



EV Charging Scheme Proposal.

Discharge of Condition 26

136791/FO/2023

26) Prior to the first occupation of the development hereby approved, full details of electric car charging points shall be submitted for approval in writing by the City Council, as Local Planning Authority. The approved details shall then be implemented as part of the development and be in place prior to the first occupation of the apartments and retained thereafter.

Reason - In the interest of air quality pursuant to policy EN16 of the Manchester Core Strategy.

A. Introduction

This report outlines the proposal for provision of EV Charging points at the above consented scheme at the Former Chorlton Leisure Centre, Manchester Road, Chorlton and has been produced to outline of the position of EV charging proposals in respect of condition 26 taking consideration of existing capacity in the power network, air quality standards inline with EN16, and the development costs in respect of Approved Document Part S.

B. Approved Document S: EV Charging

Approved Document S outlines that the connection cost for installing an electric vehicle charge point is the extra cost of the incoming electrical supply per electric vehicle charge point connection compared to the cost without electric vehicle charge points.

Where the connection cost is greater than **£3600 per electric vehicle charge point connection**, the maximum number of electric vehicle charge points should be installed before the extra grid connection costs exceed £3600 per electric vehicle charge point connection.

On a site where multiple new dwellings are planned (for example, where they are within the same notice/plans) an average connection cost may be used

Section 1, Clause 1.7 of AD:S states the following:

- 1.7 To show that the connection cost is greater than £3600 at least two formal quotes should be given to the building control body during the notice/plans stage as follows.
 - a. At least one quote should be from a distribution network operator.
 - b. Quotes should clearly show all of the following.
 - i. The total connection costs for electrical infrastructure without electric vehicle charge points for all dwellings, as an average cost per dwelling.
 - ii. The total connection costs with electric vehicle charge points for all dwellings, as an average cost per dwelling.



iii. The average additional connection costs per electric vehicle charge point per dwelling if electric vehicle charge points are installed for all dwellings with associated parking spaces.

iv. The maximum number of electric vehicle charge points that can be installed before the extra grid connections costs exceed £3600 per charge point per dwelling.

NOTE: For new dwellings where there is no requirement to install an electric vehicle charge point, cable routes may be required; see paragraph 1.2.

C. Project Context

Existing Network Capacity

During discussions between the project engineers and ENWL, the maximum available load for the site was confirmed as **150KVA without the need for a sub-station**.

Development provision as follows;

- 110KVA for 50 dwellings (2.2KVA each)
- 40KVA for the landlord/communal area supply.

The landlord supply of 40 KVA will cover the following;

- A passenger lift,
- communal areas with air conditioning,
- common area lighting and general power

There are a total of 19 parking spaces for the development, with 5 initially identified for EV Charging (or approx. 25%). To provide these 5 spaces each with a 7kW electric vehicle charger would require a load of **approximately 50KVA** and increase the overall buildings **load up to 200KVA** which is in excess of the available capacity and require a substation.

Under the current AD:S, all 19 parking spaces should be considered as EV Charging, categorising these as Associated Parking Spaces for the development. However the consented scheme limited EV charging to 5 parking bays.

Air Quality Assessment

The AQA commissioned as part of the planning application, concluded that operational-phase road vehicle exhaust emissions associated with the proposed development **were not significant**, in accordance with the IAQM screening criteria. This conclusion was based on predicted vehicle movements, which fell below the relevant IAQM thresholds (i.e., fewer than 100 LDV AADT or 25 HDV movements per day within an AQMA).

Accordingly, the AQA report stated that **no further mitigation** was required to control operational emissions, as impacts were below the level of significance, subject to the predicted traffic analysis undertaken at planning stages.



The inclusion of Electric Vehicle (EV) charging provision was considered as a best practice measure, consistent with IAQM and national planning guidance, encouraging sustainable transport. It represents an enhancement beyond what is required for the proposed developments compliance with air quality standards and therefore is not fundamental to meeting the provisions of Policy EN16.

D. Obtained Quotes

In accordance with Requirement S1 and Regulation 44D of Building Regulations Part S we have acquired 2no. quotations from ENWL, one for 150KVA and one for a 200KVA connected load. Please see these quotations attached.

These are both attached to this report, but summarise as

Quote 1 (March 2024): 200 kVA supply **£208,142 ex VAT** (£249,723 inc. VAT)

Quote 2 (May 2024): 150 kVA supply **£40,261 ex VAT** (£48,320 inc. VAT)

The difference (ex VAT) between these quotes is

- **£167,881** to provide 5no EV Charging Bays

E. EV Charger development cost calculations

The scheme provides a total of 19 parking spaces or 38% of the 50 apartments therefore not all residents will benefit from parking on this development.

i. The total connection costs for electrical infrastructure *without electric vehicle charge points* for all dwellings, as an **average cost per dwelling**.

150 kVA supply cost: **£40,261 ex VAT** (£48,320 inc. VAT)

Cost per dwelling (50): **£805.22** per dwelling

ii. The total connection costs for all dwellings, as an average cost **per parking space** (19 spaces)

200 kVA supply cost difference: **£167,881 ex VAT**

Cost per parking space (50): **£8,835.84** per space (19 spaces)

Exceeds the £3600 limit

iii. The total connection costs for all dwellings, as an average cost **per propose parking space** (5 proposed spaces)

200 kVA supply cost difference: **£167,881 ex VAT**



Cost per parking space (50): **£33,576** per space (5 spaces)

Exceeds the £3600 limit

The above calculations are based solely on the costs quoted by ENWL and do not include the additional builders work costs that will need to be provided by the main contractor, which would include construction of the substation enclosure and necessary civils works. An estimate for this total cost to the development would be in the region of £225k.

F. Future Proofing

As outlined within the Approved Document Part S, an allowance has been made for EV charging cable ducts within the proposed scheme for any future provision of chargers.

At the present time the power capacity is limited to 150kVA but until additional capacity be provided within the local network at a future date then it may be possible to retrospectively add the charging units.

This would need to be based on studies by a MEP consultant and in conjunction with discussion with the utilities providers.

G. Conclusion

Approved Document S caps the average cost of installing each electric vehicle (EV) charge point (EVCP) at £3,600, including the extra cost of the incoming electrical supply.

As set out in this document consideration has been given to the provision of EV charging. However, the calculations presented, based upon the received quotes from ENWL in Q1 2025 show that any EV Chargers cost far exceeds the £3600 per space cost as outlined in Part S for the provision of the five bays and therefore is uneconomical at this current time.

The EN16 policy on air quality was considered during the planning stage and the Air Quality report concluded that the proposals were not significant and within air quality development guidelines.

The proposals have sought to make future provision through installation of below ground ducting should capacity become available at a future point for the five spaces, but at this time the cost of EV charging exceeds the standards as set out in Approved Document S.