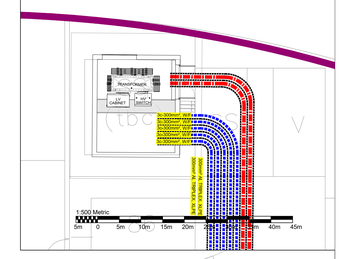
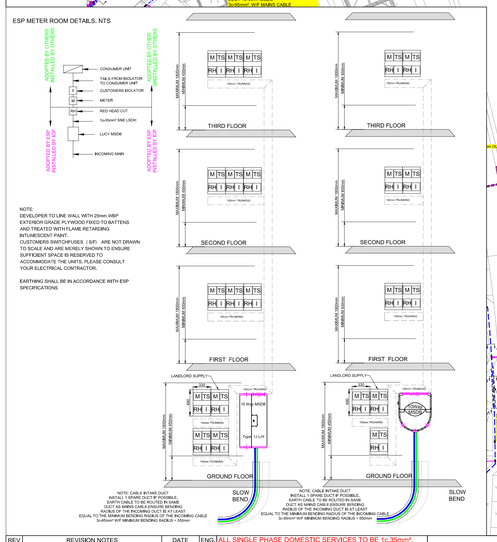


ESP BIRCH DISTRIBUTION SUBSTATION 6
3xT LAN/RESTRICTED DUAL DWD/WD ACCESS
• 6NGb+TFL 11kV RINGMAIN UNIT, 7c MOUNTED
• 11kV/433V, 1000kVA, DISTRIBUTION TRANSFORMER
• 1600A 5 WAY LV CABINET, TP MOUNTED
• 1600A SPAN OUTGOING SINGLE PHASE FUSE
• EARTHING DETAIL SEE DWG NO. NBSADR/Ut4
• POWER AND LIGHTING SEE DRG NO. NBSADR/Ut4

SUBSTATION VIEW 1:100





REV	REVISION NOTES	DATE	ENG.
Q	CLIENT COMMENT	21/05/2026	KW
P	PHASE 3DEFG SITE LAYOUT UPDATED, STREETLIGHT 30 MOVED & 31 ADDED BY PLOTS 17-18, BIN STORE ADDED BY PLOT 36, PLOT 55 SERVICE REROUTED, HYPEROPTIC FP ADDED BY PLOT 1, 2 TBS ADDED BY PLOTS 75 & 96, TIMBER FRAME NOTE ADDED, PHASE NC: NEIGHBOURHOOD CENTRE FLOORPLANS ADDED, BLOCK 5 WEST MSDB MOVED TO 1ST FLOOR, EVCFP ADDED BY BLOCK 5, CAREHOME & PUB REMOVED WITH LOADS RESERVED FOR FUTURE	20/05/2026	KW
O	46 STREETLIGHTS ADDED, MAINS MOVED INTO SERVICE STRIPS BY PLOTS 1-35, 51-73, 102-106 & 130-143. BLOCK 5: RETAILS SUPPLIED FROM MSDB & ALL CORE MSDBS ON FIRST FLOOR	21/04/2026	KW
N	3DEFG LAYOUT UPDATED & 4 FPs ADDED	12/03/2026	KW
M	CLIENT AMENDMENT	15/01/2026	KW
L	HV & LV ROUTES AMENDED BETWEEN SUBSTATIONS 3, 5 & 6	22/12/2025	KW
K	1 TBS ADDED OPPOSITE PLOT 405, 2 TBS RELOCATED BY PLOTS 627 & 646	20/11/2025	KW
J	5 APARTMENTS ADDED TO BLOCKS 16-35	17/11/2025	KW
I	PHASE 3DEFG ALL ASHP	11/07/2025	SC
H	HV & LV ROAD CROSSING SLIGHTLY AMENDED BY PLOT 477	29/04/2025	KW
G	PLOTS 527, 528, 540 & 569-572 RESUPPLIED	04/03/2025	KW
F	FEEDER PILLAR ADDED BY PLOT 672	17/01/2025	KW

ALL SINGLE PHASE DOMESTIC SERVICES TO BE 1c.35mm², CNE INDIVIDUALLY LAID IN 38mm SERVICE DUCTING & 125mm DUCTING AT ROAD CROSSINGS ONLY. ALL DOMESTIC ELECTRICITY METERS TO BE INSTALLED IN EXTERNAL METER BOXES. CONTRACTOR TO INSTALL CABLE MARKER TAPE.

SERVICE ROUTES

ALL SERVICE ROUTES ARE INDICATIVE ONLY AND MUST BE CONFIRMED ON SITE BY THE INSTALLATION CONTRACTORS REPRESENTATIVE. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO ENSURE THAT ALL SERVICE ROUTES ARE WITHIN THE DEMISE OF THE PROPERTY BEING SUPPLIED AND THE EXACT LOCATION OF DUCTS ARE CLEARLY IDENTIFIED.

****Planning Drawing Only****

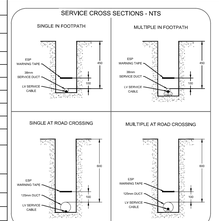
Obtain up-to-date utility records from asset owner before commencing work.

The details supplied on this drawing are intended to be used for information only and are not representative of any binding or contractual agreement between R & D Network Design and any other parties involved. The positions of existing mains is given for guidance only and, as such, no liability can be accepted by R & D Network Design Ltd for any damage caused to, nor any injury sustained, as a result of interference with such apparatus. Before any onsite works commence an up to date copy of the relevant utilities records must be obtained.

DRAWING KEY

SOLID LINE - EXISTING CABLING, COLOUR DEFINES VOLTAGE RATING	VARIES	
DASHED LINE - PROPOSED CABLING, COLOUR DEFINES VOLTAGE RATING.	VARIES	
PROPOSED 11kV MAIN CABLING.	RED	
PROPOSED LV MAINS CABLING,	BLUE	
PROPOSED LV SERVICE CABLING.	PURPLE	
PROPOSED CABLE DUCT.		
PROPOSED EARTHING CABLE.		
PROPOSED EARTHING ROD (S) .		
STREET LIGHTING/FURNITURE FEEDER PILLAR		
B.J. (BREECH JOINT) . /S.J. (STRAIGHT JOINT) . B.E. (BOTTLE END) .		
METER LOCATIONS / PHASE ALLOCATION		L1 L2 L3
METER POSITIONS.		M
STREETLIGHTING COLUMN		
ILLUMINATED SIGN		

SERVICE CROSS SECTIONS - NTS



FRAME SUPPLY TIMBER FRAME SUB-CONTR.
FOR TIMBER FRAMED UNITS, THE DEVELOPER SHALL PRE INSTALL A STEEL SHEET OF AT LEAST 1mm THICKNESS TO THE WALL BEHIND THE SERVICE CABLE & METERING EQUIPMENT
STEEL BACK PLATE TO BE BONDED TO THE CUTOUT EARTH TERMINAL

ALL SINGLE PHASE SERVICES:
- DOMESTIC SERVICE CABLES ARE 1c-35mm², CNE
- STREETLIGHTING SERVICE CABLES ARE 1c-25mm², CNE
- INDIVIDUALLY LAID IN 38mm SERVICE DUCTING
- AT ROAD CROSSINGS ONLY DOMESTIC SERVICE CABLES LAID IN SHARED 100mm DUCTING
- AT ROAD CROSSINGS ONLY STREETLIGHTING SERVICE CABLES LAID IN SHARED 100mm DUCTING
- AT ROAD CROSSINGS ONLY DOMESTIC AND STREETLIGHTING SERVICES CANNOT SHARE 100mm DUCT

FEEDER PILLARS (UNLESS STATED OTHERWISE)
- FEEDER PILLARS ARE 1kV/4
- 100A SPAN OUTGOING SINGLE PHASE FUSES TO BE MOUNTED EXTERNALLY
- TO BE HOUSED IN A SUITABLE WEATHERPROOF AND LOCKABLE ENCLOSURE TO ENG SPEC

DANGER
HIGH VOLTAGE CABLES PRESENT EXPOSE ALL CABLES BEFORE JOINTING

WARNING
TREAT ALL CABLES AS LIVE

WARNING
ALL EXCAVATION SHOULD BE DONE BY TAKING THE APPROPRIATE SAFETY PRECAUTIONS IN THE "HEALTH & SAFETY EXECUTIVE GUIDE Note47" (HSEg47)
"AVOIDING DANGER FROM UNDERGROUND SERVICES"
TAKING COGNIZANCE OF THE FACT THAT OTHER PLANT MAY BE IN THE VICINITY WHICH IS NOT SHOWN ON THE PLANS.

Design supplied for and on behalf of:

TRICONNEX

4 Tamdown Way
Braintree
Essex
CM7 2QL
01376 332680

R & D Network Design Ltd
Blue Pit Mill
Queensway
Rochdale
OL11 2YW

Client	TriConnex	Client Ref	X274
Site Address	**Kilnwood Vale, Crawley Road, Bewbush**		
Title	**Site Plan with Cable Routes**		
Drawn By	DS	Date	07/11/2018
Checked By	DK	Date	08/11/2018
Approved By	ICP	Date	
Scale	1:500 @ A0, UNLESS OTHERWISE STATED		
Revision	Q		
Drawing No	7358/15/SP/01		