technical guidance for developers

domestic electricity



If you are experiencing a power cut please call 105

This guide is here to help you prepare for the installation of the electricity network on your development and how to do so in a correct and safe manner.

Please remember we are a heavily regulated industry, and the instructions in this document need to be followed in order for the installation of your network to go smoothly and safely.

Please follow the approved electricity design we provide for you. This will be specific to your development and all design changes will require approval.

If you have any queries at all please contact our team on 029 2132 0350 or construction@tucltd.co.uk

work and material call off	page 3
excavation for mains pipes	page 4
utility pipe and cable positions	page 5
service positions	page 6
service pipe trenches	page 7
meter box installation	page 8
general advice	page 9

### Work Call Off

To call off work and/or materials with our Service Delivery team:

## calloffs@tucltd.co.uk

or

029 2132 0350

#### Lead Times

Our lead times will depend on the amount of work required in a particular visit and whether there are any external factors that may have an influence on planned dates, such as highways notices or if the work is of a specialist nature.

### Site Preparation

Please ensure that you refer to the information contained in this document in conjunction with the approved design when preparing site for our installation works.

Please note that plots requiring service connections will need to be watertight and lockable with scaffold removed from the working area prior to work commencing.

#### Cables

We will arrange for cables to be delivered ready for our operatives to install, or they will be brought along on the day. Please ensure that you can provide a suitable storage area for all materials as you could be liable for any damage to our equipment whilst it is stored on site.

Once all the cable has been removed from the drum, these can be removed from site by following the instructions that can be found on the side of each drum.

#### Meter Boxes

Where meter boxes and hockeysticks are provided by us, please ensure that these are stored in a suitable location and kept dry. The replacement of any damaged boxes, backing boards, doors or fixing kits will be chargeable.

All boxes are to be installed by you prior to our operatives attending site for the service connection ensuring doors are fitted.

### **Ducts**

All cables are to be individually ducted and cannot share a duct. The correct specification of ducts is shown on the approved design.

Please note that there may be different requirements for certain sections of the site e.g. roadway/footway/road crossings. All ducts that are not immediately required need to be left with a suitable draw cord in place. Total Utility Connections is responsible for laying all mains cables in trenches and/or ducts pre-excavated and pre-installed by yourself (unless otherwise stated) to the following minimum depths:

Recommended depth of cover for mains cables (depths shown are to finished ground level)				
	Low Voltage	High Voltage		
Road and vehicular/ pedestrian areas	600mm	750mm		
Footpath	450mm	600mm		
Verges	450mm	600mm		
Open fields and agricultural land	1000mm	1000mm		

#### Footway

inished ground level	Minimum 200mm	Finished ground leve
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	Marker tape	

## Roadway

evel	Finished ground level	Finished ground level	Finished ground level	
	••••••••••••••••••••••••••••••••••••••	$\longrightarrow$ · · · · ·		
	• • • •			
	• • • • •			
	Marker tape		• • • • • • • • •	Marker tape
	· · · ·			ivial ker tape
	· · · · ·			
	····			Duct
			· · · · · · · · · ·	
		• • • • • •		
		• • • • • •		
		• • • • • •		

## Your responsibilities:

All cables to be installed with a finefill surround Bottom of trenches must be level and free from sharp stones Backfill to be made up of good quality material free from sharp edged stones and rubble Please check separation distances as detailed on page 5 Electricity warning tape to be laid above main and ducts Spare ducts to be installed for ALL road crossings

## Road Crossing

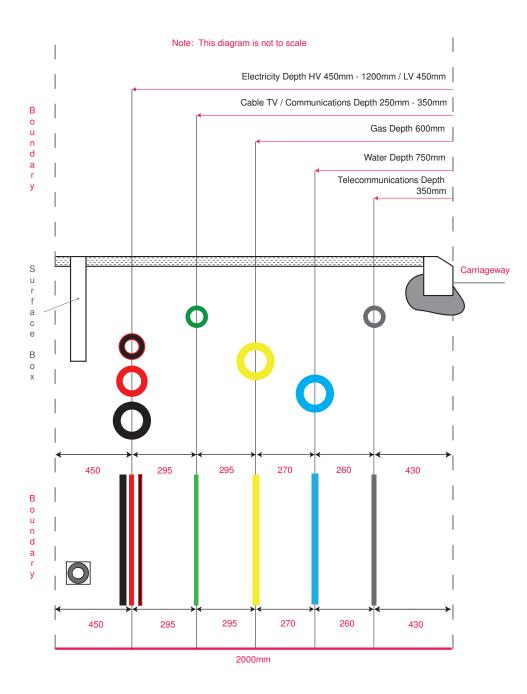
#### Finished ground level

4

Marker tape

Duct

# utility pipe and cable positions

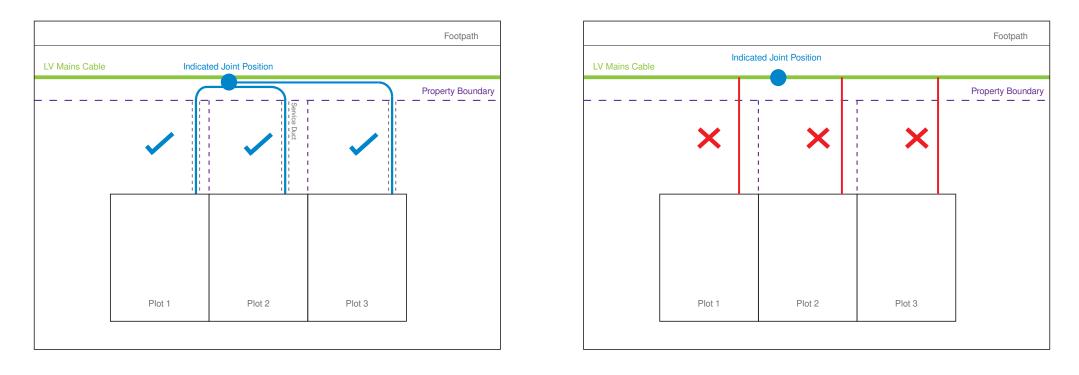


The diagram opposite illustrates the recommended positioning for new utility apparatus in a 2m footway.

If you think there may be a problem with the positioning of our network on your development then please contact us and we will be happy to advise and help resolve any issues.

Please note that this information is for guidance only (as per Streetworks UK), and the adopting network owner may have specific requirements that will be shown on your electricity design, or other utility design. In order to minimise the number of joints on the network, plots may be grouped together to be connected in the same joint.

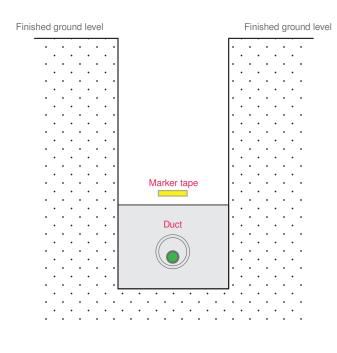
Jointing arrangements will be indicated on the approved design and you will need to bring the relevant service ducts to the positions shown.



If you foresee any issues with this on any particular plots then you must advise us as soon as possible as we will need to make any design amendments prior to the connection date.

Any amendments to the design and additional joints will require approval from the network owner and could incur additional cost.

## service cable trenches

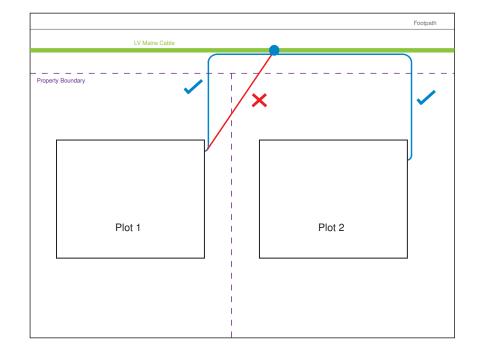


All service cables must be installed in approved ducts as indicated on the electricity design

Bottom of trenches must be level and free from sharp stones

All ducts to be installed with a finefill surround

Electritcity warning tape to be laid above main and ducts

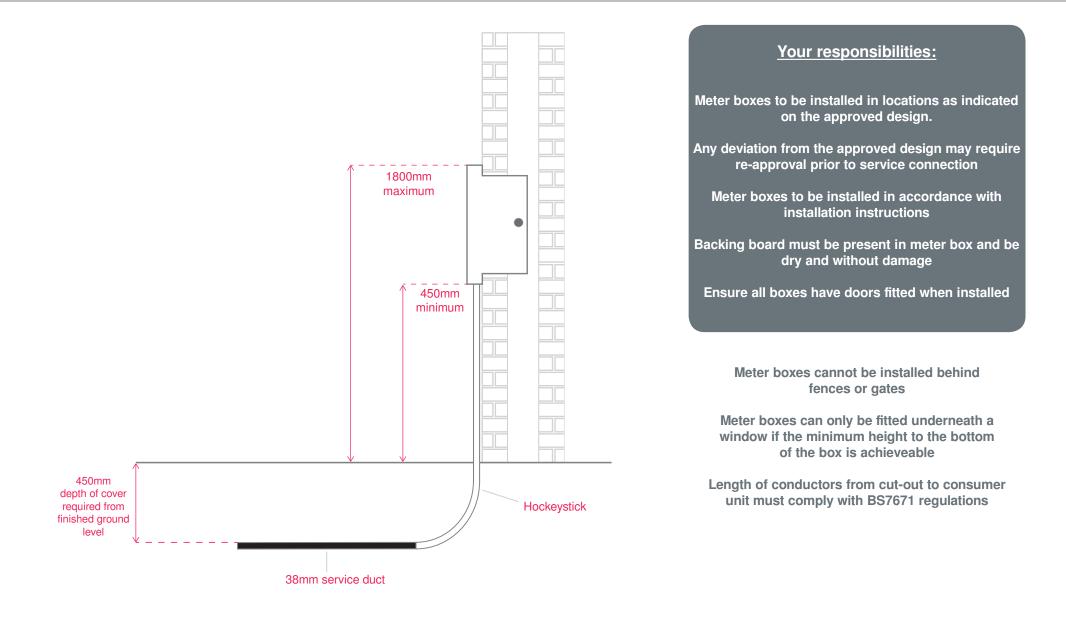


Service cables must run within the property that they serve and cannot cross the boundary into adjacent properties

Cables cannot pass through the rear gardens of properties

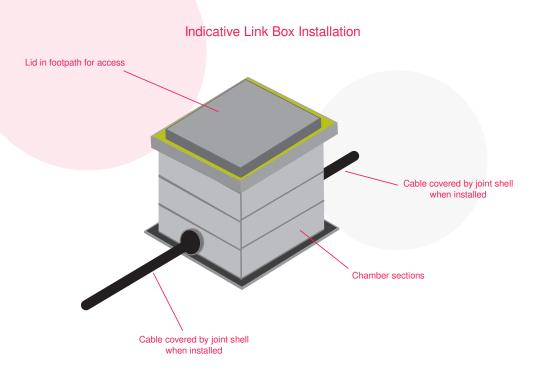
Any services requiring a road crossing must cross the road in their own duct of correct specification

## meter box installation



#### Link Boxes

A link box will be required near the site entrance if your development has a low voltage connection. The link box is contained in an underground chamber set with a cover that will generally be situated in the footpath and acts as a switching point between the connecting and adopting network owners.



Link box requires excavation of approximately L1500mm x W1000mm in footpath

#### Legal Agreements

Each new development requires a legal agreement to be in place between the adopting network owner and land owner prior to energisation. We will request your Section 38 drawing at acceptance and will endeavour to help you to expedite the legal process to prevent any energisation delays.

#### Substations

If your development requires a high voltage connection then a substation will generally be required. We will provide you with full details of the civils requirements and equipment specification as part of the electricity design.

#### Meters

Electricity meters are not included as part of our installation and are generally called off via your electricity supplier.

If you need any further help or want to ask question on the content of this document, please contact our team on 029 2132 0350 or at construction@tucltd.co.uk

If you are experiencing a power cut please call 105

