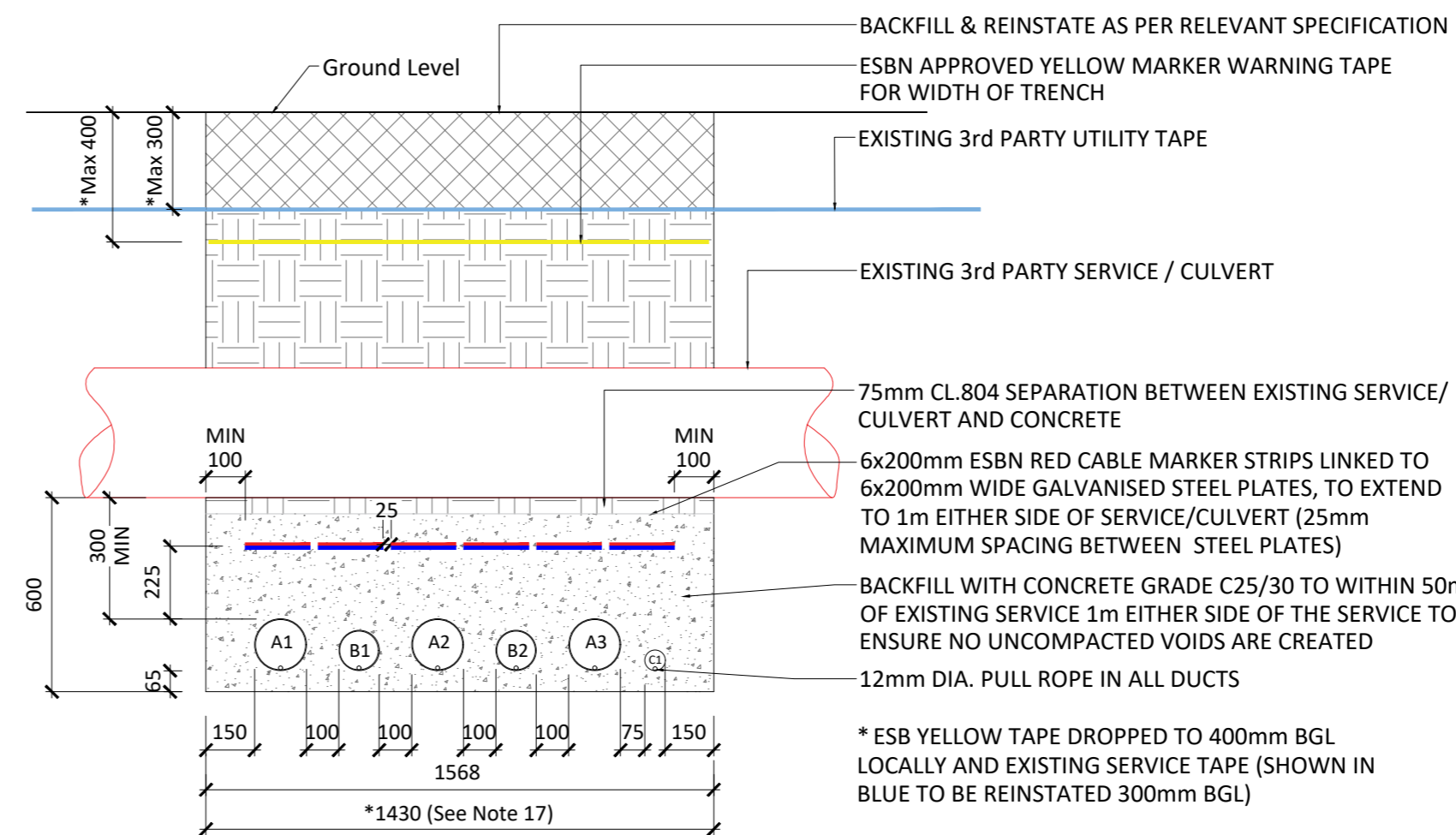
SCALE 1:50



PLAN VIEW

SCALE 1:50

SERVICE UNDERCROSSING



SECTION B - B

SCALE: 1:20

A = 125mm OUTER DIAMETER HDPE ESB APPROVED COMMS DUCT, SDR=17.6
 B = 160mm OUTER DIAMETER HDPE ESB APPROVED POWER DUCT, SDR=21
 C = 63mm OUTER DIAMETER HDPE FOR EARTH CONTINUITY CONDUCTOR

LEGEND

- 160mm Ø HDPE POWER DUCT WITH 12mm DIAMTER PULL ROPE
- 125mm Ø HDPE COMMUNICATION DUCT WITH 12mm DIAMTER PULL ROPE
- 63mm Ø HDPE EARTH CONTINUITY CONDUCTOR WITH 12mm DIAMTER PULL ROPE
- RED MARKER STRIP OR STEEL PLATES
- YELLOW MARKER WARNING TAPE
- 6mm GALVANISED STEEL PLATE
- EXISTING SERVICE TAPE

GENERAL NOTES

1. This drawing is subject to ESB design approval and is not to be used for construction.
2. This drawing is to be read in conjunction with all other relevant documentation.
3. Do not scale from this drawing use only printed dimensions
4. All dimensions are in millimetres, all chainages, levels and co-ordinates are in metres unless defined otherwise.
5. No excavation shall commence until the Contractor has consulted up to date services drawings and carried out an Electromagnetic Locator (EML) Scan.
6. Hand dig only within 500mm of existing services.
7. If compacting CBGM B could cause damage to the culvert / service below, use rapid hardening cement grade C25/30 following engineers prior approval.
8. For standard trench cross section drawings and minimum horizontal separation to existing services, see 05852-DR-210 (TREFOIL) and 05852-DR-204 (FLAT).
9. Where depths exceed 2500mm to the top of duct the Contractor shall consult the cable system design engineer for phase spacing requirements.
10. Backfill as per guidelines for the opening, backfilling and reinstatement of openings in public roads (2015).
11. **ESB's preference is to cross under existing services where possible.**
12. The Contractor is responsible for the design and construction of all temporary works. The Contractor shall appoint a temporary works designer, and submit temporary works design to PSDP for review.
13. 225mm minimum concrete over ducts where they transition from standard cross section and where they are at less than standard cover to ground level.
14. Replace existing service marker tape over ESB yellow marker tape.
15. The owner of the existing utility being crossed must be consulted in advance of works commencing as per their guidelines.
16. The Contractor shall record detailed as-built information as per the specification. At all crossing locations these records shall include photographic evidence clearly demonstrating that minimum service clearances and duct separations have been achieved.
17. Where duct for Earth Continuity Conductor (ECC) is required for single point bonded sections, attach the 63mm ECC duct to the B1 duct and update the trench width accordingly.