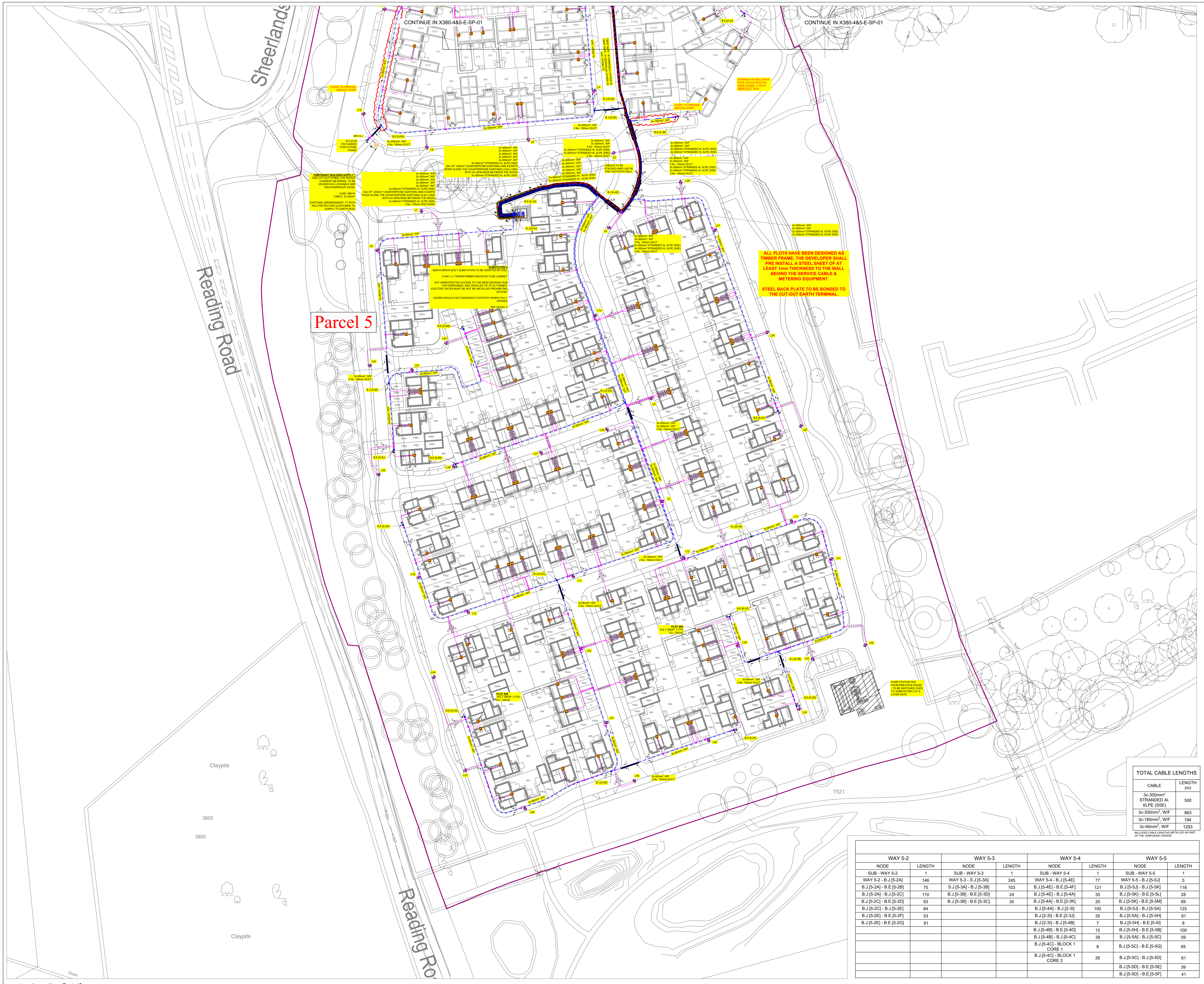

CONTINUE IN X380-4&5-E-SP-01
CONTINUE IN X380-4&5-E-SP-01
Sheerlands
Reading Road
Reading Ro
Parcel 5
SUBSTATION 5
800kVA BRICK BUILT SUBSTATION TO BE ADOPTED BY ENC.
TEMPORARY BUILDING SUPPLY
CLIENT TO PROVIDE SERVICE STRIP
AVERAGE HOUSE LOADS HAVE CALCULATED AS
3c-300mm², W/F
3c-300mm², W/F
3c-300mm² STRANDED Al, XLPE (SSE)
3c-300mm² STRANDED Al, XLPE (SSE)
PUMP STATION FED FROM PREVIOUS PHASE
Claypits
Claypits
3800
3800
T521
Drain
L28

ALL PLOTS HAVE BEEN DESIGNED AS TIMBER FRAME. 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 CUT-OUT EARTH TERMINAL.

TOTAL CABLE LENGTHS	
CABLE	LENGTH (m)
3c-300mm² STRANDED Al, XLPE (SSE)	500
3c-300mm², W/F	863
3c-185mm², W/F	194
3c-95mm², W/F	1293

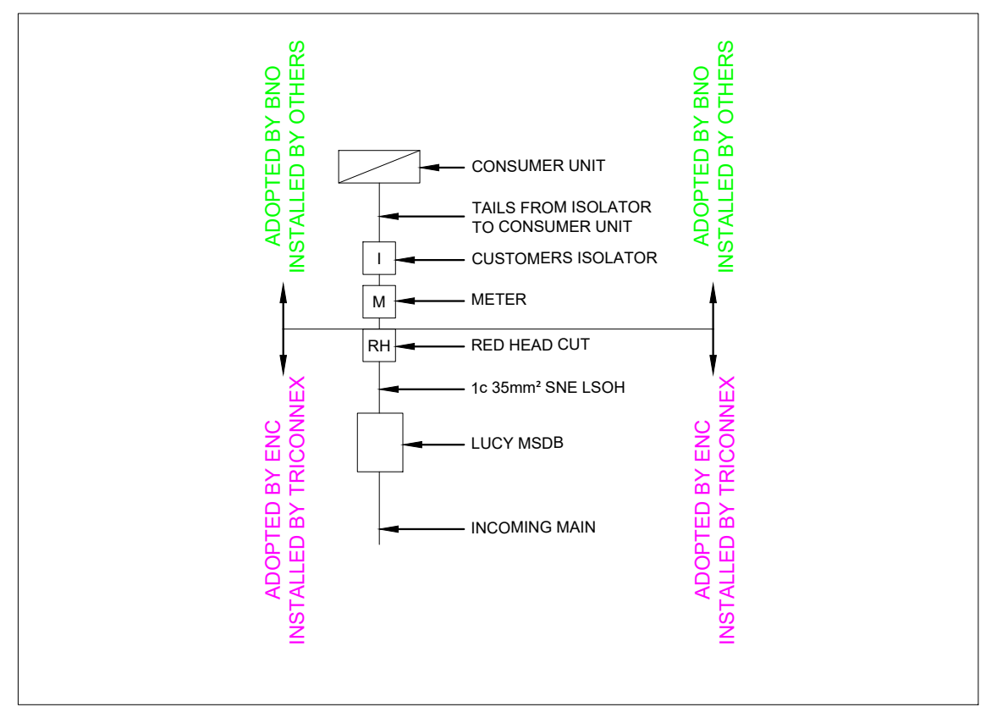
INCLUDES CABLE LENGTHS INSTALLED AS PART OF THE TEMPORARY DESIGN.

WAY 5-2		WAY 5-3		WAY 5-4		WAY 5-5	
NODE	LENGTH	NODE	LENGTH	NODE	LENGTH	NODE	LENGTH
SUB - WAY 5-2	1	SUB - WAY 5-3	1	SUB - WAY 5-4	1	SUB - WAY 5-5	1
WAY 5-2 - B.J.[5-2A]	146	WAY 5-3 - S.J.[5-3A]	245	WAY 5-4 - B.J.[5-4E]	77	WAY 5-5 - B.J.[5-5J]	5
B.J.[5-2A] - B.E.[5-2B]	75	S.J.[5-3A] - B.J.[5-3B]	103	B.J.[5-4E] - B.E.[5-4F]	121	B.J.[5-5J] - B.J.[5-5K]	118
B.J.[5-2A] - B.J.[5-2C]	110	B.J.[5-3B] - B.E.[5-3D]	24	B.J.[5-4E] - B.J.[5-4A]	35	B.J.[5-5K] - B.E.[5-5L]	28
B.J.[5-2C] - B.E.[5-2D]	93	B.J.[5-3B] - B.E.[5-3C]	35	B.J.[5-4A] - B.E.[2-3K]	20	B.J.[5-5K] - B.E.[5-5M]	69
B.J.[5-2C] - B.J.[5-2E]	84			B.J.[5-4A] - B.J.[2-3I]	100	B.J.[5-5J] - B.J.[5-5A]	125
B.J.[5-2E] - B.E.[5-2F]	53			B.J.[2-3I] - B.E.[2-3J]	35	B.J.[5-5A] - B.J.[5-5H]	91
B.J.[5-2E] - B.E.[5-2G]	91			B.J.[2-3I] - B.J.[5-4B]	7	B.J.[5-5H] - B.E.[5-5I]	8
				B.J.[5-4B] - B.E.[5-4D]	15	B.J.[5-5H] - B.E.[5-5B]	100
				B.J.[5-4B] - B.J.[5-4C]	39	B.J.[5-5A] - B.J.[5-5C]	59
				B.J.[5-4C] - BLOCK 1 CORE 1	8	B.J.[5-5C] - B.E.[5-5G]	65
				B.J.[5-4C] - BLOCK 1 CORE 2	26	B.J.[5-5C] - B.J.[5-5D]	61
						B.J.[5-5D] - B.E.[5-5E]	39
						B.J.[5-5D] - B.E.[5-5F]	41

① Location Detail

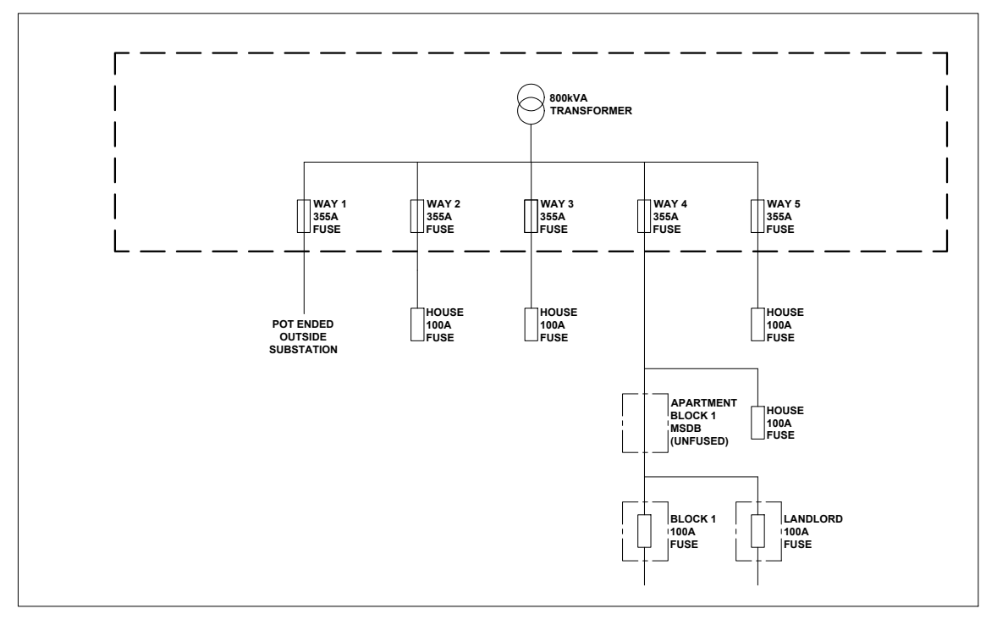
Scale: 1:500

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.



① Scope of Riser Works

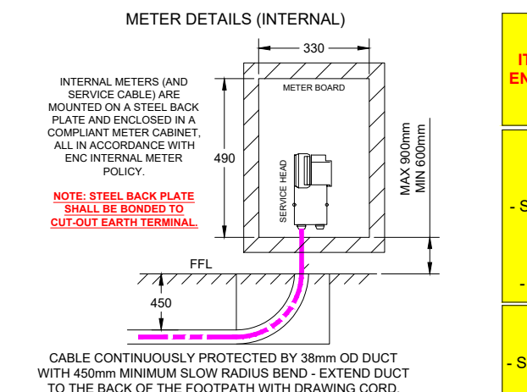
NTS



② ENC Fusing Schematic & Detail

NTS

METER DETAILS (INTERNAL)



INTERNAL METERS (AND SERVICE CABLE) ARE MOUNTED ON A STEEL BACK PLATE AND ENCLOSED IN A COMPLIANT METER CABINET, ALL IN ACCORDANCE WITH ENC INTERNAL METER POLICY.

NOTE: STEEL BACK PLATE SHALL BE BONDED TO CUT-OUT EARTH TERMINAL.

CABLE CONTINUOUSLY PROTECTED BY 38mm OD DUCT WITH 450mm MINIMUM SLOW RADIUS BEND - EXTEND DUCT TO THE BACK OF THE FOOTPATH WITH DRAWING CORD.

CLIENT TO SEAL SERVICE DUCT UPON INSTALLATION OF SERVICE CABLE WITH FIRE RATED FOAM.

NOTE: THE SUPPLY AND INSTALLATION OF METERS ARE NOT PART OF THE SCOPE OF TRICONNEX.

WARNING:

IT IS THE RESPONSIBILITY OF THE DEVELOPER TO ENSURE THAT THE METER CABINET COMPLIES WITH THE LATEST BUILDING REGULATIONS AND ANY LOCAL PLANNING REQUIREMENTS.

ALL SINGLE PHASE SERVICES:

- DOMESTIC CABLES ARE 1c-35mm², CNE
- STREETLIGHT SERVICE CABLES ARE 1c-25mm², CNE
- INDIVIDUALLY LAID IN 38mm SERVICE DUCTING
- ALL SERVICE CABLES LAID IN SHARED 150mm DUCTING AT ROAD CROSSINGS ONLY
- CONTRACTOR TO INSTALL CABLE MARKER TAPE.

MAINS CABLE DUCTING:

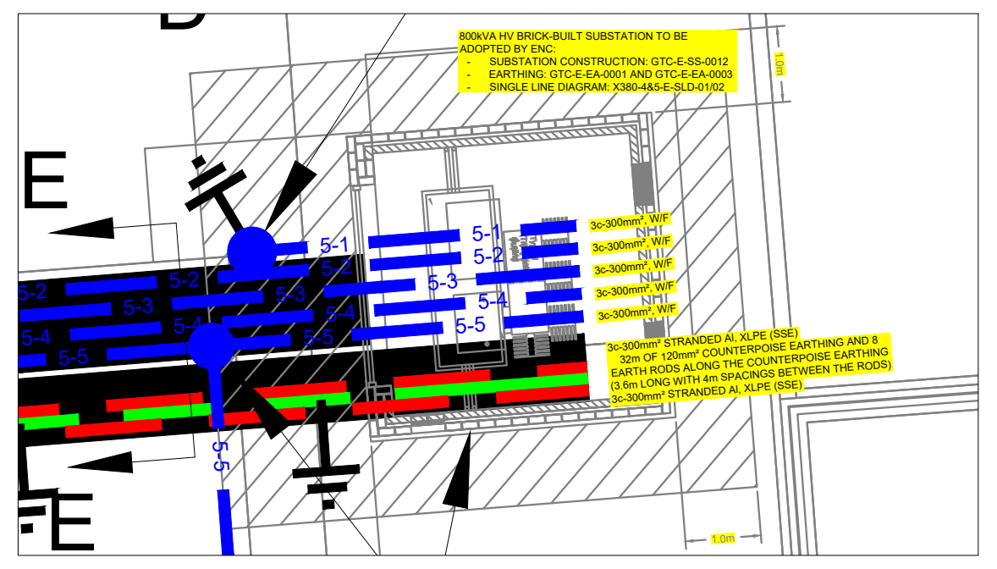
- SHALL BE TO ENATS 12-24, EMBOSSED "ELECTRICAL CABLE DUCT" ON OPPOSING SIDES.
- 1 x 'SPARE' CABLE DUCT SHOULD BE INSTALLED AT ROAD CROSSINGS.
- SIZES GIVEN ON DRAWING REFER TO INTERNAL DIAMETER

FOR INTERNAL METER SPECIFICATION, REFER TO ENC TECHNICAL GUIDELINE GE-TGI-IG-0015 - TECHNICAL GUIDELINES AND SAFETY INFORMATION FOR HOUSE BUILDERS AND DEVELOPERS:

- AS REQUIRED BY THE "BUILDING REGULATIONS FIRE SAFETY APPROVED DOCUMENT B VOLUME 1 DWELLING HOUSES, SECTION 2 MEANS OF ESCAPE" WHERE IT IS PROPOSED TO INSTALL THE ELECTRICAL SERVICE TERMINATION UNDER STAIRS OR WITHIN AN AREA REGARDED AS PRIMARY ACCESS/EGRESS ROUTE, THEN THIS SHALL BE REGARDED AS A "PROTECTED AREA" AND AS SUCH, SHALL BE CONSTRUCTED IN SUCH A WAY AS TO PROVIDE A MINIMUM OF 30 MINUTES FIRE PROTECTIONS.
- THE DOOR(S) PROVIDING ACCESS TO THE UNDER STAIRS LOCATION AND/OR CUPBOARD HOUSING THE SERVICE TERMINATION EQUIPMENT SHALL BE RATED "FIRE DOOR" AS DETERMINED IN THE REGULATIONS IN "APPENDIX B FIRE DOORS" AND SHALL COMPLY WITH THE REQUIREMENTS OF BS 476-22:1987, BE A MINIMUM OF 44mm IN THICKNESS AND OF A CERTIFIED FD30 TYPE, THEREFORE PROVIDING A MINIMUM FIRE RESISTANCE OF 30 MINUTES. ALTHOUGH NOT AN ABSOLUTE REQUIREMENT, A FIRE DOOR WHICH PREVENTS THE SPREAD OF "COLD SMOKE" AND "FIRE" BY USE OF SUITABLE SEALS AND ONE WHICH IS COMPLIANT WITH BS EN 1634-1 OR BS 476-22, IS PREFERRED.
- STANDARD FIBRE-GLASS OUTDOOR METER BOXES **ARE NOT SUITABLE** FOR USE INDOORS AS THEY DO NOT COMPLY WITH THE APPROPRIATE BRITISH STANDARDS FOR FIRE RESISTANCE AND FUME EMISSIONS.

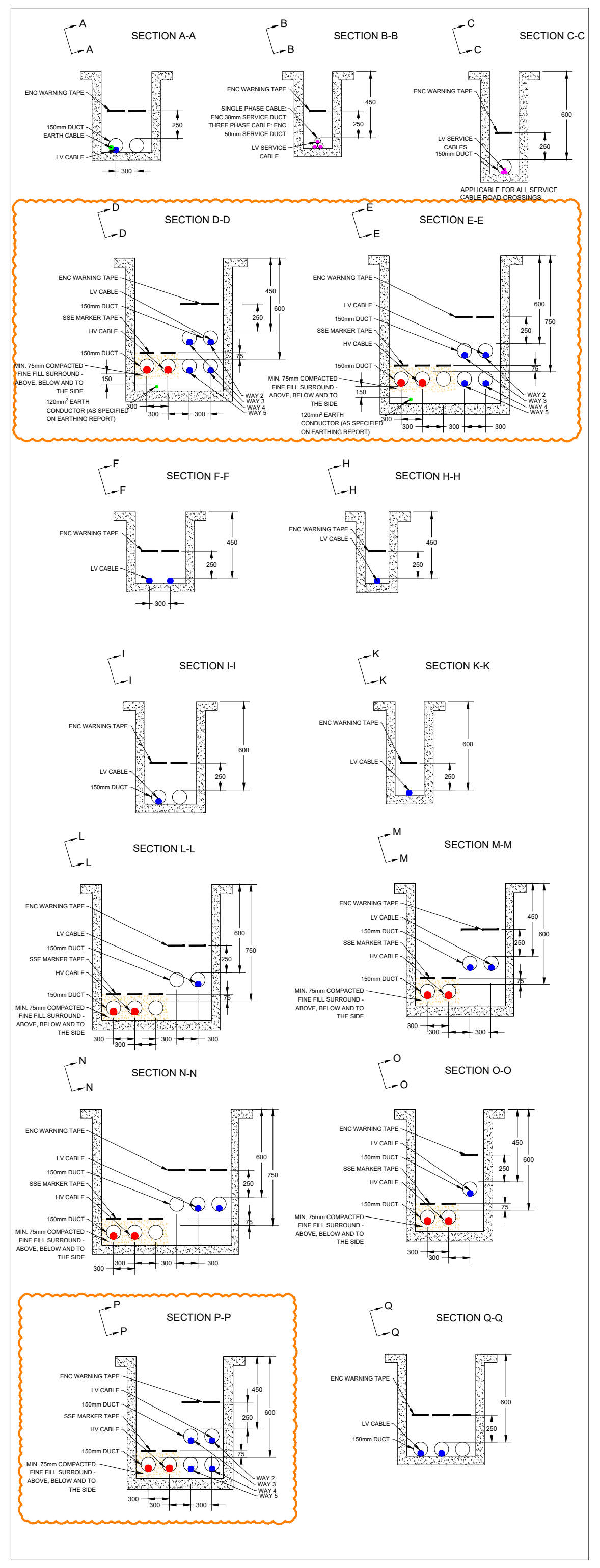
④ ENC Internal Meter Notes & Detail

NTS


800kVA HV BRICK-BUILT SUBSTATION TO BE ADOPTED BY ENC:
- SUBSTATION CONSTRUCTION: GTC-E-SS-0012
- EARTHING: GTC-E-EA-0001 AND GTC-E-EA-0003
- SINGLE LINE DIAGRAM: X380-4&5-E-SLD-01/02
1.0m
E
E

⑤ Substation Detail

Scale 1:100



⑥ Section Details

NTS

1. ALL CROSSINGS AND CABLE LAYING DEPTH SHALL BE IN ACCORDANCE TO NJUG 7.
2. ALL LV CABLES TO BE SUPPLIED AND INSTALLED TO RELEVANT IDNO STANDARDS UNLESS OTHERWISE STATED.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE FOLLOWING DESIGN DOCUMENTS:

DOCUMENT NUMBER	DOCUMENT TITLE
X380-E-DRA-01	DESIGNERS RISK ASSESSMENT
X380-E-FRA-01	FLOOD RISK ASSESSMENT
X380-4&5-E-SLD-01	SINGLE LINE DIAGRAM (SHEET 1)
X380-4&5-E-SLD-02	SINGLE LINE DIAGRAM (SHEET 2)
X380-4&5-E-ER-01	ENGINEERING REPORT
X380-4&5-E-WD-01	WINDEBUT REPORT
X380-4&5-E-R-01	RISER DESIGN

ISSUED TO SSEN
SELF-APPROVED
02/06/2025
TRICONNEX

ISSUED TO ENC
SELF-APPROVED
24/07/2025
TRICONNEX

CONSTRUCTION DESIGN MANAGEMENT

UNDER THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015, TRICONNEX UNDERTAKES THE ROLE OF DESIGNER ONLY. THE PRINCIPAL DESIGNER IS APPOINTED BY THE DEVELOPER, WHO SHALL ENSURE THAT THE DESIGN AND CONSTRUCTION OF ANY UTILITY BUILDING ENTRIES, RISERS, INTERNAL METER ROOMS OR UTILITY EQUIPMENT LOCATIONS (SUCH AS METER POSITIONS) COMPLIES WITH THE BUILDING CONTROL AND FIRE REGULATIONS.

THE DEVELOPER SHALL ENSURE THAT BUILDING ANY FORM OF BUILDING ENTRY (E.G. INTERNAL METERING) AND/OR UTILITIES INSTALLED WITHIN THE BUILDING/METERING ROOM SHALL MEET THE FOLLOWING:

1. IT SHALL COMPLY WITH THE BUILDING CONTROL AND FIRE REGULATIONS, INCLUDING BUT NOT LIMITED TO:
   - BS 9999:2017 FIRE SAFETY IN THE DESIGN, MANAGEMENT AND USE OF BUILDINGS - CODE OF PRACTICE
   - BS 8313:1997 CODE OF PRACTICE FOR ACCOMMODATION OF BUILDING SERVICES DUCTS
   - BUILDING REGULATIONS 2010
2. IT SHALL NOT BE A CONFINED SPACE AS IDENTIFIED IN THE CONFINED SPACE REGULATIONS 1997.
3. 24 HOUR UNRESTRICTED ACCESS FOR THE ADOPTING PARTY AND METER OPERATORS SHALL BE AVAILABLE.
4. ADEQUATE PHYSICAL ACCESS AND MEANS OF ESCAPE SHALL BE AVAILABLE.
5. IT SHALL BE LOCKABLE AND SECURE AND SHALL NOT BE USED AS A STORE CUPBOARD.
6. ADEQUATE LIGHTING SHALL BE PROVIDED.
7. IT SHALL BE WATERPROOF AND DRY IN A NON-CORROSIVE ATMOSPHERE AND NATURALLY VENTILATED.
8. THE AMBIENT TEMPERATURE SHALL NOT EXCEED 30°C.

north

DANGER
LOW & HIGH VOLTAGE CABLES MAY BE PRESENT.
ALL EXCAVATIONS TO BE CARRIED OUT IN ACCORDANCE WITH HSG47.
EXPOSE ALL CABLES PRIOR TO JOINTING WORKS
TREAT ALL CABLES AS LIVE

BACKFILL:
THE BACKFILL AROUND THE CABLES SHALL BE FREE OF SHARP EDGED STONES AND RUBBLE, DUCTS TO BE BEDDED IN 150mm SOFT SAND & TYPE 1 STONE UP TO BASE COURSE IN ACCORDANCE WITH THE DNO/IDNO G81 AND NRSWA REQUIREMENTS.

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.

Drawing Key

- EHV OHL Proposed
- EHV OHL Existing
- EHV OHL Existing to be Removed
- EHV Existing
- EHV Existing to be Removed
- EHV Existing to be Abandoned
- EHV Proposed
- HV OHL Proposed
- HV OHL Existing
- HV OHL Existing to be Removed
- HV Existing
- HV Existing to be Removed
- HV Existing to be Abandoned
- Straight Joint
- Pot End/Earth Rod
- Sheath Repair
- Overhead Pole with Stays
- MSDB
- Cut Out
- Car Charging Point
- External electric Meter Location/Phase
- Internal electric Meter Location/Phase
- External electric Meter Location/Phase (ASHP)
- Internal electric Meter Location/Phase (ASHP)
- External electric Meter Location/Phase SNE
- Internal electric Meter Location/Phase SNE
- Proposed Lighting Column
- Proposed Feeder Pillar
- Site Boundary
- Revision Cloud

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 TriConnex and any other parties involved. The positions of existing mains is given for guidance only and, as such, no liability can be accepted by TriConnex 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.

DATE	DESCRIPTION	REV.	DES.	QC.	APP.
23/07/25	Added LV way specifics to Sections D-D, E-E & P-P.	K	JM	BL	NM
11/07/25	Site plan updated. Plot numbers amended. Mains amended to avoid drainage clashes. SL 2 Service amended. Timber Frame note added.	J	JL	BL	NM
08/07/25	Streetlight service joints amended.	I	BL	NM	NM
13/06/25	Parcel 5 added to design.	H	MH	NM	NM

Site Earthing Status:
COLD SITE

TRICONNEX

Nexus Park, Avenue East Skyline 120, Great Notley,
Braintree Essex, CM77 7AL
Tel: 01376 332 680
Email: info@TriConnex.co.uk
www.TriConnex.co.uk

DRAWING TITLE
ELECTRIC DESIGN

SITE ADDRESS
Phase - 4
Hogwood Garden Village
Arborfield Garrison, Finchampstead
RG40 4QX

STATUS
APPROVED

SCALE
AS SHOWN on A0

DNO Reference	IDNO Reference		
FAT824	N0018855-1		
DRAWING NUMBER	REVISION	OPS VO No.	SHEET No.
X380-4&5-E-SP-02	K	--	2 of 2

CLIENT
Legal and General Homes

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TCX STD E
April 2022 V1