

This is a performance drawing and issued for pricing, guidance. The Installation Contractor shall produce all working drawings, including coordination drawings with other Trades and the Builder. This drawing shall be read in conjunction with the specification, schedules that are associated with this project. This is an A1 drawing. This drawing is copyright of Barry O'Neill Ltd trading as BBSC.

REVISION HISTORY

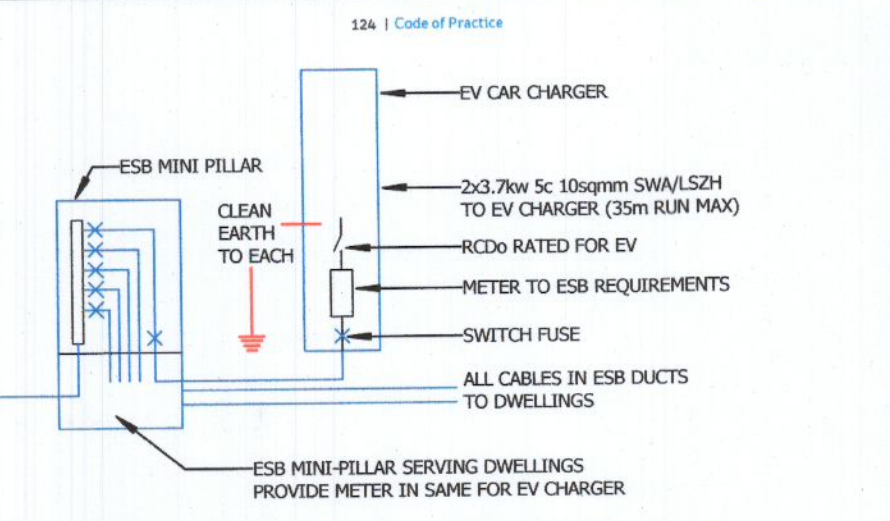
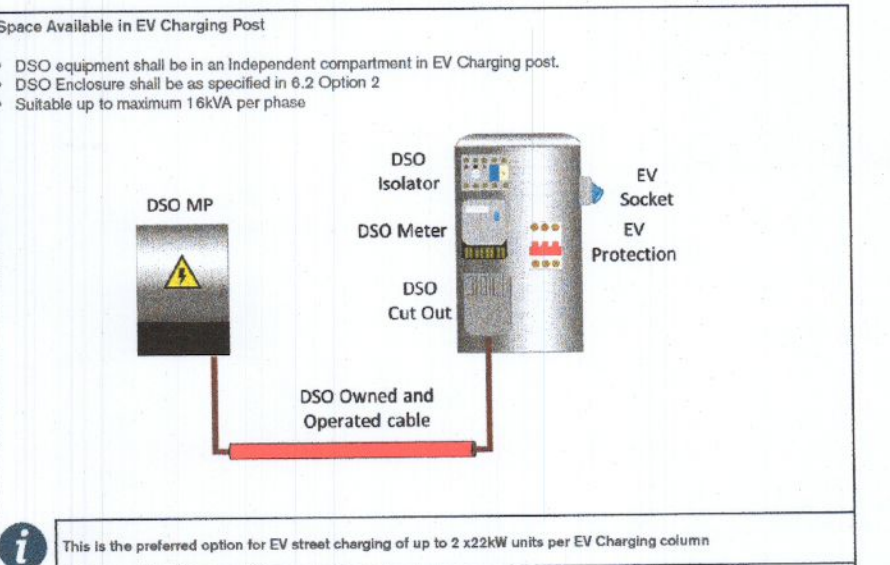
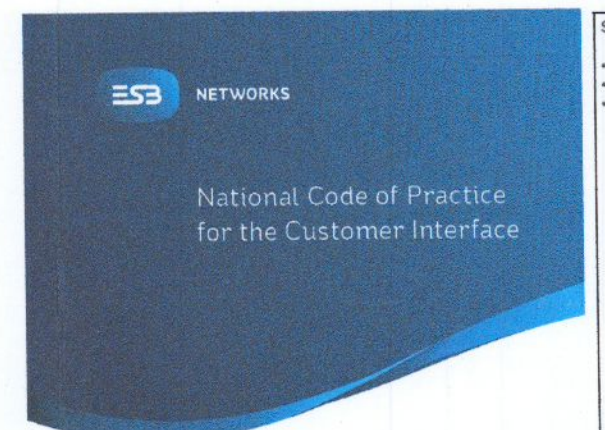
| Rev | Description | Date | By |
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|     |             |      |    |

NOTES:  
 1. ALL DUCTS TO RISE FROM GROUND TO 150mm AFFL USING HOOKEY STICK DUCT BENDS  
 2. ALL DUCTS TO CONTAIN FULL COVERS 7.5IN RATED RIGIDS  
 3. REFER TO ESB, VIRGIN, EIR FOR DUCTING STANDARDS  
 4. REFER TO ESB, VIRGIN, EIR AND OTHERS FOR MANHOLE, PULL CHAMBER SPECIFICATIONS

LEGEND OF CHARGERS

| Legend | Description   | Count | Comments               |
|--------|---|-------|------------------------|
|        | PUBLIC CHARGING POINT<br>2 OUTLETS EACH FOR VEHICLES                            |       |                        |
|        | PUBLIC CHARGING POINT<br>2 OUTLETS EACH FOR BICYCLES                            |       |                        |
|        | DWELLING CHARGING POINT<br>1 OUTLET PER DWELLING IN CURTILAGE                   | 12    | E-CHARGER FOR BICYCLES |
|        | PROVISION OF DWELLING CHARGING POINT WITH DUCTING PROVISION AS PER PART L 1.4.6 | 20    | E-CHARGER FOR CARS     |
|        | PROVISION OF DWELLING CHARGING POINT AS PER PART L 1.4.6                        | 1     | FUTURE                 |
|        | PROVISION OF DWELLING CHARGING POINT AS PER PART L 1.4.6                        | 75    | PROPOSED               |

Grand total: 108  
 BASED ON 192 CAR PARKING SPACES AND 144 BICYCLE PARKING SPACES, NOTE SOME BIKE PARKING SPACES ARE STORAGE ONLY. EACH CHARGER CAN ACCOMMODATE 2hr VEHICLES/BIKES



PROPOSED E-BIKE CHARGER MOUNTED IN BIKE SHELTER OR SIMILAR, 230V 1 PHASE 3.7 KW

PROPOSED DOMESTIC WALL MOUNTED CHARGER OR SIMILAR, 230V 1 PHASE 3.7 KW

PROPOSED COMMERCIAL PEDESTAL MOUNTED CHARGER OR SIMILAR 400V 3 PHASE 7.4/ 3.7 KW DUAL PLUG TYPE

PROPOSED COMMERCIAL GROUND MOUNTED CHARGER OR SIMILAR 400V 3 PHASE 7.4/ 3.7 KW, DUAL PLUG TYPE

**lets spelsberg**

**BCS Pure BOSCH**  
 e-bike charging station

Product number: 54813203  
 Dimensions: 528 x 537 x 226 mm

Technical Data:  
 Built-in devices:  
 SCHUKO plug socket (see note, 230V): 2  
 Bosch charging point: 2

electrical characteristics:  
 Rated operating voltage AC: 230 V  
 Rated operating voltage DC: 28 V  
 Max. operating power (active): 4 kW  
 Max. conductor cross section: 1.5 mm²  
 Protection class: II  
 Type of protection: IP54  
 variant: yes

Colours:  
 Base unit colour: grey  
 Cover colour: white translucent

Additional features:  
 Mobile app: No  
 Management panel: No

Dimensions:  
 Width: 528 mm  
 Length: 530 mm  
 Height: 226 mm

**GARO**

Wall mounted Charger GLB (non OLEV)  
 Type: GLBDC-T222-WO

GLBDC-T222 WO  
 Charging Mode: Socket or Tethered Lead  
 AC Output Current (A): 50 / 400  
 Rated voltage (V AC): 230 / 400  
 Frequency (Hz): 50  
 Temperature range (C): -25...+40  
 Degree of protection (IP): 44  
 Weight (KG): 3.2  
 Location: Wall or GLB Stand  
 DC Monitoring: Standard  
 Load management: Yes, with GNM30/31-1485  
 Local Meter: Option, with GNM30-1485  
 Input for timer/low tariff: Option  
 WiFi Card: Option  
 RFID: Option, with G-CLOUD  
 Communication Certification: EN 61851-1, IEC 61439-7

**GARO**

GLB PLUS WALL BOX 4G

The GARO GLB+ is a smart high end OCPP wallbox and is prepared to connect to backend with OCPP protocol. Has many smart features included for example "Smart Charging". The wallbox can also be configured with dynamic load management, minimizing the risk of overload the main fuse in the supply distribution box. The GLB+ is always equipped with DC leakage protection in accordance with international standard IEC 60854-7. 222 charging of electric cars.

Technical specifications:  
 Type: GLB-DC-MC-PLUS  
 Rated voltage (V AC): 230V  
 AC Output Current (A): 50 / 400  
 Frequency (Hz): 50  
 Rated power (kW): 3.7kW, 7.4kW, 11kW, 22kW  
 Degree of protection (IP): 44  
 Weight (KG): 3.2  
 Location: Wall or GLB Stand  
 DC Monitoring: Standard  
 Load management: Yes, with GNM30/31-1485  
 Local Meter: Option, with GNM30-1485  
 Input for timer/low tariff: Option  
 WiFi Card: Option  
 RFID: Option, with G-CLOUD  
 Communication Certification: EN 61851-1, IEC 61439-7

**GARO**

Ground Mounted Charger LS4 (OLEV approved)  
 Type: LS4DCMT274W0-LAN

LS4DCMT274W0-LAN  
 Charging Mode: Socket or Tethered Lead  
 AC Output Current (A): 6.10,16,20,25,32  
 Power outlet (kW): 3.7kW, 7.4kW  
 Rated voltage (V AC): 230 / 400  
 Frequency (Hz): 50  
 Temperature range (C): -25...+40  
 Degree of protection (IP): 54  
 Weight (KG): 24.5  
 Location: Ground / Wall mounted  
 DC Monitoring: Yes,  
 Load management: Standard with GNM30 / 3T  
 Local Meter: Standard  
 Communication: Local Area Network (LAN)  
 Standard: OCPP1.5 / 1.6  
 Protocol: IEC 61851-1, IEC 61439-7  
 Certification: EN 61851-1, IEC 61439-7



INSTALLATION EXAMPLE OF E-BIKE CHARGER MOUNTED IN BIKE SHELTER

Client: **KELLAND HOMES LTD**  
 Architect: **DAVEY-SMITH**  
 Structural: **ARMSTRONG FENTON**  
 Planning: **ARMSTRONG FENTON**  
 Fire Consultant: **BBSC**

**BBSC**  
 CHARTERED BUILDING SERVICES ENGINEERS  
 80 Willow Park, Avenue, Glasnevin, Dublin, D11AE48  
 (p) 086 385 7097  
 (e) barry.oneill@bbsc.ie  
 (w) www.bbsc.ie

| App'd | Approver | Chkd | Checker | Eng'r | Designer | Drawn | Author |
|-------|----------|------|---------|-------|----------|-------|--------|
|       |          |      |         |       |          |       |        |

Site: **CLONBORRIS K1 DEVELOPMENT DUBLIN**  
 Drawing Title: **EV CHARGERS & APARTMENT WATER REQUIREMENTS**

Project Nr: **22\_0322** Scale: **As indicated** Date:  Sheet Size: **A1**  
 rev:- rev date:-  
 ISO file Reference: **CLB-BBSC-X-0-DR-ME-6002** Project Status: **PLANNING**