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Service Provider Proposals
Lot 2 Major Works Framework

X253
Brunel Estate Ventilation & Fire
Safety Works

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Table of contents

1.0	Introduction.....	3
1.1	Purpose.....	3
1.2	Brunel Estate	3
2.0	Scope of Works.....	5
3.0	Method Statement.....	7
3.1	Site Set Up	7
3.2	Material Delivery and Storage	8
3.3	Waste Management	8
3.4	Methodology of the works	9
4.0	Design proposals	11
5.0	Specifications and Drawings	14
5.1	Specialist and Supplier Specification and design proposals.....	14
5.2	Drawings.....	15
6.0	Resident Engagement and Communication.....	16
6.1	Proposed communications schedule	16
7.0	Construction Phase Plan	17
8.0	Risk Register.....	17
9.0	Programme.....	17
10.0	Resource Plan.....	19
10.1	Management structure.....	19
10.2	Labour Resources	20
11.0	Costs Plan and Cash Forecast	20
11.1	Business Case Proposals	20
11.2	Cost Plan	22
11.3	Cashflow Forecast	23
12.0	Appendices.....	24
	Appendix 1 – Site set up Plan.....	25
	Appendix 2 – Waste Management Plan	26

Not all of the appendices are published online. If you would like to view the information please contact housing.enquiries@westminster.gov.uk or 0800 358 3783 quoting reference major works X253 to arrange this.

1.0 Introduction

1.1 Purpose

This Service Provider Proposals document (SPP) has been prepared following the approval of our Project Execution Plan (PEP) and the issue of a Pre-Commencement Order (PCO) by WCC on 15 October 2018, reference 80063483.

The purpose of this SPP is to develop the preliminary proposals set out in our PEP document into a detailed working document for the following aspects of the task:

- Access requirements
- Replacement of roof-based ventilation plant
- Replacement grilles and fire dampers to existing ductwork
- Associated builders work
- Replacement lighting to plant room and riser cupboards
- Fire door replacements as per scheduled Fire Risk Assessment (FRA) works
- Front Entrance Door (FED) replacements for tenants and 'opt in' for leaseholders

This proposals document is intended to be an overview of the design, specification and methodology for carrying out the works. The document is supported by the attached appendices which contain full details of the proposals.

1.2 Brunel Estate

The Brunel Estate consists of one 20-storey block and thirteen 7-storey blocks built between 1973-1974, however, this project only requires work to eleven of the blocks, including the 20-storey block, Keyham House.

The blocks are generally of concrete frame constructions with brick facades and flat roofs.

This project consists of three archetypes;

Type 1: Mickleton House, Riverford House, Sunderland House – Comprises three 7 Storey blocks, containing three different types of dwellings as follows:

Dwelling Type 1 - Left hand 2 bed single storey separate bathroom and toilet. This does not have a communal extract system, just original air brick ventilation only.

Dwelling Type 2 - 1 bed single storey combined bathroom/toilet extract ventilation system.

Dwelling Type 3 - Right hand - 2 bed single storey with separate bathroom and toilet.

This does not have a communal extract system, just original air brick ventilation only.

There is one centralised toilet/bathroom extract ventilation system serving type 2

dwelling located externally at roof level on each block

Type 2: Keyham House – 20 Storey contains 99 dwellings with five different types as below. Only 78 of the 97 properties have mechanical ventilation.

Single bedroom properties – floors 1 – 19 have the same layout

Ground floor single bedroom properties – The dwellings vary slightly and there is a commercial shop and plant rooms.

Corner properties on each level – Naturally ventilated

Dwellings type 1, 3, 4 and 5 – have four communal toilet and bathroom extract ventilation fan sets. The twin fan, extract fan sets are located externally at roof level of the tower block. The extract fan sets are grouped to serve a set of vertical dwellings:

- Types 3 and 4 – from ground floor to the nineteenth floor
- Types 1 and 5 – from the first floor to the nineteenth floor

Dwelling type 2 – Does not have a centralised extract system

Type 3: Combe House, Derrycombe House, Portishead House, Stonehouse House, Truro House, Hanwell House, Dainton House – 7 Storey contains 24 - 30 dwellings of four different types.

Left hand 2 – Entrance door and staircase on left side dwelling. Two level maisonette with two bedrooms and a bathroom and toilet.

Right Hand 2 – Entrance door and staircase on right side of dwelling. Two level maisonette with two bedrooms and a bathroom and toilet.

Left Hand 3 – Entrance door and staircase on left side of dwelling. Three level maisonette with two bedrooms, a bathroom and toilet on upper floor with an additional toilet on the lower floor. The main entrance is on the middle floor.

Right Hand 3 – Entrance door and staircase on right side of dwelling. Three level maisonette with 2 bedrooms, a bathroom and toilet on upper floor with an additional toilet on the lower floor. The main entrance is on the middle floor.

2.0 Scope of Works

The blocks are each served by a communal ventilation system, situated on the roof tops, which require replacement of the twin fans along with the grilles in the bathrooms of each property.

The scope of works includes the following:

Element	Scope of work required	Comments
Access Required	Scaffold tower required for access to the extract fans on the roofs/500kg goods hoist for Keyham House/200kg goods hoist for smaller blocks	Plant to be replaced at roof level is of a large weight which means that manual handling these materials to reach roof level would cause health and safety concerns. Therefore, independent scaffold tower to be erected in 2m lifts to give access to the roof and to be clad with debris netting. We will also be erecting a 500kg goods hoist for Keyham House and 200kg goods hoist for the 10 remaining smaller blocks, to reach roof level with safety gates.
	Roof access at Keyham House	Revised hatch/ladder access to be installed at Keyham House to allow access to both sides of the roof.
Ventilation Works	Communal roof-based ventilation	Replacement of roof-based ventilation plant including S&P UK Ventilation Limited manufactured twin fans (one per each ventilation riser).
	Ductwork	Cleaning and servicing of existing ductwork. No allowance has been made for CCTV surveys of the existing ductwork. The communal ductwork is built between the kitchen & bathrooms within a shaft. If the ductwork is damaged and needs repairing, we will need to breakout both walls to gain

		access within the shaft. No costs have been allowed for this within the cost plan as it is not feasible to foresee the works required as it is property dependant.
	Grilles and Dampers	The grilles and dampers are being installed to bathroom extract in all flats on the Brunel Estate. They are being replaced to ensure the provision of a fire compartment is established between each flat and the ductwork riser for the extract systems. The air valve being installed comes with an integral fire damper.
	Bespoke works	We will be installing a bespoke powder coated plate to cover the hole created by works, and other associated making good works.
	Builders work in connection with the in flat ventilation works	Carefully forming of wall around existing grilles to access ductwork, Fire stopping to ductwork where new Constant Air Volume (CAV) Unit will be installed to limit the amount of air flow extracted from the air valve in each.
Electrical Works	Replacement lighting and associated works	An NICEIC approved electrical contractor will be appointed to undertake all electrical works required. Associated electrical cabling and containment replacement, replacement lighting to plant room and riser cupboards, associated small power upgrade works.
Fire Doors	Replacement of Communal Fire Doors	Fire door replacements works to be carried out as per the schedule provided by WCC.
	Replacement of Front Entrance Doors (FED)	Replacement of scheduled doors with FD30(s) and all associated works.
FRA Works		Fire stopping and compartmentation works as

		identified at pre-construction surveys.
Asbestos works	Refurbishment and Demolition Asbestos R&D Survey; Removal of all Asbestos Containing Material (ACM) as recommended within the above report	An appropriately accredited and competent contractor will carry out an R&D survey in each area likely to be affected by the works during the Pre-Commencement stage. A provisional sum allowance has been made in our price for the treatment of any ACM's that maybe identified in the survey.
Building Control & Planning Considerations		Proposals will be submitted to Building Control for approval before work commences on site.

3.0 Method Statement

3.1 Site Set Up

Works are to be undertaken to 11 No. blocks located within the Brunel Estate and, as such, we have identified a suitable office and welfare compound area within the small car park areas next to Keyham House on Westbourne Park Road.

This area consists of three parking bays and is accessed via an FB gate. The area is large enough to accommodate the necessary site compound and still leave enough room for Fire Brigade access. Attached at Appendix 1 is a site plan which shows the site set up information, including the proposed location of the site compound. This area is yet to be confirmed and approved by WCC.

The site compound area will accommodate the following:

- Sanitary conveniences
- Washing facilities
- Drinking water
- Changing rooms
- Facilities for rest
- Site office
- Toilet facilities
- Storage containers
- Skips

All site compound, storage and waste collection facilities will be secured using anti-climb heras fencing which is locked at the end of each working day, or at times when the areas are unoccupied to prevent unwanted access.

3.2 Material Delivery and Storage

There are limited storage facilities available so a 'just in time' delivery policy will be adopted to optimise the storage space available at any time to the best effect and with minimum impact upon residents and any other third parties.

All orders issued to the Axis supply chain will include details of the delivery/collection address and contact details of the Axis Manager responsible for coordinating delivery/collection arrangements to ensure deliveries/collections can be monitored and managed. Our supply chain for the ventilation works will be storing materials at their workshop storage units as per their recommendation.

One six meter long storage container will be required to provide adequate storage facilities over night during the programme of works within the office and welfare site compound. The container will be used to store electrical materials and adhoc tools and materials during the works.

Materials will then be transported to individual blocks by the contractors as and when required. No materials are to be stored at individual blocks without the express permission of the Client Representative.

3.3 Waste Management

The works will involve the removal of many different types of waste. Programme demands dictate that we work on no more than two blocks at a time which means the waste is very diverse in its nature as it is produced. There is insufficient space on site available to sort the waste into segregated waste collection containers on site and as such, all waste, other than controlled waste (such as asbestos) which will be deposited into general waste skips. The contents of these skips are then segregated into relevant waste categories by our waste collection company at their collection facility for appropriate onward disposal.

The waste collection skip for office and compound waste will be located next to the office and welfare compound set up. These skips will also be used for depositing other general waste from the works where appropriate and will have a lockable cover to prevent any unwanted items being thrown into them by unauthorised persons.

All waste removal from site will comply with the relevant legislation, by an authorised waste carrier, who will provide waste transfer notes to Axis. These notes will be kept in the site file until the end of the project. After this, they will be stored electronically for 2 years as per the legislative requirements.

Attached at Appendix 2 is a copy of the Axis Waste Management Plan for these works detailing the expected waste materials for this project and where they are to be disposed of.

3.4 Methodology of the works

Some of the methods adopted may create a disturbance to the residents and neighbours and these will be explained to all affected parties by our Resident Liaison Officer in advance of the works taking place, including appropriate advice to mitigate the impact of any disturbance.

Battery powered tools will be used wherever possible.

The works being carried out to each block are in essence the same, with slight property specific variations, and will all follow the below methodology as applicable. Works have been programmed to be carried out on a block by block basis. Please refer to specifications for material details.

The works will be sequenced in a logical manner and planned in order to optimise efficiencies and outputs. The works can be identified in a number of stages, as explained below:

Pre-commencement works

Fire door Surveys

During the pre-commencement stage of this project, measured surveys will be carried out by the nominated Fire Door contractor to all tenant front entrance doors and communal doors as detailed specifically in the cost plan.

Asbestos survey

R&D survey to be carried out to all working areas.

FRA and Compartmentation survey

FRA and Compartmentation surveys were carried out to communal areas and in flat (at Keyham House only) to provide a schedule of remedial works required which have been costed and included within the cost plan.

Pre-condition survey of all communal and in flat areas

Photos will be taken of the blocks, prior to any works commencing to record the existing condition of external areas, flooring, doors and the like.

Surveys and photos will be taken by the RLO of each property on the morning works commence.

Communal area works

- Erection of scaffold tower and small goods hoist installation; To be located as per the site plan.
- Protection to all areas to be accessed by operatives; floor protection will be laid, correx protection to the lift being used for persons.
- Isolation and disconnection of existing roof mounted fan equipment.

- Removal of existing fans.
- Isolate, run new containment and supplies, lighting & power to plant rooms, 2nd fix, test & commission.
- Keyham House, Mickleton House, Sunderland House, Riverford House; Replacement works of communal doors in line with the fire safety specification.
- Keyham House, Mickleton House, Sunderland House, Riverford House; Replacement of all communal electrical intake cupboards, stairwell and bin chute fire doors.
- All associated FRA works, e.g. fire stopping to new penetrations created by these works, compartmentation works as per pre-commencement survey findings.
- Quality inspection by Westminster City Council.

In flat works

- Flooring protection; to be laid inside each property to protect areas which will need to be accessed via contractors.
- Ventilation works; removal of existing grille, Mark out and create cut out back to riser ductwork, Ductwork to be cut out and prepared for reconnection, Install duct mounted volume control damper and new fire damper valve grille, Reseal new air valve on wall with fire stopping products to fill any gaps between the fabric and the duct spigot prior to installation of the flow limiter and extract valve.
- Fire batt is to be installed by NAPFIS accredited installer between the existing square duct to form a fire seal around new circular duct and finished in intumescent mastic.
- Making good; installation of bespoke powder coated (RAL 9010) 200mmx200mm plate to cover the hole created, sealed with intumescent mastic.
- Keyham House, Mickleton House, Sunderland House, Riverford House; Installation of new FD30(s) door sets to front entrance doors.
- Quality inspection by Westminster City Council.

Commissioning

The main roof extract fans will be commissioned upon completion by taking a main pressure and volume reading against each new extract fan on the roof.

Sample air readings will be taken from a number of flats to provide a record of completion. No balancing will be required to each branch in the flats due to the Constant Air Volume's (CAV) being installed.

All testing, commissioning, certification, health and safety information and operation and maintenance manuals will be provided upon completion of the works.

The fire doors are being supplied and installed by the third-party accredited contractor who will provide commissioning and test certificates following installation.

Final handover

Upon completion of the works to each sub-block, Axis Site Management will carry out a snagging inspection and attend to any items identified prior to offering to the WCC quality manager for a final handover inspection. The WCC quality manager will issue a list of any defects they find during their inspection for Axis to attend within seven days, whereupon the WCC quality manager will be invited back to de-snag.

The WCC Quality Manager will then issue a completion certificate to cover all aspects of the works per sub-block once they are satisfied that the works have been completed to a satisfactory standard. The completion certificate may include a schedule of outstanding minor items where access has not been possible for whatever reason. Axis will compile and maintain a Schedule of Defects to include all outstanding matters identified on the completion certificates and they will continue to seek access in line with the process set out in the communications plan (with the assistance of WCC resident communications team where necessary) to rectify these issues until the end of the defects liability period.

4.0 Design proposals

Full written details of our design and specification proposals are set out in section 5.0 and attached to this SPP at Appendix 3.

The task consists of straightforward repairs and maintenance and there are no complex design issues to consider. All specifications and proposals have been prepared in-house or with the assistance of our supply chain partners.

An overview of the design proposals and how these have been developed is set out below:

Materials and Workmanship

The specification has been developed from the Nifes specification provided as Appendix 12 in the client brief. This covers all aspects of normal repairs and set out minimum standards for workmanship and materials used in the works.

Specialist and supplier specifications and design proposals

We have approached several specialists to assist us with our proposals for the task as follows:

Electrical works including the plant rooms and lift motor rooms

The lighting proposals have been prepared by Robus who are the preferred manufacturer, as discussed and agreed with WCC's M&E Design and Technical Manager. The specification for the works has been prepared by Solace Electrical Limited.

The lighting has been designed to comply with current CIBSE standards and guidelines to achieve a maximum of 150 Lux and an average of 50 Lux throughout, providing the following scope of works:

- Lighting upgrade in plant rooms and lift motor rooms
- Power supplies to new ventilation on roof
- Socket installation in plant rooms and lift motor rooms
- Remedial works in intake rooms

The installation will be installed and tested in accordance with the latest wiring regulations BS7671.

Renewal of Communal Bathroom and WC extract ventilation system

The works comprise the renewal of the communal bathroom and WC extract ventilation systems at 3No. building types on the Brunel Estate, including installation of new roof mounted run and standby extract fan equipment to serve each system as per S&P UK Ventilation System Limited's specification.

The specification by Novaseven has been based upon the specialist design carried out by Nifes. The fan manufacturer has been changed from Nuair to S&P UK Ventilation systems but the system design in regard to capacity and performance is the same.

The installation is to be in accordance with the following:

- Novaseven General specification
- Westminster City Council's standard Building Management System (BMS) specification
- Westminster City Council's standard electrical specification
- Westminster City Council's standard fire stopping specification
- Heating and Ventilating Contractors Association (HVCA) standard ductwork specification

During the pre-commencement stage, we carried out a pilot scheme to replace the extract fan in the bathroom of 97 Keyham House to test the bespoke plate which needs to be installed throughout the properties. We installed a 400mm x 400mm but by carrying out this installation, we have identified that this plate can be reduced in size and will be changing this to a 200mm x 200mm powder coated (RAL 9010) when carrying out the fire stopping works. Below is a photo of the finished product:



A fire specialist will be carrying out surveys to 1no property in all 3no property types to review where fire dampers are required and ensure the scope is correct for that specific area. This will be carried out once opening up works have been carried out to the shaft as there is currently no access to it.

Communal and Tenanted Front Entrance Doors (FED) Doors

Gerda Doors have been selected by Axis to provide fire door sets through the business case process. This task requires all communal and service doors to be replaced in Keyham House, Mickleton House, Riverford House and Sunderland House, to bring them up to current fire standards. Gerda have priced based on their safer home range of communal door sets and safer home service door sets.

As the front entrance doors are the leaseholder's responsibility, they will be given the opportunity to opt-in, at an additional cost, for their front entrance doors to be replaced in Keyham House, Mickleton House, Riverford House and Sunderland House.

During our pre-commencement communications with residents we will issue opt in forms to leaseholders for return by a set date to ensure that they are included within the manufacture by the specialist installer.

Asset Tagging

Asset tagging will be carried out to all new plant installations as per STICS specification and Westminster City Council's instruction.

Warranty/Guarantee

Element	Design requirements	Manufacturer	Warranty / Guarantee	Pricing Methodology
Electrical Works – Lighting	Plant rooms & lift motor rooms; Surface mounted LED Non-corrosive 5ft fitting RVUF805FT emergency fitting for lift motor rooms RVUF805FTE-24 Roof; Plant rooms & lift motor rooms; Surface mounted LED bulkhead RC100LEDN-01 Emergency bulkhead on roof RC100LEDNE-01	Robus	5 years	Business Case
Electrical Works – Power	Metal clad plus double socket	MK	N/A	Business Case
Mechanical works – Extract Fans	Cab Twin Ecowatt-N	S&P UK Ventilation System Ltd	24month warranty	Business Case
Tenant Flat Entrance Doors	FD30(S)	Gerda	10years manufacturer	Business Case
Communal doors, Electrical riser cupboards	FD30/60(S) – as required dependent upon location	Gerda	10years manufacturer	Business Case
Asset tagging	Assets tags to new plant installed	STICS	N/A	Business case

5.0 Specifications and Drawings

Appendix 3 contains full details of specifications and design proposals for the task as follows:

5.1 Specialist and Supplier Specification and design proposals

Mechanical and Electrical

- NovaSeven Proposal Specification
- Sketch of ductwork installation
- Electrical Specification of works
- CWH Performance specification for the electrical riser cupboards

Fire Doors

- Front Entrance Doors - WCC Performance specification and Gerda safer home range
- Communal Doors – CWH Performance specification and Gerda safer home range

Builders Works

- Keyham House – roof access proposal

FRA and Compartmentation Surveys

- FRA Surveys for all block
- Communal Compartmentation Surveys for all blocks
- In flat Compartmentation Survey (in flat)

5.2 Drawings

Appendix 4 contains all relevant drawings for the task as follows:

- 20271-M-X253-KEH-03 T2 - Keyham House Proposed Schematic
- 20271-M-X253-KEH-04 T1 - Keyham House Proposed Layouts
- 20271-M-X253-MIH-01 T1 - Mickleton House Existing Schematic
- 20271-M-X253-MIH-02 T1 - Mickleton House Existing Layouts
- 20271-M-X253-MIH-03 T2 - Mickleton House Proposed Schematic
- 20271-M-X253-MIH-04 T1 - Mickleton House Proposed Layouts
- 20271-M-X253-POH-01 T1 - Portishead House Existing Schematic
- 20271-M-X253-POH-02 T1 - Portishead House Existing Layouts-Grd - 3rd
- 20271-M-X253-POH-03 T1 - Portishead House Existing Layouts-4th - 6th & Roof Plan
- 20271-M-X253-POH-04 T1 - Portishead House Proposed Schematic
- 20271-M-X253-POH-05 T1 - Portishead House Proposed Layouts-Grd - 3rd
- 20271-M-X253-POH-06 T1 - Portishead House Proposed Layouts-4th - 6th & Roof Plan
- 20271-M-X253-RIH-01 T1 - Riverford House Existing Schematic
- 20271-M-X253-RIH-02 T1 - Riverford House Existing Layout
- 20271-M-X253-RIH-03 T2 - Riverford House Proposed Schematic
- 20271-M-X253-RIH-04 T1 - Riverford House Proposed Layouts
- 20271-M-X253-STH-01 T1 - Stonehouse House Existing Schematic
- 20271-M-X253-STH-02 T1 - Stonehouse House Existing Layouts-Grd - 3rd
- 20271-M-X253-STH-03 T1 - Stonehouse House Existing Layouts-4th - 6th & Roof
- 20271-M-X253-STH-04 T1 - Stonehouse House Proposed Schematic
- 20271-M-X253-STH-05 T1 - Stonehouse House Proposed Layouts-Grd - 3rd
- 20271-M-X253-STH-06 T1 - Stonehouse House Proposed Layouts-4th - 6th & Roof
- 20271-M-X253-SUH-01 T1 - Sunderland House Existing Schematic

- 20271-M-X253-SUH-02 T1 - Sunderland House Existing Layouts
- 20271-M-X253-SUH-03 T2 - Sunderland House Proposed Schematic
- 20271-M-X253-SUH-04 T1 - Sunderland House Proposed Layouts
- 20271-M-X253-TRH-01 T1 - Truro House Existing Schematic
- 20271-M-X253-TRH-02 T1 - Truro House Existing Layouts-Grd - 3rd
- 20271-M-X253-TRH-03 T1 - Truro House Existing Layouts-4th - 6th & Roof Plan
- 20271-M-X253-TRH-04 T1 - Truro House Proposed Schematic
- 20271-M-X253-TRH-05 T1 - Truro House Proposed Layouts-Grd - 3rd
- 20271-M-X253-TRH-06 T1 - Truro House Proposed Layouts-4th - 6th & Roof Plan

6.0 Resident Engagement and Communication

Resident engagement for this project is a key element to ensure that the programmed works are achieved on programme and to resident satisfaction. The Resident Liaison Officer and other members of the site team will follow the procedures later particularised.

Access into the properties at survey stage is critical so that it can be identified at an early stage how in-depth any internal works need to be to facilitate the installation of the new dampers and grilles. As detailed in the below programme access isn't required into all properties within each block; it is only the properties served by the communal ventilation system. However, to Mickleton, Sunderland, Riverford and Keyham House access will be required to all tenanted properties where new front entrance doors will be replaced.

Experience from previous projects has shown us that getting access to properties can be problematic and is a risk inherent in the task. Our procedures and correspondence together with plans to minimise the number visits to each property are intended to mitigate the risk of delays caused by lack of access.

Due to there being no Residents Association on the Brunel Estate, it has been agreed between Axis and WCC Property Services Communications Team that we will liaise with the Brunel Estate Sounding Board and other interested parties to create a bespoke communications plan. Axis have compiled the communications procedures later particularised based upon the procedures we believe to be necessary. Once this has been discussed with key residents it may require amending to suit Estate specific resident's needs, however the principles shall remain the same.

6.1 Proposed communications schedule

A full Communication Plan can be found at Appendix 5.

7.0 Construction Phase Plan

Appendix 6 contains a copy of the Construction Phase Plan (CPP) for this project. Included with the CPP is a copy of the method statement and risk assessments for these works from the proposed contractor ADT Energy, along with the safety data sheets for the fire-resistant materials.

Prior to works commencing on site, a plan detailing the location of scaffold and hoists will be compiled. This will be carried out alongside the specialist sub-contractor to ensure that the hoists and towers are located where it is possible to remove the materials safely at roof level, whilst taking into consideration the location of the towers in relation to footpaths, entrance doorways, and blocks which have ground level garages. This will then be kept within the site health and safety file once agreed by the Contracts Manager.

8.0 Risk Register

Appendix 7 contains a copy of the current risk register for this project, which will be amended as the project progresses when required.

9.0 Programme

A detailed programme of works is attached at appendix 8.

The programme has been developed with works commencing to Keyham House first. Keyham House is the largest of the blocks and has the most internal works to be carried out. Keyham House, due to its size, also requires a 500kg goods hoist to enable materials to be taken to the roof, therefore it would reduce the time and expense required to have this equipment on site. Once Keyham House is complete, works will continue to two smaller blocks at a time until the works are completed.

This programme is very heavily reliant on internal access being provided by residents at the correct time in the programme. Should access issues arise then there is a risk for this programme to slip beyond the completion date.

The dates to this programme will be amended to reflect actual start dates once the commencement order has been received from WCC. The durations detailed should remain the same, however.

Pre-commencement stage

Following issue of this SPP to WCC, we have allowed a two week period for review of the documents and WCC to prepare and issue Section 20 Notice of Estimates (NOE) to all necessary parties. A further leaseholder consultation period of 37 calendar days is then allowed; following issue of the NOE's and prior to issue of a commencement order for the works.

Construction Stage

Upon receipt of the commencement order, our mobilisation period will commence. A four week period has been allowed for in order to finalise the subcontractor and supplier procurement, prepare scaffold designs, finalise the Construction Phase Plan and establish our office and welfare compound set-up. We will also open up communication lines with the residents to explain our intentions in greater detail, including arrangements for a meet with the contractor event. Our RLO's will also make arrangements to undertake the property surveys necessary with the initial batch of residents that will be directly affected by the works.

It is noted that our proposals for location of an office and welfare compound have not yet been agreed with WCC and these are still being discussed. Once an agreed location has been identified, we will be able to advise and finalise any potential programme implications.

The critical path through the individual properties is driven by the need for scaffolding and hoists to carry out the ventilation works on the roof are carried out in line with the programme as the scaffold up and down dates are the significant milestones driving the programme. Once the scaffold is erected, the works necessary will follow in a logical sequence following detailed surveys that the scaffold is required to facilitate.

The internal works are critical to the overall programme as it will be driven by good communication with the residents and ensuring access is gained when appointments are arranged. The interface between external and internal works relates to the installation of the twin fans on the roof which feed the bathrooms in each property via the new grilles being installed.

Due to scaffold and goods hoist requirements for the external works, these works are due to be carried out before the internal works to reduce the duration we have the equipment on site and the risk of needing to re-visit properties for any testing and commissioning that is required.

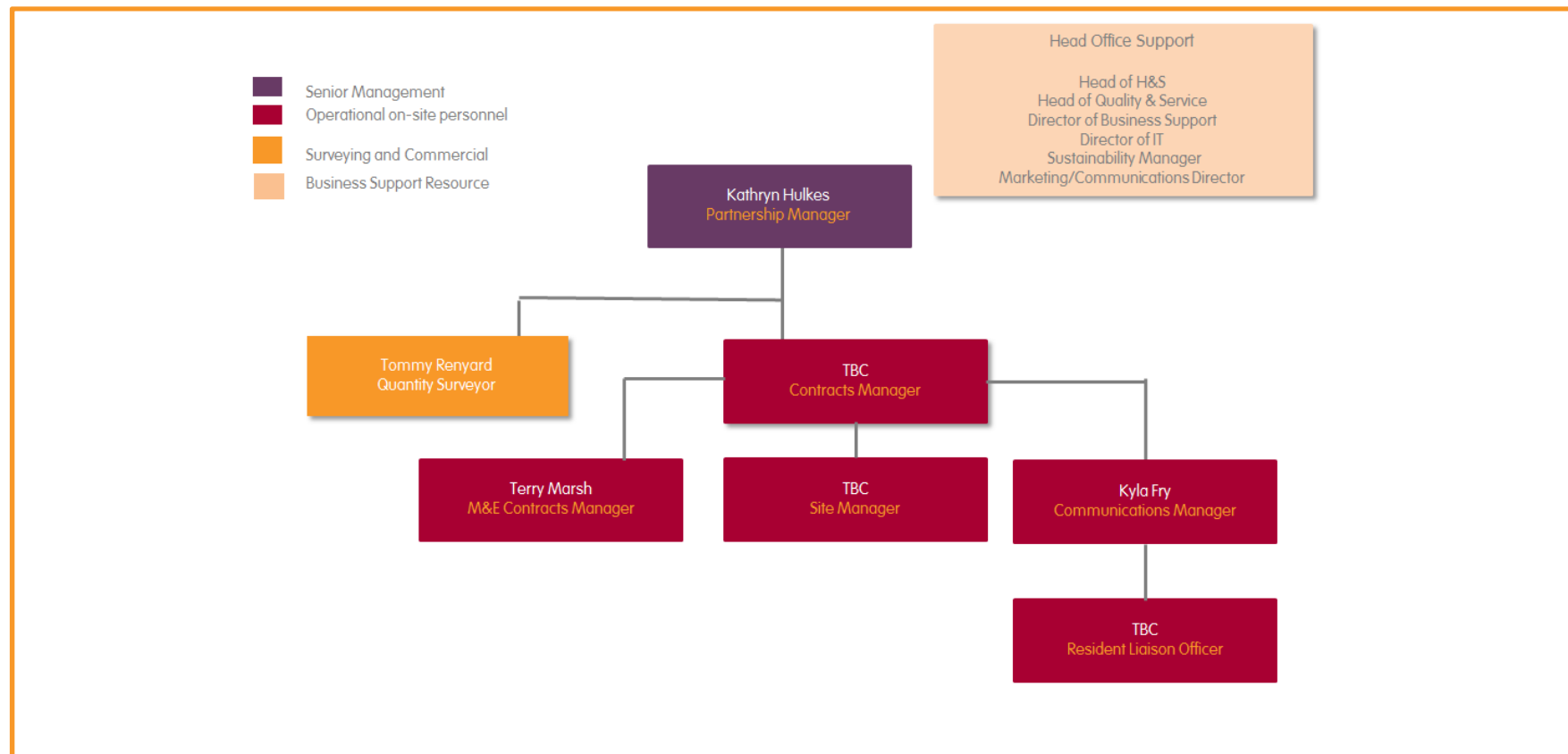
Any necessary internal 'making good' can be undertaken whilst internal works are being carried out, subject to access agreements that our RLO will arrange with the resident.

The Front Entrance Door and communal fire door replacements have been put into the programme as one item with a single period duration. This is because at the time this SPP was compiled the individual tenanted flats to receive doors have not been identified in relation to the ventilation works. There are a number of properties who are not having ventilation works as they are not connected to the communal system, meaning that some properties will only receive replacement door works. Where properties are having ventilation works, an additional day will be added to their programme to include the installation of the door. This will ensure that the programme is not extended and there is less potential disruption to residents via multiple appointments.

10.0 Resource Plan

There will be a full time Site manager and RLO allocated to this project who will be on site from 8am-5pm every day. As the works being carried out are predominantly involving mechanical and electrical works, as well as an overall Contracts Manger being allocated for this project, there will be a specialist M&E Contracts Manager allocated also

10.1 Management structure



10.2 Labour Resources

A full resource plan detailing trade labour resources can be found at Appendix 9.

The resource plan has been calculated in conjunction with the programme of works and specifically details when each trade are required. Should there be any programme slippage and acceleration be required this resource plan may be amended by the operational team as and when necessary.

11.0 Costs Plan and Cash Forecast

11.1 Business Case Proposals

Specialist packages will be procured based on business cases. The basis of a business case is a competitive tender, whereby, invitations to tender are sent to Specialist Contractors with the aim of receiving a minimum of three compliant bids.

Invitation to Tender

The first stage of preparing a business case is to prepare an individual invitation to tender (ITT) for each Specialist package. The ITT includes the following information:

- Project Particulars of the main works and the Specialist works
- Details of the form of contract being used
- Whether the Specialist has a design responsibility and what levels of design insurance is required
- The pricing basis of the tender – lump sum or re-measurement
- Fixed price period of the tender
- Defects liability period
- A list of tender documents attached to the ITT
- Tendering instructions and General Requirements
- A pricing schedule

Bidders are given a tender period which reflects the complexity of the Specialist Package and whether site visits are required.

During the tender process, bidders are contacted regularly to check on the progress of the bids and to address any pertinent queries that may arise and relevant answers to queries are shared with all bidders. In the event that any bidder elects not to provide a tender, every effort is made to find an alternative bidder to achieve the minimum of three compliant prices.

Bidders Selection

Suitable bidders are selected based on their expertise and experience of similar projects and their available resources to produce a bid and deliver the work in accordance with the programme. Bidders

are put forward by the Service Provider for approval by WCC. Bidders proposed by WCC are also invited to tender subject to them being able to deliver the project.

Normally, Bidders will be selected from our established supply chain and will have undergone vetting by our procurement team before they can be added to the tender list. The vetting procedure reviews the following:

- Health and Safety Management
- Managerial Resources
- Quality and Environmental Management Procedures
- Financial Standing
- Elements to be sub-contracted.
- Training programmes and competences of employed and sub-contracted operatives.
- Levels of insurance held by the Specialist.
- Examples of previous work and references from previous clients.

Tender Appraisal

The bids are reviewed upon receipt and the following is considered:

- Evidence of any obvious pricing or calculation errors within the submitted tenders.
- Compliance with the scope of works, specification and pricing document requirements.
- Programme and lead in period required.
- Any onerous qualifications or conditions included in the tenders.
- Where the tender is for a product such as a door, a comparison of the respective specification being put forward.
- Suggestions put forward by the bidders to reduce cost.
- Attendances required by the bidder that may increase the cost of the Specialist package.

The aim of the tender appraisal is to get to a position of having three comparable prices to carry out the specialist works in accordance with the specification and programme. The criteria for recommending a particular Specialist is normally best value. Given that the bidders have been vetted and are capable of delivering the works, the lowest price is recommended in the business case report. There are occasionally exceptions to this approach; issues such as terms and conditions, qualifications, particular specifications proposed or other concerns may mean that the lowest price does not offer the best value. In such cases, the reasons for our recommendation will be detailed in the business case report.

Business Case Report

Following appraisal of the tenders, we prepare a business case report setting out the basis of our recommendation. This sets out our approach to appraising the tenders and provides the following details:

- Description of the Specialist works
- Names of Specialists invited to tender
- A copy of the invitation to tender
- Bids received and their values
- Observations on tender pricing
- Agreement to programme
- Post tender correspondence and clarifications between Axis and the Specialists.
- Agreement to the Specialist Term Contract Conditions.
- Risks
- Recommendation of the most economically advantageous tender.
- Copies of all quotations, forms of tender and correspondence.

The business case reports for this task can be found in Appendix 10.

11.2 Cost Plan

A breakdown of our price is attached in appendix 11

Due to the weight of the plant being lifted to Keyham House a small 500kg goods hoist is required. The plant to the remaining blocks is smaller; therefore, a 200kg electric scaffold hoist will suffice.

Access equipment has been calculated on a 4 week hire period which is sufficient for the works as programmed. It is envisioned that plant will be removed once all materials have been transported to the roof working area. Should there be any delays to the programme then a further hire charge would be applicable.

An allowance for making good internally to bathroom and W.C's has been based upon localised repairs to tiles/paintwork within immediate area of grille replacement. Tiles to be standard 150mmx150mm white or standard readily available coloured tiles from Johnson tiles. Any tiles differing from this will need to be costed and instructed from the provisional sum included and detailed within the build-up tab of the cost plan.

Builders work in connection with the door installation would be in the form of making good to walls and decorations after installation. The door contractor has allowed the cost of a pre-finished door stop trim to be installed where possible to reduce the need for wet trades to the in flat side of the front entrance doors. An allowance based upon the rate of labour and materials for one hours work for a plasterer and

one hours work for a decorator is included within the build-up tab also, for where this is envisioned to be applicable, namely to the communal doors.

Several of the doors, front entrance and communal, have door entry system cables and other cables, assumed to be aerial cables, running through the frame at high level. A cost has been allowed to re-route the cables and finish them with fire rated mastic. Should there not be enough tolerance on the cables for them to be re-sited then a provisional sum has been allowed to replace them.

The fire stopping package, whilst separately priced in terms of the mechanical and communal areas, will be let to a single contractor to ensure that consistency is maintained throughout for certification purposes.

Whilst surveys for both FRA and compartmentation elements were carried out, and remedial works have been priced, these costs do not allow for intrusive surveys. Visual inspections only have been carried out as qualified in the details of the survey reports for both FRA and Compartmentation elements included within the appendices of this document.

Note: We have allowed provisional sums for works which cannot be quantified at this stage, but we are aware may be required on some properties. We have not allowed any further contingency for work over and above our current assessment and we assume allowance will be made by WCC for an appropriate project contingency.

11.3 Cashflow Forecast

A cashflow forecast, based on the planned programme, is attached in Appendix 12. This will be reviewed regularly to suit any revisions to the sequence or progress of the task.

12.0 Appendices

Appendix 1 – Site set up Plan

Appendix 2 – Waste Management Plan

Appendix 3 – Specifications

Appendix 4 - Drawings

Appendix 5 – Resident Communication Plan

Appendix 6 – Construction Phase Plan

Appendix 7 – Risk Register

Appendix 8 - Programme

Appendix 9 - Resource Plan

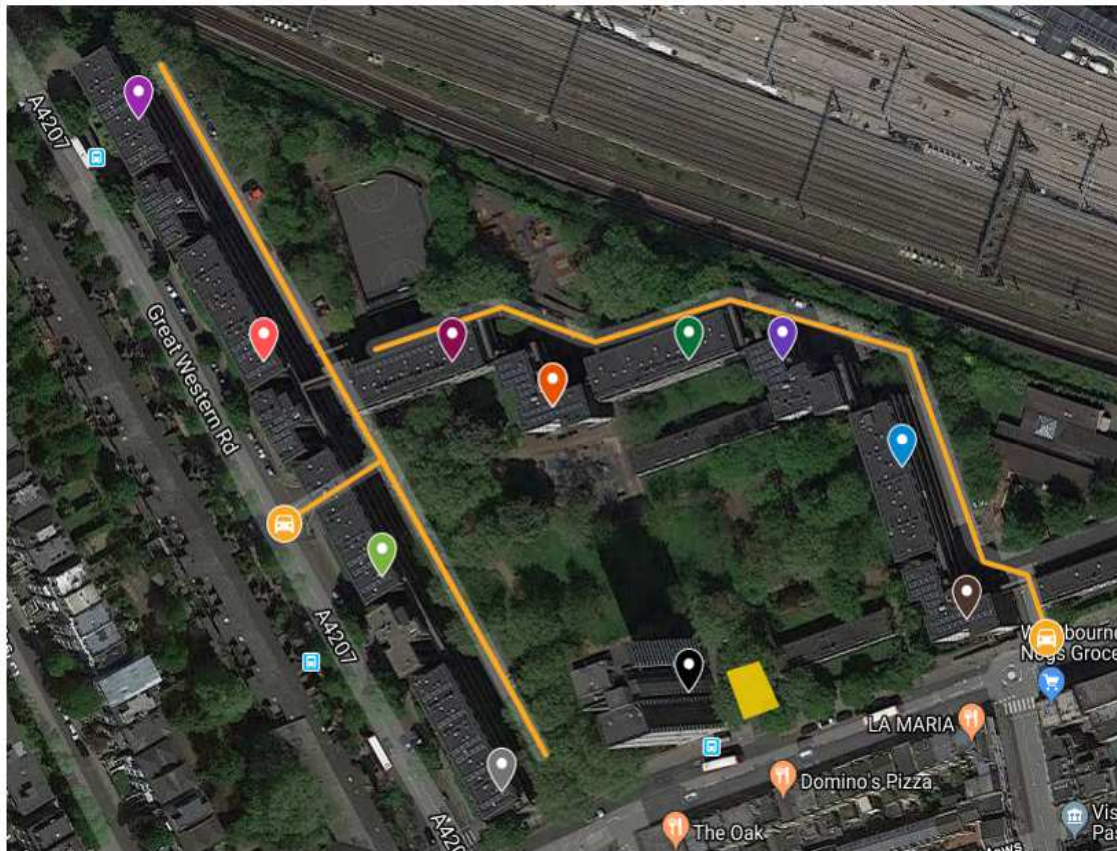
Appendix 10 - Business case proposals

Appendix 11 – Cost plan

Appendix 12 - Cashflow

Not all of the appendices are published online. If you would like to view the information please contact housing.enquiries@westminster.gov.uk or 0800 358 3783 quoting reference major works X253 to arrange this.

Brunel Estate Site Plan



- Keyham House
- Combe House
- Dainton House
- Derrycombe House
- Hanwell House
- Mickleton House
- Portishead House
- Riverford House
- Stonehouse House
- Sunderland House
- Sunderland House
- Truro House
- Proposed site compound loc...
- Vehicle access
- Vehicle access
- Vehicle access
- Vehicle access
- Vehicle access



Proposed site compound location

Appendix 2 – Waste Management Plan

Waste Management Plan for Westminster City Council – X253 Brunel Estate Ventilation

All waste and debris created from work activity shall be handled in accordance with this WMP. All staff working on this contract should be aware of the requirements listed below.

Contract Information	
Name of Client	Westminster City Council Ltd
Name of Contract	X253 Brunel Estate ventilation
Axis Division	Projects
Site Address	11no blocks to the Brunel Estate, Westbourne Park Road, London W2 5UZ
Estimated Start Date	July 2019
Estimated Finish Date	August 2020
Description of Works	Replacement communal ventilations fans, with associated electrical works, Replacement of Front Entrance Doors

Responsibilities	Name	Number
Site/Contract specific contact for waste	TBC	TBC
Companywide contact for waste	Ned Maynard	0203 597 2185
Who submits Waste Transfer Notes	All Axis staff when they receive transfer notes from Waste Service Providers.	

Waste			
Waste likely to be Produced (* = hazardous)	How Stored Until Disposal (e.g. skip, in Axis van)	Who Transports Waste (e.g. Axis staff, skip provider name)	Where Sent for Processing (e.g. skip provider name, recycling centre name)
Wood and Timber (17 02 01)	Skip	McGrath Brothers	McGrath Brothers
Mixed construction and demolition waste (17 09 04)	Skip	McGrath Brothers	McGrath Brothers
Sawdust shavings and chip board (03 01 05)	Skip	McGrath Brothers	McGrath Brothers
Glass (17 02 02)	n/a	n/a	n/a
Plastic (17 02 03)	n/a	n/a	n/a
Scrap metals (20 01 41)	Skip	McGrath Brothers	McGrath Brothers
General Builders Waste (20 03 01)	Skip	McGrath Brothers	McGrath Brothers
Brick, concrete, tiles or ceramic (17 01 07)	Skip	McGrath Brothers	McGrath Brothers
Asbestos (17 06 05)*	n/a	n/a	n/a
Paint Cans (08 01 11)*	At site compound	Axis Staff	Recycle centre
Glue or Sealant Containers (08 04 09)	Skip	McGrath Brothers	McGrath Brothers
Printer Cartridges (08 03 17)*	n/a	n/a	n/a
Batteries (20 01 34)*	n/a	n/a	n/a
Fluorescent Tubes (20 01 23)*	Coffin located at site compound	Edmundsons	Edmundsons
Electrical Equipment (16 02)*	Skip	McGrath Brothers	McGrath Brothers
Electrical Cables (17 04 11)	Skip	McGrath Brothers	McGrath Brothers
Textiles & material dust sheets (20 01 11)	Skip	McGrath Brothers	McGrath Brothers

Equipment containing chlorofluorocarbons (20 01 23)*	n/a	n/a	n/a
Paper and cardboard packaging (15 01 01)	Skip	McGrath Brothers	McGrath Brothers
Biodegradable Waste (20 02 01)	n/a	n/a	n/a