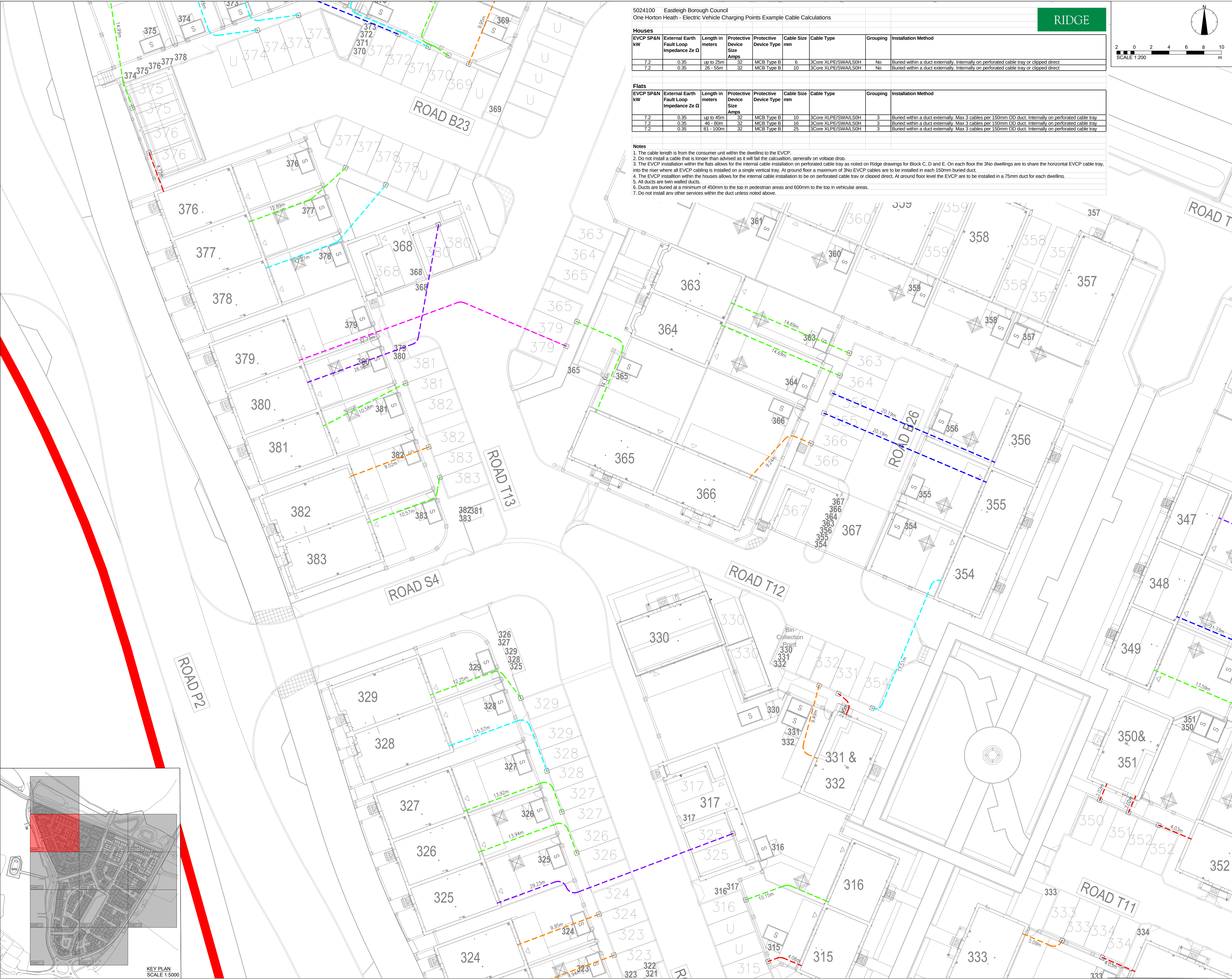




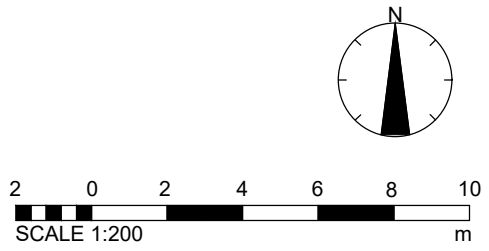
5024100 Eastleigh Borough Council
One Horton Heath - Electric Vehicle Charging Points Example Cable Calculations

Houses							
EVCP SP&N	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/SWAILSOH	No
7.2	0.35	26 - 55m	32	MCB Type B	10	3Core XLPE/SWAILSOH	No

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/SWAILSOH	3
7.2	0.35	46 - 80m	32	MCB Type B	16	3Core XLPE/SWAILSOH	3
7.2	0.35	81 - 100m	32	MCB Type B	25	3Core XLPE/SWAILSOH	3

- Notes**
1. The cable length is from the consumer unit within the dwelling to the EVCP.
 2. Do not install a cable that is longer than advised as it will fail the calculation, generally on voltage drop.
 3. 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.
 4. 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.
 5. All ducts are twin walled ducts.
 6. Ducts are buried at a minimum of 450mm to the top in pedestrian areas and 600mm to the top in vehicular areas.
 7. Do not install any other services within the duct unless noted above.

RIDGE



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DRAWING NOTES:

CDM REGULATIONS 2015

SIGNIFICANT OR NON-OBSVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.

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. ENCIONE-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
	EV DUCT ROUTE 5-10m
	EV DUCT ROUTE 10-15m
	EV DUCT ROUTE 15-20m
	EV DUCT ROUTE 20-25m
	EV DUCT ROUTE 25-30m
	EV DUCT ROUTE 30-35m
	EV DUCT ROUTE 35-40m
	HOUSES - 100mm DUCT FOR FLATS - 150mm DUCT FOR UP TO 3 CABLES PER DUCT. WHERE MORE THAN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED.
	FLATS - 150mm DUCT FOR UP TO 3 CABLES PER DUCT. MORE THEN 3 UNITS SERVED PER RUN AN ADDITIONAL DUCT IS TO BE PROVIDED.
	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:

1 ROYAL COURT
KINGS WORTHY
WINCHESTER
SO23 7TW

TEL: 01962 834400
WWW.RIDGE.CO.UK

CLIENT:

IN ASSOCIATION WITH:

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

TITLE:
**EV DUCT ROUTE
SHEET 2**

TECH:	CSE:	Check Level	ICSE:	Scale	SCALE: 1:200	@	A1
JF	01/04/2025	11/04/2025	11/04/2025	11/04/2025	11/04/2025		
STATUS: A5 - SUITABLE FOR CONSTRUCTION							
DRAWING No:							
PROJECT:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5015560	RDG	Z01	ST	DR	C	0522	C01