Bournemouth, Christchurch and Poole Council
For
POOLE HOUSING PARTNERSHIP LTD.

RENEWAL of ELECTRICAL STORAGE HEATING AND LIGHTING AT WILLOW PARK 2020

A Package of Electrical Works to provide new lighting and Electrical Heaters to Common Rooms And Communal Areas and electrical heaters to the flats.

1 GENERAL ITEMS

1.1 Introduction

1.2 Objectives

1.3 Scope of Works

Communal Room, communal Areas, laundry rooms Offices x 2 and guest bedrooms
The Contractor is to renew all storage heaters and wiring circuits in communal areas throughout Willow Park as per the Dimplex schedule. Appendix C5 contains proposed layouts of heater positions in communal areas. Some existing heaters are to be altered or removed, or new heaters in other positions. The Contractor is to allow for all disturbances to walls and handrails and making good to all areas including chasing and making good where required. The contractor is to make an allowance for new distribution boards where necessary.

The contractor is to rewire all lighting circuits in the communal areas, common room guest bedrooms laundry room's offices x 2 and stairwells and replace all light fittings with LED type as per the Thorn schedule in Appendices C, the contractor shall allow for temporary lighting as and where necessary. The contractor shall allow for full testing of all appropriate circuits in accordance with current Electrical Wiring regulations.
All existing heating units, light fittings and wiring is to be disposed of by the Contractor.

51 Residents Flats, 1 Studio flat, 2 guest bedrooms & 2 offices
In residents flats & as above the heaters are to be renewed and all new wiring is to be clipped just under ceiling level, chased down the wall and with the installation of coving to cover it. A new circuit may be required from the distribution board for the new heater in the bedroom. Locations of existing heaters within the flats are to be used, unless otherwise stated. The Contractor is to make good to all areas disturbed by the works.

All new wiring is to be concealed within coving & within the walls. Under no circumstances should the Contractor be using surface trunking without the express permission from the CA. The Contractor is also to replace both on peak and off peak distribution boards throughout all of the 51 flats and allow for full testing of all appropriate circuits in accordance with current BS7671 Wiring regulations 2018

A total of approximately 260 new heating products are to be supplied and fitted throughout Willow Park communal areas and 51 resident's flats as indicated on the Dimplex schedule in Appendix A. The existing heaters are to be located as per the drawings in Appendix C5. There are extra heaters to be fitted and wired (which will require chasing in and making good) and some of the existing heater positions have been altered or omitted. Please refer to the proposed heating layout drawings in Appendix C5

The contractor will allow for all making good, redecoration of the lounge, bedroom, hall and for the provision of coving as and where necessary.

1.4 Location of Work

Willow Park is occupied by vulnerable and elderly residents and may remain occupied during the works. Some will have dementia and other conditions. The Contractor must make adequate provisions for their safety and convenience at all times during the works.

2 ELECTRICAL SPECIFICATION

2.1 Regulations

All works shall comply with:

BS7671 'Requirements for Electrical Installations' (The IET Wiring Regulations 18th Edition) and all amendments made on, before or after the date of tender.

BS7375: 1991 The Electrical Safety Recommendations of the National Joint council for the Building Industry.

Electrical Supply Regulations 1988.

Electricity at Work Regulations 1989, Issue No. 635.

The Contractor must be NICEIC approved and remain registered for the duration of the contract.

2.2 Earthing & Bonding

The complete electrical installation shall be earthed and bonded to comply with Chapter 54 of the BS 7671 2018 and with the requirements of the Supply Authority.

All main equipotential bonding conductors, main earth conductors and C.P.C.'s shall terminate in separate ways in the main earth bar of the consumer unit.

All cable terminations at conduits or pipes shall be crimped and fitted to proprietary bonding clamps provided with metal labels engraved "DO NOT REMOVE – ELECTRICAL EARTH CONNECTION."

2.3 Main Equipotential Conductors

The Main Equipotential Bonding Conductors shall be separate 10 sq mm green and yellow PVC copper cable connected between the consumer unit main earth terminal and each of the following:

1. Main gas supply pipe, within 600 mm of gas meter on consumer's side.
2. Incoming cold water mains supply pipe, were metallic.
3. Cables to be run straight, vertical or horizontal and parallel to walls unless shown otherwise.
4. Position at least 150 mm clear of other services. Cables running parallel and adjacent to heating pipes to be located below the pipes.
5. Concealed horizontal runs in walls, if unavoidable, to be located within 150mm of ceiling or between 150 and 300 mm of floor
6. Concealed cable runs to wall switches and outlets to be vertically in line with the accessory.

2.4 Installing Cables

Install cables neatly and securely, adequately protected against accidental damage, adverse environmental conditions, mechanical stress and deleterious substances.

Install cables without joints. Connections will only be permitted at equipment and fittings. Do not use junction boxes.

Sleeve cables passing through masonry walls with conduit bushed at both ends

Cables shall be fixed by using plastic type clips with integral masonry nails. The clips shall be the correct size for the cables.
All wiring shall be chased in and be concealed, only exceptionally will surface trunking be allowed and this will require prior agreement of the CA.

2.5 Circuit Protective Conductors

Cables shall be used throughout as circuit protective conductors. Conduit and trunking shall not be used as the CPC for circuits.

3 SOCKETS AND FITTINGS

See appendix C5 for schedule of Dimplex heaters to be used throughout and accompanying drawings of proposed locations in Appendix C.

3.1 Preferred Material and/or Design:

High impact plastic faceplates colour to be white. To include:

- Galvanised flush mounting boxes
- Electric cables etc.
- Switched fused connection units
- 20A double pole switches

3.2 Minimum installation requirements

This will include upgrade to existing installations to the minimum provision listed below, to be included with all rewires and deemed to be included in Priced Schedules.

Do Not: Surface mount units/wiring/conduits.

3.3 Equipment Schedule:

The following schedule lists equipment deemed to comply with PHP's requirements and is to be included when completing Pricing Schedules:

CATEGORY	DESCRIPTION	Manufacturers Ref.	COLOUR
SWITCHED FUSE CONNECTION UNITS FUSE CONNECTION UNITS	CRABTREE PLUS RANGE COMPLETE WITH NEON INDICATOR or equivalent UNSWITCHED WITHOUT NEON	4827/3 4828	WHITE
DB BOARDS DWELLING	DISTRIBUTION BOARDS FOR DOMESTIC DWELLINGS – UNIT SHALL BE DUAL RCD WITH 100 AMP INCOMER	Crabtree 513/2637636B or equivalent	Metalclad

	DISCONNECTOR AND 80 AMP/30MA DISCONNECTOR RCD'S		
DB BOARDS COMMUNAL AREA			Metalclad
HEATERS	See Appendix A2 DIMPLEX heater schedule		

4 TESTING AND COMMISSIONING

All other installations shall be fully tested electrically and functionally in compliance with IEE Regulations and Manufacturers requirements.

One set of manufacturer's operating and maintenance instructions and a guarantee certificate shall be handed over, for each house.

Blank copies of the Council's form of installation certificate/disclaimer notice will be provided to the Contractor. The Contractor shall complete the certificate, obtain the resident's signature and pass completed certificates to the Client's representative.

5 INSPECTION AND TESTING

5.1 Comply with BS 7671 (17th IEE Wiring Regulations: Part 6) and any revisions within the life of this contract.

Visually inspect and verify the correctness of all connections, Insulation colour, size segregation and protection of all conductors.

Once the Contractor has satisfied himself that all faults have been cleared the installation shall be offered to the Clerk of Works for an official acceptance test. This test shall be carried out by the Contractor, using his own test equipment, to the requirements of the Clerk of Works.

Each test instrument shall have its serial number noted on a calibration certificate which should also have the frequency of the calibration test as recommended by the manufacturer.

Installations will only be accepted for official testing if the work of all trades is complete and a completed and signed Inspection Certificate Incorporating a Test Results Sheet is made available to the Clerk of Works.

The tests to be carried out by the Contractor to satisfy the previous requirements and as described in APPENDIX D

All measurements shall be given infinite values. Where the reading is greater than the meter full scale, this shall be given as greater than that scale. Infinity will not be accepted.

The Contractor shall submit the fully typed Inspection Certificate along with the Completed Test results sheets.

Where characteristics of protective devices can be adjusted, confirm devices are within maximum and minimum specified tripping times.

Confirm any interlocks or specific sequences operation correctly and safely.

The Inspection Certificate shall be in the same form as that specified in Appendix 6 of the 17th Edition, IEE Wiring Regulations and shall be signed and endorsed with the Contractor's name and address.

5.2 Testing Documentation

To be provided by the contractor in email/PDF format containing the following information:

a) Manufacturers details of all installed equipment and accessories
b) Equipment Operation Instructions where applicable
c) All test certificates