St John the Divine, Selsdon

Schedule of Works for a

Hybrid Heating System

Issue 1

 October 2024

1.0 Introduction

The following schedule from Cowley Heating forms the outline of the work proposed to install the Hybrid Heating System detailed in the Scope of Works, Issue 1, dated 21.08.24.

The schedule may be subject to minor changes as the proposal is developed.

2.0 Schedule

2.1 Isolate, disconnect, remove and cart away from site the existing equipment as follows: gas boiler, Clyde Combustion 505-8 rated at 275 kW output, and the redundant radiators and pipework.

2.2 Run a new 3 phase electrical supply cable to the location of the new heat pumps.

2.3 Provide a new concrete plinth to site the new heat pumps

2.4 Supply and fit 2 no new air source heat pumps type Mitsubishi Ecodan CAHV-R45OYAHPM, rated at 40kW output at EN14511. Seasonal coefficient of performance of 3.57.

2.5 Run new LTHW flow and return pipework from the new heat pumps to the main plant room.

2.6 Supply and install a new gas fired condensing boiler to provide backup heating, 1 no Ideal Evomax rated at 150 kW output at 70 deg c MWT sited in the plant room. Allow to reline the existing chimney with a new condenser flue liner. Provide safe high level access to the top of the tower.

2.7 Supply and install 3 no 1000 litre thermal storage cylinders to the main plant room. Connect to the new heating system via a plate heat exchanger.

2.8 Run new flow and return pipework from the plate heat exchanger to the north and south aisle circuits via 2 no new system pumps.

2.9 Run a new PVC condensate waste from the boiler and flue system to the nearest suitable drain via a neutraliser.

2.10 Supply and install new Smiths Caspian Fan convectors. MHS Galant radiators and under pew heaters as per Heat Emitter Schedule and located as shown on drawing SJ/30266/M/01.

2.11 Allow to carry out electrical work to the new air source heat pumps and boiler and provide new corrosion proof lighting to the plant room.

2.12 Install a new twin pump pressurisation unit and expansion vessel to the primary heating circuit.

2.13 Supply and install Trend/Tridium controls to manage system.

2.14 Provide new thermal insulation to all new heating pipework.

2.15 On completion test, commission and leave operational.