Pure energy from Statkraft

Electric Vehicle Charging Station Site Survey for Calderdale and Huddersfield NHS Foundation Trust – Back Area – 2x 22Kw Dual 1x 22Kw Single

Project Reference: - ELMCOM10290
Survey Report ID: - 591907

Your account manager - Lyndsey Hetherington Date:
- 26/04/2023

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Pre-Requisites

Form ID	**591907**
Project Reference Number	**ELMCOM10290**
Account Name	**Calderdale and Huddersfield NHS Foundation Trust**
Account Manager	**Lyndsey Hetherington**
On-Site Surveyor	**Steve Squires**
Customer On-Site Contact	**Daniel Smith 07786691637**
Survey Date	**26/04/2023**
Survey Time	**13:00 (1 GMT)**
Address	**Calderdale and Huddersfield NHS Foundation Trust** **Acre Street** **Lindley** **Huddersfield** **HD3 3EA**
Project Type	**Supply and Part Install Of** • **2 x 22Kw Dual Alfen Post mounted EV chargers** • **1 x 22kw Single Alfen Post mounted EV charger** • **Supply only, of 3 x concrete EV Root Mounts** • **Supply only, of 3 x Protective Hoop Barriers** • **Installation of wiring to each EV Charger from the Local Feeder Pillar. Feeder pillar and EVDB will be Supplied and fitted by others.** • **Supply and install 1 x Matt-e unit fed from MCB Within the Clients supplied EVDB, Mounted in the feeder pillar.** • **Test and Commission** • **Mer Back-office software**

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Section 1 – Project Specification

What is the Maximum Demand of the Site?	N/A
Are there Site Plans or Electrical Schematics Available?	Yes
Is Landlord Permission required before Starting Works?	No
What Vehicles are going to be used on the Chargers?	EV and PHEV
Dwell Time of Vehicles	<2 Hours, 2-4 Hours
How does the Customer intend to use the Chargers?	Visitors' vehicles
Does the Customer require Future Proofing?	No

Section 2 - Incoming Supply Details

Is a New DNO Connection Required	No
MPAN Number of Existing Supply	TBC
Location of Incoming Supply	Feeder Pillar (Supplied and fitted by others)
Rating of Incoming Supply	100A Three Phase
Earthing System Type	TNCS
Is Water Bonding Present	Limitation
Is Gas Bonding Present	Limitation
Is Structural Steel Bonding Present	Limitation
Is Lightning Protection in Place	Limitation
Any Other Relevant Bonding	No

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Surveyor Notes on Incoming Supply	**100a 4 Way TPN DB In Feeder Pillar Supplied, By Others. Matt-E Unit To Be Added By Mer and installed within the feeder pillar**
Incoming Supply Images	**N/A**

Section 3 - Existing Distribution Board Details

Section 4 - Cable Run

Is a New Sub-Main Distribution Cable Required	**By Others**
EV Charger Cable Run 1 (m)	**5**
EV Charger Cable Run 2 (m)	**10**
EV Charger Cable Run 3 (m)	**15**

Section 5 - Ground Works

Are Ground Works Required?	**No, By Others**
Is there Existing Ducting that can be Utilised?	**Client To Install Ductings To Each EV Station From The Feeder Pillar**
Are there Utility Plans Available?	**Yes**
Feeder Pillar	**By Others**

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Surveyor's Groundwork Notes	**It is the responsibility of the Client for the supply of Feeder Pillar, its base and all ducts work out to the EV positions. We will require 2 x 63mm ductings from the feeder pillar to each charger position (1 for power and 1 for Data)** **MER Will Supply the Concrete root Mounts for the EV Charger posts and the Protection Hoop Barriers, These will be installed by the Client.** **FYI. Please find attached a PDF Of the Concrete Post mounts.** Alfen Eve Concrete Base Foundation_tran

Section 6 - Site Requirements

Location / GPS of Project	

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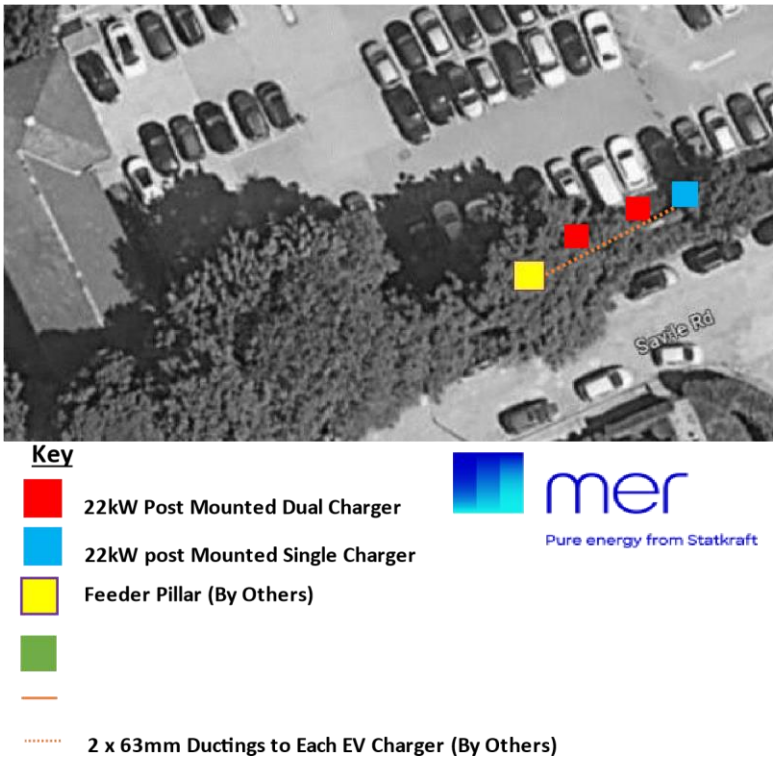
Ariel Image of Charging project	
Electrical Schematic	

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Station 1 Location	

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Station 2 Location	

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Station 3 Location	

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Section 7 - Charging Stations and Accessories

Is AC Charging Equipment Required?	Yes
Eve Double 22KW	2
Installation Post for Eve Double	3
Eve Single 22KW	1
Concrete bases Required	3
Are Dual Incomers Required?	No
Is Advanced Load Management Required?	No
Are Additional Accessories required?	No
Protective Hoop Barriers	3
Is Mer Connect required?	Yes
Number of Socket Connections required?	5
Number of Station Setups required?	3

Section 8 - Health & Safety, Environmental and General Questions

Are they any Site Hour Restrictions?	No
Are there any access restrictions for Vehicles?	Yes
If Yes, please Describe?	Car parking is very limited
Is there a permit to Work System?	Yes
If Yes, please Describe?	Client to provide
Is there a site induction required?	Yes
If Yes, please Describe?	Client to provide

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Does the client have asbestos that may be potentially disturbed during work?	**No**
Is an electrical shutdown required?	**No**
Please check all the Environmental Concerns that the Design and Field Teams will need to be aware of?	**Noise, Vibration, Odour, Dust**

Section 9 Estimators Concluding Comments

Are there any concerns over Power Capacity?	**No**
Is there any further information required from the customer?	**No**
Are there welfare facilities on-site that the customer has said we can use during installation?	**Yes**

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Estimation Engineers Concluding Statement	**<u>Scope of Works</u>** **Supply and Part Install Of** • **2 x 22Kw Dual Alfen Post mounted EV chargers** • **1 x 22kw Single Alfen Post mounted EV charger** • **Supply only, of 3 x concrete EV Root Mounts** • **Supply only, of 3 x Protective Hoop Barriers** • **Installation of wiring to each EV Charger from the Local Feeder Pillar. Feeder pillar and EVDB will be Supplied and fitted by others.** • **Supply and install 1 x Matt-e unit fed from MCB Within the Clients supplied EVDB, Mounted in the feeder pillar.** • **Test and Commission** • **Mer Back-office software** **All Ground works will be Carried out by the Clients contractor.** **MER Will supply the Hardware.** **All Electrical work from the Feeder pillar/EVDB will conform to the current 18th Edition of the BS7671 Wiring regulations.** **The 100a TPN Power cabling from the building to the feeder pilar will be run and terminated into a 4-way TPN DB mounted in the Feeder pillar by the Client's Electrical contractor.**

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Ground Works by Others

- **Create Concrete Feeder Pillar Base with all associated duct work.**
- **Land And Secure Feeder Pillar onto the concrete base**
- **Dig and lay 2 x 63mm Ductings to each EV position.**
- **Install 3 x Concrete Post mounts (Supplied by MER)**
- **Back file and reinstate.**

Electrical By Others

- **Supply and install Composite Feeder Pillar**
- **Install 1 x 4-way EVDB with 4 x 40a TPN C Type MCBs, within the new Feeder Pillar.**
- **Install 1 x Tubular Heater and 1 x 13 a Twin Switched Socket within the Feeder Pillar**
- **Supply, Run and terminate 1 x 100a 3 Phase and Neutral Electrical supply and separate Earth from the main building to the Feeder Pillar**
-

Electrical By MER

- **Run 3 x 6mm 5 core swa`s and 3 x Cat 6 cables in the newly installed ductings to Each EV Charger**
- **Mount and Terminate 2 x 22Kw Dual Alfen EV Chargers**
- **Mount and Terminate 1 x 22Kw Single Alfen EV Charger**
- **Install 1 x 100a TPN Matt-e unit within the Feeder pillar.**

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- **Set up MER Back-office software.**
- **Test, Label and commission**
- **Tidy the site and Dispose of all rubbish in the skips**

Assumptions

1. **The site engineers will have access to the Car parking area and able to park their vans.**
2. **A Skip will be in within the Proposed Site.**
3. **The Work areas are free from any obstacles, rubbish and Equipment as, to allow safe and unrestricted movement of MER Engineers**
4. **the Proposed EV Bays and stoned area can be conned off and entrance restricted to Mer Engineers only.**
5. **The site engineers have access to site welfare facilities.**
6. **All ground and electrical works by others will be complete and ready for MER engineers to Install the EV Equipment before arrival.**

I Estimate the install will take 3 days for 2 Electricians.

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Installation Terms

From our experience of site installations, we highlight the following notes so we can maintain a high-quality service while remaining within the quotation (contract) provided.

Mer responsibilities

Mer will seek to undertake reasonable endeavors to fulfill its obligations to successful completion of the contract.

1. Act in a professional manner always.
2. Provide the services outlined in the contract.

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3. Meet all HSE requirements.
4. Communicate any requirements or issues to site contact for visibility of anything that will impact on successful contract completion.

Customer responsibilities

Services are supplied with the understanding that the customer will be in a state of readiness for the service to be carried out and have all prerequisites ready as per the contract, this will facilitate the works to be delivered in a timely fashion and provide all reasonable access. These are listed below.

1. Reasonable access to areas will be required for indoor runs and groundwork's to be provided at the site.
2. Areas to be in a state of readiness for works to be carried out as per order.
3. Mer has undertaken a survey in conjunction with the site-specific information from you, the customer and reasonable survey techniques but cannot quote for unforeseen site-specific environmental issues i.e., Below ground issues not highlighted by the customer. This will be highlighted at the time and use of the Order Variations Form is needed to highlight and issues and agree a remedy.
4. Electrical - Customer is responsible for providing reasonable access to allow. Mer to undertake its installation at the specified location.
5. The customer is responsible for ensuring sufficient electrical capacity and supply, other than those specified expressly in the quote.
6. Ensure the agreed installation date is adhered to. If for any reason this date is to be amended, 7-day notice should be provided.

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