

BACKFILL NOTES

BACKFILL SPEC:

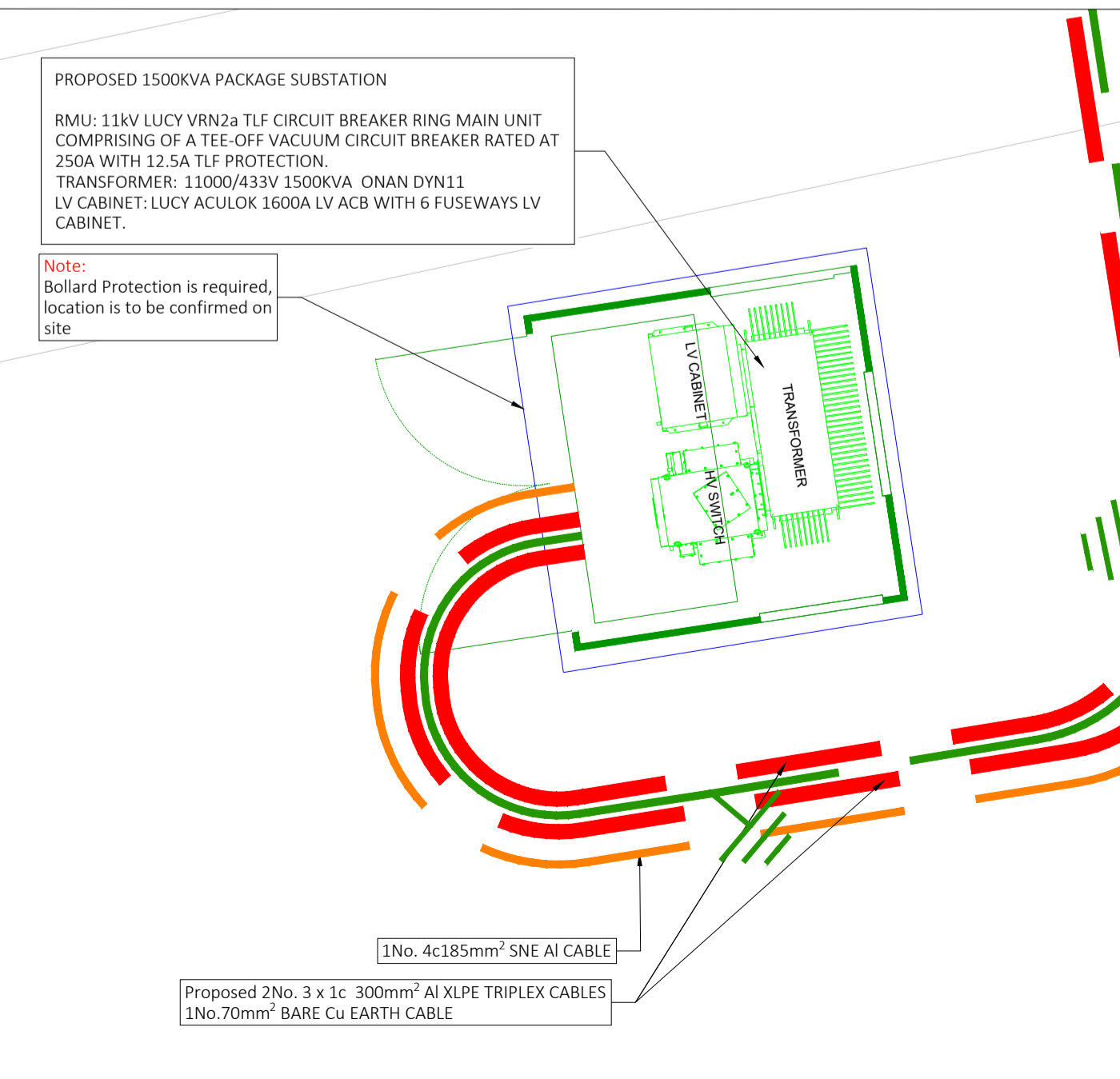
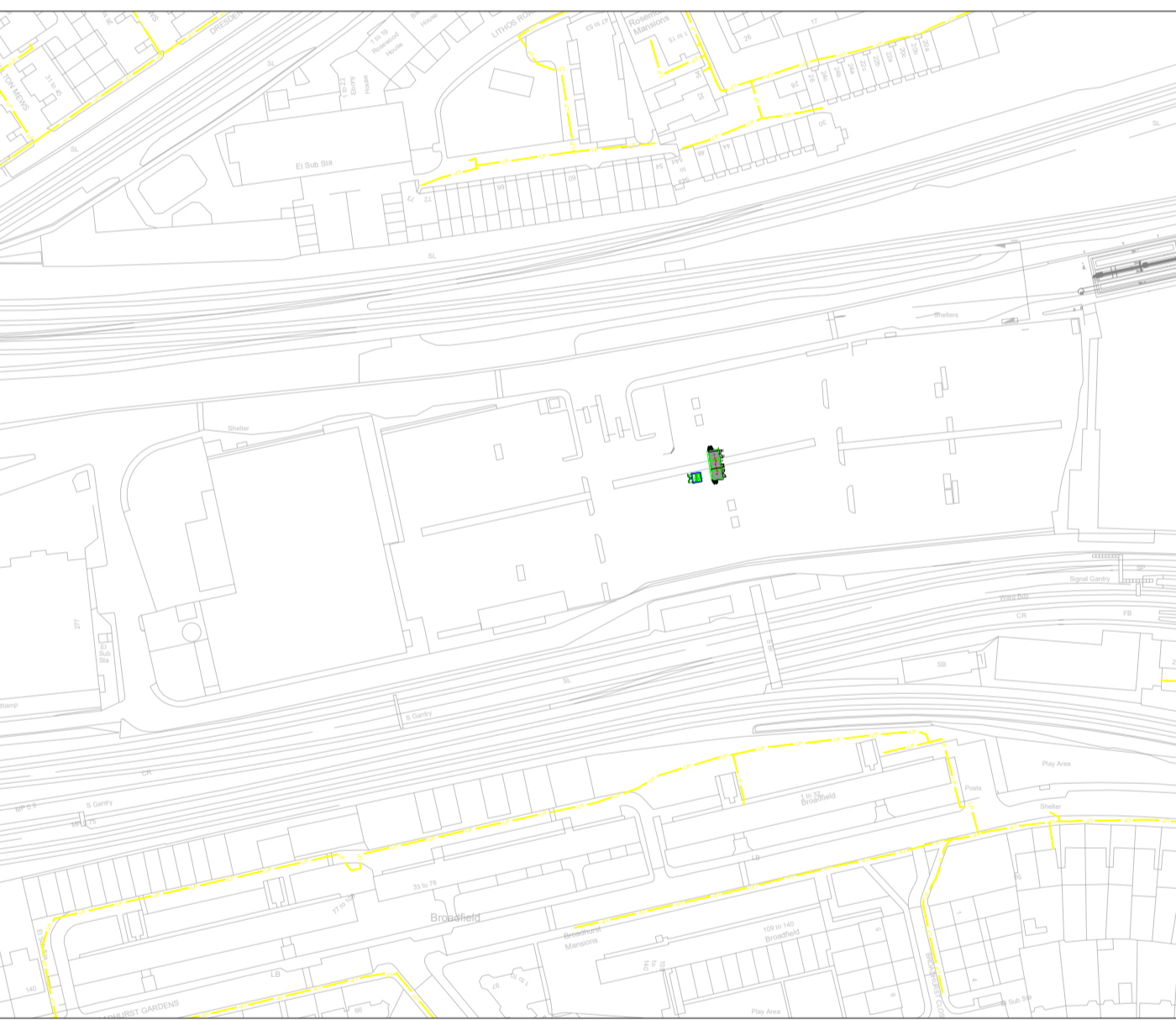
CABLES MAY ONLY BE LAID ON THE BOTTOM OF THE TRENCH WHEN IT IS SMOOTH AND FREE FROM LOOSE OR PROJECTING STONES, RUBBLE, ROCK, ETC. ALL BEDDING LAYERS SHALL BE COMPACTED TO A DEPTH OF 75MM AND SHALL BE INSTALLED COVERING THE FULL WIDTH OF THE TRENCH.

SAND FILLED BAGS SHALL BE USED TO SUPPORT CABLES, JOINTS OR ANCILLARY EQUIPMENT WHEN NECESSARY. ALL ACCUMULATED WATER SHALL BE PUMPED FROM THE EXCAVATION BEFORE BLINDING THE CABLE OR DUCT. FOLLOWING INSTALLATION, ALL CABLES SHALL BE BLINDED TO A COMPACTED DEPTH OF 100MM ABOVE THE CABLE OR CABLE JOINT WITH SOIL TAKEN FROM THE EXCAVATED MATERIAL OR IMPORTED MATERIAL. THE BLINDING SHALL BE FREE FROM MATERIALS THAT MAY DAMAGE THE CABLE.

THE BLINDING MATERIAL MUST BE HAND RAMMED OVER AND AROUND THE CABLES. MECHANICAL RAMMERS MUST **NOT** BE USED FOR THIS PURPOSE.

NOTES

CABLE TYPE	MAXIMUM PULLING TENSION	MINIMUM DUCT INTERNAL DIAMETER	MINIMUM BENDING RADII (mm)
LV 1Ph Al 35mm ²	Manual	38mm	Manual
LV 3Ph Al 185mm ²	7000N	125mm	700
HV 3 x 1c 300mm ²	26487N	125mm	1240



HARD STANDING ACCESS TO SUBSTATION MADE CLEAR AND LEVEL. ACCESS ROAD TO BE SUITABLY DESIGNED TO SUSTAIN HIAB LOADINGS (32TONNE)

NOTE: NOT ALL EXISTING UTILITIES ARE SHOWN. ALL EXCAVATION TO BE CARRIED OUT IN ACCORDANCE WITH HSG47 AVOIDANCE OF UNDERGROUND UTILITIES. ALL NECESSARY SEARCHES AND OR SURVEYS SHOULD BE CARRIED OUT PRIOR TO DIGGING.

NOTE: BOLLARD PROTECTION REQUIRED TO PREVENT THE SUBSTATION AND ELECTRICAL EQUIPMENT FROM ACCIDENTAL VEHICULAR DAMAGE. LOCATION TO BE CONFIRMED ON SITE.

Proposed 1No. Private 1500kVA Packaged Substation.

1No. 4c 185mm² Al WF SNE

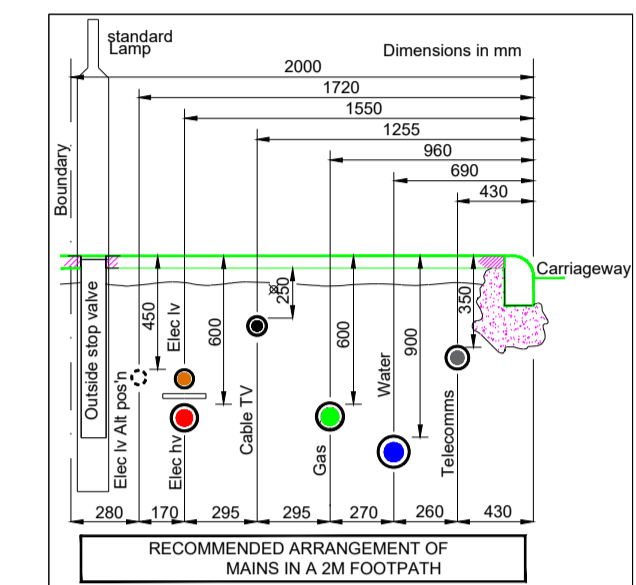
Proposed 2No. 3 x 1c 300mm² Al XLPE TRIPLEX CABLES
1No. 70mm² BARE Cu EARTH CABLE WITH 3 X 4.8m EARTH RODS AT 5m SEPARATION

EARTHING NOTE FOR PRIVATE SUBSTATION
ITU CLASSIFICATION: COLD
EPR CLASSIFICATION: LOW EPR
HV/LV LINK: COMBINED
TARGET RESISTANCE PRIOR TO CONNECTION: 3.16Ω
HV RADIAL TO BE INSTALLED FOR 15m WITH 3 X 4.8m EARTH RODS EVERY 5m.

HV POINT OF CONNECTION
Total Import Capacity: 1242kVA
2No. Private 11kV 3 x 1c 300mm² Al XLPE Triplex Cables are to be Terminated onto the 2No. UKPN adopted HV Metered Substations for looped point of connection. Final Cable Termination is to be carried by UKPN. ICP to leave sufficient cable at the Substation.



- GENERAL
- THIS DRAWING IS FOR PLANNING PURPOSES. CONSULT ALL UTILITY PLANS BEFORE ANY EXCAVATIONS.
 - THIS DRAWING DOES NOT INTEND TO IDENTIFY THE EXACT POSITION OF THE EXISTING APPARATUS. LOCATION OF THE EXISTING APPARATUS MUST IN ALL CASES BE IDENTIFIED BY CONSULTING THE RELEVANT NETWORK OWNERS IN THE AREA.
- PROPOSED MAINS
- ROAD CROSSINGS TO BE IN DUCT PROVIDED BY THE DEVELOPER. LAID AS PER THE SPECIFIC SECTION DETAILS FOR THE JOB.
- PROPOSED SERVICES
- ALL SERVICES TO BE DUCTED.
 - 38mm DUCT TO BE UTILIZED FOR SINGLE PHASE SERVICES. DUCT TO BE LAID BY THE DEVELOPER AT 450mm COVER TO THE FINISHED LEVEL.
 - 50mm DUCT TO BE UTILIZED FOR THREE PHASE SERVICES. DUCT TO BE LAID BY THE DEVELOPER AT 450mm COVER TO THE FINISHED LEVEL.
 - 100mm DUCT TO BE UTILIZED FOR SINGLE PHASE OR THREE PHASE SERVICE ROAD CROSSING. DUCT TO BE LAID BY THE DEVELOPER AT 600mm COVER TO THE FINISHED LEVEL.
 - IT IS RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT ALL SERVICE ROUTES ARE WITHIN THE DEMISE OF THE PROPERTY BEING SUPPLIED AND THE LOCATION OF ALL DUCTS ARE CLEARLY MARKED.
 - ALL SERVICES ROAD CROSSINGS TO BE SEPARATELY DUCTED WITH THEIR POSITIONS CLEARLY MARKED.



LEGEND

- 11kV EXISTING CABLE
- - - 11kV PROPOSED CABLE
- 6.6kV EXISTING CABLE
- - - 6.6kV PROPOSED CABLE
- LV EXISTING CABLE
- - - LV PROPOSED CABLE
- - - HV PROPOSED EARTH CABLE
- - - LV PROPOSED EARTH CABLE
- - - LV PROPOSED DUCTED SERVICE
- EXISTING WATER MAIN
- EXISTING LP GAS MAIN
- - - EXISTING IP GAS MAIN
- - - EXISTING HP GAS MAIN
- LV SERVICE JOINT
- LV MAIN JOINT
- 11kV JOINT
- BOTTLE END & EARTH ROD
- ▲ HV CABLE CROSSING
- ▲ LP GAS MAIN CROSSING

REV	DESCRIPTION	BY	DATE
P5	PRIV. SUB LOCATION AND CABLES ROUTE UPDATED	AT	21/01/2025
P4	SUB LOCATION AND CABLES UPDATED	AT	16/01/2025
P3	EARTHING ARRANGEMENT UPDATED	SJ	13/01/2025
P2	DWG UPDATED TBS SUB	AT	21/11/2024
P1	FIRST DRAFT	AT	13/11/2024

STATUS

DRAFT



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PROJECT

**02 FINCHLEY ROAD
LONDON
NW3 6LU**

DRAWING TITLE

ELECTRIC CONSTRUCTION PLAN

SCALE	DRAWN	CHECKED	APPROVED
1:100	AT	YG	

DRAWING NUMBER

DHV_ICP3136-FINC-30000

REV

P5