

06 Construction

06 Construction

Introduction

- 6.1 This chapter of the ES describes the proposed outline programme and key activities associated with the construction of the Proposed Development.
- 6.2 Planning for demolition and construction is necessarily broad at this stage and may be subject to modification during the detailed construction planning. Consequently, a number of aspects of construction in relation to environmental issues cannot, at this stage, be accurately predicted. For example, the number of vehicles required during demolition/site preparation arising will be dependent on progress of the works against the construction programme. For this reason therefore, the following assessment is based on professional judgement.
- 6.3 This chapter has been written by URS, with reference to the Stage C Report produced for the Proposed Development (Ref 6-1)

Programme of Works

- 6.4 As the Proposed Development is an Over Site Development (OSD) associated with the Crossrail project, it is important to describe the extent of and anticipated programme for the Crossrail works. It is expected that the Crossrail works will be complete prior to works commencing on the Proposed Development, the broad programme for which is described below.

Crossrail Works

- 6.5 The Crossrail works comprise the construction of the Fisher Street intervention shaft and head house, which will allow maintenance access to the Crossrail tunnels between Tottenham Court Road and Farringdon. The Crossrail works are ongoing at the time of writing but are expected to be complete in 2015.
- 6.6 The foundation and superstructure of the Crossrail intervention shaft and head house have been designed to integrate with the Proposed Development. Figure 5-2 shows a cross-section of how the Crossrail intervention shaft and head house interface with the Proposed Development.
- 6.7 Foundations across the site have already been constructed as part of the Crossrail works. No piling/substructure will be required as part of the Proposed Development because it will be supported by a combination of individual piles located around the perimeter of the site and by the internal head house structure and the intervention shaft lining. Load points upon the headhouse structure are designed to carry loads from the Proposed Development, within and through the Crossrail intervention shaft structure.

Proposed Development Works

- 6.8 It is anticipated that a development partner will be found to deliver the construction of the Proposed Development. Upon site handover from the Crossrail contractor (anticipated to be 2015), enabling works for the Proposed Development will commence. Only limited demolition will be required as previous buildings on the application site have already been demolished to make way for the Crossrail intervention shaft and head house.
- 6.9 Construction will follow, with an anticipated completion by 2018. The construction programme will last approximately 30 months from commencement.

- 6.10 Whilst specific details relating to the construction programme have not been finalised, the main activities and an indicative construction programme are provided within Appendix G of the Stage C Report (Ref 6-1) and provided within this ES as Technical Appendix B of Volume III.

- 6.11 The overall programme can be divided into the following key component parts. These are listed below in order to the anticipated sequence:
- Enabling works and site setup;
 - Demolition;
 - Main structure construction;
 - Fit-out; and
 - Public realm and external works.

Description of Works

- 6.12 Once the application site is handed over to the Applicant (anticipated to be in 2015), it is expected that the enabling works and site set up will commence straight away

Enabling Works and Site Setup

- 6.13 The likely scope of the enabling works and site setup will be as follows:
- Identify any services and assets that will require protection and / or monitoring throughout the construction period;
 - Road closure and signage;
 - Installation of site-offices, temporary services and welfare facilities;
 - Power supply; and
 - Provide screening/protection works to the site perimeter through the use of hoardings.
- 6.14 All of the major utility and service diversion works for the application site will have already been undertaken by the Crossrail contractor. However, the Proposed Development will require some minor local service diversion and protection works. This will be required for areas under the tower crane foundations and other areas within the construction compound which could be damaged by the construction works. These diversion works will need to be undertaken prior to site setup (Ref 6-1).
- 6.15 The application site is very constrained and so the hoardings will need to be constructed in Fisher Street, resulting in the full closure of Fisher Street and part closure of Catton Street. Works will not commence until full perimeter hoarding is in place. Appropriate road signage will need to be installed prior to the main works (Ref 6-1).
- 6.16 8-10 Southampton Row is a grade II listed building and so will require protection measures, such as hoardings, to be in place prior to commencement of the construction works.

Demolition

- 6.17 Some very limited site demolition works are expected to take place prior to construction activities due to breakout of existing concrete piles and removal of temporary cladding and structures. The demolition required for the Proposed Development, involves the following:
- Façade panels;
 - Head house loading points;
 - Excavation to expose piles; and
 - Ground Source Heat Pump (GSHP) connections.

06 Construction

Main Structure

- 6.18** The main building structure will be formed using reinforced concrete and will be founded on loading points within the Crossrail intervention shaft, ground beams on pile foundations to the east of the intervention shaft and the basement structure on the west side of the intervention shaft.
- 6.19** There is insufficient room on-site for concrete mixing facilities and therefore concrete will be delivered ready mixed.
- 6.20** The superstructure will consist of the following:
- Reinforced concrete ground slab;
 - Reinforced concrete walls, columns and floors up to the second floor level, built around the head house and the lobby;
 - Reinforced concrete walls, columns and floors, including raking columns and walls for the sloping façade for levels 2 to 8;
 - Reinforced concrete cantilever box structure for level 7;
 - Steel framed roof structure; and
 - Steel framed bike store and balcony area.
- 6.21** The Proposed Development will be constructed sequentially level by level, after which the bike store and first floor terrace extension will be constructed.
- 6.22** Mechanical and electrical installation will consist of the following:
- Two 13 person lifts to provide access to all the apartments;
 - Generator; and
 - Sub station and switch room.
- 6.23** The lifts, substation and switch room installation will commence as soon as the main structure is complete and water tight. The generator will be installed as soon as the bike store structure is complete and water tight.

Fit-Out

- 6.24** Apartment fit-out will commence as soon as the main structure has been completed and it has been deemed water tight. Each apartment will be fitted out in the following sequence, but they can be fitted out in concurrence with the fit out of the other apartments:
- Carpenters first fix;
 - Services (Gas, water, electricity and telephone) first fix;
 - Carpenters second fix;
 - Services second fix; and
 - Decoration.

Public Realm and External Works

- 6.25** It is anticipated that once the building structure and envelope has been completed to the top floor, works on completing the common/service areas surrounding the building will commence. This will include completion of service and drainage lines, paving, construction of planters and erection of external lighting.
- 6.26** The landscaping works for the first floor terrace and roof top terrace are described in **Chapter 5: The Proposed Development** of this ES.

Commissioning and Building Handover

- 6.27** As each system is completed throughout the building, they will be tested in accordance with the mandatory specifications and codes. Fire sprinkler systems will be tested and inspected as required under national regulations.
- 6.28** On completion of all works, the building and systems shall be subjected to statutory inspections and testing before finally being handed over to the building owner/tenants.

Materials and Resource Use

- 6.29** Estimates of key construction materials are provided in Table 6-1. The Applicant will adopt the appropriate targets for re-use and recycling of construction materials contained within the London Plan (Ref.6-2) and the Mayor of London's Supplementary Planning Guidance (SPG) on Sustainable Design and Construction (Ref. 6-3).

Table 6-1 Estimated Quantities of Construction Materials

Materials	Approximate Construction Quantities for Proposed Development (m ²)
Concrete surfaces	164
Reinforced concrete walls	2,670
Reinforced concrete flat slab construction	2,466
Reinforced concrete suspended slab construction	356
Roof installation	815
Lift and conveyor installations	4,718
External walls, cavity construction and cladding	3,000
Internal walls and partitions	2,595
Windows, glazing and external doors	816
Wall, floor and ceiling finishes	19,354
Plant, utilities and services	21,748
Fixtures and fittings	4,064
Hard landscaping	27

Plant and Equipment

- 6.30** The following types of plant are likely to be used on-site during the construction phase of the Proposed Development main structure:
- Mobile / Tower cranes;
 - Air compressors;
 - Scaffold / Hydraulic access platforms;
 - Ready mixed concrete lorry;
 - Concrete mixer truck (discharging) and concrete pump (pumping);
 - Poker vibrator; and
 - Flat bed articulated vehicle.
- 6.31** As the substructure will already have been constructed ahead of the Proposed Development and because demolition is deemed to be negligible, no plant and equipment associated with these phases is provided

06 Construction

above. Environmental impacts resulting from the use of this plant are described in **Chapter 7: Air Quality** and **Chapter 8: Noise and Vibration** of this ES.

Hours of Work

- 6.32** It is anticipated that the core working hours for demolition and construction will be as follows:
- 0800 – 1800 hours: weekdays; and
 - 0800 – 1300 hours: Saturdays.
- 6.33** All work outside the core hours listed above will be subject to prior agreement, and/or reasonable notice to LBC. In exceptional circumstances, such as large concrete pours, it may be necessary to work extended hours.

Potential Environmental Impacts

- 6.34** A review has been undertaken of the potential sources of adverse impacts associated with demolition and construction works. The results of this have been presented in Table 6-2.

Table 6-2 Potential Impacts during Demolition and Construction

Issue	Potential Impacts
Dust/Air Quality	Windblown dust from ground surfaces, stockpiles, vehicles, work faces and cutting and grinding of materials. Exhaust emissions from lorries and plant delivering and removing materials including dust and particulates.
Energy Usage	Indirect impacts associated with energy consumption such as CO ₂ emissions, depletion of natural resources, air pollution etc.
Fuel and construction materials storage	Accidental spills, discharges to drains/stormwater systems, contamination to ground.
Hazardous materials and Contaminated Land	Exposure of the workforce to hazardous materials and contaminated land, mobilisation of any source contaminants and creation of pathway from source to groundwater receptor.
Noise	Increased road noise levels from vehicles. Increased noise levels from plant during general construction works (e.g. from the use of air compressors and diamond cutters) on-site.
Site and surroundings pedestrian access	Restrictions on pedestrian access to footpaths and roads.
Traffic	Traffic congestion caused by site traffic and the full closure of Fisher Street and part closure of Catton Street during construction. Increased vehicle movements mainly consisting of HGVs. Transfer of mud and material from vehicles onto the public highway. Disruption from abnormal or hazardous loads. Exhaust emissions.
Waste	Waste generation and its disposal.
Water	Increased sediment loadings to stormwater system. Potentially contaminated stormwater runoff.
Water Usage	Natural resources depletion.
Vibration	Increased vibration levels from vehicles. Increased vibration levels from plant during general construction works.
Views	Views impacted and/or impeded from construction equipment, particularly cranes.

Note: HGV – Heavy Goods Vehicles, CO₂ – Carbon Dioxide.

Mitigation

- 6.35** The Proposed Development will need to be constructed in accordance with the relevant planning restrictions and local government requirements.
- 6.36** The Proposed Development will meet the Essential Standards of the Mayor of London's Supplementary Planning Guidance (SPG) on Sustainable Design and Construction (Ref. 6.3), which requires the following:
- *“Reduce waste during construction and demolition phases and sort waste stream on site where practical;*
 - *Reduce the risk of statutory nuisance to neighbouring properties as much as possible through site management;*

- *All developers should consider and comply with the Mayor and ALG's London Best Practice Guide on the control of dust and emissions from demolition and construction;*
- *Comply with protected species legislation; and*
- *All developers should sign up to the relevant Considerate Constructors Scheme.....”*

- 6.37** The construction of the Proposed Development will also meet the Mayor's Preferred Standards, which require the following:
- *“All contractors should be required by tender requirements to sign up to the Mayor and ALG's London Best Practice Guide on the control of dust and emissions from demolition and construction; and*
 - *All contractors should be required by tender requirements to sign up to the relevant Considerate Constructors Scheme...”*

Demolition and Construction Method Statement

- 6.38** The appointed Principal Contractor for the demolition and construction phase will be required to operate an environmental management system certified to ISO 14001 or similar. They will be appointed to develop a Demolition and Construction Method Statement (DCMS). The DCMS will identify all the procedures to be adhered to through demolition and construction. Individual trade contracts will incorporate environmental control, health and safety regulations, and current guidance. This will ensure that the Principal Contractor and all sub-contractors involved with the demolition and construction phases are committed to agreed best practice.

- 6.39** Trade contractors will be required to demonstrate how they will meet the targets of the DCMS. The DCMS will include the following items:
- Demolition and construction programme;
 - Broad plan of the demolition and construction works, highlighting the various stages and their context within the whole project;
 - Details of the Environmental Management Plan (described below), including restricted operations, site access and housekeeping procedures;
 - Detailed site layout arrangements (including requirements for temporary works) during the project, including plans for storage, accommodation, vehicular movement, delivery and access;
 - Site working hours;
 - Details of operations likely to result in disturbance, with an indication of the expected duration of each phase with key dates. This should include a procedure for prior notification of LBC and relevant statutory and non-statutory (including neighbours) parties, so that local arrangements can be agreed;
 - A procedure to ensure communication is maintained with LBC and the local community to provide information on any operations likely to cause disturbance (through for example; meetings and newsletters);
 - Provisions for affected parties to register complaints and procedures for responding to complaints; and
 - Provisions for reporting to LBC and the Applicant.

Environmental Management Plan (EMP)

- 6.40** The site will be managed in accordance with statutory requirements and industry good practice. Matters concerning site activities during demolition and construction that relate to environmental issues will be discussed and agreed with LBC in advance of works commencing. This will include the agreement of the DCMS and the EMP, the latter of which will include:
- Relevant contractors will enter into the Considerate Constructors Scheme (CCS) (or equivalent);
 - A commitment to environmental protection (all Consultants and trade contractors will be invited to declare their support for this at the tender stage, such by demonstrating an Environmental Management System, Environmental Policy and using sustainable procurement);

06 Construction

- Document planning provisions (i.e. background information on and consideration of impact types to help the project team plan both their activities in relation to environmental issues and their control measures). Details will also be included on what will be needed to comply with the environmental elements of any planning conditions;
- Detail on control measures and activities to be undertaken to minimise environmental impact;
- Monitoring and record-keeping requirements;
- Establishment of baseline levels for noise, vibration and dust;
- Details of a dedicated point of contact during both normal working hours and after hours, with responsibility to deal with environmental issues if they arise; and
- Commitment to a periodic review of the EMP and regular environmental audits of its implementation.

Management of Trade Contractors

- 6.41** Individual contractors (e.g. for waste removal) will incorporate relevant requirements in respect of environmental control, based largely on the standard of 'good working practice' as outlined in the DCMS, as well as statutory requirements. Potential trade contractors will be required to demonstrate how they will achieve the provisions of the DCMS, how targets will be met and how potential impacts will be minimised.

Traffic Management, Access and Egress

- 6.42** The application site is very constrained so hoardings will need to be constructed in Fisher Street, resulting in the continued full closure of Fisher Street and part closure of Catton Street (as implemented for the Crossrail construction works). Access to the site will be provided by in and out gateways into Fisher Street. Construction traffic will approach the construction site from Southampton Row and will exit the site into Procter Street. Access routes to and from the site to be used by HGV's will be agreed with LBC prior to demolition and construction.
- 6.43** As the construction site is very restricted, there is a risk that construction plant could clash with existing structures, contractor's personnel, the new structures, materials and other construction plant. Site traffic will be separated from site pedestrian areas and there will be specific designated material storage areas and segregated construction plant routes.
- 6.44** The total number of HGVs accessing the construction site is not known at this stage. During the construction of another larger OSD at One Oxford Street, the peak number of HGVs was predicted to be 10 per day. Therefore, for the Proposed Development a lower number are anticipated.
- 6.45** A general policy of no on-site car parking will be adopted and the site labour force will be encouraged to use public transport. Unapproved parking on public roads will not be allowed. Provisions will be made within the construction site, where possible, for essential on-site parking only. Any local traffic management measures for site access will be agreed with LBC. A traffic management plan will be established to avoid congestion.
- 6.46** To minimise site-generated material on roads, the Principal Contractor will adopt measures to include the provision of suitable facilities at site exits, where necessary. This will enable regular vehicle cleaning as recommended in the mitigation section of **Chapter 7: Air Quality**. In addition, there should be a suitable means to clean all highways in the vicinity of the site from any site generated matter. Collected debris will be disposed of as controlled waste in accordance with The Duty of Care Regulations 2003 (Ref. 6-4) at a licensed waste disposal facility.

Management of Noise, Vibration and Dust

- 6.47** Full assessments of activities with the potential to generate high levels of noise, vibration and dust are presented in **Chapter 7: Air Quality** and **Chapter 8: Noise and Vibration** of this ES, respectively.

- 6.48** Mitigation measures will be incorporated within the DCMS. Best practicable means of preventing, reducing and minimising noise will be adopted in agreement with LBC. This aspect of the works is likely to be regulated by an agreement under Section 61 of the Control of Pollution Act (COPA) (Ref. 6-5).

- 6.49** On-site good practice procedures will be followed in order to mitigate noise, vibration and air pollution (e.g. through dust and fume generation) impacts. Measures currently planned to be adopted include:
- Trained and responsible manager on-site during working times to maintain logbook and carry out site inspections;
 - No bonfires on the construction site;
 - Use of water as a dust suppressant where appropriate during dry weather;
 - Skips shall be securely covered and drop heights minimised;
 - Use enclosed chutes;
 - All loads entering and leaving the construction site will be covered.
 - The use (where appropriate) of catalytic converters;
 - No vehicle engine idling;
 - Regular vehicle cleaning;
 - The regular maintenance of vehicle engines and on-road vehicles to comply with national and EU emission standards. Vehicles and machinery will be fitted with effective exhaust silencers, be maintained in good and efficient working order, and be used in a way that reduces noise as much as possible. The relevant European Community Directive and United Kingdom Statutory Instruments will be followed;
 - Solid barriers on the construction site boundary. Wherever possible, the construction site will be totally surrounded by fencing or hoarding to reduce the amount of noise that escapes from the site. All site gates will be controlled so that they are open long enough to allow vehicles to pass through but no loud noise can escape to the surrounding areas;
 - Wherever possible, fixed items of construction machinery will be electrically powered rather than powered by diesel or petrol. Where this is not practical, suitable measures such as acoustic enclosures will be employed. A three-phase electricity supply will be installed on site as soon as possible, and power for lighting at night will be provided by a proper electrical supply or battery, not a generator;
 - Machines that are not used very often will be shut down when they are not in use or throttled down to a minimum. Equipment that needs to run continuously and which produces a lot of noise, will be kept in a suitable acoustic enclosure;
 - Any compressors will be 'sound-reduced' models that are fitted with properly lined and sealed acoustic covers kept closed whenever the machine is in use. Also, pneumatic percussive tools will be fitted with the most effective muffler or silencer available;
 - Equipment which breaks concrete by pressure will be employed as far as is reasonably practical;
 - Hydraulic or electrical powered rotary drills and bursters will be employed where practical to remove hard materials;
 - Noisy machinery and equipment will be kept as far away as practical from residential or other noise-sensitive properties. Barriers or proprietary acoustic barriers will be employed where practical;
 - Care will be taken when loading or unloading vehicles, dismantling scaffolding or moving materials to reduce the noise;
 - All material and machinery that is delivered to the construction site, and any waste or other material that is to be removed, will take place within the permitted hours;
 - The arrival of delivery vehicles will be properly co-ordinated at the construction site to prevent parking in local streets while awaiting access to the site. Vehicles will not arrive before 08:00. In-cab communication will be considered to prevent unacceptable queuing on streets outside the site;
 - Plans will be drawn up to make sure that lengthy work can be completed within the permitted hours;

06 Construction

- All employees, subcontractors and people employed on the construction site will be instructed to not cause unnecessary noise from their activities; for example, 'revving' vehicle engines, music from radios and shouting; and
- All subcontractors and other people employed in connection with the work will be made aware of and, where practical, keep to these guidelines.

Site Waste Management Plan (SWMP)

6.50 There will be minimal demolition and groundwork associated with the construction of the Proposed Development. Therefore, the production of waste usually associated with these stages of the project will be minimised. However, some site preparation works are expected to take place prior to construction activities due to breakout of existing concrete piles and removal of temporary cladding and structures. In total, these activities are expected to generate approximately 628m² of waste materials. As there will be minimal opportunity for onsite re-use of materials from this phase of the development works, the use of re-used and recycled materials from other sources will be a main focus for the project.

6.51 A Waste Statement has been produced to accompany the planning application and can be found within the Sustainability Statement (Ref 6-6). This discusses opportunities to reduce construction waste in line with the waste hierarchy.

6.52 A Site Waste Management Plan (SWMP) that includes benchmarks, procedures and commitments will be implemented for the Proposed Development, which will address construction site waste management.

6.53 The SWMP will be produced by the Principal Contractor prior to the commencement of any on-site work. The Principal Contractor will have responsibility for writing, implementing and updating the SWMP throughout the development process. The SWMP will identify all waste streams and will discuss the potential to reduce, re-use and recycle all materials wherever possible. In accordance with the principles of the UK Governments Waste Strategy for England (2009) commitment to waste minimisation will be achieved in a number of ways including, but not limited to, the following:

- Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
- Implementation of a 'just-in-time' material delivery system to avoid materials being stockpiled on-site for long periods of time, which increases the risk of their damage and disposal as waste;
- Attention to material quantity requirements to avoid over-ordering and generation of wasted materials;
- Segregation of waste at source where practical; and
- Re-use and recycling of materials off-site and where re-use on-site is not practical (e.g. through use of an off-site waste segregation facility and re-sale for direct re-use or re-processing).

6.54 Waste will only be disposed of at authorised waste treatment and disposal sites, in accordance with the requirements of the legislation and planning policy documents as listed in Paragraph 9.3 of **Chapter 9: Waste and Recycling** of this ES. All waste will be classified in accordance with the Hazardous Waste Regulations (2009) and the site will be registered with the Environment Agency. Where space permits on-site, and as a minimum, waste will be segregated into labelled and colour coded containers for active, inert, compactable, plasterboard, metals and hazardous waste. Where space does not permit site segregation waste will be taken to a licensed transfer/handling station where it will be processed. All hazardous materials including chemicals, cleaning agents, solvents and solvent containing products will be properly sealed in containers at the end of each day, prior to storage in appropriately protected and bunded storage areas.

6.55 Construction contractors will be constantly monitored to ensure that the proportion of materials being recycled is maximised wherever possible. The Principal Contractor will ensure that the disposal of all waste and other materials removed from the site is in accordance with the requirements of the Environment Agency, legislation and planning policy documents.

6.56 As part of the SWMP, the Principal Contractor will provide proof that all site waste has been deposited or transferred to the correct place and by appropriately licensed contractors. Records will also be kept and updated regularly ensuring that all waste transferred or disposed of has been correctly processed with evidence of signed waste transfer notes that will be kept on-site for inspection whenever requested.

6.57 A docket system will also be operated on-site to prove that correct procedures have been followed for the depositing of all site waste, including deconstruction arisings and the prevention of 'fly' tipping. The trade contractors will operate a sequentially numbered system, to confirm that each load is received at the approved disposal site. Copies of the dockets will be provided to the nominated manager and be available for inspection at the site. In addition, direct routes via main roads to designated waste recycling/disposal facilities will be agreed with the trade contractors

6.58 Throughout the construction phases of the Proposed Development, pre-assembly and pre-fabrication of construction materials will be prioritised wherever practicable to minimise on-site generation of waste and packaging. The Principal Contractor will undertake various measures to reduce site generated matter on roads and footpaths. This will include the provision of suitable facilities at the site gates, wheel washing facilities and the use of a mechanical road sweeper/cleaner. Collected debris will be classified as controlled waste and disposed of in accordance with the Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 at a licensed waste disposal facility.

Protection of Water Resources

6.59 In summary, surface drainage, ground water seepage, and any minor dewatering will pass via settlement tank facilities to the foul water sewer. Discharge arrangements into the foul water sewer will be agreed with Thames Water Utilities Limited (TWUL).

6.60 All liquids and solids of a potentially hazardous nature (e.g. diesel fuel, oils, and solvents) will be stored on surfaced areas, with bunding, to the satisfaction of the Environment Agency (EA).

6.61 The Principal Contractor will ensure that any water that may have come into contact with contaminated materials will be disposed of in accordance with the Water Resources Act (1991) and other legislation, and to the satisfaction of the EA and/or TWUL.

Energy and Water Usage

6.62 A Sustainability Statement has been submitted as part of the planning application (Ref 6-6). All relevant trade contractors will be required to investigate opportunities to minimise and reduce use of energy and water, such as:

- Use of alternatives to diesel/petrol powered equipment where possible;
- The incorporation of sources of renewable energy to offset the use of main utilities will be considered;
- Selection and specification of energy efficient plant and equipment wherever viable;
- Implementation of staff based initiatives such as turning off taps, plant and equipment when not in use both on-site and within site offices; encouraging a paper-reduced office and encouraging double sided printing and photocopying when these activities are necessary;
- Use of recycling water systems such as wheel washes; and
- Use of a rainwater harvesting system for use in equipment and vehicle washing will also be investigated.

06 Construction

- 6.63 The energy and water consumption of the project will be monitored, either through sub-metering or reading utility bills, to allow comparison against best practice benchmarks and improvements to be made.

Cumulative Impacts

- 6.64 It is not unusual for construction to take place on more than one site in close proximity to each other. It is expected that the Principal Contractor will undertake regular liaison meetings and reviews with neighbouring sites to plan works so that they do not cause unnecessary disruption.
- 6.65 **Chapter 11: Cumulative Impact Assessment** includes an assessment of cumulative impacts from sources such as other construction sites and the combined impacts of different types of impacts. Both of these are relevant with respect to demolition and construction activities. For example, nearby receptors could be subject to impacts from noise, vibration, visual amenity and dust at the same time and the impact of activities from the Proposed Development could take place at the same time as other sites.
- 6.66 In the event that two or more projects have overlapping programmes, there is a possibility that there will be localised, short-term cumulative impacts to affected receptors.

Demolition of the Proposed Development

- 6.67 The demolition of the new building at the end of its lifespan will follow a similar method and reversed sequence to that used during construction. Safe working practices will be devised and implemented during the demolition period.
- 6.68 The Construction (Design and Management) Regulations 1994 (the CDM Regulations) and employment of a planning supervisor at the planning stage has ensured that the Applicant has taken account of the need for structures that can be safely demolished at the end of their useful life.

References

- Ref. 6-1 Jacobs (2012); Fisher Street Oversight Development Stage C Report
- Ref. 6-2 Greater London Authority (2011); The London Plan – Spatial Development Strategy for Greater London
- Ref. 6-3 Greater London Authority (2006); 'Supplementary Planning Guidance Sustainable Design and Construction'.
- Ref. 6-4 HMSO, (2003); The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003
- Ref. 6-5 HMSO (1990); 'Control of Pollution Act'.
- Ref. 6-6 Jacobs (2012); Fisher Street Oversight Development Sustainability Statement