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CENTRE POINT REFURBISHMENT

Construction Management Plan

April 2016

Contents

Revision No.	Prepared By	Approved By	Revision History	Date
00		Nigel Taylor (Project Manager)	First Issue	2013
01	D. O'Flynn (Construction Manager)	Nigel Taylor (Project Manager)	Internal Review – Almacantar	October 2013
02	R. Thompson (Engineer)	Nigel Taylor (Project Manager)		November 2013
03	R. Thompson (Engineer)	Nigel Taylor (Project Manager)	Incorporate comments from J.Flutcher (LBC) & P. Floyd (TfL)	January 2014
04	R. Thompson (Engineer)	Nigel Taylor (Project Manager)	Incorporate comments from M. Houska (LBC). Updated to suit current proposals	April 2014
05	R. Thompson (Engineer)	Nigel Taylor (Project Manager)	Update at conclusion of PCSA	August 2014
06	Stephen Still (Project Manager)	Stephen Browne (Project Director)	Converted into Brookfield Multiplex format and updated.	October 2014
07	Stephen Still (Project Manager)	Stephen Browne (Project Director)	Updated following various meetings with Giles Coordination Group (including Camden, Consolidated, TWBN and Crossrail).	December 2014
08	Joe Nightingale (Sustainability Advisor)	Stephen Still (Project Manager)	Updated following telephone discussions with Mario Houska (LBC).,	December 2014
09	Joe Nightingale (Sustainability Advisor)	Stephen Browne (Project Director)	Updated following site meeting with Mario Houska (LBC).,	January 2015
10	Benn Chandler (Project Manager)	Stephen Browne (Project Director)	Update Logistic's, photos and CPHSP	July 2015

11	Joe Nightingale	Benn Chandler (Project Manager)	Update to logistics, environment, project milestones, and descriptions	April 2016

1. Executive Summary

1.1 Introduction

The following document describes the plan for managing and mitigating the potential impact of the Centre Point refurbishment on local amenity, highways, surrounding businesses and residents. This document has been prepared in line with the guidance notes given in the 'Camden Planning Guidance 6: Amenity: Construction Management Plans' document. It describes the construction methodology, sequencing & programme for the project, and describes how the potential health, safety & environmental issues which may affect the surrounding area will be mitigated.

This document is a revised version of the Sir Robert McAlpine (SRM) proposal, originally developed to assist Almacantar in the planning process. Brookfield Multiplex Construction Europe (BMCE) have taken advice from specialist works contractors and used their own experience of similar projects to revise this document. Due regard has also been paid to the 'Guide for Contractors Working in Camden' document published by London Borough of Camden (LBC).

A number of key constraints have been considered in drawing up this Construction Management Plan and these are discussed in detail within the following sections of this document. They primarily relate to the following:

1. The interface with the Crossrail Project and the upgrade works at Tottenham Court Road tube station.
2. The potential development of St Giles Circus & the Consolidated Scheme.
3. Pedestrian routes around the development.
4. Traffic routes around the development and the effect that deliveries to the site may have on these.
5. The effect of the development on existing businesses and residents, particularly those living in Centre Point House.
6. Utilities diversions required to facilitate the project.
7. The effect of Crossrail tunnelling works on the Centre Point Redevelopment, particularly related to the basement works of the affordable housing scheme.
8. The London Cycle Network

The project duration is discussed along with key milestones and approximate numbers of delivery vehicles expected throughout the construction period.

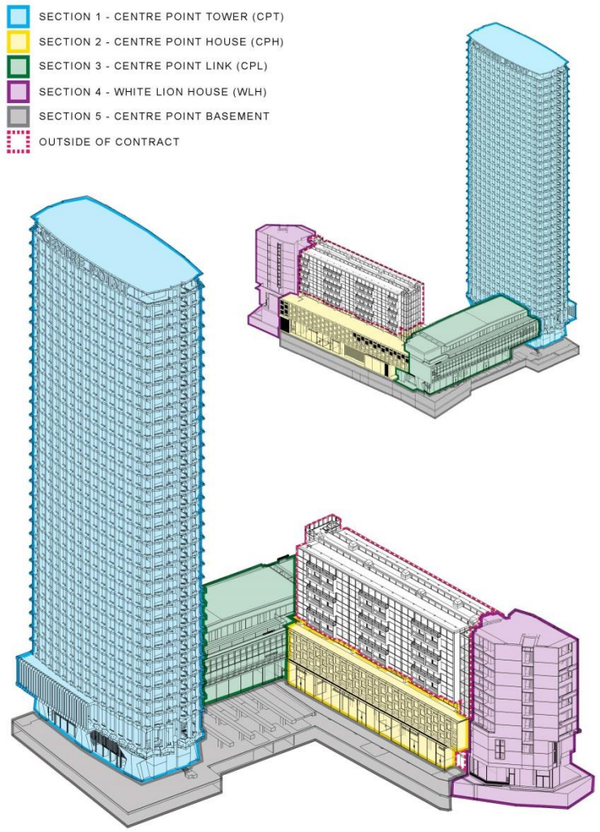
In accordance with "Camden Planning Guidance 6" it is agreed contents of this Construction Management Plan will be complied with unless otherwise agreed with LBC. The BMCE Project Manager shall work with LBC to review this Construction Management Plan if problems arise in relation to the development. Any future revised plan must be approved by LBC and complied with thereafter.

Project specific Health and Safety, and Environmental Plans have been produced and are available for review, upon request. These plans will evolve throughout the duration of the project and will be updated at regular intervals, as appropriate, to reflect changes during the construction period.

1.2 Centre Point - The site

The Centre Point complex is located at 101-103 New Oxford Street, London, WC1A 1DD. The Grade II listed buildings, which were constructed in the 1960s, incorporate Centre Point Tower (CPT), Centre Point Link Bridge (CPL) and Centre Point House (CPH). At the south end of CPH is the Intrepid Fox public house. The site is located at the eastern end of Oxford Street adjacent to Tottenham Court Road Tube Station in the London Borough of Camden (LBC).

The site is situated on an island site surrounded by New Oxford Street to the north, Charing Cross Road to the west, Earnshaw Street to the east and St Giles Circus to the south, and is situated in a busy location within the heart of Central London. In addition, major Crossrail works are currently being undertaken directly adjacent to Centre Point on the west side as part of the Tottenham Court Road Station Upgrade Project. These works currently have an estimated completion date of 2017/18. As part of the Crossrail project, Charing Cross Road is closed in the vicinity of Tottenham Court Road tube station and as a result is diverted under CPL. St Giles High Street runs to the west of CPH and under CPL.



1.2.1 Centre Point Tower (CPT)

Centre Point Tower is a 35 storey building and one of the tallest structures in the West End of London reaching to a height of 141.06m above ordnance datum

1.2.2 Centre Point House (CPH)

Centre Point House a ten storey high mixed-use linear block that forms the eastern edge of the Centre Point complex adjacent to Earnshaw Street. It currently contains vacant retail units at ground and mezzanine levels; vacant offices at first and first floor mezzanine accessed laterally via the Bridge Link (CPL) and Centre Point Tower; and a six storey residential block above, comprising 36 apartments, 10 of which are owned by Almacantar.

1.2.3 Centre Point Link (CPL)

Centre Point Link (CPL) is an independent structure with a first floor and second floor levels spanning over St Giles High Street, between CPT and CPH. At second floor, above the main bridge link, there is a recessed storey of offices beneath a sculptural and cantilevering roof. At ground level there is an vacant retail unit which had been operating as a bar. This is a self-contained space at the north east corner of the building, spread over ground floor, mezzanine and basement areas. As part of the construction works retail units will be created under Centre Point Link existing building, with the fit out to be undertaken by a different contractor.

1.2.4 Centre Point Public House (WLH)

The Intrepid Fox pub is located in a separate block at the southern end of Centre Point House orientated away from the other buildings. The building spans over three levels, basement, ground and first floor with associated storage and ancillary use on a further two upper storeys.

The Intrepid Fox pub has now been demolished and work is underway to construct White Lion House affordable housing it its place. The acronym has been changed from CPW to better reflect the description of the site.

1.2.5 Basements and Undercroft

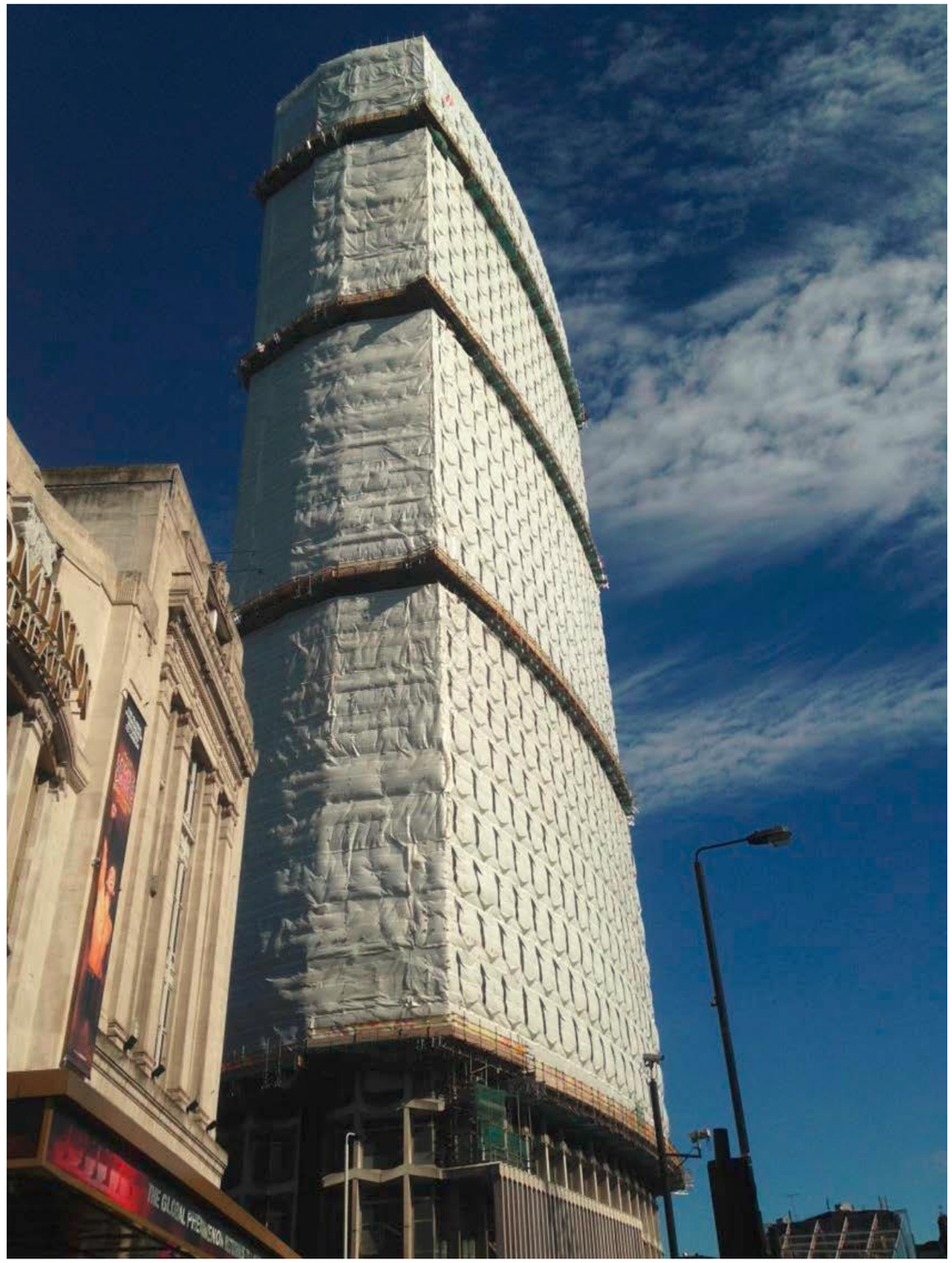
The basement areas are undergoing structural alterations to enable the installation of a car lift and rooms are being created to host the plant, building services and facilities for the Building Management Team.

1.2.6 Open spaces and Temporary structures

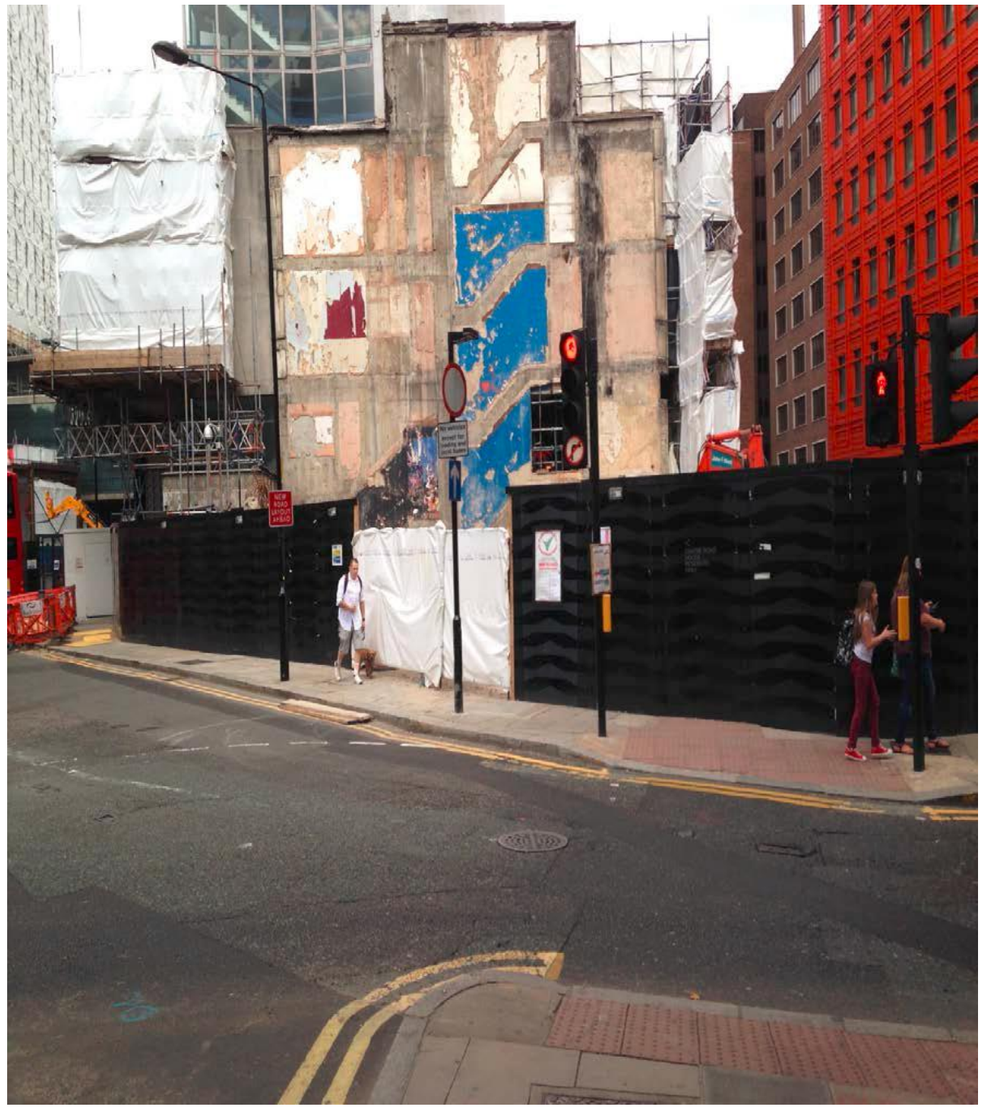
A sub-base will be provided by BMCE to enable a contractor to provide landscaping and other finishing works. Pedestrian routes to the proposed Piazza will be created at ground level from New Oxford Street through Centre Point Link and from Earnshaw Street through Centre Point House. A temporary steel gantry with site cabins situated alongside the south side of Centre Point Link has been erected to provide site offices for subcontractors.

Centre Point House (CPH) - The retail units and office are now vacant. The apartments will remain occupied throughout the development.

Centre Point Link (CPL) – This vacant building spans over St Giles High Street



Centre Point Tower – Scaffolding to the Façade has already commenced



WLH - The Intrepid Fox, previously named the White Lion Pub, has been demolished. White Lion House apartments will be built in its place

Centre Point - The Refurbishment

The Centre Point Refurbishment comprises the following works:

1. Conversion of the existing 35 storey Centre Point Tower from office use into 82 residential apartments with new amenity space at levels 1 and 2.

2. Conversion of lower levels of Centre Point House from retail and office use into new retail units.

3. Conversion of Centre Point Link to retail space.

4. Structural alterations and re-cladding of the north and south staircase cores of Centre Point House.

5. Reconfiguration and refurbishment of the existing basements.

6. Public realm works.

7. Demolition of the existing Intrepid Fox Public House and construction of 13 affordable apartments.

8. Construction of new retail unit on ground level below existing link building.

The site has major interfaces with the local London bus network and there are a number of bus stands in St Giles High Street and Earnshaw Street, the provision for which will be maintained throughout the project.

2. Construction Programme

2.1 Overall Construction Programme

The overall project programme for each of the buildings is as follows:

- Centre Point Tower (CPT) – 138 weeks
- Centre Point House (CPH) and Centre Point Link (CPL) – 131 weeks
- Centre Point White Lion House - Affordable Housing Development (WLH) – 133 weeks

2.2 Key Project Milestones

The project scope and sequence are identified on the Strategic Programme (See Appendix) with key project milestones shown below in Table 1. This table gives approximate durations for the key elements of work within each building.

Work activity

CPT	Start	Duration
• Demolition and Structural Alterations	16 February 2015	98w
• Fit Out	04 January2016	89w
• Façade Works	26 October 2015	60w
WLH		
• Demolition	2 March 2015	16w
• Substructure	18 September 2015	39w
• Concrete Frame	14 June 2016	24w
• Fit Out	17 October 2016	36w
• Façade Works	28 September 2016	15w
CPH / CPL/Basements		
• Demolition and Structural Alterations	10 May 2016	60w
• Fit Out	16 March 2017	16w

2.3 Delivery Histogram

An analysis has been carried out to estimate the anticipated vehicle movements for the duration of the project. The figures show how HGV movements will change throughout the programme of works. The peak for deliveries is between month 11 & month 18. This peak is approximately 400 vehicles per month with a spike of 550 in month 7. It is the intention of the site team to look at ways to smooth out this spike so as to minimise the effect on the surrounding road network.

Peak volumes of delivery are limited to one vehicle to each gate every 45minutes, this allows time to offload before the next wagon arrives as there are no local holding areas. Deliveries will be spread throughout the day to minimise peaks in construction traffic flows. Consolidation centres are being considered for fit out works to help both with site storage and deliveries.

3. Method Statement

The outline methodology and proposed sequence of works for the Centre Point Refurbishment project are described below. This section should be read in conjunction with Sections 4 and 5 of this document which give more detail on logistics, traffic and highways management, health, safety and environment, and mitigation measures proposed to deal with project risks.

3.1 Enabling Works

Prior to the commencement of demolition works, hoardings will be erected around the perimeter of the site as described in Section 4 of this document. Both delivery and pedestrian gate positions are indicated on the drawings in Section 4. Vehicle Gates will be manned by traffic marshals and pedestrian access points by Security.

Services diversions will be undertaken at an early stage and close liaison with the utility providers will be necessary to carefully plan the works so that continuity of service for other users is maintained and planned downtime is kept to a minimum. Existing services within the buildings will be isolated and made safe before demolition commences. Where services are to remain live they will be clearly marked. Due regard will be taken of the proposed but un-consented works by LBC to construction a new public piazza.

3.2 Demolition

Management surveys carried out within the existing Centre Point buildings have highlighted the existence of asbestos in various locations. A full Refurbishment & Demolition survey of the buildings will be undertaken prior to soft strip commencing. All personnel will be made aware of the risk and any asbestos will be removed by a licenced contractor in accordance with the “Control of Asbestos Regulations”.

All demolition will be carried out in accordance with the “Code of Practice for Demolition – BS 6187:2000”.

3.2.1 Centre Point Tower (CPT)

On each floor of the tower, the demolition will generally entail removal of any asbestos, soft strip, screed removal, formation of builders work openings, and removal of windows (following the precast concrete cleaning). Larger openings will have trimmer steels installed and packed prior to cutting the slab.

The internal circular concrete ramp structure spanning between ground floor, basement and sub- basement will be removed, once temporary propping has been installed to support the adjacent floors. The arisings from this process will be removed via the basement and sub- basement to the Earnshaw Street ramp.

At Levels 32, 33, 34 & 35, extensive demolition works will be undertaken to facilitate the construction of the new structure for the double storey penthouse and the whole floor apartments. This will entail the removal of the ‘Centre Point’ signs and balustrade on the Level 34 terrace, demolition and replacement of the Level 32 spine beam, main building column strengthening, reconstruction of the Level 33 and 34 slabs, construction of 2 lift shaft cores and removal of the existing roof asphalt. These works will be carried out using a fully enclosed external access scaffold from Level 30 upwards for the duration of the works.

3.2.2 Centre Point House (CPH)

CPH will remain occupied for the project duration by residents in levels 3 to 8. It is therefore imperative that access for residents is not compromised, nor that they are subjected to unacceptable levels of noise, dust or vibration. The methods proposed to deal with this are covered in more detail in Section 4 of this document.

Existing supplies / drainage for the residents in CPH will be clearly identified & protected, and where necessary will be diverted away from areas where they may be affected by the works.

Demolition within CPH will entail:

a) Asbestos removal.
b) Existing lift removal.
c) Soft strip, light demolition and screed removal.
d) Cladding to the north & south stair enclosures of the CPH residential block.
e) Removal of existing roof asphalt where required.

The strip and demolition arisings from the floors will be segregated on the floors, hoisted to the ground floor level and loaded into trucks and skips, and disposed of to the appropriate recycling facility. The trucks and skips for this purpose will be located on the existing ramp.

Between ground floor and Level 1 in addition to the standard strip the full height glazed shop fronts and all finishes will be removed in the appropriate manner.

3.2.3 Centre Point Link (CPL)

The CPL building is vacated, but contains a number of heritage items which must be retained for the final scheme. Demolition within CPL will entail:

a) Asbestos Removal
b) Soft strip, light demolition and screed removal.
c) Protection of heritage items
d) Removal of the BMU and Plantrooms
e) Removal of level 2 windows
f) Demolition of select parts of the sub-basement slab (to support new water tanks)
g) Structural alterations to the exisitgn RC slabs to introduce new stairs and risers.
h) Reconstruction of part of the RC roof
i) The partial demolition of an area of the 1st and 2nd floor PT slabs
j) Removal of existing roof asphalt where required.
k) Removal of road surface where required

Demolition arising will be removed from site via the CPH building.

3.2.4 Demolition of the White Horse Pub (WLH)

Initially the live services will be isolated to make the existing building safe prior to hand over to the demolition subcontractor. Demolition within the area will entail:

a) Asbestos removal.
b) Existing lift removal.
c) Soft strip, light demolition and screed removal.
d) Propping and protection of the existing UKPN sub-station.
e) Propping of the eastern (Earnshaw Street side) retaining wall below ground floor level.
f) Propping and erection of a crash deck & demolition of the building structure and slabs to basement level, leaving the UKPN sub-station and the eastern retaining wall intact.
g) Break out of existing footings to clear a path for the future perimeter piles.
h) Backfill of basement with granular material for the piling access mat.
i) Re-excavation of the basement after piling.

All asbestos will be contained appropriately, hoisted to ground floor level following dedicated routes and transported away from site, to a licenced tip. The soft strip and demolition arisings from the floors will be segregated and loaded directly into trucks and skips, by excavator and disposed of to the appropriate recycling facility. The trucks and skips will be situated within the local hoarding.

3.3 Piling

All piling activities for the project have been completed

3.3.1 CPH & CPL

Piles are to be installed in the sub-basement and basement to support new structures within the building. These will be installed using mini-piling techniques and the works will be carried out from existing basement and sub-basement slab level.

The arising's will be cleared by a mini-excavator, and be removed for disposal at the base of the existing ramp. Reinforcement and other materials will be delivered to the ramp and transported across the basement to a dedicated area.

3.3.2 WLH

The piling and foundations to the WLH basement will be in close proximity to the new Crossrail tunnels which will have been recently completed. The work will, therefore, be subject to consultation under the Safeguarding Direction. The design for these works is being carried out by Pell Frischmann, to their document entitled "Response to LUL & Crossrail Planning Comments" dated June 2013.

Approval from LUL and Crossrail will be obtained before any foundation and piling works are commenced in this area. The extension to the basement of WLHwill be formed using a secant piled wall. This will be constructed from existing ground level. Once the capping beam to the wall has been constructed the load bearing piles will be installed from within the building footprint from a level below existing ground level and made
up from the demolition arisings. Pile arisings will be removed as works proceed.

3.4 Scaffolding

Scaffolding to CPT
A full scaffold access system will be erected to CPT to carry out the following work:

a) Pre-cast concrete façade cleaning.
b) Pre-cast concrete façade repairs.
c) Window lower spandrel panel removal.
d) Mastic removal and replacement.
e) Outer access to assist with the whole window removal and replacement (although the windows are being installed from within the building).
f) Outer window flashings and finishing.
g) Final clean.
h) Façade and window inspection and handover.
i) Glass frontage at ground floor lobby.
j) Façade retention, slab demolition and reconstruction of Levels 32, 33 and 34.
k) Replacement of the 'Centre Point' listed sign on the terrace at Level 34.

The scaffold support will be cantilevered out of the building at Levels 3, 13, 22 and 30, and construction of this work has already commenced. See also Appendix 8.08 – drawing DG/T/64335/DR/53453 'Tower Elevations & Sections'

3.4.1 Scaffolding to CPH & CPL

To control any noise that might affect the CPH residents, an acoustic scaffold will be erected around CPH. This scaffold will be in traditional tube and fittings with integral acoustic mats. The screen will include a horizontal section which will span the undercroft between Level 2 of CPH and Level 3 of the residential block (see Appendix 8.04).

The scaffold will be founded on the ground to the west and supported on top of the Earnshaw Street pedestrian protection gantry to the east. The scaffold will be converted and retained for the main works which include:

a) Concrete façade (Brise Soleil) cleaning.
b) Concrete façade (Brise Soleil) repairs.
c) Window (Brise Soleil) removal and replacement.
d) Residential block stair cladding removal and replacement – north and south stairs.
e) Residential block stair new structural steel riser and cladding installation – north and south stairs.
f) Tiling.
g) Shopfront replacement.
h) Roof works/ edge protection.

The scaffold will have conventional fans where it projects above pedestrian areas (both public and within the site). See also Appendix 8.04 – drawing JH.12.430.03 'Perimeter Access Scaffold'

3.4.2 Scaffolding to WLH

A scaffold will be erected to the WLH building to carry out the final façade and roof works following the incremental completion of the new WLH building structure and precast facade. The scaffold will be constructed on top of pedestrian protection gantries on all elevations due to the restricted width of the pavements.

3.5 Façade Cleaning and Concrete Repairs

3.5.1 Façade Cleaning

The concrete facades to the whole Centre Point Redevelopment are to be cleaned using the DOFF (high temperature water) cleaning system. A sample cleaning and remedial panel has already been carried out, at the south east corner of CPT. This has been accepted by the LBC Conservation Officer. Cleaning will take place with the existing windows in place so as to prevent water entering the building and potentially damaging the HAC ribbed floor units.

3.5.2 Concrete Repairs

An extensive condition survey of the CPT concrete façade has been carried out. This will be used to dictate the extent of concrete remedials to be carried out, however a further inspection of the façade will be carried out once areas have been cleaned. These repairs will entail epoxy resin injection of hairline cracks and bulk repairs of chips and spalls which, depending on severity, might need chasing back behind the reinforcing and building back to the finished surface with an appropriate mortar. Elsewhere, on CPH & CPL repairs of a similar extent and nature are required.

3.6 Structural Works

The major structural alterations to the buildings consist of the following:

3.6.1 CPT, CPL & CPH Basements and Sub-Basement:

a) Preparatory excavation and installation of new portions of the drainage system.
b) Preparatory excavation and construction of the replacement ground bearings slabs, the new sprinkler tank, stair core, lift and vehicle lift foundations.
c) Excavation, breakthrough, temporary propping of the piles (if required) and construction of the new retaining wall linings, capping beams and plant room for the vehicle lift.
d) Construction of the below ground floor portions of the stair core, lift and vehicle lift shafts, and their tie-in to the retained slabs.
e) Construction of the new shear wall and plinths for the above ground floor steel portal on gridline 5.
f) Permanent structural steel beams and the concrete infill to the Earnshaw Street ramp at 2 levels. Reconstruction of the CPT UKPN sub-station.
g) Remedials to the base of the CPT lift shafts. (A & D).
h) Structural steel supports and concrete infill to the old circular ramp, at 2 levels in CPT.

3.6.2 CPH & CPL (Ground Floor Upwards)

a) Permanent propping and backing arrangement to the Brise Soleil at both the east & west side of CPH.
b) Structural follow-on and making good to the cut and carve elements of CPH and CPL to create a double height space for future retail and restaurant use.
c) Construction of the above ground floor portions of all of the new stair core, lift and vehicle shafts and their tie-in to the retained slabs.
d) Construction of the rooflight detail and new plant room structures at the east end of the CPL Level 3 roof.
e) Riser structures to the north and south end of the CPH residential block.
f) Construction of new concrete upstand for retail 01

3.6.3 CPT (Ground Floor Upwards)

a) Construction of a new pair of feature stair spines on the ground floor.
b) Construction of the support work, using 'Macalloy' bars, for parts of the ground floor mezzanine slab.
c) Structural steelwork and concrete slabs associated with the Level 1 pool, raised area and gymnasium.
d) Adaption of the existing and installation of new stairs at the upper floors (Level 32, 33 & 34).
e) Raising and closure of each of the 6 lifts.
f) Reconfiguration of the upper floors and plant rooms (Level 32 to 35 incl.) into the Penthouse. This work involves the full façade retention, and removal of the existing slabs and their reconstruction.

3.6.4 WLH

a) Support structures, in both the temporary and permanent condition, of the existing UKPN sub-station in the south west corner of WLH.
b) Construction of new pile caps.
c) Lining and capping beam to the secant pile wall to form the basement walls.
d) Construction of the new 9 storey concrete frame building complete with lift & stair cores.
e) Installation of precast stair flights.
f) Provision of plant plinths, upstands etc. particularly on the roof.

It should be noted that there will be a large amount of blockwork partitions across the basements, in WLH and to the shell and core areas of CPH & CPL, in particular.

3.7 Windows

3.7.1 Windows to CPT

All of the CPT windows will be delivered on a 'just in time' basis on stillages and hoisted up the building in Hoist No. 1. The windows will be installed following the external clean and old window removal.

The windows for standard size openings will be delivered, on a floor by floor basis, commencing with the top levels of 3 of the 4 separate scaffolds (L3 to 12, L13 to 21 & L22 to 29) and working down. They will be stored at each floor level, on the spine beam, which is central to the floor plate.

The new windows will be offered into the openings, from within the building, using a manipulator. These units are likely to be track mounted so as not to overload the floor slabs.

The windows from L30 to the roof, including the penthouse rooflights, balustrades etc. will be installed similarly, but after the demolition and floor slab reconstruction has been completed.

3.7.2 Windows to CPH

The windows and cladding to be replaced at CPH are as follows:

a) Brise Soleil windows.
b) Residential block stair cladding removal and replacement – north and south stairs.
c) Shopfronts.

The Brise Soleil windows will be installed from the adapted demolition scaffold. A running rail will be added for the shopfront glazing to be moved into position and fitted.

3.7.3 Windows to CPL

The windows to be replaced, or refurbished, and the balustrade works at CPL are as follows:
a) Replacement of the Level 2 to 3 bridge glazed façade.
b) New balustrades at Level 2.
c) Refurbishment of the Level 1 listed bridge glazed façade.
d) Installation of the new rooflight.
e) New and replacement shopfronts.
f) Forming of new retail unit 01

These will be installed either from a scaffold founded at ground level. A running rail will be added for the installation of the largest shopfront glass panels.

3.7.4 Windows to WLH

The windows or curtain walling and cladding will be installed to the new build structure from a scaffold constructed on top of pedestrian protection gantries.

3.8 Roofing Works

Roofing works are to be carried out at the following locations:
a) CPT Level 35 – there are new openings to be cut in L35, for the rooflights,
b) The existing CPT BMU is to be upgraded. This activity needs to be carefully programmed as the BMU will be used to complete the CPT façade works that cannot be accessed by any other method e.g. the completion of seals to the windows at Levels 13, 22 & 30 following the scaffold removal.
c) WLHLevel 9 – new roof construction.
d) CPH Level 9 - roof remedial works.
e) CPH & CPL Level 2 new roof construction.
f) CPL Level 3 new green roof construction .

3.9 Building Services

3.9.1 CPT and CPL

The existing services within CPT will be removed as part of the demolition works once they have been isolated and made safe, with the exception of the existing lightning protection system and wet risers. The lightning protection system will be upgraded as part of the redevelopment and new wet risers will be installed and made operational prior to the existing risers being removed. The building will, as a result, always be protected during the construction works. The plant for the new services will be positioned at basement, sub-basement and roof levels. There will be additional plant spaces within the amenity levels of CPT (Levels 1&2) and at each of the residential levels. The new core services that serve the redevelopment will be installed progressively from the new basement and sub-basement plantrooms upwards via the service risers. The fit-out of the residential floors will be in a top down sequence back to the plantrooms on each level. The amenity areas services will be fitted out back to their individual plant areas.

3.9.2 CPH

The existing services which support CPH will be dealt with in two separate ways. Those that support levels 3 and below will generally be isolated for removal and redevelopment and those that support the residential levels above level 3 will be retained and kept operational as there are only limited intervention works to be carried out to these spaces. The core services that serve the lower levels of CPH originate from plant and systems within the redevelopment of CPT. These services will be installed to the individual plant areas for continuation by the future tenants.

3.9.3 WLH

The existing services that support the current building will be isolated prior to its demolition. The existing UKPN substation is to be maintained throughout the construction of the new building. Close liaison with UKPN will take place to ensure that methods are agreed and risks to other customers supplied by the substation are mitigated.

The new affordable housing building services will be installed following the construction of the main structure.

3.9.4 Commissioning

Commissioning of the systems will be sequenced to suit the phased handovers arising from the construction sequence. CPT and areas of the CPL basement and sub-basement associated with CPT will form one handover, and CPH including WLH, the remainder. All primary plant and systems will form part of the first handover commissioning exercise to ensure that the life-safety systems are in place for occupation.

It is important to note that whilst the installation and fit out is being completed level by level, the commissioning cannot be truly commenced until all vertical elements are completed.

Where the new core services serve spaces subject to tenant fit out works, these systems will be commissioned up to the point of interface. These interface points will be designed in such a manner that the core service is not directly connected to the fit-out works. The services to WLH are being designed to be essentially separate from the main part of the project. Any service reporting interfaces will be reviewed and incorporated into the commissioning process as they are identified.

3.10 Retail Areas

The retail areas, including Retail 01, at the lower levels of the buildings will be completed to a shell & core standard to permit the fit out works to be carried out by the tenants.

3.11 Apartment Fit Out

The sequence of construction of the apartments will be as follows:

a) High level first-fix building services.
b) Erect partitions (single side) complete with timber noggings and sub-frames.
c) Installation of underfloor heating andscreed.
d) First-fix building services to walls.
e) Close up walls.
f) Joinery carcassing / ceilings and second-fix building services.
g) Hard floor finishes.
h) Fit bathroom / kitchens.
i) Floor finishes / final fix joinery and skirtings, and final fix building services fittings.
j) Appliances.
k) Testing and commissioning.
l) Final clean and snagging.

3.12 Communal Areas

The staircase and entrance hall finishes will be completed in conjunction with the lift installation, towards the end of the project. The specialist joinery and reception desks will be the last elements completed. At least one stair in both buildings will remain open at all times during the construction phase for emergency egress. It may therefore be necessary to carry out some finishing works outside of normal working hours to ensure the safety of the users.

3.13 Public Realm Works

Works to the Public Realm (by London Borough of Camden) will commence as soon as areas become available and will be completed to suit the phased handover. This will mean that the area at the base of CPT will be completed ready for the completion of the tower. The remaining areas will be completed towards the end of the construction programme.

BMCE will liaise with LBC in respect of the wider public domain works if these are brought forward. The design for this work is being carried out by Gillespies on behalf of the consortium client of London Borough of Camden, City of Westminster and TfL/LUL. All of this work is undergoing separate public consultation promoted and managed by the consortium client

4. SITE LOGISTICS

This section of the Construction Management Plan has been set out to respond to particular considerations raised in the "Camden Planning Guidance 6: Amenity: Construction Management Plans" document. It also gives details of the logistic plans for the site during different stages of the development, showing hoarding layouts, craneage and hoisting arrangements and scaffold details associated with the project.

4.1 Environmental, Traffic and Highways Management

4.1.1 Start and end dates for each phase of construction

Projected start dates are currently anticipated to be as follows:

- Section 1 Centre Point Tower (CPT)
  - Commence – Week 1
  - Completion and handover – Week 138
- Section 2 Centre Point Link (CPL),
  - Commence – Week 1
  - Completion and handover – Week 131
- Section 3 Centre Point House (CPH)
  - Commence – Week 1
  - Completion and handover – Week 131
- Section 4 Centre Point White Lion House (CPW)
  - Commence – Week 2
  - Completion and handover – Week 133

4.1.2 Proposed working hours

Unless otherwise stated, site hours are:

- Monday to Friday 8am – 6pm
- Saturday 8am – 1pm

- Scaffold works to the west elevation of CPT will take place during engineering hours (1am to 6am) as dictated by LUL
- Saturday hours listed above will be restricted to CPT, WLH and CPL and basement areas in order to minimise the impact and disturbance upon the residents of CPH. Saturday works in the basement below CPH will not include breaking, demolition, or cutting or drilling into the structure.
- Internal fit out works can take place in CPT, CPL, WLH and the basement during the out of hours period (i.e. the hours listed below) providing they are not audible beyond the site boundary, and so as not to disturb the local residents:
  - Monday to Friday 6pm - 8am
  - Saturday 1pm – Monday 8am

  With regards to Centre Point House residents, works which can be heard inside Centre Point House apartment are considered as audible beyond site boundary; the sec 60 Notice served on 10th March 2016 regarding Saturday working, will remain in place throughout the lifetime of the project.
- For a minimum period of 6 months, BMCE expect to undertake works which will exceed the structure borne noise limits imposed by Camden Council, and consequently Centre Point House residents have been offered a choice of either temporary housing or compensation in lieu of temporary rehousing for this period. These works are planned to take place during anticipated working hours stated above, however there may be periods when noisy works will need to be carried out outside of standard working hours. In such instances we will give at least 48 hours' notice ahead of works outside of these core working hours to both the residents and local authority and to take into account considerations of the impact on the next nearest sensitive receptors, for example avoiding the use of heavy machinery.
- After the envisaged noisy works period has ended, BMCE we will return to undertaking project works within the structure borne noise limits dictated by the relevant Section 60 requirements. Alternatively the project may seek to extend the period of works where structure borne noise limits will be exceeded, although such a scenario will require BMCE to inform CPH residents.

Deliveries to site may also take place at times outside of site working hours as per previous instances, in order to avoid congestion. Any delivery which does occur out of hours will use white noise vehicles reversing alarms instead of noisier alternatives

4.1.3 Access arrangements for vehicles

Vehicles will enter and leave the site by the routes shown on drawing BMCE-97-00-103 'Workforce and Vehicular Gate Locations' See Appendix 8.06.

WLH

Vehicles will enter and exit via Gate 2. Upon entry into the site, Gate 2 will be closed, the vehicle will be unloaded, and Gate 2 will then be re-opened to allow the vehicle to leave site. Traffic Marshalls will direct the vehicles into and out of the site, and will ensure that no pedestrians are endangered by delivery vehicles. Pedestrians will have priority at the entrances.

CPH and CPT basement

Vehicles will enter via Gate 3 and traverse down the existing delivery ramp which currently services the basement of CPH and CPT. There is a head height restriction at the bottom of the ramp which means that delivery vehicles will not be able to enter the basement. Once they have been unloaded at the bottom of the ramp they will reverse back up to the top before exiting Gate 3 back onto Earnshaw Street. Whilst the footpath on the west side of Earnshaw Street is closed to pedestrians, Traffic Marshalls will direct vehicles into and out of the site whilst Pedestrian Marshalls will ensure no pedestrians stray into the path of the delivery vehicles. Only one delivery at a time will be allowed on the ramp.

Once the new service yard is constructed, the entrance off Earnshaw Street (Gate 3) will be moved further north to this position and the existing ramp will be closed off.

CPH (St Giles High Street elevation)

In order to create vehicular entry to the western side of CPH the existing alignment of St Giles High Street is to be realigned to its original kerb line which is still evident. This will allow vehicles to enter site via Gate 4 and exit via Gate

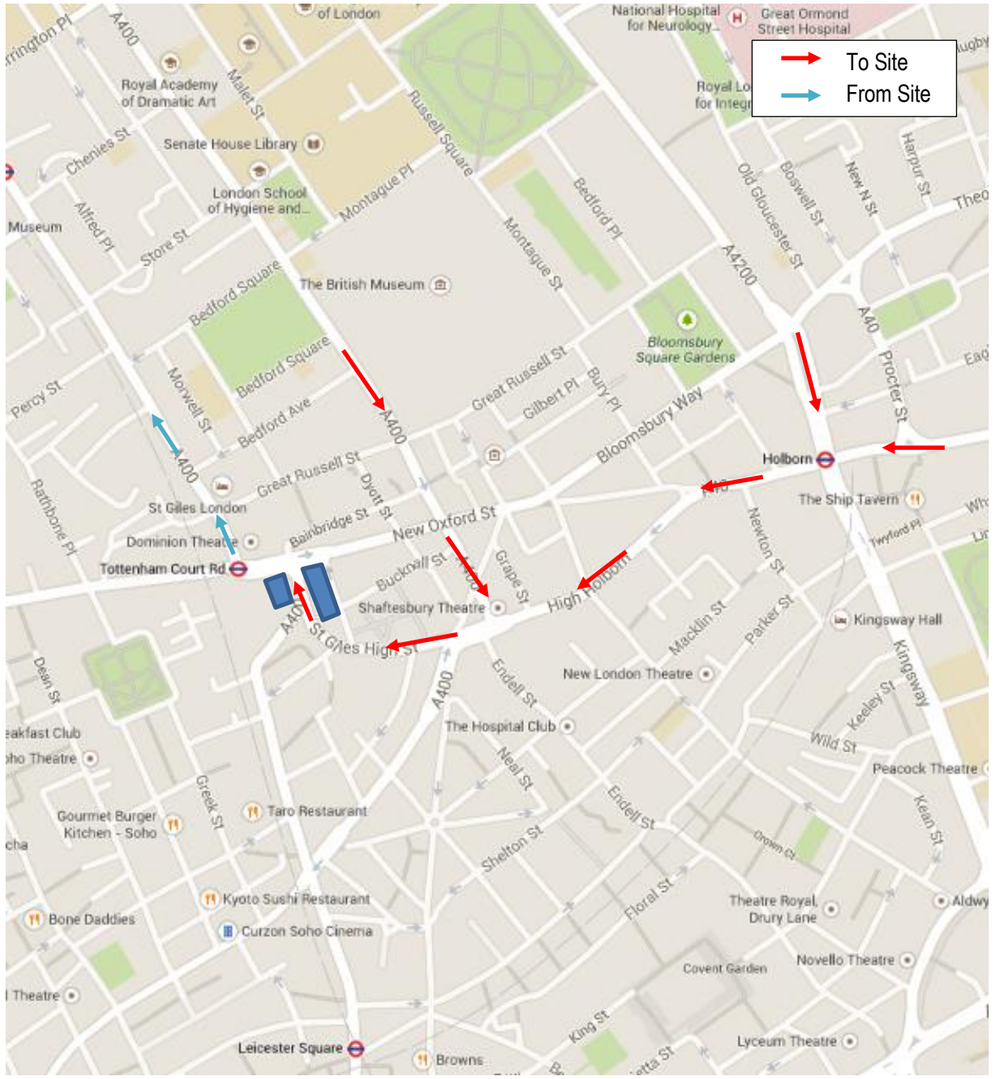
5. The sequence of work for this re-alignment is shown in Appendix 8.15. Traffic flow will be one-way. Upon entry into the site Gate 4 will be closed, the vehicle will be unloaded, and Gate 5 will open for the vehicle to leave site. Traffic Marshalls will direct the vehicles into and out of site, and will ensure that no pedestrians encroach on the path of the delivery vehicle.

CPT

Vehicles will approach site on St Giles High Street to the junction with the diverted route of Charing Cross Road. Once through the traffic lights at this junction, vehicles will enter site via Gate 6 and exit via Gate 7. Traffic flow will be one-way. Upon entry into the site Gate 6 will be closed, the vehicle will be offloaded, and Gate 7 will open for the vehicle to leave site. Traffic Marshalls will direct the vehicles into and out of site, and will ensure that no pedestrians encroach on the path of the delivery vehicle. Materials will be loaded into the twin hoist at the south of the tower for distribution to the various levels of the building.

4.1.4 Proposed routes for vehicles between the site and the Transport for London Road Network

Construction delivery vehicles will approach the Centre Point development from the south via St Giles High Street. Vehicles will subsequently leave the development via New Oxford Street and Tottenham Court Road. Local traffic routes to and from site are shown below.



4.1.5 Sizes of all vehicles and the frequency and times of day when they will need to access the site, for each phase of construction

The anticipated vehicle movements for the project are given in Section 2 of this document.

The projected vehicle movements during the main construction works will be approximately 800 vehicles per month during the peak of the project.

The range of vehicles delivering materials to and from the site will include:

- Tippers (9m long and 2.5m wide) – mainly for removal of demolition waste
- Skip lorries (7.5m long and 2.4m wide)
- Ready mix concrete lorries (8.25 m long and 2.5m wide)
- Flat bed delivery vehicles (8.5m x 2.5m) for materials such as windows, scaffolding, steelwork, reinforcement, brick and blockwork, plant deliveries, and fit-out materials.

All vehicles over 3.5t will be registered with the Freight Operator Registration scheme (FORS) and have achieved Bronze standard as a minimum. All drivers will undertake cycle awareness training such as the Safe Urban Driver module through FORs. All vehicles associated with the works will:

- Have side guards fitted
- Have a close proximity warning system comprising rear facing CCTV, a close proximity sensor, an in cab warning device and an external warning device to alert road users to the planned manoeuvre
- Have a Class VI mirror
- Bear prominent signage on the rear of the vehicle to warn cyclists of the dangers of passing on the inside

It required that contractors and supply chain comply with CLOCS standards for Construction Logistics Operation, therefore FORs certification shall be demonstrated. Once the system is on place, the contractors will have 90 days –from being awarded with the contract- to demonstrate the compliancy with this policy. Any exception shall be notify and agreed with the logistics manager

4.1.6 Swept path drawings for any tight manoeuvres on vehicle routes to the site

Swept path analysis has been carried out for each of the delivery points to the site. This has shown that 40' articulated lorries will not be able to deliver materials to CPT (through gates 6 & 7) and CPW (through gate 2). It will, therefore, be a project requirement that smaller rigid backed vehicles will be used to deliver to these areas. The swept path analysis demonstrates that the route is achievable for these smaller vehicles. Refer to Appendix 4 for swept path drawings

4.1.7 Details of any highway works necessary to enable construction to take place

In order to create a vehicular entry into Gate 4 on St Giles High Street, the existing kerb will need to be temporarily re-aligned as shown on drawing BMCE-97-00-100 (Appendix 1). The positions for bus stands in Earnshaw Street and St Giles High Street will be relocated as shown on the drawing and this proposal has already been discussed with TfL. Changes to pedestrian routes as a result of the Centre Point Redevelopment and have been discussed with Steer Davis Gleeve and coordinated with TfL, LUL and Crossrail at TCRSU.

4.1.8 Parking and loading arrangements of vehicles and delivery of materials and plant to the site

There will be no parking allowed on or adjacent to the site. Loading/unloading arrangements within the site compounds are discussed within Section 4.1.3 above.

4.1.9 Details of proposed parking bays, suspensions and temporary traffic management orders

SDG have been liaising with Camden Council throughout the planning process to ensure logistics are suitably maintained during the construction process. Loading Bay requirements will continue to be monitored, as requested by Camden Council (see David Jenkins email dated 16th January 2015, appendix 5) to take into account concerns from all stakeholders, and will be amended if and when necessary.
In order to re-align the kerb on St Giles High Street there will be a need for temporary traffic management. Detailed proposals have been developed by Active Reach and agreed with TfL and LBC.
Reach Active will also undertake the necessary service diversions around the scheme, which also require temporary traffic management around the perimeter of the development. These schemes have been agreed with TfL and LBC, please refer to David Jenkins email dated 7th & 15th January 2015 (appendix 5) which confirms this

4.1.10 Details of how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary) and any banksman arrangements

Traffic Marshalls at each gate will direct the vehicles into and out of the site. They will ensure that no pedestrians encroach into the path of delivery vehicles. The current route on the west side of CPH will be closed to the public for the duration of the project, however, access will be maintained for residents to gain access to the stair core at the south end of CPH. The emergency escape for the residents from the north stair core of CPH will be maintained by forming a temporary access route at Level 2 over to New Oxford Street.

The footpath to the east of Andrew Borde Street will be closed from New Oxford Street to St Gilles High Street. A traffic marshal will be located at the New Oxford Street & Andrew Borde Street crossing and a further marshal will be at the Andrew Borde Street and St Giles Street crossing to manage the pedestrians

. On the west side of Earnshaw Street will be closed to the public leaving the primary pedestrian route will be along the east side of Earnshaw Street.

There are no proposals at this stage for any further diversions to pedestrian or cyclist routes.

4.1.11 Details of how traffic associated with the development will be managed in order to reduce congestion

Space within the site compounds will be extremely limited and as a result materials will need to be distributed to the construction floors with minimal delay. Loads will be palletised to enable ease of handling on the site. Individual loads will be carefully managed to ensure that all the materials/components can be accommodated within the hoists/goods lifts.

Deliveries will be managed using a web-based delivery management system. This will provide a job specific electronic booking protocol to control all deliveries to site. The system will ensure that deliveries arrive on a 'just in time' basis and prevent other vehicles arriving on site at the same time, creating congestion on the surrounding road network. Subcontractors and suppliers will need to give 48 hours notice of any deliveries. Vehicles arriving on site which are not booked in through the system will be refused entry to the site. The Project Logistics Manager will be dedicated to and responsible for the coordination and control of all aspects of material deliveries and movement.

4.1.12 Arrangements for controlling the movements of large / heavy goods vehicles on and in the immediate vicinity of the site, including arrangements for waiting, turning and reversing and the provision of banksmen, and measures to avoid obstruction of adjoining premises

Traffic Marshalls will direct vehicles into and out of the site at the various gates described in Section 4.1.3 above. Vehicle unloading will be undertaken when the vehicle has entered the site hoardings and the gates have been closed. Vehicles will not be allowed to idle outside of the site. To manage the flow of deliveries to the unloading areas, a Traffic Marshall will be positioned on the approach road.

4.1.13 Details of any other measures designed to reduce the impact of associated traffic

As discussed in 4.1.6 above it is clear that it will not be possible for larger vehicles to deliver to CPT and CPW. As a result contractors will deliver materials in smaller loads using consolidation areas away from the site.
The web based delivery system described in 4.1.11 above will ensure that deliveries are sequenced to avoid vehicles backing up onto the highway.

The project team will look to maximise the hours available for deliveries. Noise levels will be continuously monitored throughout the works. If it can be proved that deliveries outside of normal working hours do not impact on background noise levels, the site team would look to negotiate an extension of the hours during which the site can take deliveries through discussion with LBC. This may help avoid traffic congestion in the local areas by opening the site earlier and closing it later to carry out these particular operations. This would only be done once approval from LBC had been received.

4.1.14 How the servicing approach takes into consideration the cumulative effects of other local developments with regard to traffic and transport

The measures outlined above detail how, for the whole Centre Point Redevelopment, deliveries, traffic and transport issues will be dealt with. In respect of other local developments, LBC has expressed their intention of setting up a working group with adjacent sites as a forum to discuss any issues including the following:

a) Deliveries.
b) Public feedback.
c) Programme for the developments.
d) Changes during construction.

The St Giles Circus Working Group meets monthly and members are in regular contact between meetings. Almacantar and BMCE also meet with Crossrail and Taylor Woodrow/Bam Nuttall (TWBN) to discuss interfaces between Centre Point and the Tottenham Court Road Tube Station Upgrade project. These meetings occur every fortnight. Consolidated have also joined this working forum to discuss interfaces with the St Giles Circus development. It is the intention throughout the project to hold regular discussions with these and any other adjacent developments which may be affected by or have an interest in Centre Point.

4.1.15 Workforce Entry and Access to Site

This section should be read in conjunction with drawing BMCE-97-00-101 (Appendix 1).

The site Entrance is located at 103 New Oxford Street, the workforce will then go through security turnstiles and enter the welfare facilities which are located on the basement, ground and mezzanine floors. Once here they will change into their personal protective equipment (PPE) using the changing rooms provided as part of the welfare facilities. Once in full PPE, they will be able to enter each area of the site as follows:

a) CPT – by entering the tower at Level 3 from the top of the CPL bridge. They will be able to access higher levels of the tower using the pedestrian hoists at the north and south end of CPT. These hoists feed every floor up to Level 35. Lower levels below Level 3 will generally be accessed using the existing escape stairs.
b) CPH (St Giles High Street) – from the CPL bridge down through the existing northern staircase of CPH.
c) WLH – via pedestrian gate P1 situated adjacent to vehicular gate G2. Before entry into the WLH site the workforce will use the main welfare facilities to change and store their PPE.

The office staff and visitors will use the same entrance as the workforce , and will take the external scaffold accessed at mezzanine level to the required floor. BMCE office are located on level 1 of CPL

4.1.16 This route will not require personnel to be in PPE.Workforce Travel

There will be no on-site parking and the project team and workforce will be encouraged to use the extensive tube, bus and cycle network public transport for the duration of the project as detailed below.

- The nearest tube stations are;
  - Tottenham Court Road (Northern & Central Lines)
  - Goodge Street (Northern Line)
  - Oxford Circus (Victoria, Central & Bakerloo Lines)
  - Holborn (Central & Piccadilly Lines)
- There are many bus stops serving routes to all parts of London and to railway termini
- The London Cycle network

A workforce travel planning leaflet & poster will be included within the subcontractor tender documentation and also displayed within the site welfare.

4.1.17 Security

An outline Site Security Plan has been prepared for the project and is available upon request. The plan will evolve to meet the ongoing needs of the project and will be based on the following principles:

- CCTV will be installed to cover pedestrian and vehicle entrances. Pedestrian access and egress will be controlled via turnstiles in 3 locations, these being: at the staircase on New Oxford Street, at the entrance to CPW and at the entrance from CPL into CPT. Pedestrian access will not be allowed through the main delivery gates.
- During the day, security guards will be employed to oversee the Access Control System as well as carry out patrols of the external and internal site perimeter. At night, security guards will monitor the CCTV system as well as continue their site patrols.
- Security guards will also man the Vehicular Access Gates to control those entering/leaving site by vehicle

4.1.18 Details of any Construction Working Group that may be required, addressing the concerns of surrounding residents, as well as contact details for the person responsible for community liaison on behalf of the developer, and how these contact details will be advertised to the community.

From the outset of the project well publicised meetings in collaboration with the developer Almacantar will be held. Invitations will be extended to all residents and local businesses, with particular attention being paid to CPH residents. The first of which has been arranged for 19th January 2015 and invitations have been issued.

The planning consultation has been regularly reviewed to take into account residents' concerns and to mitigate any potential impact the construction process has on their daily life. Any comments from discussions and meetings with local stakeholders have shaped the numerous amendments to the CMP. Plans have changed to ensure CPH residents have access to waste bins, and CPH entrance area will receive full security measures such as being subject to regular security checks, being well lit at all times, and existing CCTV provision at the entrance will be maintained. Best Practicable Means will be employed to ensure noise or any other issues which may cause nuisance to the local environment are mitigated where possible.

A dedicated Community Liaison Manager will be appointed to the project. Regular community liaison meetings will be held to update local businesses and residents of site activities and to respond quickly to any concerns. Newsletters will be sent out Bi-Monthly updating the local community of any site activity or any upcoming works that might affect them. A direct hotline number to the Project has been set up and will be clearly displayed, so if people have any questions or queries, they can make direct contact. A fortnightly meeting is also held between BMCE, Crossrail (TWBN) and Consolidated to discuss external liaison and public/community interfaces.

Community Liaison Manager contact details are as follows:

- Telephone number: 01202 045 817
- Email address: Centre.Point@brookfieldmultiplex.com

These shall be advertised during regular local business and resident meetings and in Newsletters.

Regular Working Group meetings will be held to ensure co-ordination at the interfaces with project neighbours, particularly Crossrail and Consolidated. This liaison has already commenced and the monthly St Giles Circus Working Group meetings held to date have been productive in terms of planning the project and will continue to add benefit throughout the project.

As further works start in the St Giles area these meetings will help to manage the coordination of a number of major construction projects within close proximity. The schematic Programme which follows this section outlines the interfaces and overlaps of the major works planned for construction phase during the Centre Point project this programme and the associated interfaces will be managed with the St Giles Circus Working Group supplemented by further meetings as required.

Further measures to be taken include:

- The project will be registered with the national Considerate Constructor Scheme and subcontractors will be required to ensure compliance and co-operation.

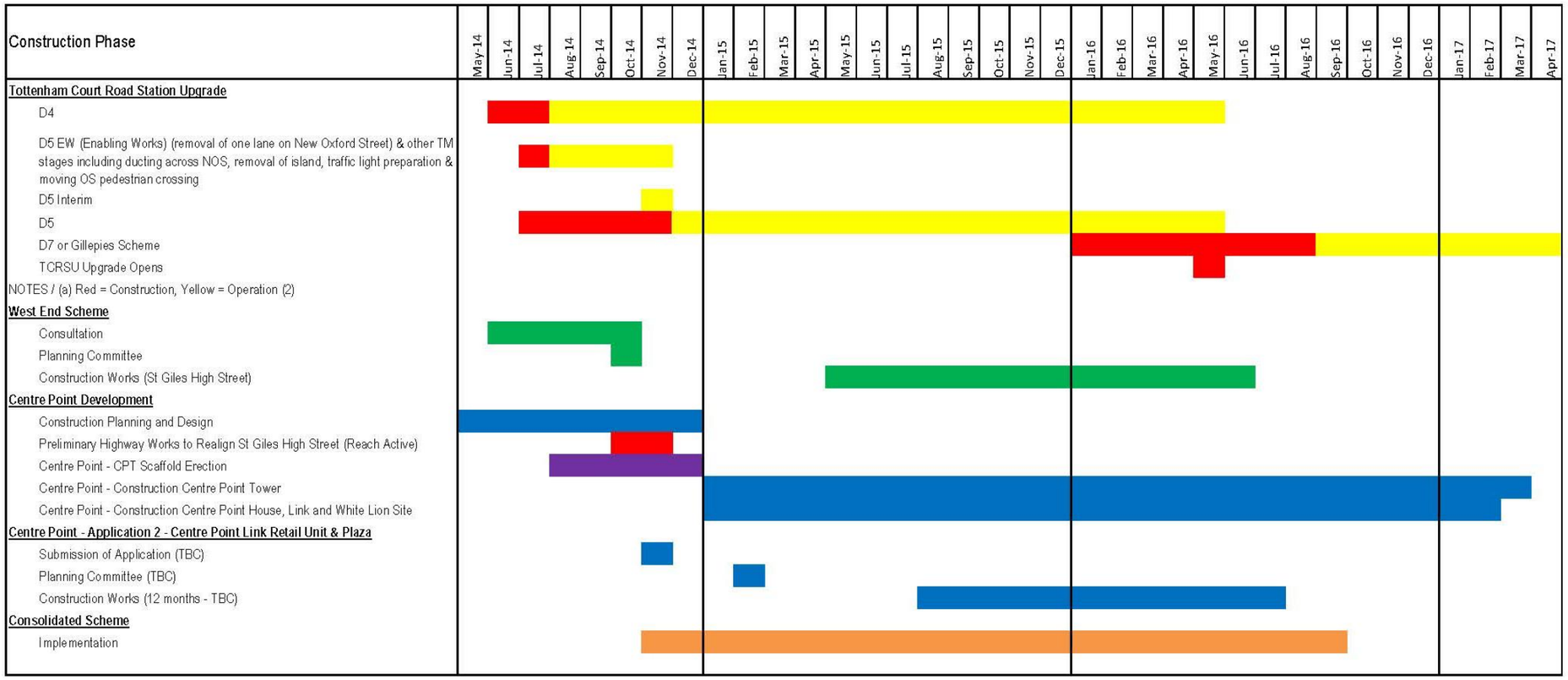
- Local projects by other contractors include:
    - The West End project, which consists of a set of interlocking and co-ordinated proposals that would enable the significant upgrade of a series of public spaces and contribute directly to the regeneration and economic success of the area near Tottenham Court Road, New Oxford Street and Shaftesbury Avenue. The package of measures includes improved facilities for pedestrians and cyclists and enhanced public realm at the following five locations:
        1. Tottenham Court Road/ Gower Street.
        2. Euston Circus - (Euston Road / Tottenham Court Road)
        3. Princes Circus - (New Oxford Street / High Holborn / Shaftesbury Avenue)
        4. St Giles Circus - (New Oxford Street / Charing Cross Road)
        5. Cambridge Circus - (Charing Cross Road / Shaftesbury Avenue)

The work to refurbish the Centre Point buildings is compatible with the proposed West End scheme and the Centre Point scheme helps ensure the deliverability of the St Giles Circus scheme through S106 contributions of £3.17m which are to be used to fund the piazza. A further £1.0m is allocated in the S106 towards the funding of the other elements of the West End project.

Our client Almacantar is working closely with the deliverers of other schemes in the nearby area through the St Giles Circus Working Group to ensure that the design and implementation of the different proposals are coordinated. Almacantar is currently facilitating and hosting this Working Group.

Taylor Woodrow Bam Nutall are undertaking the Tottenham Court Road Station Upgrade project. It is one of the major schemes in London Underground's £2bn Station Capacity Programme, expanding and modernising some of the Tube network's busiest interchanges to relieve congestion, provide step-free access, and help London work better. Other projects are on site at Bond Street and Victoria, and work is scheduled to start at Bank in 2016. Goslett Yard Box and Escalator Decline has now been handed over to Crossrail and their contractors BAM Ferrovial Keir (BFK). They will now begin the work of joining the Goslett yard box and the rest of the Crossrail station and passenger tunnels.

Consolidated Developments project consists of 21,000sqm of mixed use redevelopment of Denmark Street. This includes retained facades to Denmark St and St Giles High St, basement excavation and construction of new buildings within these street boundaries. Deliveries for Centre Point and Denmark Street will both be approaching the site from Holborn. Offloading by Consolidated will restrict vehicle movements on St Giles High St. Tower cranes on the two sites will need to share communication and have anti-clash features


Construction Phase
May-14
Jun-14
Jul-14
Aug-14
Sep-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
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May-16
Jun-16
Jul-16
Aug-16
Sep-16
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
Tottenham Court Road Station Upgrade
D4
D5 EW (Enabling Works) (removal of one lane on New Oxford Street) & other TM stages including ducting across NOS, removal of island, traffic light preparation & moving OS pedestrian crossing
D5 Interim
D5
D7 or Gillepies Scheme
TCRSU Upgrade Opens
NOTES / (a) Red = Construction, Yellow = Operation (2)
West End Scheme
Consultation
Planning Committee
Construction Works (St Giles High Street)
Centre Point Development
Construction Planning and Design
Preliminary Highway Works to Realign St Giles High Street (Reach Active)
Centre Point - CPT Scaffold Erection
Centre Point - Construction Centre Point Tower
Centre Point - Construction Centre Point House, Link and White Lion Site
Centre Point - Application 2 - Centre Point Link Retail Unit & Plaza
Submission of Application (TBC)
Planning Committee (TBC)
Construction Works (12 months - TBC)
Consolidated Scheme
Implementation

4.2 Hoardings and Scaffold Arrangements

This section deals with perimeter scaffolds and hoardings, and the proposals for site welfare. Scaffolding and hoarding layouts are shown on drawings BMCE-97-00-100-102.

4.2.1 Proposed overhang of the public highway (scaffolding, cranes etc)

A full scaffold access system will be erected around the perimeter of CPT. It will be cantilevered out from the building on a support structure at Levels 3, 13, 22 and 30. A scaffold protection fan will be erected around the full perimeter at Level 3.

An acoustic scaffold will be erected around CPH to mitigate noise that might affect CPH residents. This scaffold will be in traditional tube and fittings with integral acoustic mats forming an acoustic barrier. The scaffold on the Earnshaw Street elevation will cantilever away from the building and be supported by a portal scaffold gantry with pedestrian access underneath.

It is intended that scaffold will be erected as required to install the windows and provide edge protection to the WLH building after the construction fot he structure and installation of the precast façade.

All necessary highway and over sailing licences will be obtained and agreed and programmed with Camden (Engineering Services).

4.2.2 Details of any temporary buildings outside the site boundary, or overhanging the building

Two levels of stacked welfare cabins will be erected on top of CPL within the site boundary. Access to welfare will be gained from the staircase at street level on New Oxford Street up onto CPL. This staircase is outside the project boundary. Project team offices will be provided in Level 1 of the CPL which is also inside the boundary. This arrangement is shown on drawing BMCE-97-00-101 in the Appendix.

A steel gantry wil be erected over the footpath on Earnshaw Street and also acts as part of the temporary works.

Limited satellite welfare facilities will be provided on site at WLH within the site boundary.

4.2.3 Details of hoardings required or any other occupation of the public highway

The project will commence with a number of enabling works which will include service diversions, street lighting removal, traffic light relocation, and the re-alignment of road, kerb and footways. These works will be undertaken behind temporary HERAS type hoardings with temporary traffic control to keep disruption to a minimum. This will be agreed with LBC and TfL prior to any works taking place. Further details for these works including programme and detailed drawings are included in the Appendix

Hoardings will be 2.4 metres high and will be erected around the perimeter of the site. Hoarding licences have been applied for and the associated fee paid to LBC. Covered gantries over adjacent pavements will form protected walkways for pedestrians. Viewing panels will be incorporated within the hoarding for the public to view the works.

Covered gantries will be lit to provide a safe access for pedestrians. Hoarding panels will be maintained and kept clean for the duration of the project. Layout and section details of the hoardings are shown on drawings CPT/MCA/PC/001 and 004 – See Appendix 8.01 and 8.04.

Scaffolding footprints allow for 2.4m pedestrian pavement to New Oxford St & 2m to all other footways as SDG model. Access to CPH residents is limited to 1.5m along St Giles High Street

On-going discussions are being held between Almacantar/BMCE/TfL/LBC regarding the impact of the construction works on the local area. This includes traffic management, oversailing licences, road closures, scaffold licences etc.

4.3 Vertical Transportation

This section should be read with reference to drawing BMCE-97-00-100 as this shows positions and reference details for the hoists and tower crane which are currently proposed for the development (in the Appendix).

4.3.1 Hoists to CPT

A double goods hoist (Hoist No 1) will be erected at the south end of CPT to service all floors. An offloading platform will be erected to enable delivery vehicles to pull up adjacent to the platform and off loaded directly onto the platform by using a small forklift, pallet trucks, manually or by Hiab. This will be the main supply route into and out of the building.

3 single internal hoists (Hoist 2 – 4) will be erected within the existing lift shafts 1no. in the south core and 2no in the north core CPT for passanger and deliveries distribution to the north apartments.

4.3.2 Hoists to CPH & CPL

There will be a single hoist (Hoist No. 4) situated at the inner junction of WLH & CPL which will feed directly into CPH through the Brise Soleil. In order to eliminate general pedestrian access across the offloading/delivery yard at the base of this hoist arrangement, this hoist set-up will be designated for ‘goods’ only. This hoist will serve all floors from Ground Floor to Level 8.

4.3.3 Crane

A Tower Crane (TC No. 1) will be erected within the WLH site area on St Giles High Street. The crane will primarily serve the WLH site for transporting/lifting materials around site. The crane will be prevented from oversailing adjacent developments, however, in the out of service condition it will oversail St Giles High Street. An appropriate licence is to be obtained as necessary. Discussions with LBC have taken place regarding the oversailing license and temporary road closures required for the crane erection.

This crane will also be used to offload and assist with movement of materials within the site compound on the west side of CPH.

4.3.4 Forklifts

A up to three BMCE forklifts will be used to assist in the movement of materials around site. This will work within the hoardings and will not be allowed to use the public roads around the site.

5. HEALTH, SAFETY AND ENVIRONMENT

5.1 Health & Safety

5.1.1 Health and Safety Plan

In order to ensure the effective management, monitoring and co-ordination of health, safety and welfare on the project a Construction Phase Health & Safety Plan (CPHSP) has been prepared – See Appendix 2. This will be regularly reviewed and revised to suit the needs of the project.

The CHP is a live document providing project specific health and safety information with arrangements for managing the works and co-ordinating the activities of all contractors. It will ensure that works are undertaken in an efficient manner in terms of health, safety and welfare on the project by addressing the following:

a) Project safety objectives.
b) Project arrangements for the management of health and safety.
c) Responsibilities of project staff.
d) Method Statements and Risk Assessments.
e) Safety Meetings.
f) Consultations with the Workforce.
g) Project emergency response arrangements and contingency plans.
h) Training requirements.
i) Guidance of hazard-specific protection requirements.
j) Project safety instructions.
k) Accommodation and welfare arrangements.

5.1.2 Management Structure

The Project Manager will have overall responsibility for all project health and safety issues. The Project Manager will be supported in his role by a project based Health and Safety Advisor who will provide advice and guidance to the project team and subcontractors. In addition all sub-contractors will provide their own site supervision focussing particularly on health and safety.

5.1.3 Site Induction

All project staff, workforce and visitors will attend a site induction. Infrequent visitors will be escorted at all times whilst on site. The induction will describe the site rules, fire and emergency plan, health, safety and accident reporting. Any site specific risks / precautions will also be explained.

5.1.4 Workforce Engagement/Communication

A number of site based initiatives/activities will be implemented to improve and encourage communication with the workforce. These will include:

a) Safety Leadership Team will be put in place for the project
b) Weekly Package meetings.
c) Start up meetings.
d) Daily Site Management Briefings.
e) "It's Your Life" – Behaviour Safety Training
f) Suggestion Boxes.
g) Safety messages/reminders on TV in welfare.
h) Safety Team sessions.
i) Daily Activity Briefings for operatives.
j) Daily / Weekly site walkarounds attended by representatives from each contractor.
k) Tool Box Talks.
l) Notice boards with information updated regularly.
m) Safety Alerts.
n) Poster campaigns.
o) Open Door policy.
p) Monthly EHS Meetings
q) Monthly Safety Committee Meetings
r) Monthly EHS Performance League

5.1.5 Welfare Provision

Welfare facilities will be provided in double stacked cabins on the gantry situated above CPL. They will be accessed via the Pedestrian gate on New Oxford Street and up the staircase onto the CPL bridge. Facilities will be of a high standard and will include changing, washing/showering and WC facilities, drying rooms, canteen, First Aid room and security induction room – See drawings within Appendix 1.

5.1.6 Emergencies, First Aid and Occupational Health

Prior to starting on site and as part of the project safety plan, a specific fire and emergency plan will be prepared. The plan will describe the following:

a) Emergency escape routes.
b) Marshalling/assembly areas.
c) Fire extinguisher/alarm locations.
d) Fire engine/ambulance access.
e) Provision and location of dry and wet risers/falling mains.

Relevant parts of the plan will be exhibited in the project site office and around the site as appropriate. The CPHSP will be regularly reviewed, updated, reissued and redisplayed as the project evolves.

First Aid cover will be provided to suit the size of the workforce as well as to address any unusual hazards that may exist on the site. Occupational Health cover will also be provided for all operatives and managers. Occupational Health provision will include Drugs and Alcohol testing and 'for cause' testing following an incident.

5.1.7 Fire Safety Management

Around the site boundary the access gates will be used as escape routes in the event of an emergency. Emergency exit routes will be clearly indicated throughout the Centre Point Redevelopment, maintained free from obstruction, with emergency packs, directional signs and exit points marked by use of standard pictograms. Prior to start of construction, a Fire Safety Co-ordinator will be appointed who will prepare the Fire and Emergency Plan detailing the fire fighting shafts, dedicated emergency escape routes, fire points etc. They will make contact with the London Fire Brigade to present the Fire and Emergency Plan and make amendments as and when the project need arises. Fire

Safety Management will generally be organised in accordance with 'Joint Code of Practice – Fire Prevention on Construction Sites – 8th Edition Jan 2012'

5.2 Environmental Management

A site specific Project Environmental Plan has been prepared – See Appendix 3. This sets out the environmental controls to be implemented throughout the Centre Point Refurbishment to minimise the impact of construction activities on the local environment and the wider surroundings.

In addition to employing the Best Practicable Means to manage noise, vibration, dust and any other potential nuisance to local community and environment we will monitor activities, reflect on methods used and constantly update best practices to ensure quality is maintained throughout the entire construction process. We will ensure all subcontractor method statements are thoroughly reviewed and adhered to and all operatives are appropriately trained to adapt to changes to the programme and deal with any issues that arise.

As well as having appropriate and well management procedures in place, we also acknowledge the importance of installing the right attitude in those working on the project. This right-first-time philosophy and progressive mentality, where innovative ideas will be encouraged, will be driven top-down from Senior Management throughout the BMCE team and subcontractors and installed on all who work on the Centre Point Project.

5.2.1 Site Waste Management Plan

A Site Waste Management Plan has been prepared in accordance with DEFRA Guidance, Site Waste Management Plan Regulations (2008), and BMCE internal Procedure EHS -P-356
It contains the following:

a) Decisions taken by the project to eliminate, reduce, reuse or recover waste.
b) A forecast of waste to be generated.
c) Full duty of care details for all waste carriers and waste facilities.
d) Actual waste figures which will be updated on a monthly basis.
e) Diversion from landfill %

Opportunities for designing out waste in the first instance, using materials with a recycled content, re-use and recycling will be progressed through workshops with the design team and subcontractors. The site has already been registered as a 'Hazardous Waste Producer' in anticipation of works on site.

A Waste Segregation Area will be positioned in a suitable location inside the site hoarding to sort, store and recycle materials. Subcontractors will be audited to ensure that they comply with waste segregation and that all operatives have been briefed on the system. Subcontractors will be responsible for placing all waste arisings from their works in the waste containers provided.

The waste will be segregated and removed to a licenced waste facility. Only appropriately licenced waste carriers will transport waste and only appropriately licenced sites will accept waste or hazardous waste. Subcontractors will provide details of waste movements, waste carrier licences, Waste Management Licences/Exemptions and Waste Transfer Notes/Hazardous Consignment Notes (with completed Part E).

5.2.2 Dust Emissions

Best Practicable Means will be employed to ensure that dust does not cause nuisance. Additionally the following philosophy will be used to control dust:

1. Prevention
2. Suppression
3. Containment

Containment Mitigation measures to ensure dust is kept to a minimum will include the following:

a) Solid site hoarding will be erected around the site perimeter.
b) The Centre Point Tower will be enclosed with monoflex
c) Demolition activities will take place with windows still in place, and dust dampening will be used if necessary
d) Scaffolding and Gantry will be enclosed with sheeted material
e) Cutting equipment will use water as a suppressant or a suitable local exhaust ventilation system will be employed.
f) Materials will be enclosed and dampening down of dusty materials using water spray will be used at appropriate periods, for example dry seasons. However, only sufficient water will be applied to damp down the material and excess water will not be allowed to contaminate the local watercourses. Additionally, due caution will be made to "over dampening" due to the sensitive nature of the HAC ribbed floor units.
g) The site shall be dampened down during the working day and again at the end of the day, if deemed necessary,to reduce the amount that is re-suspended dust. Again, due caution will be made to the danger "over dampening". Machinery and dust-causing materials and activities to be located away from the site boundary and sensitive receptors.
h) If deemed necessary, the public highways will be cleaned using wet sweeping methods, especially during dry periods.
i) Vehicles transporting materials onto or off site will be suitably covered where necessary to prevent dust, and wheel washing techniques will be implemented if necessary to reduce track out onto the public highway
j) As this is a refurbishment project, we do not envisage vehicles bringing or removing significant quantities of mud to such an extent as to cause offense to the local community and environment. Nevertheless, dusty vehicles will be managed through dampening dusting down if necessary.
k) Given the tight entrance and exits on the project site, a speed limit of 5mph will be imposed inside site boundary and when exiting the project site
l) We do not intend to use mobile crushing, screening plant nor cement batching plant on the project.
m) Site personnel shall be trained in dust mitigation and a Logistics manager supported by the Sustainability Advisor shall be present for managing dust on site.

5.2.3 Air Pollution Emissions (Fumes, Smoke and GHG emissions)

Construction dust will comprise both coarse dust and finer particles such as PM10s. Camden is deemed an Air Quality Management Area, with a serious concern for PM10s generated from construction sites. PM10 data will be collated pre-commencement on site using the London Air Quality Network. Throughout the development, the Project team will carry out dust monitoring and measuring of PM10 on a continuous basis. The Project Environmental and Sustainability Advisor will be responsible for accessing the data from site surveillances to check air quality.

Mitigation measures to ensure air pollution emissions are kept to a minimum will include the following:

a) Throughout the construction phase continuous particulate matter (PM10) monitoring shall be undertaken. Two instruments will be deployed at areas close to sensitive receptors of CPH. The specification of the instrument and locations will be agreed in advance with Camden's air quality officer.
b) Adequate quality assurance/quality control procedures shall be in place including monitor maintenance and calibration as well and data checking. PM10 data shall be collected automatically on a 15 minute basis.
c) A trigger action level for PM10 concentrations of 200µg.m-3 (15 minute average) shall be used to identify incidences of elevated dust emissions at the site boundary. The development site shall comply with the trigger action throughout the demolition and construction phases.
d) An on-site alert system (email or SMS) shall be in place to notify appropriate staff that the trigger action level has been reached. Immediate and appropriate measures can be put in place to rectify abnormal particulate emissions. A procedure shall be established to deal with abnormal dust emissions. All incidences of abnormal particulate emissions leading to breaches of the trigger action level, shall be documented in the

site log book (date and time), with details of the action take to remediate dust emissions. Trigger emails will also be sent to a designated Camden council email address agreed with Camden's air quality officer.

e) A summary of any exceedance and subsequent actions taken on site will be kept shared with Camden Council's air quality officer should it be requested .
f) An electronic report shall be submitted to Camden Council's air quality officer every three months, should it be requested, summarising the following information from each monitoring site – 24 hour average PM10 concentration, date and time of any breach of the trigger action level with the 15 minute mean concentration, prevailing wind direction and details of the cause of elevated dust emissions and mitigation measures.
g) A 24-hour phone hotline shall be set up so that residents can complain about high dust or PM10 levels directly to the contractor.
h) CO2 emissions from site activities will be recorded in line with the BMCE Brookfield Metrics and updated monthly.
i) We have registered the site for Non Road Mobile Machinery (NRMM) and are in the process of implementing compliance on our site, working with relevant subcontractors to review and improve emission standards.

5.2.4 Noise and Vibration:

BMCE will use the best practicable means to reduce the negative effects and increase beneficial effects on the environment by controlling noise, vibration and other nuisance which may cause offence to the local community or environment. Noise monitoring will be carried out as follows:

a) 3D modelling will be used on the top of the Centre Point Tower to predict noise levels, and vibration in the case of the basement works. This is specifically concerned with the structural alterations to be undertaken using such techniques as diamond sawing on the top 4 floors of Centre Point Tower
b) Baseline monitoring will be undertaken prior to works commencing. Noise and vibration monitoring will be continuous, to enable any requests/complaints to be addressed.
c) Monitoring will be carried out next to sensitive receptors e.g. CPH

Mitigation measures to ensure noise and vibration are kept to a minimum will include the following:

a) 2.4m hoarding from durable recycled plastic to reduce the amount of noise that escapes the site
b) Noisy machinery and equipment will be as far away as practical from CPH and other sensitive properties
c) CPH will be enclosed with an acoustic scaffold.
d) Gates will remain closed and only open to allow vehicles to pass through
e) An electric temporary substation has been applied for with the view of powering the tower crane, lighting and saws instead of diesel or petrol
f) We will envisage to use acoustic enclosures where necessary
g) Machines that are not used very often will be shut down when not in use or throttled down to a minimum
h) Vehicles and machinery used for work must be fitted with effective exhaust silencers, be maintained in good and efficient working order, and be used in a way that reduces noise and vibration
i) The Logistics Manager will use a Delivery Log to carefully coordinate the vehicle movements and minimise congestion
j) Deliveries outside of hours will only be used as a last resort . Any delivery which does occur out of hours will use white noise vehicles reversing alarms instead of noisier alternatives
k) We have made carefully considered plans to use quieter breaking and cutting techniques such as diamond saws, diamond blades, munching and hydraulic cracking. Percussive breaking will be avoided and only used if approved through a process of elimination of other techniques.
l) Pneumatic tools will be fitted with silencers wherever possible and where hydraulic hammers are used they will be fitted with baffles
m) We do not intend to use impact-driven sheet piling. Instead we expect to use hydraulically operated or vibratory methods to drive extract sheet pilling.
n) The quietest and newest vehicles/plant machinery shall be used at all times. All vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers, shall be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.
o) In the case of vibration, the principles BS 5228: 2009 part 2 will be applied to works with the potential to cause vibration issues. In advance of any works being undertaken background readings will be taken to identify the current vibrations levels noting the location of the existing underground tube line

5.2.5 Protection of biodiversity and trees

Regular monitoring will be undertaken throughout the construction phase of the project to ensure that impacts on ecology are minimised. In the event that a protected species or habitat is discovered during construction, works will stop and expert advice will be sought on how to proceed.

There is only one tree within the site boundary and this is a poor specimen of a lime tree. This will be removed in the early phase of the works. New trees are proposed for the enhanced public domain area in the scheme to be promoted by LBC and TfL.

During demolition and construction, best practice measures will be employed to ensure that surface and groundwater is managed to avoid risk of pollution.
These measures will include:

a) Fuel, oil and chemicals stored in suitable secondary containment systems.
b) Chemical storage covered to prevent rainwater ingress.
c) Drip trays used under static plant.
d) Emergency spill kits provided in strategic locations around each work area with personnel trained in their use.

The water table is approximately 1.5m above the basement level. It is therefore anticipated that groundwater will be encountered during the basement works. An application will be made for a Thames Water Groundwater Discharge Consent prior to commencement on site.

Water will be discharged from site via a settlement tank with a meter attached.

5.2.6 Stability of adjacent properties

A structural and vibration monitoring regime will be established for the project, to monitor any structural movement and vibration during demolition, structural alteration and construction activities; and to give an immediate warning on site to prevent any damage to adjacent structures. This will entail establishing baseline data and trigger levels for movement and vibration, live report access giving real time readings and alarm/text notification if trigger levels are exceeded.

5.3 Local Procurement

Almacantar and BMCE recognise the benefits that a high profile project such as Centre Point has on the local economy and therefore will actively engage with the local supply chain and encourage the procurement of locally sourced goods , services and materials. BMCE maintain a nationwide register of sub-contractors, and wherever possible, will invite local firms to tender for the works packages on the project. BMCE will attend organised events, such as Meet the Buyer events, that create opportunities for local suppliers to enter the tendering process.

Almacantar attended a Meet the Buyer event at London Borough of Camden on 19th September 2013 and SRM have previously been in negotiation with Contractors who were present at the event. LBC has been encouraged to submit names/details of suitable supplies and sub-contractors.

Local suppliers not already registered with SRM will be coached through the process.

5.4 Communication with the Community

BM will produce a newsletter that will be made available bimonthly to the Community and any person or group who would like to receive a copy. The newsletter will provide all relevant information about the project for the specific upcoming period. It will also include a rolling look ahead programme that will show the key programme activities along with general and relevant information.

Further to the Newsletter, BM will liaise with key parties in the local vicinity to ensure that vulnerable people, such as the Centre Point House residents, are fully aware of activities happening throughout the course of the construction phase.

Also, the BM logistic manager will liaise with the local businesses and other construction sites in relation to deliveries to the site and to the business premises to ensure that when deliveries happen

5.5 Considerate Constructors Scheme and Guide for Contractors Working in Camden

Following formal appointment, BM will register the Centre Point Tower scheme with Considerate Contractors Scheme (CCS) at the earliest opportunity. BM will ensure that our specialist trade contractors and supply chain partners also comply with these requirements.

BM will follow the "Guide for Contractors Working in Camden"

BM operates award winning sites and has previously received Performance Beyond Compliance, Silver and Gold awards from both National Considerate Constructors Scheme.

All contractors working on site will be instructed to work to the 'Guide for Contractors Working in Camden'. Along with our own procedures this will be referred to throughout the tendering process with our subcontractors. In addition the site team will use the manual as a reference throughout the construction process.

5.6 24/7 Helpline

BM will provide a 24/7 helpline service that is efficient, professional, courteous and customer focussed. The helpline will operate 24/7, 365 days per year, managing all calls received from the neighbours and the public. All calls taken by the helpline will be recorded and reported to the project lead for action. BM will record all calls received and close-out details including the action taken on a weekly register.
The 24/7 helpline contact details will be communicated widely to all neighbours and advertised on:
• Internet
• Newsletters
• Hoardings
• Letters issued to neighbours

The manned 24/7 helpline will receive all calls and those non-urgent will be reported to the project lead on the next business day.
Should a call outside of business hours require immediate action, the helpline will escalate the concern. By engaging a multi-level response system, BM will ensure they provide an efficient and comprehensive 24/7 response.

5.7 Complaints and compliments register

All calls, emails and notifications will be logged, actioned, recorded and closed out in a suitable timeframe. This will align with the register which will be established for the project. A member of the team will be charged with keeping the register up to date and ensure procedures are adhered to.

5.8 Other construction sites in the local area

BM is aware of Cross Rail construction site next to Centre Point Tower. Contact with be sought with this project with regards to noisy works. Demolition works will be planned and scheduled with Cross Rail and as far as is reasonably possible arranged so the that noisy works are carried out at different times to minimise the accumulative noise generated which could be a nuisance to local businesses and neighbours.

5.9 Rodent Control.

Rodent Control Inspections at Centre Point Tower have been undertaken by specialised assessors since September 2014. These records are available for inspection. The level of Rodent activity has been deemed with 'Light'. Nevertheless, we understand the importance of carefully managed Rodent Control on construction sites, and as such we will take the following preventative measures to effectively manage Rodent Control:

a) Seal all disused drains and sewers correctly. Records of all action we take and approvals we receive will be recorded
b) Treat any pest infestation efficiently and effectively, and notify Camden as soon as possible
c) Ensure no rubbish or rotting material will build up onsite. Caters will be based on the 4th floor of Centre Point Tower, which is the only place site operatives are authorised to eat

5.10 Training and Apprenticeships

BMCE and Almacantar are committed to the engagement of apprenticeships, acknowledging the need to provide a skilled workforce, now and in the future. BMCE will encourage all their subcontractors and suppliers to replicate these beliefs by offering apprenticeship opportunities throughout all areas of the site development and for all levels of ability.

On the Centre Point project, contacts will be made with local training organisations and education establishments, in particular the Kings Cross Construction Centre, K-10 and the Prince's Trust to ensure that they are aware of the skills requirements of the project and to give them the opportunity to promote training opportunities with the sub-contractors in formal presentations. BMCE will engage with sub-contractors to establish targets for employing apprentices from the London area prior to formalising sub-contracts. The performance of achieving the targets will be reviewed regularly and a formal framework for reporting our site progress in relation to these matters will be adopted for the duration of the project.

BMCE have successfully delivered apprenticeships on other site developments, in particular New South Glasgow Hospital where we were awarded the Scottish Government Opportunities CSR Award 2012 and the National Government Opportunities Award for Supplier Engagement 2013. We shall include our regional employment schemes as part of this project and refer places to our community partners, in particular those who work with long term unemployed people, to offer employment opportunities to Camden residents.

Almacantar also supports the charity 'Centrepoint' and will explore contact between the charity, the Principal Contractor and the sub-contractors so as to promote employment and training.

It is important to note that those entering and working on the site do so at the absolute discretion of BMCE whose rules for the safe operation of the site are of prime importance.

20 UNEMPLOYED PEOPLE GET THE OPPORTUNITY TO LEARN A NEW TRADE

Through the community benefit partnership, dry lining supply chain partner, Astins, offered local people the opportunity to learn a new trade. Working in conjunction with Jobs & Business Glasgow and Construction Skills 20 local people have had the chance to participate in eight week training programme funded by Glasgow City Council's Responsive Training Fund supported by European Social Funding and investment from the local Southwest Community Planning Partnership.

This bespoke programme was run on-site by Astin's NVQ Assessor and the trainees were given IPAF, nail gun and power saw training as well as on-job skills.

ENGINEERING STUDENTS GET ON-SITE EXPERIENCE

Students from Clyde College completed a two-week work placement programme with the mechanical and electrical contractor at the New South Glasgow Hospitals project. The two-week rolling programme saw thirteen HNC Engineering students get onto the site.

The thirteen students were hosted on the site by key supply chain partner, Mercury Engineering Ltd. Each student was allocated a supervisor and work station while on site. They spent their time working alongside experienced teams and were give a real sense of working on a big, busy construction site.

At the end of each session the students were given a full debrief and all students stated that the work experience added real value to their studies. In particular they highlighted the level of structure, scale of the operation and communication as being the core experience for them.

6. Conclusion

This Construction Management Plan has been prepared in discussion with the Centre Point Refurbishment Project Team to support the planning process. It details current proposals for the method and sequence of work, and logistic arrangements proposed to deliver the project.

Adjacent developments have been considered in formulating these proposals and the report details a range of measures which will be implemented in order to minimise or eliminate the impact of construction on the surrounding area and the local community.

The content of the report will be reviewed regularly and updated as necessary to reflect any changes throughout the planning, design and construction phase of the project.

The agreed contents of the Construction Management Plan must be complied with unless otherwise agreed with the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the Development. Any future revised plan must be approved by the Council and complied with thereafter.

Appendix 1

Logistics Set Up

Accommodation

Hoists and Delivery Access

Appendix 2

Brookfield MULTIPLEX
Built to outperform.

Construction Phase Health and Safety Plan

Appendix 3

Environmental Sustainability Management Plan