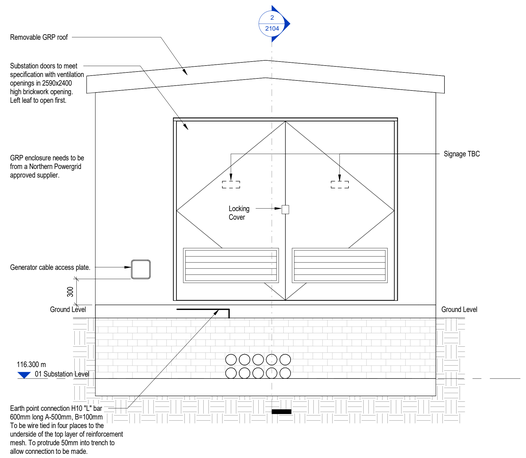
Graphical Scale 1:25 — 0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.5 2.0m

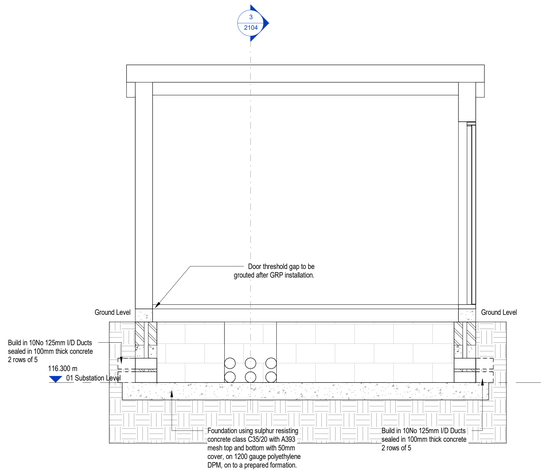
Drawn by : CP | Date : 17.09.2024 | Scale : As indicated | ⊘ A0

Status	Preliminary	Presentation	Tender	Construction	Last Issue
Date : 17.09.24					
Approved by : NS					

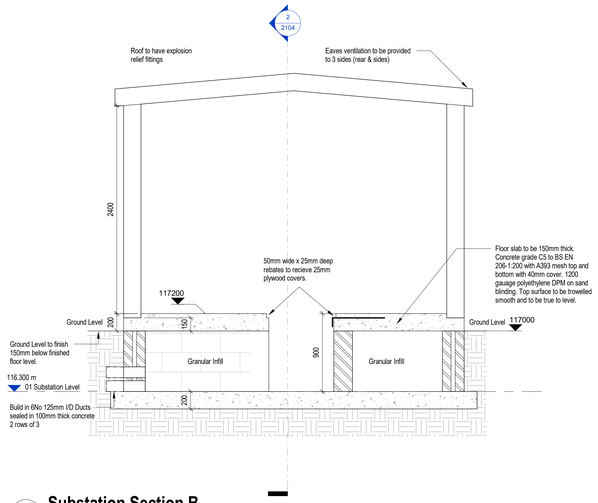
Revision		Date	Drawn	Approved
P1	Issued for planning submission.	17.09.2024	CP	NS
P2	Existing tree removed due to poor location next to BT comms and retaining wall. New proposed tree and location added.	15.11.2024	NS	NS



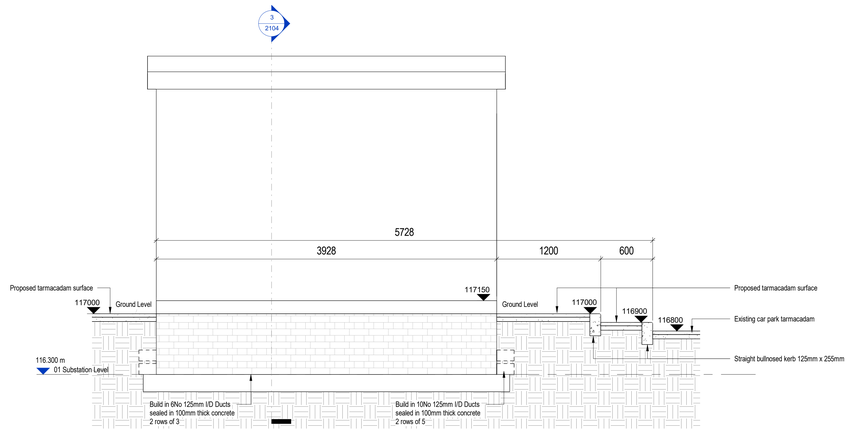
1 Substation Sectional Elevation A
1 : 25



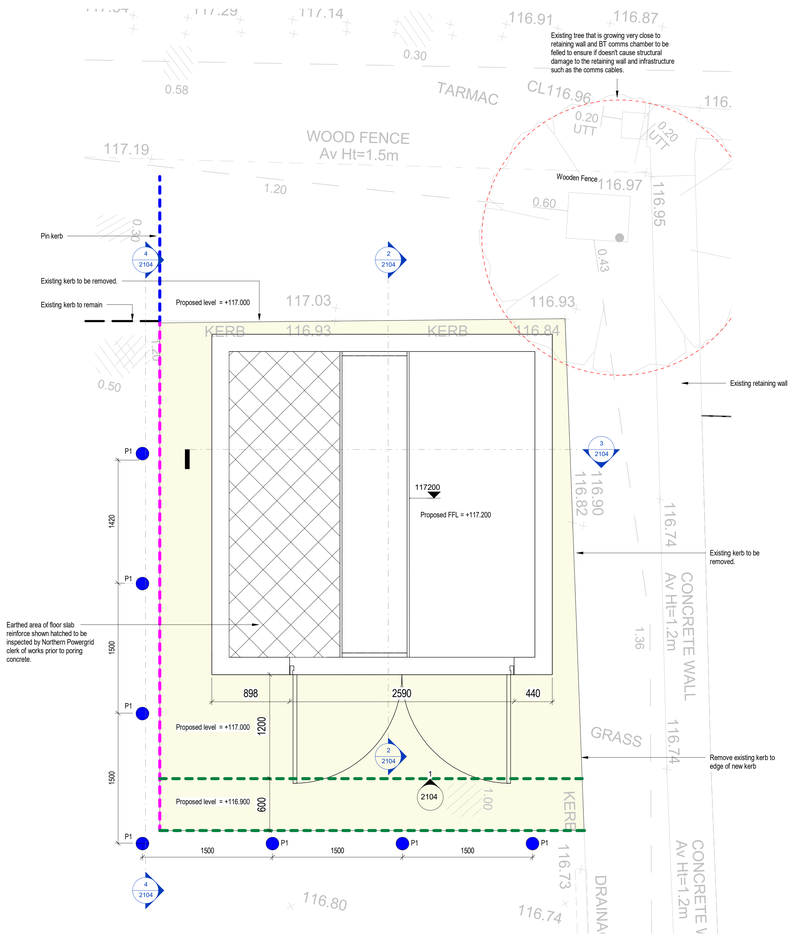
2 Substation Section C
1 : 25



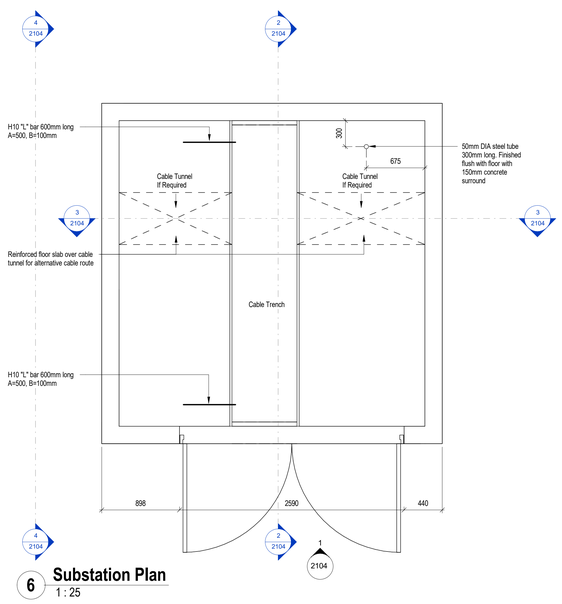
3 Substation Section B
1 : 25



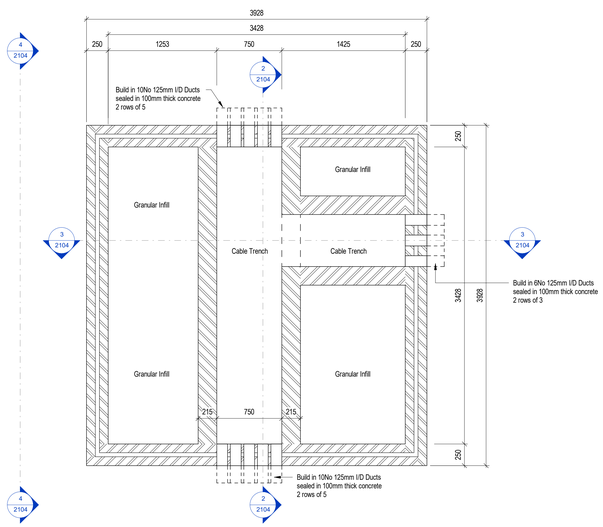
4 Substation Section D
1 : 25



5 Substation Electrical Layout & Enclosure
1 : 25



6 Substation Plan
1 : 25



7 Substation Foundation Plan
1 : 25

Floor:

1. Foundartions to be designed for a maximum weight of transformer of 40kN and a minimum ground bearing pressure of 80kN/m².
2. The Foundations shown are for a substation built on natural ground. if ground is unsuitable the foundations are to be adjusted to structural engineers instructions.
3. Floor slab shall be designed to carry a minimum load of 7.5kN/m² Floor to be level, steel float finish concrete, and sealed with approved concrete sealer or concrete paint before equipment installation.
4. Earther area of floor slab reinforcement shown hatched (on electrical layout) to be inspected by Northern Powergrid clerk of works prior to pouring concrete.
5. Trench covers to be 25mm exterior quality WBP ply. maximum width 1200mm, each cover to have 2 No. 35mm diameter finger holes, covers to be painted two coats silver gloss paint both sides and all edges.
6. Floor to be cast to front face of door opening, providing solid threshold. External level to be 150mm below finished floor level, allow unrestricted access for gear, and have a level landing area.
7. External paving and site finishes shall be provided as agreed with Northern Powergrid representative on site. As a minimum this shall consist of paving to full width of substation doors x 1200mm deep, with paving linking nearest highway path.

Brickwork:

8. Masonry below ground level to be 7N/mm² dense concrete block or brick.
9. Walls to be 250mm cavity walls with blockwork or brick inner leaf. Internal walls minimum 100mm thick 7N concrete block or brickwork. Leafs to be tied together with stainless steel double triangle wall ties to BS1243 at 450mmcentres vertical and 900mm centres horizontal.
10. 215mm trench walls to be fair faced and flush painted dense concrete block or brick.

Substation doors to be set back a minimum of 1500mm from back edge of footpath. Any proposed reduction in this clearance to be approved by Northern Powergrid following submission of site specific risk assessment and operational method statement.

Care is to be taken to ensure that access to cable openings is not impaired.

No gas, sanitary, water or other services to run through or under the substation.

Note: This drawing is to be approved by Northern Powergrid, Barnsley College and GF Tomlinson.

- Outline of GRP substation enclosure Refer to UK Power Networks typical enclosure drawing *"eds-07-3102_01-unit-or-padmount-substation-in-a-grp-enclosure". GRP Colour - Dark Green*
- Hard landscaping - tarmacadam access path from public footpath to substation and surrounding substation.
- Straight Bullnose kerb.
- Verticle paving slab.
- Pin kerb.
- EV — Parking with the provition of electric vehicle charging.
- Electrical vehicle charging point. Serves 2 EV parking bays.
- P1 - Vehicle protection bollard

All structural elements to be designed by the structural engineer.

RCA.
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Client:
GF Tomlinson

Project :
Barnsley IoT

RCA Project Ref:
3093-13

Drawing Title :
Substation Details

Drawing Number:

BIOT	RCA	XX	XX	D	A	2104
Project Code	Originator	Volume	Level	File Type	Role	Number

Status	Suitability Description	Revision Description	Revision
S4	Stage Approval	PRELIMINARY	P2

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