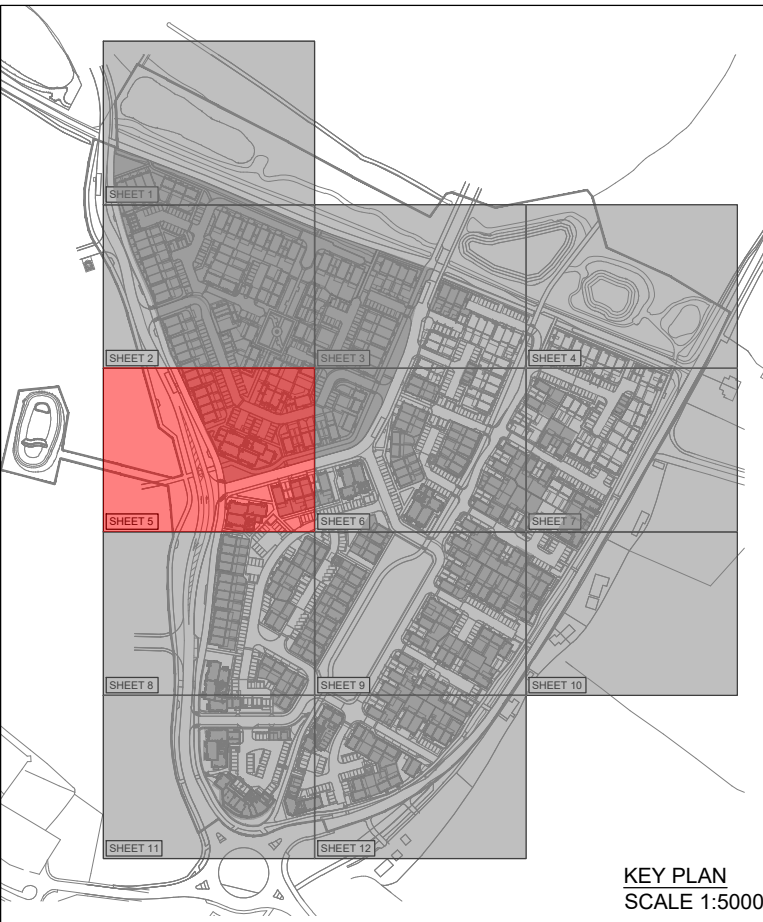
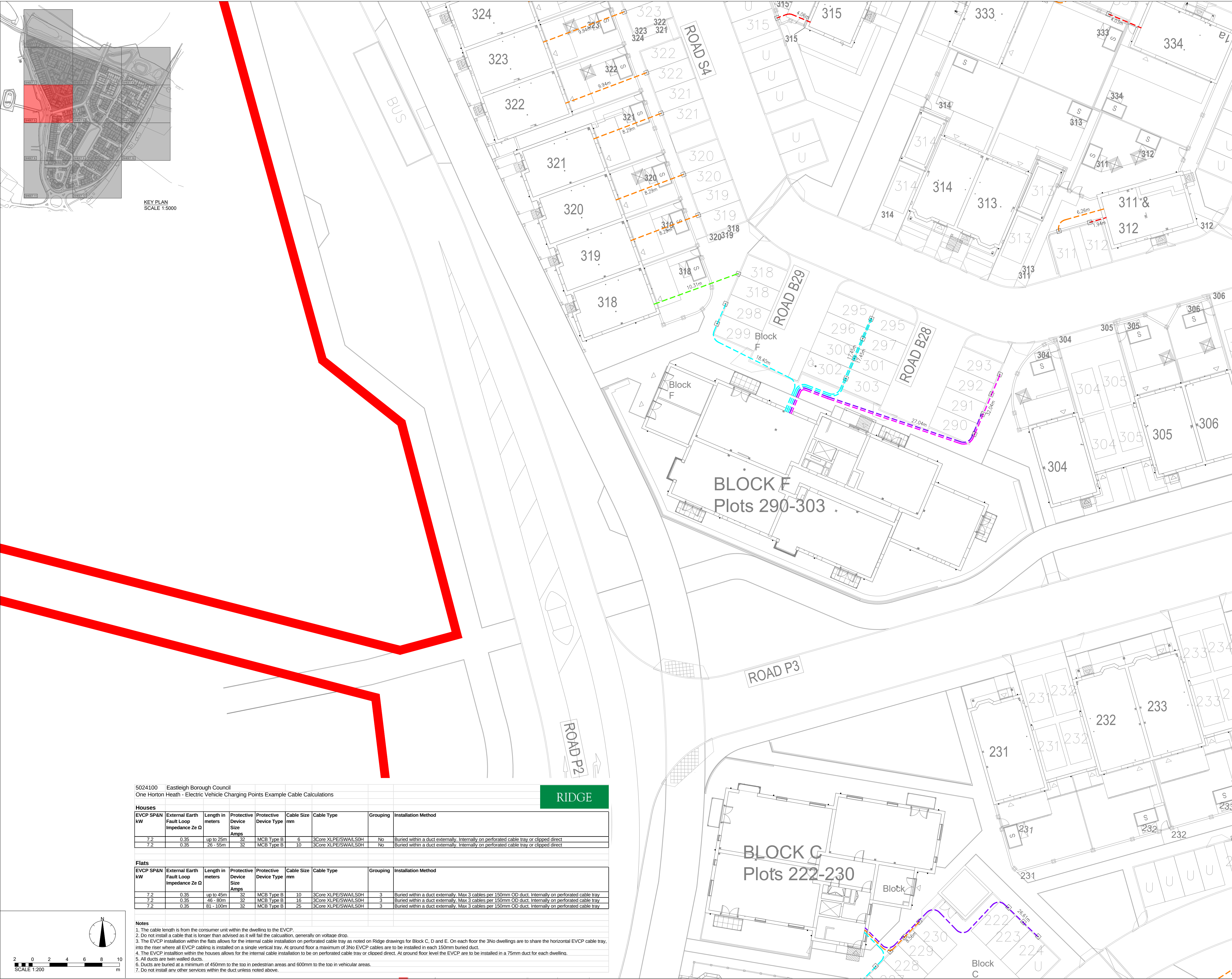


5024100 | Eastleigh Borough Council
One Horton Heath - Electric Vehicle Charging Points Example Cable Calculations

Houses							
EVCP SP&N kW	External Earth Fault Loop Impedance Ze Ω	Length in meters	Protective Device Size Amps	Protective Device Type	Cable Size mm	Cable Type	Grouping
7.2	0.35	up to 25m	32	MCB Type B	6	3Core XLPE/SWALSOH	No
7.2	0.35	26 - 55m	32	MCB Type B	10	3Core XLPE/SWALSOH	No
Installation Method							
Buried within a duct externally, internally on perforated cable tray or clipped direct							
Buried within a duct externally, internally on perforated cable tray or clipped direct							
Flats							
EVCP SP&N kW	External Earth Fault Loop Impedance Ze Ω	Length in meters	Protective Device Size Amps	Protective Device Type	Cable Size mm	Cable Type	Grouping
7.2	0.35	up to 45m	32	MCB Type B	10	3Core XLPE/SWALSOH	3
7.2	0.35	46 - 80m	32	MCB Type B	16	3Core XLPE/SWALSOH	3
7.2	0.35	81 - 100m	32	MCB Type B	25	3Core XLPE/SWALSOH	3
Installation Method							
Buried within a duct externally, Max 3 cables per 150mm OD duct, internally on perforated cable tray							
Buried within a duct externally, Max 3 cables per 150mm OD duct, internally on perforated cable tray							
Buried within a duct externally, Max 3 cables per 150mm OD duct, internally on perforated cable tray							

- Notes
- The cable length is from the consumer unit within the dwelling to the EVCP.
 - Do not install a cable that is longer than advised as it will fail the calculation, generally on voltage drop.
 - The EVCP installation within the flats allows for the internal cable installation on perforated cable tray as noted on Ridge drawings for Block C, D and E. On each floor the 3No dwellings are to share the horizontal EVCP cable tray, into the riser where all EVCP cabling is installed on a single vertical tray. At ground floor a maximum of 3No EVCP cables are to be installed in each 150mm buried duct.
 - The EVCP installation within the houses allows for the internal cable installation to be on perforated cable tray or clipped direct. At ground floor level the EVCP are to be installed in a 75mm duct for each dwelling.
 - All ducts are twin walled ducts.
 - Ducts are buried at a minimum of 450mm to the top in pedestrian areas and 600mm to the top in vehicular areas.
 - Do not install any other services within the duct unless noted above.

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CDM REGULATIONS 2015

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EXTERNAL REFERENCES:

THIS INFORMATION & RIDGE & PARTNERS LLP CIVIL 3D & ASSOCIATED 3D OUTPUTS ARE BASED UPON THE FOLLOWING INFORMATION FROM THE DESIGN TEAM

ARCHITECT REFERENCE:

- AXIS MASON DRAWING No. 4101-AXM-00-00-DR-A-0500 REV. T3 (DATED 11/09/2023)

SURVEY REFERENCE:

- SURVEY DWG No. ENCONE-HH-FEB21 (FEBRUARY 2021)

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THIS INFORMATION IS CURRENT PRIOR TO CONSTRUCTION

LEGEND	
EV DUCT ROUTE 0-5m	HOUSES - 100mm DUCT
EV DUCT ROUTE 5-10m	FLATS - 150mm DUCT FOR UP TO 3 CABLES PER DUCT.
EV DUCT ROUTE 10-15m	WHERE MORE THAN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED
EV DUCT ROUTE 15-20m	
EV DUCT ROUTE 20-25m	
EV DUCT ROUTE 25-30m	FLATS - 150MM DUCT FOR UP TO 3 CABLES PER DUCT
EV DUCT ROUTE 30-35m	MORE THAN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED
EV DUCT ROUTE 35-40m	
	SACRIFICIAL EV CHARGING POST SLAB 100mm THICK. DUCT TO BE TURNED UP TO THE CENTRE OF THE SLAB AND CAPPED OFF AND THE SLAB CAST IN SITU.
	PROPOSED ATTACH TO WALL

C01 INITIAL ISSUE	09/04/2025	JF
REV DESCRIPTION	DATE	DRAWN

ORIGINATOR:



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WINCHESTER
SO23 7TW

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CLIENT:



IN ASSOCIATION WITH:

PROJECT:
**PROPOSED RESIDENTIAL DEVELOPMENT
ONE HORTON HEATH
FIRST RESIDENTIAL PARCEL**

TITLE:
**EV DUCT ROUTE
SHEET 5**

TECH: JF	CSE: Chris Leavel I have reviewed the document 13/04/2025	ICSE: I have checked the document 13/04/2025	SCALE: 1:200	@ A1
STATUS: A5-SUITABLE FOR CONSTRUCTION				
DRAWING No:				
PROJECT: 5015560	ORG: RDG	ZONE: Z01	LEVEL: ST	TYPE: DR
ROLE: C	NUMBER: 0525	REV: C01		