

# **BLOSSOM STREET, E1**

Replacement Environmental Statement  
Non-Technical Summary  
**NOVEMBER 2015**





# Application Documents

Application forms

CIL Additional Information form

Revised Planning Drawings

Addendum Design and Access Statement

Planning Statement

Replacement Environmental Statement I

Replacement Environmental Statement II

Replacement Environmental Statement III

## **Replacement Environmental Statement Non-Technical Summary**

Financial Viability Assessment

Addendum Heritage Appraisal

Archaeological Assessment

Regeneration Statement

Energy Statement

Sustainability Statement

Transport Assessment

Statement of Community Involvement

Blossom Street Warehouses Structural Method Statement



## Preface – Update 2015

- 1 The Replacement November 2015 Environmental Statement (hereafter referred as the 'November 2015 Replacement ES' or 'the Replacement ES') takes into account the design changes to the Blossom Street project (refer *Chapter 4: Proposed Development*) that have occurred since the submission of the application in December 2014 ES and concludes if any changes to the likely significant effects occur as a result of those changes. The Replacement ES consolidates the environmental assessment of the design changes into a single ES, presenting commentary (under the heading 'Update 2015') for the design changes in the March 2015 ES Addendum (the 'March 2015 Addendum') by blue text, and the design changes arising from the current design changes by red text. Where relevant, text removed will be denoted by strike-through, (e.g. effect), and updated tables and figures will be denoted by the suffix 'A' (e.g. Figure 1A).
- 2 The Replacement ES adopts the following terminology to describe the development descriptions and design changes:
  - Proposed Development: description of the development presented in the December 2014 ES;
  - Revised Scheme: description of the scheme incorporating the design changes to the Proposed Development in March 2015 (the design changes referred as the 'March 2015 amendments'), assessed within the March 2015 Addendum;
  - Amended Proposed Development: description of the development incorporating the current design changes to the Revised Scheme (the design changes referred as the 'November 2015 amendments'), to be assessed within the November 2015 Replacement ES.
- 3 This document, known as the 'November 2015 Replacement' Non-Technical Summary (NTS), provides a non-technical overview of the assessment of the December 2014 ES together with the changes contained in the March 2015 Addendum; and the assessment changes comprising the November 2015 Replacement ES for the purpose of the general public.
- 4 Since the preparation of the December 2014 ES, AECOM Infrastructure and Environment Limited (AECOM) has merged with URS Infrastructure & Environment Limited (URS) to become a single environmental consultancy. Reference within the text to 'URS' in the November 2015 Addendum has now been replaced by 'AECOM'.

## Introduction

- 5 British Land Property Management Limited (the 'Applicant') is seeking planning permission for a high quality commercial-led mixed use development (the 'Proposed Development') within the administrative boundary of the London Borough of Tower Hamlets (LBTH). The scheme is known as 'Blossom Street'.
- 6 The application for full planning permission is accompanied by the following applications:
  - Listed Building Consent: For work to the carriageway on Fleur de Lis Street; and
  - Scheduled Ancient Monument Consent: For sub-ground works within the southern portion of the Site which falls within an area designated as a Scheduled Ancient Monument.
- 7 The Application Site (the 'Site') is to be redeveloped to provide a mixed use commercial-led scheme comprising:
  - ~~24,376 m<sup>2</sup>~~ ~~24,292 m<sup>2</sup>~~ 23,897 m<sup>2</sup> Net Internal Area (NIA) office space (Class B1);
  - ~~779 m<sup>2</sup>~~ 788 m<sup>2</sup> NIA retail space (Class A1);
  - ~~2,612 m<sup>2</sup>~~ ~~2,596 m<sup>2</sup>~~ 2,451 m<sup>2</sup> restaurant and café (Class A3);
  - 393 m<sup>2</sup> NIA public house (Class A4); and
  - 40 residential dwellings (one bedroom to three bedroom).

## Planning Background

- 8 The Site has been subject to planning applications in recent years and recently planning permission was granted in October 2011 (ref. PA/10/02764) for the following:
  - 18,775sqm Office (Class B1);
  - 1,816sqm of Retail (Class A1) and Restaurant (Class A3); and
  - 663sqm of Public House (Class A4).
- 9 Redevelopment of the former Nicholls and Clarke site and adjoining depot site, for commercially led mixed use purposes, comprising buildings between 4 and 9 storeys in height measuring 48.40m AOD (plus plant), to provide approximately:
  - 18,775sqm Office (Class B1);
  - 1,816sqm of Retail (Class A1) and Restaurant (Class A3); and
  - 663sqm of Public House (Class A4).
- 10 Together with the recreation of new public space (Blossom Place), provision of new access to Blossom Place, highway works and public realm improvements to Shoreditch High Street and Blossom Street and provision of managed offstreet servicing and parking facilities.
- 11 The permission comprised the regeneration of the former Nicholls and Clarke Depot sites and demolition and development of 13 and 20 Norton Folgate, 2-9 Shoreditch High Street, 16-17 and 10 Blossom Street. The permission also sought to recreate the historic public space known as 'Blossom

Place', with adjoining amenity space, and improvements to the public realm along Shoreditch High Street.

### **Planning Background - Update 2015**

#### **March 2015 ES Addendum**

- 12** Following submission of the application in December 2014, further discussion and consultation with LBTH and stakeholders was undertaken, leading to design changes in response to concerns raised by LBTH Highways with regards to the impact on the highway, specifically access during maintenance. This involved the removal of the bridge links between S1 and S1c buildings, resulting in S1 and S1c to be independent buildings.
- 13** The amendments resulted in a revised application lodged in March 2015 and supported by an ES Addendum (March 2015 ES Addendum).

#### **November 2015 Amendments**

- 14** Since the preparation of the March 2015 ES Addendum, a minor amendment was made to the proposed accommodation schedule within S3 in June 2015, as part of the submission to LBTH. This comprised of changing one residential unit from a 2-bed private to 3-bed 5 person affordable unit on corner of Elder Street/ Fleur De Lis Street, to improve the affordable housing provision. No changes to the massing or floor space were made.
- 15** In November 2015, after consultation with the GLA, further changes have been proposed. These changes incorporate the retention of 12-13 Blossom Street as a separate building.

#### **The Application Site**

- 16** The Site is comprised of three distinct plots (S1, S2 and S3). As the concept for the masterplan has developed, these plots were further subdivided into individual buildings, resulting in the following plots: S1, S1a, S1b, S1c, S2 and S3 (refer Figure 1). The Site has a total development area of 0.9 hectares (ha).
- 17** The Site is bound by railway lines to the north; Elder Street and Blossom Street to the east; Folgate Street to the south; and Norton Folgate and Shoreditch High Street to the west.
- 18** Within the Site there are a variety of buildings of differing types and ages, of which many are remnants of the expansion of the Nicholls & Clarke company in the late 19th Century. Following significant economic and social changes in the second half of the 20th Century, many of these buildings are now not in use, however the former main showroom building is used for large scale art exhibitions and fashion shows.

- 19** The Site lies within the Elder Street Conservation Area, while the Brick Lane and Fournier Street Conservation Areas lie to the east and the South Shoreditch, Redchurch and Boundary Estate Conservation Areas lie to the north of the Site. Three locally listed buildings lie within the Site boundary: 4 to 8 Elder Street; 5 to 9 Folgate Street; and 11 to 11A Folgate Street. There are also a number of buildings within the Site that are not locally listed but contribute to the character of the Site and surrounding area.
- 20** The southern portion of the Site lies within the Scheduled Ancient Monument of the Priory and Hospital of St Mary Spital, which is also designated as an Area of Archaeological Importance (LBTH).
- 21** The Site plan and redline boundary is shown in Figure 1 (overleaf), and the location in the context of the surrounding area is illustrated at Figure 2.

#### **The Application Site – Update 2015**

##### **November 2015 Amendments**

- 22** An updated site plan (indicating the proposed roof plan) is presented in Figure 1A. There has been no change to the Redline Boundary.

Figure 1A. Redline Boundary & Site Layout

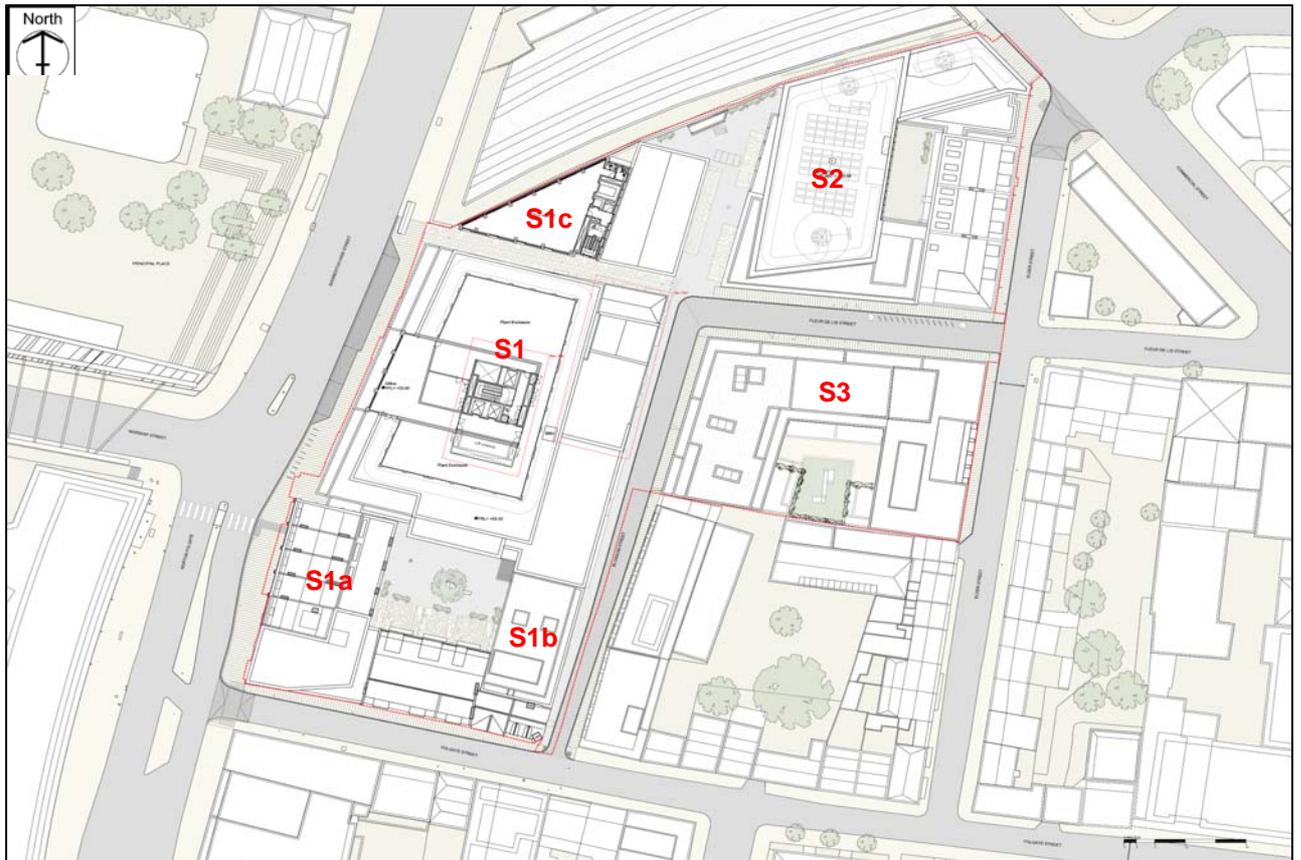
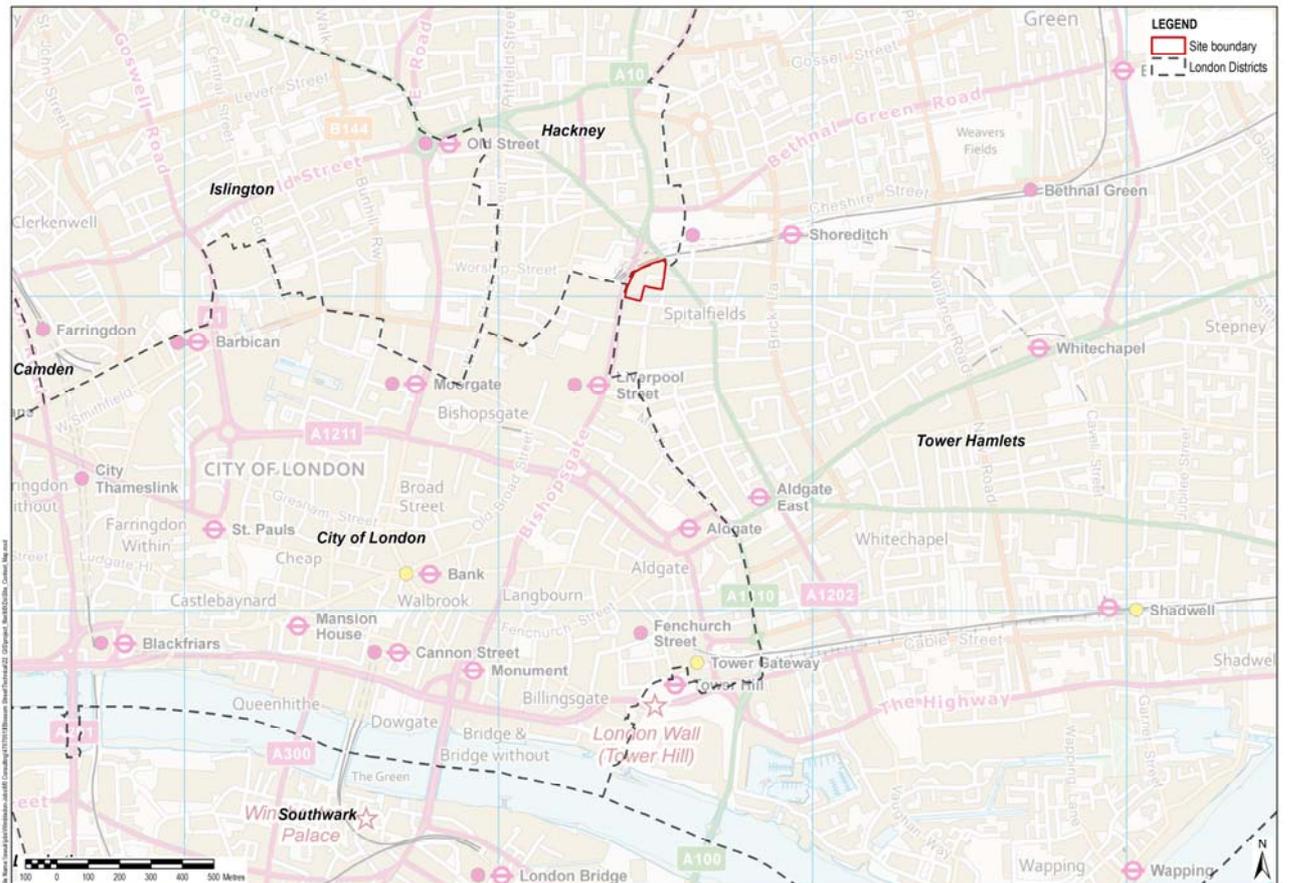


Figure 2 – Location of Site & Surrounding Area



## The EIA Process

- 23 The Proposed Development is classified as an 'Urban Development Project' under Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (Ref. 1) (hereafter the 2011 EIA Regulations). The Applicant has commissioned AECOM to undertake the EIA in line with the 2011 EIA Regulations.

### *The EIA Process - Update 2015*

#### *November 2015 Amendments*

- 24 In April 2015, the Town and Country Planning EIA (Amendment) Regulations 2015 (Ref. 10) came into effect, which amend the thresholds for determining the need for EIA of urban development projects. The revised thresholds only apply to projects screened after 6th April 2015.
- 25 The application for the Proposed Development, comprising the December 2014 ES, was lodged in December 2014 and therefore the new thresholds do not apply.

## ES Structure

- 26 The results of the EIA process are presented within the ES, which comprises the following:
- **Volume I:** the main body of the ES, detailing the results of the assessments, including potential significant environmental effects and proposed measures to mitigate the likely environmental effects;
  - **Volume II:** Townscape and Visual Impact Assessment. This volume is accompanied by a full set of views as agreed with LBTH as part of the EIA Scoping Phase;
  - **Volume III:** the appendices for the assessments that comprise background data, technical reports, tables, figures and surveys.

### *ES Structure – Update 2015*

#### *November 2015 Amendments*

- 27 This Replacement ES takes into account the design changes to the scheme (refer *Chapter 4: Proposed Development*) that have occurred since the initial submission of the application in December 2014 ES and concludes if any changes to the likely significant effects occurs as a result changes.
- 28 This November 2015 Replacement ES comprises the following structure:
- **Replacement ES Volume I: Main ES** – describes the scheme changes and the details the likely significant environmental effects resulting from the changes that have been made to the December 2014 Scheme, as amended by the design changes comprising the March 2015

ES Addendum, for each topic as presented within the December 2014 ES;

- **Replacement ES Volume II – Townscape and Visual Impact Assessment** – An Addendum to the submitted Townscape and Visual Impact Assessment (TVIA), consolidating the assessments presented for both the December 2014 ES and March 2015 ES Addendum; and
- **Replacement ES Volume III: Technical Appendices** - a complete set of appendices is provided for reference. These comprise background data, technical reports, tables, figures and surveys, which support the assessments in ES Volume I.

## Policy Background

- 29 The overarching legislative and planning policy framework within which the EIA has been undertaken is the National Planning Policy Framework (NPPF) (2012) (Ref. 2) which contains policies setting out the Government's vision for sustainable development and the Planning Practice Guidance (PPG) (2014) (Ref. 3), which provides a web-based resource in support of the NPPF.
- 30 At a regional scale, 'The London Plan' (Ref. 4) sets out the strategic objectives and policy for urban development within the London region. The London Plan has undergone revised early minor alterations (2013) (Ref. 5) to ensure consistency with the NPPF and draft further alterations to the London Plan (FALP) (2014) (Ref. 6) which are currently undergoing consultation.
- 31 On a local scale, the development is guided by the LBTH Local Plan, which encompasses the Core Strategy, (2010) (Ref. 7), and other Development Plan Documents (DPDs), including the Managing Development Document (MDD) (2013) (Ref. 8).
- 32 The MDD provides the planning policies and site allocations required to meet the strategic objectives set out in the Core Strategy. It aims to support the delivery of key infrastructure required within the Borough.
- 33 In addition, each of the ES technical chapters outline their own legislation, planning policy, guidance and standards that are relevant to the specific assessment.

### *Policy Background – Update 2015*

#### *November 2015 Amendments*

- 34 The adoption of the FALP in March 2015 resulted in the consolidation of changes to the London Plan (2011) to become the 'London Plan (2015)'. The London Plan (2015) (Ref. 11) also incorporates the REMA, which were published in October 2013.
- 35 On 11<sup>th</sup> May 2015 the Mayor of London published for six weeks public consultation (11<sup>th</sup> May to 22<sup>nd</sup> June)

two sets of 'Minor Alterations to the London Plan – on Housing Standards and on Parking Standards'. Both sets of minor alterations were to be considered at a public examination, commencing on 21<sup>st</sup> October 2015.

## Description of the Surrounding Area

- 36** The Site is close to the border of three London boroughs; the City of London (CoL) to the south west, the London Borough of Hackney (LBH) to the north-west and the LBTH which the Site lies within (see Figure 2).
- 37** There are a wide variety of land uses within the immediate surroundings of the Site which reflect the residential, commercial and industrial heritage of the area. Land uses include retail and office use to the west and south west of the Site in the CoL.
- In the LBH, to the north west of the Site are retail units with residential uses above located at Norton Folgate.
- 38** A mixture of offices and retail with residential above are located at Commercial Street to the north east of the Site in the LBTH and predominantly residential buildings along Folgate Street to the south east in the LBTH.
- 39** There are several listed buildings and structures that are located within and around the immediate vicinity of the Site, including road surfaces (i.e. Fleur De Lis Street; Folgate Street; Elder Street) and buildings along Elder Street and Folgate Street.
- 40** The majority of the Site lies within the view from King Henry VIII's Mound view as designated by the London View Management Framework (2012) (Ref. 9).
- 41** Spitalfields City farm and Allen Gardens SINC (Site of Importance for Nature Conservation) (Borough grade II) are located approximately 400m east of the Site at its closest point.
- 42** The Site is extremely well served by public transport with a Public Transport Accessibility Level (PTAL) of 6b, the highest rating possible. Within 500m of the Site are Shoreditch High Street Overground Station and Liverpool Street Rail Station. Beyond 500m in the surrounding area are several Overground and London Underground Stations within walking distance.
- 43** Crossrail, when complete, will connect the City to commuter areas east and west of London. An interchange will be provided at Liverpool Street Station.
- 44** A total of 12 bus routes run adjacent to the west of the Site along the A10 Shoreditch High Street/Norton Folgate,

- 45** There are pedestrian routes within and adjacent to the Site, including Fleur De Lis Passage that connects Shoreditch High Street and Fleur De Lis Street. There are also local cycle routes within the surrounding road network, as well as Barclays cycle hire docking stations within 100m of the Site.

## Sensitive Receptors

- 46** The EIA process has identified sensitive receptors for the purpose of assessing the likely environmental effects during demolition and construction and operational phases of the Proposed Development.
- 47** The identified key sensitive receptors include:
- Neighbouring residential property;
  - Neighbouring local commercial properties and businesses;
  - Future on-site users;
  - Demolition and construction workers;
  - Local Population and Resources;
  - Employment and local economy;
  - Air quality;
  - Surface water / water resources;
  - Ground water / water resources;
  - Subsurface and surface utilities and infrastructure;
  - Pedestrian and cycle network;
  - Local highway network;
  - Public transport network;
  - Archaeological assets;
  - Built heritage assets;
  - Townscape character; and
  - Local and long distance views.

## Scoping and Consultation

### Scoping

- 48** In line with good practice, the preparation of the ES was preceded by a scoping exercise wherein a formal Scoping Report was issued to LBTH on 17<sup>th</sup> July 2014 seeking an opinion on the scope of ES. LBTH's Scoping Opinion was received on 21 August 2014. The Scoping Opinion and related correspondence is presented within **ES Volume III: Appendix A**).
- 49** The scoping exercise involved consultation with the relevant authorities and stakeholders which served to help focus the environmental studies and to identify specific issues that require assessment.
- 50** The LBTH consulted with the following statutory and non-statutory consultees to inform the EIA scoping opinion:
- CoL;

- Transport for London (TfL);
  - Crossrail;
  - Network Rail;
  - Port of London Authority;
  - London City Airport;
  - Environment Agency (EA);
  - Canal and River Trust;
  - Marine Management Organisation;
  - Thames Water;
  - Fire Authority;
  - Greater London Archaeology Advisory Service;
  - English Heritage (EH);
  - Historic Royal Palaces;
  - Natural England;
  - Adjacent owners and occupiers; and
  - Neighbourhood / Resident Associations.
- 51** The Scoping Opinion raised a number of points to be addressed within the ES. A summary of the key points and where these have been addressed within the ES is provided in **Chapter 2: EIA Methodology** as well as within the relevant ES Chapter.
- 52** The scoping exercise identified the following topics to be considered within the ES:
- Demolition and Construction;
  - Waste and Recycling;
  - Socio-economics;
  - Traffic and Transport;
  - Air Quality;
  - Noise and Vibration;
  - Wind Microclimate;
  - Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare;
  - Water Resources, Drainage and Flood Risk;
  - Archaeology;
  - Townscape and Visual Impact Assessment; and
  - Built Heritage.
- 53** It has been demonstrated for the following topics that they are not likely to result in significant effects and therefore been scoped out from the EIA.
- Health and Well-Being;
  - Ecology;
  - Electronic Interference;
  - Ground Conditions; and
  - Aviation.

## Consultation

- 54** The process of consultation is critical to the development of a comprehensive and balanced ES. As summarised below, consultation has been undertaken, both with key statutory and non-statutory consultees, as well as with the general public in terms of local residents and businesses, and local interest groups. For further detail regarding stakeholder consultation, please refer to the '*Statement of Community Involvement*', accompanying this Application.
- 55** Consultees involved in the evolution of the design and preliminary assessment of environmental effects included:
- LBTH (i.e. Waste, Transport, Planning; Environmental Health, Energy / Sustainability, and Housing);
  - CoL;
  - LBH;
  - Greater London Authority (GLA);
  - English Heritage (EH);
  - Commission for Architecture and Built Environment (CABE);
  - Conservation and Design Advisory Panel (CADAP) for Tower Hamlets;
  - EA;
  - Transport for London (TfL) / London Underground;
  - Thames Water Utilities Limited (TWUL);
  - Adjacent owners and occupiers; and
  - Neighbourhood / Resident Associations.
- 56** Public consultation has been undertaken at an early stage to receive feedback on the design of the scheme and discuss how the scheme is changing. This has helped the scheme evolve through the iterations described in **Chapter 3: Alternatives and Design Evolution** of the ES.
- 57** In order to gain feedback from local groups and residents. The following events were held:
- Design Workshop (2<sup>nd</sup> June 2014)
    - The Design Workshop provided attendees the opportunity to hear about the Proposed Development;
  - Public Realm Workshop (11<sup>th</sup> and 12<sup>th</sup> June 2014)
    - The Public Realm Workshop allowed attendees to discuss key issues relating to landscaping with the Applicant and the landscape consultant.
- 58** Representatives from the following interest groups were present at the consultation event held in June 2014:
- Spitalfields Society;

- Spitalfields Community Group;
- Spitalfields Trust;
- The East End Preservation Society;
- Burhan Uddin Tenants and Residents' Association;
- St George's Tenants and Residents' Association; and
- Tune Hotel.

59 Following the June 2014 consultation exercise, local interest groups and stakeholders have continued to be given an opportunity to consult on the scheme through the following means:

- public exhibition (held on the 5th, 7th and 8th July 2014);
- consultation update letter (distributed 1<sup>st</sup> September 2014);
- Ongoing meetings with local interest groups (August to November 2014); and
- public exhibition (held on 29<sup>th</sup> November to 2<sup>nd</sup> December).

## Alternatives and Design Evolution

60 Under the EIA Regulations, an ES is required to provide “an outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for [his] choice, taking into account the environmental effects”. The alternatives analysis is a key part of the EIA process and serves to ensure that environmental considerations are built into the project design at the earliest possible stage.

61 The EIA has considered the ‘no development’ alternative, the use of ‘alternative sites’ and ‘alternative designs’ in response to consultee comments. The ‘No Development’ alternative would fail to achieve the following objectives and effects:

- The positive contribution to achieving LBTH's housing targets;
- Provision of on-site jobs;
- A lost opportunity to regenerate a run-down neighbourhood and maintain the character of the Elder Street Conservation Area; and
- Provision of public open space exceeding LBTH requirements.

62 Consequently, the ‘No Development’ option was ruled out by the Applicant.

63 The key considerations, opportunities and environmental constraints relevant to the design of the Proposed Development are as follows:

- There are a number of heritage assets with aesthetic and historic merit within the Site and

the Site lies within Elder Street Conservation Area;

- The 2011 consented scheme defined a permissible development on plots S1, S1a, S1b and part of S3;
- The southern portion of the Site lies within the Scheduled Ancient Monument of the Priory and Hospital of St Mary Spital;
- A large proportion of the Site lies within one of the Mayor's Strategic Views (King Henry VIII's mound to St Paul's Cathedral) which limits the height of buildings within the Site; and
- The Proposed Development presents opportunities for the provision of affordable housing and opportunities for local employment and businesses.

64 An overview of the alternative designs and design evolution of the masterplan and the plots is presented in the following sections.

### *Masterplan*

65 The masterplan seeks to bring many vacant or under used buildings back in to economic use and to regenerate and restore those of heritage value so that their future is secured for the long term.

66 The key design principles of the masterplan include:

- Creation of new frontages to Blossom Street and Fleur De Lis Street that follow the historic street pattern;
- The Nicholls & Clarke Yard provides a new setting for the 1887 warehouse and 1927 Warehouse façade;
- The scale of new frontages respond to the historic streets in the Elder Street Conservation Area; and
- The masterplan also seeks to replace the fragmented edge of the Site to the railway to the west, where the urban fabric was damaged by the cutting through of the mainline railway route to Liverpool Street.

67 The public realm and landscape proposals have evolved through continued engagement with statutory authorities and local community groups. The engagement has included workshops, exhibitions, pre-application meetings and walks through the local public realm.

68 Formal feedback received through the consultation process identified three points for key consideration and design progression, including:

- The Blossom Street Warehouses;
- The elevation of the new residential properties on Elder Street (S3); and
- The building on the corner of Norton Folgate and Folgate Street (S1a).

S1

- 69 Based on the initial heritage assessment, a number of options were investigated involving scenarios of varying scales of building retention throughout the Site. These options are illustrated in Figure 3. Elements from the options were amalgamated into one cohesive plan which took into consideration heritage issues in addition to technical and statutory design requirements such as integrating 16-19 Norton Folgate into the plan, retention of the Blossom Street warehouses and increasing the public realm at ground floor.
- 70 The response to the design proposals focused on a number of points throughout the scheme. Including the façade treatment of Shoreditch High Street, and the retention of the Blossom Street warehouses.
- 71 The initial studies for the façade focused on tiering the massing. Following the Design Review Panel, the facade strategy was reappraised since it was felt that the tiers created a large monolithic facade and that a more vertical facade broken down into tiers reflected the tighter grain of the southern part of S1. Variiegating the tiers along the High Street creates terraces to every level and in an asymmetrical order which enhanced the vertical progression of the site towards the triangle of S1c.
- 72 The retention of the Blossom Street Warehouse proposes two different strategies, reflecting the concrete and timber sections, and are summarised below:

No 12 & 13 Blossom Street (Timber section of Blossom Street warehouses)

- 73 The scheme will now include more of the fabric of the No 12 & 13, Blossom Street. In particular, with regard to the timber floors and cast iron it is proposed to largely retain and reuse these, with interventions for the purpose of structural reinforcement and fire protection in order to provide for the requirements of modern occupiers. It is also proposed to re-set the floors at the first and second floors by raising the existing structure to tie in with levels elsewhere. It is the intention to try and keep elements of the rear wall of the warehouse, redefining the rear elevation of the warehouse along the length of Blossom Street and in doing so safeguard the character of that street and the conservation area.

**Alternatives and Design Evolution – No 12 & 13 Blossom Street - Update 2015**

**November 2015 Amendments**

- 74 Following consultation with the GLA, further changes have been made to adopt the strategy for No 12 & 13 Blossom Street Warehouses to be retained as found. It is proposed to retain and refurbish No 12 & 13 Blossom Street Warehouses, with the objective to operate as an independent building from S1.
- 75 A number of interior and exterior actions would be undertaken as part of the refurbishment, which would require a number of interventions to bring the warehouses up to meet modern building regulations along with repair to the fabric.

Figure 3 Site S1 Development Options



No 14 and 15 Blossom Street (Concrete section of Blossom Street warehouses)

**76** The facade will be retained. The concrete structure will be replaced with a new timber and steel structure which is in the spirit of the adjacent timber warehouses.

*S1a*

**77** The design evolution of S1a has been driven by an iterative and experimental approach. Numerous massing and facade arrangements were developed and tested through sketches, models and visualisation. Figure 4 shows the massing development for S1a.

**78** Having developed a thorough understanding of the Site and its context, the massing of S1a has been informed by a number of factors. The Norton Folgate frontage responds to the urban scale of the city and the main road it fronts.

**79** Design responses from consultation include:

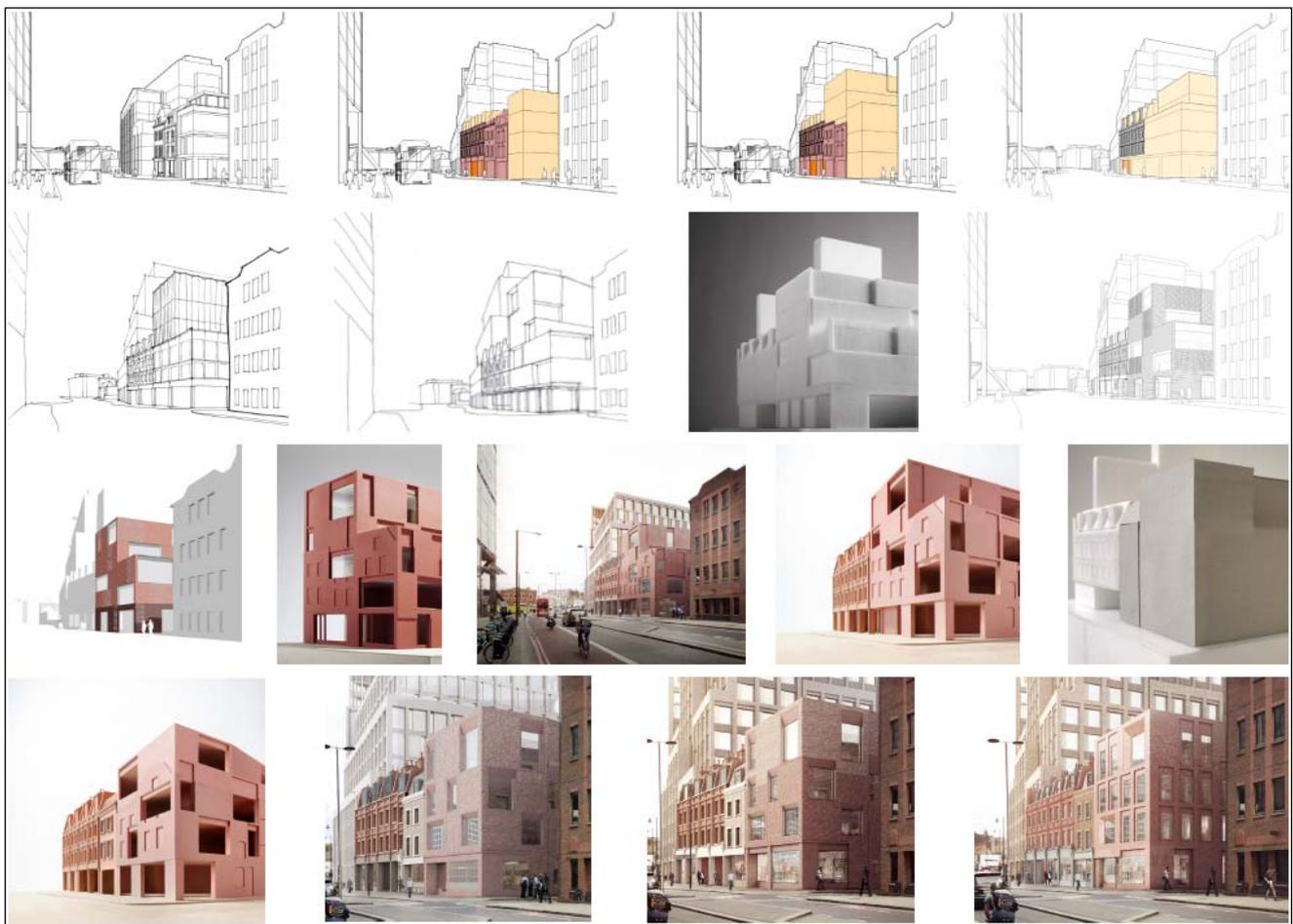
- Restoration work to heritage assets to carefully repair/ replace key architectural features such as windows and mouldings in same historic style;

- Produce a design where the facade of no.15 Norton Folgate is retained;
- Extend reference to the Georgian context and architectural lessons it may directly provide;
- Adopt brick as the primary facade material for new build elements;
- Establish a facade grid that is suitable for Norton Folgate;
- Create a shift in scale from Norton Folgate to Folgate St, in the proportions of glazing;
- Adopt portrait glazing apertures with a proportional relationship to neighbours; and
- Remove render and reveal/repair original brick facade of 15 Norton Folgate.

*S1b*

**80** The design of S1b has been developed through an iterative process, combining sketches, drawings and both 3D and physical models. Variations of the form, massing and articulation of the scheme have been tested to ensure that the final design responds to the existing buildings, and integrates with the character, scale and identity of the area.

**Figure 4. Massing development for S1a**



**81** Preliminary tests for the facade of 5 - 11a Folgate Street explored the introduction of a contemporary facade to replace the incongruous shop front at 5-7 Folgate Street. This contemporary façade option was discounted in favour of an authentic shop front to complete the terrace and to respect the historic nature of the streetscape.K

**82** The proposal to replace 16-17 Blossom Street was explored in terms of finding an appropriate response to both the adjacent warehouses and the Arts and Craft buildings. Early studies followed a contemporary brick building design; the proportion of bays which might be introduced was explored to both reflect the adjacent warehouses, and also to compliment the courtyard elevation so that the building is visually pleasing from both aspects.

#### S1c

**83** The position of S1c on the edge of the Site meant that early in the design process this plot was identified as having potential for a taller building. The initial massing approach for S1c looked at separate and combined elements over Fleur De Lis Passage. Proposed bridge links were put forward as a means of mediating between both sites without blocking views into and out of the Fleur De Lis passage and the Elder Street Conservation Area.

**84** Initial design was presented to the various consultation bodies and feedback was mixed between those who wanted contrast within the development and those who wanted the building to tie into the proposed masterplan around it.

**85** A revised approach looked at reducing the bulk by narrowing its elevation. By expressing the core as a separate element to match the bridge links, the wall to floor ratio of the building was improved and appears more slender against the skyline.

#### ***Alternatives and Design Evolution –S1c – Update 2015***

##### ***March 2015 ES Addendum***

**86** The design evolved to remove the bridge links between S1 and S1c, resulting in S1 and S1c becoming independent buildings. Separating S1 and S1c would create smaller floor plates in S1c.

**87** Given the smaller floor plates, there was also the opportunity to review the floor by floor heights in S1c and it is proposed to recalibrate the building from 3.9m to 3.5m in height (floor to floor), to suit the smaller office floor plates.

**88** Disconnecting S1 and S1c allowed the S1 core to be reduced in size as facilities are no longer shared with S1c.

#### S2

**89** One of the challenges has been the design approach to retention of the historic elements

within the new development. Consultation has informed the following key scheme considerations:

- Proposed refurbishment of No. 4-8 Elder Street;
- Proposed facade retention of 1927 Warehouse; and
- Proposed facade retention of 161 Commercial Street.

#### 4-8 Elder Street Warehouses

**90** The development design options responded to the following consultation feedback:

- A new contemporary roof was proposed to replace the mansard roof to connect the new development to the existing warehouses - consultation feedback was for the traditional roof form to be retained;
- A new contemporary 'mansard' roof was proposed to replace the original roof to connect the new development to the existing warehouses - the consultation feedback preference was for the original roof form to be retained; and
- Incorporate additional dormers within the original roof to improve the continuity of the façade - this approach was considered to be appropriate during consultation.

#### 1927 Warehouse

**91** The development design options responded to the following consultation feedback:

- Embed and frame the 1927 warehouse facade into the new development form – the consultation feedback was for the 1927 warehouse façade to be expressed as a more distinct element separate from the new development;
- 'Release' the retained frontage at the Northern corner and set new development back, restore the original loading doors and replace the lower doors to match and build up the lower roof parapet to match existing and relate to new development – the consultation feedback was that this was considered to be an appropriate approach;
- To gain more light into the building through the warehouse facade, a proposal was considered to replace the original restored doors, with a contemporary version – the consultation feedback was that the original doors were considered to have the most historic interest within the façade and the preference was for new floor areas to be set back from the façade and not expressed on the historic elevation; and

- Restoration of the original loading doors, setting back of the floor areas to create an internal lightwell and skylight to gain more light into the building – the consultation feedback was that this was considered to be an appropriate approach.

161 Commercial Street

92 The development design options responded to the following consultation feedback:

- A new six storey corner building replacing 161 Commercial Street - consultation feedback was that 161 Commercial Street is of historic interest and should be retained;
- Retention of 161 Commercial Street façade - the consultation feedback was that retention of the 161 Commercial Street façade was a positive addition to the scheme but that the massing was considered to be too high; and
- Reduce the height of 161 Commercial Street to five storeys - This approach was considered to be acceptable during consultation.

S3

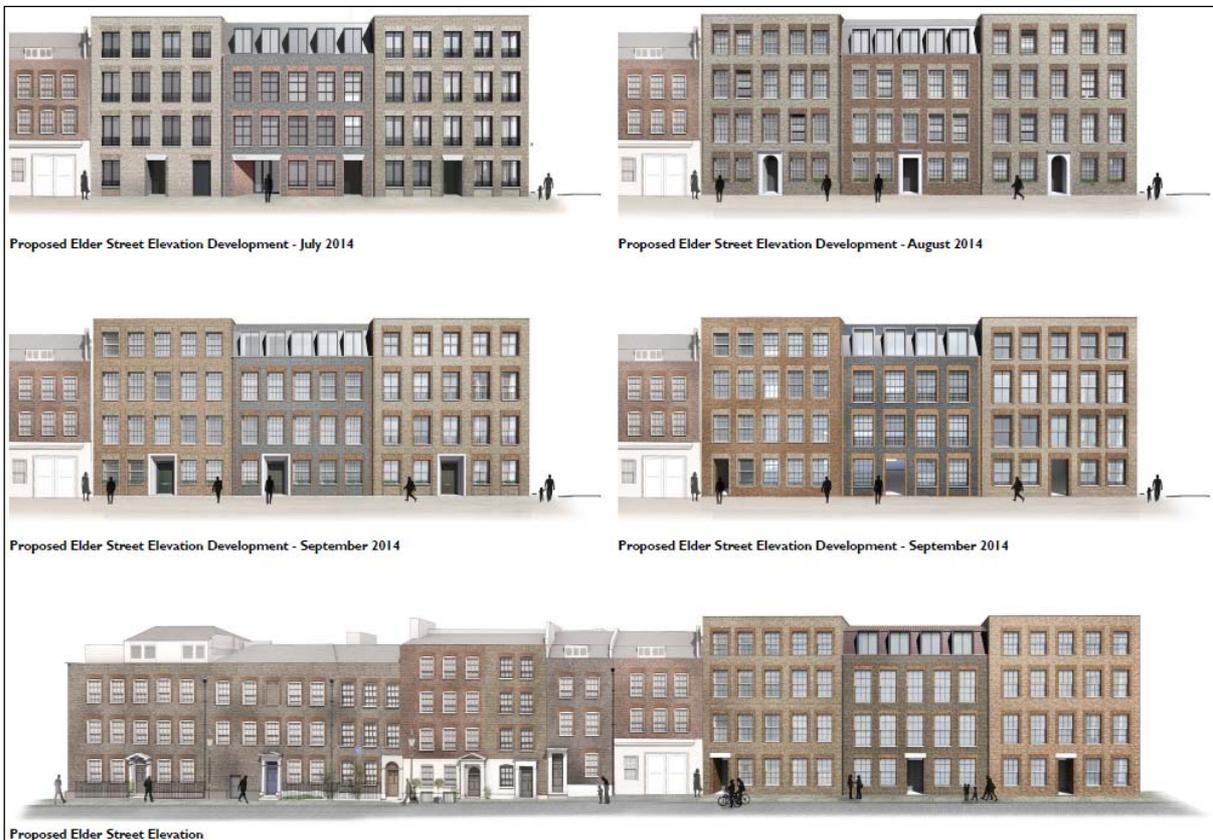
93 The evolution of the design for S3 has been driven by a developing understanding of the Elder Street Conservation Area context. At the heart of the proposal is the need to provide a variety of high quality residential accommodation within the development while maintaining massing and elevation appearance in keeping with the local context and the Elder Street Conservation Area.

94 To inform the design process a thorough analysis of the existing buildings on Elder Street was undertaken to ensure that the proposed elevations to S3 were appropriately proportioned, detailed and designed. This analysis looked at building widths and proportions, front doors and windows, brickwork and historic images of the buildings on the plot and surrounding streets.

95 The design of the proposed Elder Street elevation has been an iterative process carried out in close consultation with local community groups. In response to this feedback, the design of the elevation has been developed to (summary):

- Break down the mass of the building with the use of vertical divisions and give the appearance of a series of smaller buildings similar in width to the existing paired houses on Elder Street;

**Figure 5 Development of the Elder Street Elevation**



- Locate and design windows to replicate the proportions of the Georgian houses;
- Vary the parapet height to emphasise the divisions between buildings;
- Punctuate the elevation with front doors at ground floor to provide variety at street level;
- Adopt the Georgian proportion of windows that is prevalent in the Elder Street Conservation Area;
- Utilise sash windows in keeping with the existing buildings on the street;
- Vary window sill and head heights to differentiate between the three bays of the proposed buildings and respond to the function and daylight requirements of the rooms behind;
- Recreate the decorative brickwork around windows that is frequently seen on the neighbouring buildings; and
- Vary the brickwork used for each bay laid in a Flemish/ English bond.

#### **Alternatives and Design Evolution – S3 - Update 2015**

##### **November 2015 Amendments**

- 96** Since the preparation of the March 2015 ES Addendum, a minor amendment was made to the proposed accommodation schedule within S3 in June 2015, as part of the submission to LBTH. This comprised of changing one residential unit from a 2-bed private to 3-bed 5 person affordable unit on corner of Elder Street/ Fleur De Lis Street, to improve the affordable housing provision.

## **The Proposed Development**

### **Proposed Development Description**

- 97** The Proposed Development is for redevelopment of the Site to provide a mixed use scheme comprising the following:
- 40 residential dwellings comprising 4,024 square metres (m<sup>2</sup>) NIA of with unit sizes ranging from one bedroom to three bedroom apartments;
  - Office floorspace (Class B1) of 24,376m<sup>2</sup> NIA;
  - Retail floorspace (Class A1) of 779m<sup>2</sup> NIA;
  - Restaurant and café floorspace (Class A3) of 2,612m<sup>2</sup> NIA;
  - Drinking establishment floorspace (Class A4) of 393m<sup>2</sup> NIA;
  - 1,433m<sup>2</sup> public open space area;
  - 120m<sup>2</sup> child play space;
  - Seven residential car parking spaces (five standard spaces and two disabled spaces) and two disabled retail car parking spaces; and
  - 413 office cycle spaces (S1/S1c -248; S1b – 44; S2 – 121), 80 residential cycle

parking spaces (within S3) and 54 visitor cycle spaces (Site wide).

#### **The Proposed Development – Update 2015**

##### **March 2015 ES Addendum**

- 98** Changes were made to Plots S1 and S1c of the Proposed Development as follows:
- Separation of S1 and S1c by removing bridge links;
  - Amendments to S1c core as a result of disconnecting both buildings;
  - Additional floor in S1c by recalibrating floor to floor height to 3.5m within the existing planning envelope;
  - Reduction of S1 core in size on L04 – L06 as facilities are not shared with S1c; and
  - Enlargement of S1c terrace (an additional 30m<sup>2</sup> of space) at L13 for office workers.

##### **November 2015 Amendments**

- 99** The November 2015 amendments comprise the key changes as follows:
- Separation of S1 and 12-13 Blossom Street;
  - Amendments to the S1 core as a result of disconnecting 12-13 Blossom Street;
  - Creation of a new core to serve 12-13 Blossom Street;
  - Creation of further smaller floor plates for co-working and SMEs, via office space within 12-13 Blossom Street;
  - Retention of existing roof profile to 12-13 Blossom Street;
  - Retention and refurbishment of internal fabric of 12-13 Blossom Street warehouses, including maintaining existing structural floor levels; and
  - Creation of a new amenity terrace for office workers to 12-13 Blossom Street.

- 100** Since the preparation of the March 2015 ES Addendum, a minor amendment was made to the proposed accommodation schedule within S3 in June 2015, as part of the submission to LBTH. This comprised of changing one residential unit from a 2-bed private to 3-bed 5 person affordable unit on corner of Elder Street/ Fleur De Lis Street, to improve the affordable housing provision. No changes to the massing or floor space were made.

- 101** An overview of each of the development plots is provided in the following sections.

##### **S1/S1c**

- 102** Plots S1/S1c will provide for office (Class B1) floorspace within a new building, which will incorporate the retained façade to Blossom Street and retained 1887 warehouse.

**103** There will be different strategies for their retention and refurbishment:

- No 12 & 13 Blossom Street (Timber section) will now include more of the fabric of the No 12 & 13, Blossom Street. In particular, with regard to the timber floors and cast iron it will be sought to largely retain and reuse these; and
- No 14 & 15 Blossom Street (concrete section) - the facade will be retained. The concrete structure will be replaced with a new timber and steel structure which is in the spirit of the adjacent timber warehouses

**104** Plot S1 will provide restaurant (A3) and retail (Class A1) at ground floor. Plot S1c will provide restaurant (Class A3) at ground floor and basement level.

**105** The building heights will range from four storeys on Blossom Street, up to eleven storeys including plant (S1) and 13 storeys including plant (S1c) on Shoreditch High Street. Plot S1 will provide restaurant (A3) and retail (Class A1) at ground floor. Plot S1c will provide restaurant (Class A3) at ground floor and basement level.

#### **The Proposed Development - S1/S1c – Update 2015**

##### **March 2015 ES**

**106** The removal of bridge links between S1 and S1c has resulted in the disconnecting of the two buildings, resulting in amendments to the S1c core, which will no longer be served by S1 and access to the upper floors will be through S1c. Separating S1 and S1c would create smaller floor plates in S1c.

**107** S1c now extends up to 14 storeys, including plant.

#### **The Proposed Development - 12 & 13 Blossom Street Warehouses – Update 2015**

##### **November 2015 Amendments**

**108** It is proposed to retain and refurbish No 12 & 13 Blossom Street Warehouses, with the objective to operate as an independent building from S1. No 12 & 13 Blossom Street Warehouses will provide two food and beverage units at ground floor, one to the corner of Blossom Street and Fleur De Lis, with the other accessed off Blossom Street.

**109** Office (Class B1) space will be provided on the first to third floors.

**110** The smaller office floor plates will be for use by small-medium enterprises (SMEs) and are designed so that floors can be let individually or to one tenant.

S1a

**111** Plot S1a will provide office (Class B1) floorspace within a new building, which will incorporate the retained buildings 15-19 Norton Folgate. S1a will provide retail (Class A1) and restaurant (Class A3) at ground floor, and a mix of office (Class B1),

retail (Class A1) and restaurant (Class A3) floorspace at basement level.

**112** Plot S1a will be of 4 storeys in height.

S1b

**113** Plot S1b will provide for office (Class B1) floorspace within a new building, which will incorporate the retained buildings 5-11a Folgate. The height will range from four storeys on Folgate Street to five storeys on Blossom Street. S1b will provide retail (Class A1) and public house (Class A4) at ground floor, and a mix of office (Class B1) and public house at basement level.

S2

**114** Plot S2 will provide for office (Class B1) floorspace within a new building, which will incorporate the retained buildings 4-8 Elder Street and retained façade of 1927 warehouse and 161 Commercial Street. The height will range from five storeys on Commercial Street, four storeys on Commercial Street and up to nine storeys (plus plant) to the railway. Plot S2 will provide restaurant (Class A3) at ground floor and basement level, and a mix of office (Class B1) and restaurant at basement level.

S3

**115** Plot S3 will provide residential accommodation (Class C3) within a new build of up to 6 storeys in height. Retail (A1) unit will be located at ground level, with a mix of residential provision, plant and car parking at basement level.

#### **The Proposed Development – S3 - Update 2015**

##### **November 2015 Amendments**

**116** Since the preparation of the March 2015 ES Addendum, a minor amendment was made to the proposed accommodation schedule within S3 in June 2015, as part of the submission to LBTH. This comprised of changing one residential unit from a 2-bed private to 3-bed 5 person affordable unit on corner of Elder Street/ Fleur De Lis Street, to improve the affordable housing provision.

**117** The unit mix for the residential (Class C3) accommodation for S3 is provided in **Table 1A**.

**Table 1A. Unit Mix – Update 2015**

Unit Tenure	Total
Private	<del>30</del> 29
Social/Affordable	6 7
Intermediate	4
<b>Total</b>	<b>40</b>

*Basement*

- 118** Plots S1 and S1c will share a new-build basement bounded by the train line and Shoreditch High Street to the north and west respectively.
- 119** The basement for S1 and S1c basement will contain a mix of uses, with restaurant and café (Class A3) use located within the Site S1c basement of the 1887 warehouse. This will be accessed directly from the floor above. The plant within the basement will also service plots S1a and S1b.
- 120** The shared basement will provide 248 office cycle spaces (long stay), 28 cycle showers and a commercial waste store.
- 121** Plot S1a will have a basement and shares a commercial waste storage room with S1b.
- 122** Plot S1b has a basement. Cycle parking (44 long stay spaces) will be provided in the S1a and S1b basements for the office and retail employees. This will be accessed by the goods lift provided to access the basement.
- 123** Plot S2 will have a basement, which will provide 121 (long stay) office cycle spaces and a commercial waste storage room.
- 124** Plot S3 has a basement, and provides 82 residential cycle spaces (80 long stay and two short stay) and a commercial waste storage room. Residential car parking is provided in the basement of S3 comprising five standard spaces and two disabled spaces.
- 125** Access to residential accommodation is provided via three entrances (from each side of the Site) and these entrances will be connected by the courtyard. In addition to the three residential entrances, there will be a vehicle entrance at basement / lower ground floor level that will give access to a car lift and parking spaces.
- 126** An overview of the public realm and open space proposals is provided as follows.
- 127** At Norton Folgate / Shoreditch High Street, the existing public realm will be upgraded, maintaining its status as the Site's main interface with the City.
- 128** At Blossom Street, Fleur De Lis Street and the Fleur De Lis Street Passage, it is proposed to build upon the existing character of the streets, building on their industrial heritage and improving them as an attractive and unique pedestrian environment, to support the proposed commercial and residential uses in the area.
- 129** There will be a new publicly accessible space between plots S1, S1a, and S1b (Blossom Yard), as well as a new pedestrian connection between Blossom Street and Norton Folgate.
- 130** Plot S2 will be made up of two spaces: Nicholls and Clark Yard to the end of Blossom Street and the interior passages and courtyard within S2.
- 131** Plot S3 will have a private shared garden for the future residents. The garden will provide a key amenity space for both private and affordable housing occupants.
- 132** The Proposed Development has been designed to be an exemplar of building design to ensure that it is low energy in use. The Proposed Development aims to be as energy efficient as practicable and generate its own energy where this is feasible.
- 133** The Proposed Development will achieve the following sustainability benchmarking targets:
- ~~Code for Sustainable Homes (CSH) Level 4 (code is no longer in existence);~~
  - BREEAM 'Excellent' rating for office; and
  - BREEAM 'Very Good' rating for retail units.

***The Proposed Development - Basement - 12 & 13 Blossom Street Warehouses – Update 2015******November 2015 Amendments***

- 134** A full basement under the entire footprint of S1 will be constructed, which also incorporates part of the existing 12 & 13 Blossom Street Warehouse basement, which is to be lowered to 9.90m AOD. It is proposed that the cross walls and column structure of 12-13 Blossom Street are retained. The existing Blossom Street Warehouse buildings to be retained sit on strip footings and these will be underpinned to provide structural support.
- 135** Cycle provision (storage, changing and shower facilities) for 12 & 13 Blossom Street, S1 and S1c will be provided to the north west of S1, along the underpinned Blossom Street warehouses. Extensive plant equipment will be provided within the new-build basement, in addition to refuse stores and other service equipment.

***The Proposed Development – Development Description – Update 2015******November 2015 Amendments***

- 136** The Amended Proposed Development comprises the following updated floorspace schedule:
- 40 residential dwellings comprising 4,024 square metres (m<sup>2</sup>) NIA of with unit sizes ranging from one bedroom to three bedroom apartments;
  - Office floorspace (Class B1) of 23,897m<sup>2</sup> NIA;
  - Retail floorspace (Class A1) of 788m<sup>2</sup> NIA;
  - Restaurant and café floorspace (Class A3) of 2,451m<sup>2</sup> NIA;
  - Drinking establishment floorspace (Class A4) of 393m<sup>2</sup> NIA;

- 1,433m<sup>2</sup> public open space area;
- 120m<sup>2</sup> child play space;
- Seven residential car parking spaces (five standard spaces and two disabled spaces) and two disabled office car parking spaces; and
- 417 office cycle spaces, 80 residential cycle parking spaces and 29 visitor cycle spaces.

137 The Amended Proposed Development is shown in Figure 6A.

## Assessment Methodology and Significance Criteria

138 Specific criteria for each technical topic have been applied to determine significance of effects, giving due regard to the following:

- Extent and magnitude of the effect;
- Duration of effect (short, medium or long-term);
- Nature of effect (whether direct or indirect, reversible or irreversible);
- Whether the effect occurs in isolation, is cumulative or interactive;
- Performance against environmental quality standards;
- Sensitivity of the receptor; and
- Compatibility with environmental policies.

Figure 6A View of Shoreditch High Street Façades of S1 and S1c from Principal Place – Update 2015



139 Effects have been classified as being **adverse**, **negligible** or **beneficial** in significance. Where adverse or beneficial effects are identified, their magnitude has been further categorised as **minor**, **moderate** or **major**. Where possible, effects have also been assigned a geographic scale; for example, local, district or regional.

140 The ES has highlighted the residual effects, which are those effects that remain following the incorporation of any identified mitigation measures.

141 In general, residual effects found to be 'moderate' or 'major' are deemed to be 'significant'. Effects found to be 'minor' are considered to be 'not significant', although they may be a matter of local concern. 'Negligible' effects are considered to be 'not significant' and not a matter of local concern. Mitigation measures, designed to offset or reduce any significant adverse environmental effects, have been incorporated into the project design wherever possible.

### Methodology – Update 2015

### November 2015 Amendments

142 The November 2015 Replacement ES consolidates the December 2014 ES and March 2015 Addendum into a single ES, and includes the changes comprising the November 2015 Amendments, resulting in the assessment of the likely significant environmental effects of the Amended Proposed Development.

- 143** The purpose of the Replacement ES is to account for any new significant effects as a result of the design changes.
- 144** The December 2014 ES provided details of baseline conditions, impact assessments and mitigation measures in relation to the Proposed Development. The March 2015 Addendum detailed how the design changes comprising the March 2015 amendments (resulting in the revised scheme) had affected the significance of the effects presented in the December 2014 ES or introduced new likely significant effects. For the current Replacement ES, the preceding assessments have been reviewed in light of the design changes comprising the November 2015 amendments and provides an assessment of the environmental impacts, detailing how the scheme changes have affected (if at all) the significance of effects or introduced new likely significant effects. The Replacement ES also reviews and takes into consideration any changes to planning policy, guidance and legislation; assessment methodology and baseline conditions; and any updates to cumulative schemes. The approach to producing the Replacement ES has been as follows:
- AECOM's EIA specialists and other technical contributors (i.e. Quod, Arup, GIA, RWDI, AKT - II, MOLA, KM Heritage and Peter Stewart Consultancy) have been asked to consider whether the scheme changes could materially affect the previously identified effects or introduce new significant effects, and therefore whether further consideration or detailed technical assessment is required;
  - Where no material changes are considered likely to occur to the previously identified effects, no further technical assessment has been considered necessary; and
  - Where the scheme changes are considered likely to materially change the previously identified significant effects or introduce new significant effects, an updated assessment for the relevant environmental topic has been undertaken.
- Demolition (note: a number of buildings will be demolished whilst a number of buildings will be retained or have their façades retained);
  - Substructure and basement construction;
  - Construction of the superstructure (i.e. frame);
  - Construction of envelope, roof, shell and core; and
  - Fit-out and external works.
- 147** The Applicant will develop and implement a Demolition and Construction Environmental Management Plan (DCEMP), which will incorporate the mitigation measures set out in the ES as well as the requirements set out within guidance and industry best practice, including the LBTH's Code of Construction Practice (CoCP). In addition, the Applicant also proposes to demonstrate best practice and standards through their own sustainability policy and guidance for managing waste and construction activities.
- 148** A commitment will be made to periodically review the DCEMP and undertake regular environmental audits of its implementation during the demolition and construction phases.
- 149** The DCEMP will comprise information on the following, to minimise the environmental effects of the demolition and construction of the Proposed Development:
- Demolition and Construction Method Statement (DCMS);
  - Considerate Constructors' Scheme;
  - Neighbour and public relations;
  - Management of trade contractors;
  - Mitigation measures for:
    - Management of effects from noise, vibration and air quality;
    - Waste management;
    - Protection of ground conditions;
    - Protection of water resources;
    - Protection of archaeological assets
    - Ecological protection; and
    - Management of energy and water usage.

## Demolition and Construction

- 145** Given the scale of the Proposed Development, the current expectation is that the demolition and construction works will be for a duration of approximately 29 months.
- 146** The demolition and construction programme consists of the following key stages (the duration of which the activities may overlap):
- Enabling works;
- 150** It is anticipated that the core working hours for the demolition and construction phase will be as follows:
- 08:00 – 18:00 hours weekdays;
  - 08:00 – 13:00 hours Saturdays; and
  - No working undertaken on Sundays or Bank Holidays.
- 151** It is recognised that approval from the LBTH will be required for any works that need to be undertaken outside of these hours.

- 152** Access routes to and from the Site by heavy goods vehicles (HGVs) for deliveries of material and for the removal of waste will be agreed with the LBTH / highway authority prior to the commencement of demolition and construction works.
- 153** Supplier, contractors and subcontractors will be required to submit individual delivery plans to confirm intended delivery routes to and from the Site and a vehicle booking / management system will be implemented to minimise peaks and increase opportunities for consolidated deliveries.
- 154** Transportation by water has been considered but due to the distance of the River Thames from the Site (approximately 1.7km), it was concluded as not being feasible and the transport of all material and waste will be by road.
- 155** Mitigation to manage noise and vibration and air quality impacts will include measures such as: the use of hoarding to provide screening of low-level noise and dust emissions; locating noisy machinery and dust causing activities away from sensitive receptors; and the minimisation of construction traffic movement around the Site.
- 156** A Site Waste Management Plan will be produced setting out the classification of all waste; performance targets; measures consistent with the waste hierarchy (i.e. prevention, preparing for re-use, recycling, other recovery and disposal).
- 157** Phase 2 Ground Contamination and Site Investigation (if required) will be undertaken. Should areas of contamination be identified from the investigations, a Remediation Strategy and method of disposal would be agreed in advance of works.
- 158** Main mitigation measures to protect water resources include (but are not limited to) the preparation of an Emergency Response Plan to contain potential leaks and spills, and the storage of all potentially hazardous liquids and solids on surfaced areas with bunding, in accordance with the Environment Agency's requirements.
- 159** To protect any sub-surface archaeological deposits, targeted archaeological excavations will be undertaken identifying archaeological evaluation trenches / pits and archaeological monitoring of geotechnical pits dug.

### **Demolition and Construction - Update 2015**

#### **November 2015 Amendments**

- 160** It is expected that the timescale for the demolition and construction works would remain approximately 29 months, with the indicative year of operation of the Amended Proposed Development shifting to 2019.

## **Waste and Recycling**

- 161** *Chapter 6: Waste and Recycling* presents an assessment of the potential effects in relation to waste and recycling. The assessment considers the relevant requirements placed upon new development under national legislation and adopted planning policy at the national, regional and local levels. Waste management objectives and targets for the Proposed Development are set out and a detailed description of the main waste streams and systems expected to be generated during the demolition and construction phase, and once the Proposed Development is completed and operational, is also included.
- 162** The following sensitive receptors have been identified as likely to be affected by the Proposed Development:
- Demolition and construction;
  - Neighbouring users / occupiers of local commercial / retail / residential; and
  - Local waste management construction.
- 163** The potential effects during the demolition and construction phase can be reduced through design and implementation of management measures including, but not limited to the promotion of the waste hierarchy (i.e. prevention, preparing for re-use recycling, other recovery and disposal) and good practice measures managed through the production of a Construction Resource Management Plan (CRMP) to be agreed before works commence.
- 164** The CRMP will outline the measures for the removal, transportation and disposal of all waste materials resulting from excavations and other demolition and construction activities. All waste will be subject to controlled collection by permitted carriers to suitable licensed disposal sites.
- 165** Following the implementation of mitigation measures, the likely effect on demolition and construction workers will be **negligible**; the likely effect on neighbouring users / occupiers of local commercial / retail / residential properties will be **negligible**; and the likely effect on local waste management infrastructure will be **minor adverse**.
- 166** The following sensitive receptors have been identified as likely to be affected by the completed and operational Proposed Development:
- Neighbouring users / occupiers of local commercial / retail / residential properties;
  - Future on-site users; and
  - Local waste management infrastructure.
- 167** Once operational, the Proposed Development is anticipated to produce a total of 234,890 litres (L) of waste per week, which is considered typical for a development of this size and nature. Due to the

nature of the Proposed Development, the majority of the waste is anticipated to be of inert and non-hazardous origin.

- 168 Design and management measures have been recommended to manage waste arising generated. These include, but are not limited to:
- Separate provision for mixed dry recyclable waste, residual (i.e. non-recyclable) waste, organic food waste, and glass;
  - Separate provision for waste generated by the retail, residential and office elements of the Proposed Development; and
  - A two day capacity storage provision for commercial waste produced by the majority of the Site (plots S1a, S1b, S1, S1c and S2), with a seven day capacity storage provision for commercial waste generated by occupants within S3.
- 169 Following the implementation of the recommended design and management measures that will be incorporated as part of the Proposed Development, the effect of waste generated by the completed and operational development is likely to be **negligible** upon all sensitive receptors assessed.

### Waste and Recycling - Update 2015

#### March 2015 ES Addendum

- 170 Whilst there is no change proposed to the demolition, construction and refurbishment methodology, the anticipated volume of demolition, construction and excavation waste expected to be generated during each year of the demolition and construction phase of the Revised Scheme has been recalculated based on a 29 month time frame. The resultant increased volume of waste (increase of 939 tonnes per year resulting in 5,520 tonnes per year) has not affected the conclusions of the waste and recycling assessment of the December 2014 ES, and the assessment remains valid.
- 171 The scheme changes are likely to result in an overall reduction in total weekly waste arisings anticipated to be generated during the operational phase of the Revised Scheme by residential and commercial uses by 975 L when compared against the December 2014 ES. This overall decrease in volume of waste has not affected the conclusions presented in the December 2014 ES.

#### November 2015 Amendments

- 172 The November 2015 amendments are likely to result in an overall reduction in total weekly waste arisings generated during the operational phase of the Amended Proposed Development by 6,660 L.

- 173 As the Amended Proposed Development has resulted in an overall reduction in total waste arisings, it is considered that the waste and recycling assessment presented in the March 2015 ES Addendum provides a worst case scenario. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid.

## Socio-economics

- 174 **Chapter 7: Socio-Economics** of the ES provides an assessment of the social-economic effects of the Proposed Development and the extent to which it conforms to relevant socio-economic planning policy. The assessment comprised the following:
- An economic effect assessment, including the effect of employment on the labour market and additional local spending; and
  - A review of other relevant socio-economic effects, including the demand on existing social infrastructure such as education, primary healthcare, open space and play space, as well as a review of the additional provision of market and affordable housing, and office and retail floorspace.
- 175 The Proposed Development is assessed against the current socio-economic baseline conditions at the local level and, where relevant and appropriate, in a borough and regional (Greater London) context.
- 176 The demolition and construction phase of the Proposed Development is expected to generate approximately 125 Full-Time Equivalent (FTE) jobs. Due to the mobile nature of construction employment it is not meaningful to consider this impact at a local level; however, at the regional level, it is assessed that the likely effect of the Proposed Development would be **negligible** in relation to the provision of demolition and construction employment.
- 177 The new non-residential floorspace proposed will generate net additional employment opportunities (approximately 2,400 net additional FTE jobs). This takes into account existing employment on-site. The creation of net additional employment opportunities is therefore assessed to generate a **moderate beneficial** effect at the local level, **minor beneficial** effect at the borough level, and **negligible** effect at the regional level.
- 178 The Proposed Development will contribute to meeting LBTH's housing targets by adding 40 residential units, including the provision of 10 affordable homes in line with LBTH planning policy. When assessed against the LBTH's housing targets, the likely effect of the Proposed Development will be **minor beneficial** at the borough level and **negligible** at the regional level.
- 179 The residential units are expected to accommodate in the region of 80 new residents to the Site, which

currently has no resident population. These new residents, and the new workers brought to the Site as a result of the commercial floorspace, will generate approximately £570,000 and £5.6million additional spending respectively per year. The likely effect of the Proposed Development, in relation to additional spending, will generate a **minor beneficial** effect at the local level and **negligible** at the borough level.

- 180 The additional demand for social infrastructure created as a result of the Proposed Development's new population, including primary healthcare, primary school places, and secondary school places is not expected to be significant as there is capacity within existing facilities to absorb the additional demand created by the new resident population. Overall, the effect on primary school and secondary school places is assessed to be **negligible** at the local level and borough level respectively. The likely effect on the Proposed Development on primary healthcare is **negligible** at the local level.
- 181 The Proposed Development is expected to deliver open space in line with LBTH policy. In addition, play space will be provided for younger age groups of children e.g. under 5s. Overall, the effect of the Proposed Development on open space is assessed to be **minor beneficial** at the local level. The effect on play space is assessed to be **negligible** at the local level.

### Socio-Economics - Update 2015

#### March 2015 ES Addendum

- 182 The reduction in the quantum of commercial floorspace proposed is likely to result in c.10 fewer jobs (FTE) and as a result a reduction in the level of employee spending than was calculated in the December 2014 ES. The decrease is not assessed to be material and, therefore, the likely effect as set out in the December 2014 ES remains valid.

#### November 2015 Amendments

- 183 The November 2015 Amendments propose a reduction of office (B1) and retail (A1 and A3) floorspace.
- 184 The reduction in floorspace is likely to result in c.50 fewer jobs (FTE) than was calculated in the March 2015 ES Addendum. Overall, the Amended Proposed Development results in c.60 fewer jobs than initially assessed in the December 2014 ES. The predicted decrease in employment relative to the level of employment calculated for the December 2014 ES is not considered to change the likely effects or significance in terms of the overall employment impact arising from the Amended Proposed Development.

- 185 The impact of the changes is also likely to result in a reduction in employee spending and decrease the demand for open space; but again the magnitude of change is not likely to be at a level that changes the likely effects and the significance concluded.
- 186 The change in unit mix (change from private to affordable) is likely to result in a minor increase onsite population, but would not place significant additional demand on social infrastructure (i.e. education, health, playspace).
- 187 Overall, the Amended Proposed Development does not result in any changes to the socio-economic effects and significance presented in the December 2014 ES and March 2015 ES Addendum. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid.

## Traffic and Transport

- 188 *Chapter 8: Traffic and Transport* of the ES presents an assessment of the potential effects of the Proposed Development on the surrounding road network and public transport facilities.
- 189 The assessment of the demolition and construction vehicle activity assumes that construction vehicle traffic generation will be at its peak between weeks 32 to 36 of the indicative construction programme where 159 two way heavy goods vehicle movements will occur to/from the Site. This equates to 29 two way heavy goods vehicle movements a day (~3 two way vehicles movements per hour). A Construction Method Statement, including a Traffic Management Plan, will set out methods and routes for delivery of construction materials prior to commencement of construction works as well as loading and unloading. It will ensure that the impact on the local highway and pedestrian and cycling network is minimised. A suite of measures to minimise the likelihood of congestion will be included.
- 190 A short-term **minor adverse** effect on pedestrian access may potentially occur due to the closure of Fleur De Lis Passage; however, this will be **negligible** to cyclists.
- 191 Taking into account the mitigation measures, it is considered Proposed Development is likely to result in overall **negligible** effect during the temporary demolition and construction phase on highway network capacity.
- 192 The operational Proposed Development is predicted to have an overall increase on vehicle flows on the surrounding highway network of less than 3%, which is considered a **negligible** effect.
- 193 In terms of public transport in the AM and PM peak hours, the impact on the rail services operating from Shoreditch High Street station will range from 1.5 to 12.5 additional passengers per train by direction. The services from Liverpool Street station are

predicted to experience an increase in passengers per train of 2 to 12 passengers. London Underground services are predicted to experience an increase between 0 and 3 passengers per train. It is not expected that the Proposed Development will cause capacity concerns for existing rail and underground services; moreover the situation is expected to improve when Crossrail services open in Liverpool Street and Moorgate in 2018 (the year following the expected completion of the Proposed Development) in addition to improvements across the London Underground network that will provide additional capacity at peak times. The number of additional bus trips when distributed across the high bus service frequencies results in a low impact on existing bus services (up to 1 passenger per bus). The overall effect of the Proposed Development on journeys by rail, underground and bus is therefore a long-term **negligible** effect.

- 194** The pedestrian environment and connectivity within the Site will be improved by the Proposed Development; enhanced permeability and increased space to pedestrians, where possible. The pedestrian environment will be high quality with well-maintained and legible pathways and lighting. Pedestrian movement will be enhanced through improvements to the public realm and increased routes within the Site. Overall, the Proposed Development provides attractive pedestrian facilities for both users of the Site and for visitors to the Site, resulting in likely **minor beneficial** effects.
- 195** A Travel Plan has been prepared in association with the operational / completed development phase, and is aimed at minimising the environmental effects of travel by improving accessibility to the Site and reducing car use by encouraging more sustainable travel options (for example, the provision of 582 cycle parking spaces).
- 196** A Delivery and Servicing Plan has been prepared in association with the operational / completed development phase and is aimed at minimising the environmental impacts of servicing associated with the Proposed Development. The overall operational effect of the additional traffic to the road network is considered **negligible**.

### Traffic and Transport - Update 2015

#### March 2015 ES Addendum

- 197** The March 2015 amendments are expected to result in a decrease of 31 trips per day across all modes of transport. These changes are considered negligible. Therefore, the trip generation and associated assessment of effects on transport

infrastructure presented in the December 2014 ES remains valid.

### November 2015 Amendments

- 198** The Amended Proposed Development is anticipated to be operational in 2019, which has been updated from the initial indicative opening year 2017.
- 199** The November 2015 amendments result in changes to B1 office, A1 and A3 retail floor space. The Amended Proposed Development is predicted to result in a decrease of 137 trips per day across all modes of transport.
- 200** The predicted changes arising from the November 2015 amendments, in terms of the assessment on each of the different transport modes, is considered negligible. The conclusions set out in the December 2014 ES and March 2015 ES Addendum remain valid.

### Air Quality

- 201** *Chapter 9: Air Quality* of the ES provides an assessment of the potential effect on local air quality resulting from demolition and construction dust, and road traffic during the operational phase of the Proposed Development.
- 202** Demolition and construction road traffic emissions were not assessed as the additional number of demolition and construction vehicle movements was not considered high enough to have the potential to cause a significant adverse effect (in terms of road traffic emissions) on any local air quality sensitive receptor;
- 203** Demolition and construction plant emissions were not assessed as it was anticipated that there will be relatively few plant present in any area on-site at any one time during the demolition and construction phase, and that the total number of plant used will be relatively small when compared to background road traffic levels in the area. Therefore, it is considered that this temporary source of pollution is unlikely to generate any significant adverse effects.
- 204** The energy strategy for the Site will adopt a centralised Site-wide system that, based on electric supply, will not generate additional emissions at the location of the Site. Therefore, operational plant emissions were not assessed as the Proposed Development will not generate high enough levels of operational plant emissions to cause any significant adverse effects on sensitive receptors.
- 205** The statutory review and assessment of local air quality within the LBTH (including the Site) resulted in the entire borough being designated an Air Quality Management Area (AQMA), due to exceedences of the objectives for nitrogen dioxide (NO<sub>2</sub>) and particulate matter smaller than 10 micrometres (µm) (PM<sub>10</sub>). Consequently, Air Quality Action Plans have

been prepared for the borough, which have been taken into consideration in the assessment of air quality effects.

- 206** The assessment of potential effects during the demolition and construction phase was aligned with the following key stages: demolition, earthworks, construction, and trackout material. The assessment considered the potential effects on sensitive receptors within a 350m radius of the Site (i.e. neighbouring amenity and properties, and neighbouring residents' / occupants' human health) in terms of dust emissions and PM<sub>10</sub> concentrations exceeding the air quality objective. Subject to the implementation of best practice measures and Site management, the likely effects on neighbouring amenities / properties and human health were determined to be **negligible**.
- 207** The operational traffic emissions modelled recorded very low to low increases in concentrations of NO<sub>2</sub> and imperceptible changes in particulate matter (PM<sub>10</sub> and smaller than 2.5µm (PM<sub>2.5</sub>)). Therefore, it was concluded likely that operational traffic emissions would result in a **negligible** effect.
- 208** The air quality neutral assessment indicated that transport emissions will be within the recommended emission standards; therefore, the Proposed Development is considered to be air quality neutral. Building emissions were not assessed within the air quality neutral assessment as the energy strategy for the Site will be based on an electric supply, which will not generate additional emissions at the Site.
- 209** The Proposed Development will provide restaurant / café uses on the ground floor levels of buildings of plots S1, S1a, S1c and S2. Plot S1b will also include a public house. The extraction of air from these units / buildings will have the potential to cause odour issues for the proposed residential units of the Site and neighbouring residential properties. However, the potential effect of odour from exhaust ducts will be controlled in accordance with the Department of Environment, Food and Rural Affairs' Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems. The location of exhaust ducts, and details of an appropriate extraction and abatement system, will be determined and agreed with the LBTH at detailed design stage and installed prior to occupation / operation.

### **Air Quality - Update 2015**

#### **March 2015 ES Addendum**

- 210** The Revised Scheme will not change the building volume compared to the December 2014 Scheme and, as such, the energy consumption and

emissions associated with on-site energy generation will remain as reported in the December 2014 ES.

- 211** The Revised scheme results in a decrease of 31 trips per day across all modes of transport. It is therefore considered that the Revised Scheme has a negligible impact on vehicle trip generation and therefore would not alter the results of the dispersion modelling presented within the December 2014 ES.
- 212** As the emissions associated with on-site energy generation and road traffic emissions reported in the December 2014 ES Addendum remain valid, it is considered that the Site is suitable for its proposed use.
- 213** The change in of floor space for each land use class with the Revised Scheme result in revised transport emissions benchmarks for the air quality neutral assessment. As the actual emission rates remain lower than the benchmark emission rates, the conclusions of the 2014 ES therefore remain valid and the Revised Scheme is considered to be Air Quality Neutral.

#### **November 2015 Amendments**

- 214** In April 2015, the Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK) have released an updated guidance for planning purposes and supersedes the one used in the December 2014 ES and March 2015 ES Addendum. The updated IAQM and EPUK significance criteria increases the likelihood of moderate and major adverse effects occurring where total pollutant concentrations are already elevated beyond the relevant objective value.
- 215** A change in traffic data used in the December 2014 ES and March 2015 ES Addendum includes greater base flows being accounted for as a result of future development schemes coming forward for the updated indicative year of opening (now 2019). From review of the future baseline (2019), the annual mean NO<sub>2</sub> concentrations are expected to exceed the Air Quality Strategy (AQS) Objective value at all external sensitive receptors, as a result of background concentrations already being in excess of the objective value (40 µg/m<sup>3</sup>).
- 216** The assessment of the Amended Proposed Development in operation results in the annual mean NO<sub>2</sub> concentrations expected to exceed the AQS Objective values at all external receptors. This is as a result of the elevated background concentrations being already well above the threshold. In terms of the updated EPUK / IAQM guidance, the 'With Development (2019)' scenario model predicts a **moderate adverse** effect at the majority of locations within the study area, and a **major adverse** effect at limited locations within the study area.
- 217** The nature of the likely effects identified on external receptors is emphasised by the updated IAQM and

EPUK significance criteria, which increases the likelihood of moderate and major adverse effects occurring where total pollutant concentrations are already elevated beyond the relevant objective value. In this instance, concentrations are elevated beyond the objective value mainly as a result of high background pollutant concentrations, rather than the contribution predicted as a result of the Amended Proposed Development.

- 218** For PM<sub>10</sub> and PM<sub>2.5</sub>, the results show that the likely effects are considered to be **negligible**. This conclusion is consistent with the conclusion of the December 2014 ES and March 2015 ES Addendum.
- 219** In terms of the suitability of the Site for the intended use, as with the December 2014 ES and March 2015 ES Addendum, the building parameters considered for the Amended Proposed Development have not significantly altered and remain unchanged for the assessment. The results of the assessment indicate that providing that mitigation measures are in place for new residential areas (i.e. mechanical ventilation), as proposed in the December 2014 ES, it is concluded that the Site will experience an appropriate standard of air quality possible, bearing in mind that background concentrations of NO<sub>2</sub> are already in excess of the relevant objective value.
- 220** For the air quality neutral assessment, the change in floor space for each land use class arising from the November 2015 Amendments produces revised transport emissions benchmarks, as a result of a reduction in trip generation associated with the Amended proposed Development. The results indicate that as the actual emission rates remain lower than the benchmark emission rates, the transport emissions associated with the revised scheme are considered to be Air Quality Neutral, and as such the conclusions of the December 2014 ES and March 2015 ES Addendum remain valid.

## Noise and Vibration

- 221** *Chapter 10: Noise and Vibration* of the ES presents an assessment of the likely significant effects of the Proposed Development with respect to noise and vibration to surrounding properties, in terms of:
- Predicted noise and vibration levels from demolition and construction;
  - Predicted road traffic noise associated with construction activities;
  - Noise and vibration from the building services plant; and

- Any increases to road traffic, and the associated noise, attributed to the Proposed Development.

- 222** The assessment also considers the proposed amenity areas, suitability of the Site for development and the proposed residential uses, in line with relevant British Standards (in terms of internal noise levels), and the glazing / façade treatment required.
- 223** A baseline noise and vibration survey was undertaken to establish ambient noise and vibration levels at selected locations around the Site. It was noted that the noise environment is dominated by rail and road traffic on the surrounding transport network and vibration levels are dominated by train movement and overground / underground lines.
- 224** A Site suitability assessment has been undertaken in line with relevant standards and noise predictions have been carried out to determine the highest predicted noise level at each building façade of the Proposed Development. This assessment took account of glazing and ventilation recommended to provide suitable internal noise levels within the Proposed Development. Further assessment at the detailed design stage will confirm the mitigation requirements for individual residential units, to ensure that the appropriate internal criteria will be met, in line with the relevant standards. Due to the existing high baseline noise levels (i.e. dense urban areas adjoining the strategic transport network), proposed amenity areas will be designed to achieve the lowest practicable levels. Therefore, taking account of the recommended glazing and ventilation (as well as the design of the proposed amenity areas), the Proposed Development will be suitable for the proposed uses.
- 225** The assessment of noise associated with demolition and construction activities indicates that the Proposed Development may result in negligible to major adverse noise effects to nearby properties. However, it should be noted that construction noise predictions have been based on a worst-case scenario where, over the course of a working day, all plant are operational at all areas of the worksite. In reality, it is likely that the worst-case noise levels predicted will only occur for limited periods of time and will only be temporary. Additionally, taking account of mitigation measures, the Proposed Development may result in **negligible to moderate adverse** noise effects.
- 226** Temporary piling activities may occur close enough to some receptors to result in vibration being noticeable and having up to a moderate adverse effect. However, following the implementation of mitigation measures, the vibration effects will be no worse than **negligible to minor adverse** (depending upon the piling method used) but will not be strong enough to result in cosmetic building damage.

**227** Mitigation measures for demolition and construction noise and vibration include, but are not limited to, the following:

- Use of only modern, quiet and well maintained equipment;
- Situating noisy plant away from sensitive locations;
- Use of low impact techniques;
- Use of modern piling rigs;
- Use of electronically powered equipment run from the mains supply;
- Careful planning of the sequence of work in order to minimise the transfer of noise or vibration to neighbours; and
- The erection of acoustic screens where necessary.

**228** Construction haul routes have been planned on roads that experience high volumes of road traffic; therefore, increases in road traffic flows as a result of the construction of the Proposed Development would not result in a noticeable increase in road traffic noise levels. Consequently, changes in road traffic noise are expected to result in negligible to minor adverse effects (at worst). It is recommended that mitigation measures are employed as best practice to ensure that noise effects due to construction traffic remain insignificant. Mitigation measures include:

- Fitting vehicles with exhaust silencers;
- Adoption of timeslots for deliveries;
- Control of parking of vehicles near sensitive locations; and
- Use of clear and sufficient signage for designated routes.

**229** Changes in road traffic flows due to the operation of the Proposed Development will increase noise levels by an imperceptible level. Therefore, the effects of changes in operational road traffic flows and, as such, road traffic noise will be **negligible**.

**230** Noise limits (based on background noise levels measures in quiet areas around the Proposed Development) have been set for fixed plant associated with the proposed buildings. Fixed plant will be designed to produce noise levels that do not exceed these limits, resulting in a **negligible** effect in relation to plant noise levels.

### **Noise and Vibration - Update 2015**

#### **March 2015 ES Addendum**

**231** As the footprint of the Revised Scheme remains unchanged, it is concluded that in terms of the suitability of the Site, the predicted façade noise

levels and glazing recommendations presented in the December 2014 ES remain valid.

**232** Since submission of the December 2014 ES, no material changes have been made to the operational traffic flows or building services plant. Therefore all conclusions from the completed and operational noise assessment presented in the December 2014 ES remain valid.

#### **November 2015 Amendments**

**233** The revised opening year of 2019 and the amendment to the commercial and office floor space in the Amended Proposed Development has resulted in potential changes in road traffic noise levels.

**234** Comparison of the calculated baseline noise levels with the future noise levels calculated from the November 2015 amended road traffic flows indicates that changes arising from the Amended Proposed Development will result in a negligible effect on road traffic noise.

**235** Overall, the Amended Proposed Development does not result in any changes to the noise and vibration effects and significance presented in the December 2014 ES and March 2015 ES Addendum. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid.

### **Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare**

**236** *Chapter 11: Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution* presents an assessment of the Proposed Development's potential effect on daylight and sunlight availability to surrounding neighbouring properties as well as the internal daylight conditions, overshadowing, light pollution and solar glare. The technical analysis has been undertaken in accordance with the Building Research Establishment (BRE) 2011 Guidelines.

**237** It was not considered necessary to undertake a sun hours on ground assessment as there are no areas of amenity space situated to the north and directly adjacent to the Site.

**238** The properties surrounding the Site that have been identified as in residential use and therefore have the potential to be impacted by the Proposed Development (completed/operational), in terms of daylight / sunlight levels, include:

- Burham Uddin House;
- 154, 167 and 169 Commercial Street;
- 3, 5, 7, 9, 11&13, 15, 17, 30, 34, and 36 Elder Street;
- 6/6A, 8, 10, 12-14, 16, 17/17A, 18, 19, 21, and 23-27 Folgate Street;

- 21-26 (rear), 30, 31, 223, 226, 227, and 228 Shoreditch High Street; and
  - 4 Spital Square.
- 239** To assess the surrounding existing properties, the BRE Guidelines provide two main methods for assessing daylight: 'Vertical Sky Component' (VSC) and 'No Sky Line' (NSL).
- 240** The VSC method measures the amount of light available on a vertical wall or window following the introduction of barriers such as buildings. The NSL method is a measure of the distribution of daylight at the 'working plane' within a room (i.e. a horizontal 'desktop' plane of 0.85 metres (m) in height). The NSL divides those areas of working plane in a room which receive direct sky light through the windows from those areas of the working plane which cannot. Where all of the windows meet the VSC and all of the rooms meet the NSL criteria within a property the effect is considered to be negligible.
- 241** For the assessment of sunlight, the approach considers the 'Annual Probable Sunlight Hours' (APSH) for a reference point on a window (i.e. if a window point can receive at least 25% APSH, then the room should still receive enough sunlight). Windows are checked to see if they are facing 90° due south, with the emphasis on main living rooms and other rooms such as the kitchen and bedrooms being of less importance.
- 242** Overall, the daylight assessment modelling results have identified that the Proposed Development may have a **negligible to minor adverse** effect on the surrounding residential properties, with the exception of 9 Elder Street which has the potential to experience a **moderate adverse** effect, although those rooms identified as being affected are located on the upper floors; therefore it is likely that they are bedrooms which are considered less sensitive in terms of daylight compared to living rooms. In terms of sunlight the overall effect of the Proposed Development will be **negligible**, with isolated **minor adverse** effects to Burham Uddin House and the rear of 21-26 Folgate Street.
- 243** For the purposes of assessing whether the residents occupying the Proposed Development will receive adequate daylight levels, the BRE Guidelines direct to the 'Average Daylight Factor' (ADF) methodology, which considers how much light gets through the window glass, the size of the room and the angle of visible sky reaching the window. The NSL methodology is also used for assessment. Overall, the results of the internal daylight assessment identified that the Proposed Development will provide future occupants with accommodation that can be considered acceptable in terms of daylight and sunlight.
- 244** The transient overshadowing assessments indicate that the Proposed Development is likely to result in a **minor adverse** effect during winter (i.e. December), and a **negligible** effect during early spring (i.e. March) and summer (i.e. June) on the football pitches near Shoreditch Station.
- 245** Solar glare analysis was undertaken at identified sensitive locations (i.e. vehicle and pedestrian junctions) around the Site. The results indicate a potential **minor adverse** effect from viewpoints 2 (i.e. travelling east along Worship Street and stopping at a pedestrian crossing) and 8 (i.e. travelling south along Shoreditch High Street and stopping at traffic light), and a potential **minor to moderate adverse** effect from viewpoint 3 (i.e. travelling west along Fleur de Lis Street and stopping at a road junction). However, these effects can be mitigated through the use of a visor by drivers. The likely effect from the other viewpoints is considered **negligible**.
- 246** For the assessment of light pollution, the results indicate a potential **minor adverse** effect to Burham Uddin House and 6-18 Folgate Street, and a **negligible** effect on all remaining residential receptors surrounding the Site. Within the Site, future residential receptors (S3) may be impacted by light pollution from the surrounding urban surrounds however through the use of appropriate mitigation (such as blinds, sensor lighting or lighting strategies), the likely worst case effect is **minor adverse**.

### **Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare - Update 2015**

#### **March 2015 ES Addendum**

- 247** The qualitative assessment of the March 2015 ES amendments including the removal of the three bridges, concluded that the December 2014 ES presented the worst case scenario and that the likely effects of the Revised Scheme would be no worse in terms of daylight and sunlight effects. There is also no alteration to the effects previously reported in the December 2014 ES for either overshadowing or solar glare, and therefore the conclusions presented in the December 2014 ES remain valid.

#### **November 2015 Amendments**

- 248** The November 2015 Amendments comprise of internal and minor external massing changes, which are not considered to significantly alter the overall massing of the Revised Scheme considered for the March 2015 ES or the external finishes relevant for light pollution.
- 249** It is considered that the nature and scale of the November 2015 Amendments are not likely to affect the assessments presented within the December 2014 ES and subsequent March 2015 ES Addendum. As such, the conclusions set out within

the March 2015 ES Addendum, and the December 2014 ES, remain valid.

## Wind Microclimate

- 250** *Chapter 12: Wind Microclimate* of the ES sets out the effect of the Proposed Development on the wind microclimate of the Site and surrounding area. The wind environment around a development is defined as suitable for different types of activity such as sitting or walking based on empirical human comfort criteria (known as Lawson Criteria). The EIA has considered potential wind effects on buildings around the Site and within the Proposed Development footprint.
- 251** Wind tunnel tests have been conducted to provide a quantitative assessment of wind effects. Wind speed was measured at up to 76 locations, including potential entrances, amenity areas and thoroughfares within and around the Site as well as off-site locations surrounding the Site.
- 252** Wind tunnel tests were conducted using a 1:300 scale model devoid of landscape detail to determine the likely effects of the Proposed Development on the local microclimate. The proposed landscaping was then taken into consideration to account for any adverse conditions identified and the likely residual effects identified.
- 253** The results were compared with the Lawson Comfort Criteria and focused on the windiest (i.e. winter) and summer seasons. A photograph of the model in the wind tunnel is provided in Figure 7.

**Figure 7: Model in the Wind Tunnel**



- 254** In summary, in the absence of any proposed landscaping during the windiest season, pedestrian thoroughfares within and around the Site are generally consistent with the target wind conditions (i.e. leisure walking) or calmer than desired (**negligible to moderate beneficial** effects).
- 255** Similarly, the majority of entrances at ground level are consistent with the target conditions (i.e. standing/entrance use) or calmer than desired (**negligible to minor beneficial** effects), except at

one of the entrances to S1a with conditions suitable for leisure walking (**minor adverse** effect).

- 256** At ground level in the summer, amenity spaces was suitable for sitting (target conditions), representing **negligible** effects. The private terraces across the Site were suitable for sitting (target conditions – **negligible** effect) during the summer.
- 257** The effect of strong winds (i.e. in excess of Beaufort Force 6 for more than 1 hour per year) was also assessed and found that there is potential for conditions at the following locations to exceed the target microclimate conditions:
- South-west entrance to S1a;
  - A location in the north the Site, between S1c and S2; and
  - A location located off-site (corner of Shoreditch High Street and Worship Street) to the west of S1a.
- 258** The provision of the proposed mitigation (i.e. localised screening around the entrance, which could take either the form of solid or porous screens, planted trellises or shrubs in planters), particularly around the entrance to S1a, would assist in disrupting the wind. Mitigation would not be required at the 2 remaining locations which would experience strong winds, as they are located on thoroughfares where infrequent strong winds are unlikely to be a nuisance.

### *Wind Microclimate - Update 2015*

#### *March 2015 ES Addendum*

- 259** The qualitative assessment of the March 2015 ES amendments including: the removal of the three bridges; enlargement of S1C terrace; and changes to entrances on the Elder Street Elevation concluded that these minor changes would provide similar conditions to the December 2014 scheme (with all locations suitable for their intended use) and therefore no adverse effects are anticipated.
- 260** With regards to the additional floor (as a result of the floor to floor height recalibration) given that the changes occur within the planning parapet height (as assessed in the December 2014 ES), there will be no effect to the wind microclimate.
- 261** The conclusions from the completed and operational wind microclimate assessment presented in the December 2014 ES remain valid.

#### *November 2015 Amendments*

- 262** The predicted changes in wind microclimate in the local area arising from the November 2015 amendments is only likely to be minor. The location of the new entrance along Fleur De Lis Passage is likely to be suitable for intended use. It is considered that the changes involving the retention of the

existing roof profile at 12-13 Blossom Street is not likely to have a significant effect and the conclusions remain valid.

**263** Overall, the Amended Proposed Development does not result in any changes to the scale and magnitude of the wind microclimate effects identified in the December 2014 ES. As such, the conclusions set out within the March 2015 ES Addendum, and the December 2014 ES, remain valid.

## Water Resources, Drainage and Flood Risk

**264** *Chapter 13: Water Resources, Drainage and Flood Risk* of the ES presents an assessment of the effect of the Proposed Development on water resources, drainage and surface water run-off associated with the demolition / construction and operation of the Proposed Development. The chapter also examines the potential for flood risk associated with the Proposed Development. Consideration of potential effects is made in the context of the existing Site conditions; the nature of the demolition and construction works; and once the Proposed Development is completed and operational.

**265** The assessment has been based on professional judgement and a review of baseline data including British Geological Survey (BGS) maps, an Envirocheck Report, Environment Agency maps and desk studies, together with a review of relevant literature, policies and legislation. The assessment is supported by a Flood Risk Assessment and Conceptual Drainage Strategy.

**266** Potential effects that could arise from demolition and construction activities include: the creation of preferential pathways and disturbance to groundwater; disturbance of existing drainage systems and water supply networks; disturbance of potentially contaminated land; spills and leaks of contaminants; increase in suspended sediments; and an increase in water demand and wastewater generation affecting the supply and sewer networks respectively.

**267** The assessment indicates that through the incorporation of mitigation measures that form part of standard practice guidelines, and which apply control at the source or along the pathway of the pollution, the overall likely effect on the water environment during the demolition and construction phase of the Proposed Development will be **negligible to minor adverse**. Measures include, but are not limited to, the following:

- Decommissioning of boreholes and exposed surface water drainage pipes;

- Implementation of an emergency response plan;
- Designated storage of oils and hydrocarbons;
- Installation of cut-off ditches around excavations or exposed ground / stockpiles; and
- Use of water efficient fixtures and fittings.

**268** Pollution sources arising from operational uses that could affect surface and groundwater include leaks and spillages; contamination from below ground structures; flood risk; additional water demand; and additional wastewater generation.

**269** Mitigation measures implemented during the operational phase include for example: the use of interceptors in association with the drainage network; use of damp-proof membranes during the construction of foundations and substructure; and the use of water efficient fixtures and fittings.

**270** Upon completion and occupation of the Proposed Development, the effect to shallow groundwater will be **minor adverse**; the effect to the local supply network and local wastewater network will be **moderate beneficial**; and the effect to the River Thames will be **minor adverse to minor beneficial**.

**271** A Conceptual Drainage Strategy has been developed for the Proposed Development. This includes discharging surface water to the TWUL sewer network at a reduced rate, approximately 50% less than the existing Site run-off rates. Surface water generated on-site will be collected and channelled to a below ground attenuation tank system. This storage volume will accommodate runoff generated by the 1 in 100 year storm event, with an allowance for the effects of climate change. The Proposed Development will therefore be fully compliant with the requirements of the London Plan resulting in a **moderate beneficial** effect on the capacity of the local wastewater network. As the pressure on the local wastewater / sewer network is likely to be reduced, the effect upon flood risk is considered to be **minor beneficial**.

### **Water Resources, Drainage and Flood Risk - Update 2015**

#### **March 2015 ES Addendum**

**272** The surface water drainage strategy for the Revised Scheme will not be materially different to the December 2014 Scheme and therefore will remain as having a likely minor beneficial effect on flood risk.

**273** As the employee numbers have been reduced by 10 for the Revised Scheme, the potential water demand assessment presented in the December 2014 ES represents the worst case scenario. Overall, the

conclusions presented in the December 2014 ES remain valid.

### November 2015 Amendments

- 274** Whilst the November 2015 Amendments propose a reduction in office and commercial floor area, the Amended Proposed Development has not increased the impermeable area from the scheme considered within the December 2014 ES and it is considered that the surface water drainage strategy presented within the December 2014 ES will remain as having a minor beneficial effect on flood risk.
- 275** The November 2015 Amendments also have the potential of reducing the estimated number of staff occupying the Site by 60 persons (which includes the reduction of 10 persons estimated arising from the Revised Scheme presented in the March 2015 ES Addendum). It is considered that estimated scale of the reduction of staff is negligible relative to the overall predicted occupancy levels and that the conclusions presented in the December 2014 ES (and March 2015 ES Addendum) represents the worst case scenario in terms of the potential water demand and foul water generated.
- 276** Overall, the Amended Proposed Development does not result in any changes to the water resource, drainage and flood risk effects and significance presented in the December 2014 ES and March 2015 ES Addendum. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid.

## Archaeology

- 277** *Chapter 14: Archaeology* of the ES presents the findings of an assessment of the potential effects to the historic environment, specifically known or possible buried heritage assets / archaeology. The assessment summarises the archaeological implications of the Proposed Development only and does not cover potential effects to built heritage (e.g. listed buildings, conservation areas and their settings etc.).
- 278** The assessment has been based on the following:
- A desk-based study to set the Site into its archaeological and historical context, and establish the potential for archaeological remains, by collecting information on the known historic environment held within a 200m radius study area around the Site (which was considered through professional judgement to be appropriate to characterise the historic environment of the Site) and consulting a broad range of relevant documentary and cartographic sources

- (including published histories and journals and British Geological Survey data); and
- Three Site investigations undertaken in 2006, 2009 and 2014, which involved the excavation of test pits, evaluation trenches and the extraction of geoarchaeological core samples.
- 279** For the purposes of this assessment, the Site has been divided into three areas, and comprise:
- Area fronting Norton Folgate / Shoreditch High Street (note: for the purposes of this assessment, reference to Site S1 captures the plots comprising S1, S1a, and S1b);
  - Area to the north between Fleur De Lis Street and the railway (note: for the purposes of this assessment, reference to Site S2 captures the plots comprising S1c and S2); and
  - Area to the east (note: for the purposes of this assessment, reference to Site S3 captures the plot comprising S3).
- 280** Potential effects that could arise from the demolition and construction of the Proposed Development include truncation or removal of:
- Remains of Roman cut features (ditches, quarrying) or cultivation soils – located Site-wide;
  - Remains of Roman burials – located Site-wide;
  - Later Medieval remains including: an 11<sup>th</sup> – 12<sup>th</sup> century water system and 12<sup>th</sup> century road – located in Site S1;
  - Later Medieval Priory of St Mary Spital scheduled monument – located in Site S1 and Site S3;
  - Later Medieval features associated with the Priory – located Site-wide;
  - Later Medieval occupation outside the Priory) – located in Site S1; and
  - Post Medieval remains including the remains of 17<sup>th</sup> – 19<sup>th</sup> century cellars, wall foundations, waste pits or wells – located Site-wide.
- 281** The assessment indicated that, through the incorporation of mitigation measures (i.e. targeted archaeological excavation prior to development, a watching brief during ground works, archaeological evaluation trenches / pits, and a preliminary investigation including the archaeological monitoring of geotechnical pits), there would be no significant residual effects (**negligible**) to known and potential buried heritage assets, with the exception of the ground works within Site S1 and Site S3, which comprises the scheduled monument area of the medieval Priory of St Mary Spital (**major adverse**). Targeted mitigation measures, including archaeological investigation and evaluation, are similarly proposed. Prior written permission, known

as Scheduled Monument Consent (SMC), is also required from the Secretary of State for works physically affecting a scheduled monument.

### Archaeology - Update 2015

#### March 2015 ES Addendum

**282** The assessment of the Revised Scheme has enabled a more detailed review of the likely effects given that the only areas of the Priory and Hospital of St Mary Spital that are of the highest significance are fall within the southern part of S1. The potential impacts of the intrusive works are considered small scale and limited in their extent. All works in the north part of S1 fall outside of the Priory. The works in S3 are in the gardens of the priory which, whilst scheduled, are of lower archaeological significance. Overall the likely effects are considered **moderate adverse** on the Scheduled Monument, rather than the **major adverse** effect reported in the December 2014 ES. All other effects reported in the December 2014 ES remain valid.

#### November 2015 Amendments

**283** The December 2014 ES identified that a full basement under the entire footprint of the building will be constructed, with the basement slab at approximately 8.10 AOD, and 9.90 AOD on the eastern part of Building S1. The November 2015 amendments will also incorporate part of the existing 12 & 13 Blossom Street Warehouse basement, which is proposed to be lowered to 9.90 AOD. The existing Blossom Street Warehouse buildings to be retained sit on strip footings and these will be underpinned to provide structural support.

**284** Taking into account the nature and scale of the proposed November 2015 Amendments, and that works in the north part of S1 are outside of the Priory, it is not considered that the Amended Proposed Development would result in any new or change to the likely effects and significance concluded within the December 2014 ES and March 2015 ES Addendum.

**285** It is considered that the likely residual effects concluded in the December 2014 ES and March 2015 ES Addendum remain valid.

### Buried Heritage

**286** **Chapter 15: Built Heritage** presents the findings of an assessment of the potential effects to the built heritage assets, including statutory and locally listed buildings and structures, and conservation areas.

**287** During the Site Preparation, Demolition and Construction phase, the Proposed Development

will affect built heritage assets in two main ways. Buildings within the conservation area will be directly altered and demolished as part of the works. The setting of other buildings and the character and appearance of the conservation area will be affected by construction activities, which will have the effect of reducing temporarily the degree to which the heritage significance of built heritage assets in the vicinity of the Site will be appreciated. The works will not directly impact on the heritage receptors (conservation area, listed buildings), other than the part of the conservation area that includes the Site where unlisted buildings are being altered or demolished.

**288** Assuming the adoption of appropriate mitigation measures to protect and secure buildings (i.e. hoarding, propping, structural support), the works are likely to result in **minor adverse** effects (short term) as a worst case scenario.

**289** The exception to this is the listed street surface of Fleur De Lis Street. This will be removed, its fabric carefully set aside, and the carriageway rebuilt to restore its original appearance while incorporating necessary new features of the public realm design. The overall outcome for the listed street surface will be highly positive, and its improvement will, in turn, enhance the Elder Street Conservation Area and the setting of listed buildings. There is likely to be a **major adverse** effect (temporary) in the short term, prior to the reinstatement of the historic street surface.

**290** The Proposed Development retains, refurbishes and reuses the buildings on the Site that are of value and which can be reused. The new buildings have been carefully designed to respect the heritage assets on-site and within the surrounding area. The design of the Proposed Development therefore preserves and enhances the setting of listed buildings and locally listed buildings and the character and appearance of the Elder Street Conservation Area. The locally listed buildings that form part of the Site will be refurbished and repaired and provided with a sustainable and long term future.

**291** The built heritage assets in the vicinity of the Proposed Development will benefit from the improvement in the appearance and condition of the Site, as well as from the positive economic and social effects generated by the mixed-use development. The new development will give new life to the Site and the surrounding area. It will provide the older buildings of the Site with a long term and sustainable future in direct terms, and will indirectly help to do the same for the conservation area.

**292** The likely effects of the Proposed Development on the setting of the built heritage assets on-site and the surrounding area once completed and operational is **moderate to major beneficial** effect.

**Buried Heritage - Update 2015****March 2015 ES Addendum**

- 293** The removal of the bridges across Fleur De Lis Street will have a very small impact on this part of the Revised Scheme, and on the heritage assets (i.e. conservation area, listed buildings) within the local area. The remaining amendments comprising the Revised Scheme are assessed to have a negligible or no impact on the heritage assets considered.
- 294** Overall, the conclusions presented in the December 2014 ES on the likely effect of the Revised Scheme on the Elder Street Conservation Area, the locally listed buildings at 4-8 Elder Street and the listed Fleur De Lis Street remain valid.

**November 2015 Amendments**

- 295** The November 2015 amendments propose to retain the 12 & 13 Blossom Street Warehouse and undertake repairs and alterations to allow the building to be reused as office space and become a self-contained building within the overall development. These changes will involve less external change in the appearance of 12 & 13 Blossom Street than initially proposed, and therefore it is considered that the Amended Proposed Development will have a lesser impact on the character and appearance of the conservation area and on the setting of listed and locally buildings.
- 296** The November 2015 amendments are not considered to result in any new or change to the likely effects and significance concluded within the December 2014 ES and March 2015 ES Addendum in terms of the setting of the built heritage assets on-site and the surrounding area once completed and operational. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid.

**Townscape and Visual Impact Assessment**

- 297** *Volume II: Townscape and Visual Impact Assessment* provides an assessment of the visual effects of the Proposed Development. The assessment includes of a series of accurately prepared photomontage images or Accurate Visual Representations (AVR), that show the visibility and appearance of the Proposed Development from a range of viewpoints from publicly accessible locations around the Site.
- 298** The views included in the assessment were selected by the project team with agreement and input from LBTH officers. In total, 18 viewpoints were agreed, which comprised 17 local views and

view 9A.1 designated in the London View Management Framework (LVMF).

- 299** The assessment found that the Proposed Development would be compliant with relevant local, regional and national planning policy and guidance.
- 300** The potential effects of the Proposed Development on the character of the local and wider townscape, on views and on the townscape setting of designated heritage assets have been fully assessed and, where there is an effect, the effect has found to be of **no effect / minor to major beneficial**.
- 301** The construction works would be temporary and would have no residual townscape and visual effects beyond the completion of the Proposed Development.
- 302** An assessment has been undertaken which considers the urban character of the townscape surrounding the Site (divided into Townscape Character Areas, including 'Elder Street and Spitalfields' (in which the Site is located); 'South Shoreditch'; 'The City'; and 'Goodsyrd'), and whether the Proposed Development has the potential to affect townscape character. It is anticipated that the greatest indirect effects would be experienced on-site and in the area immediately around it (Townscape Character Area 1: 'Elder Street and Spitalfields'). The effect will be moderate to major beneficial.
- 303** In the surrounding Townscape Character Areas, the effect will be focused in those parts of them closest to the Site (as indicated by the relatively short distance of the viewpoints from the Site). The significance of these indirect effects would diminish with increasing distance from the Site and the likely effects range will from **minor to major beneficial**.
- 304** The Site lies in the Elder Street Conservation Area (CA) and the effect on this heritage asset will be **moderate to major beneficial**. Of the surrounding CAs (including South Shoreditch CA and Brick Lane and Fournier Street CA), accounting for the medium sensitivity of these areas, the effects of the Proposed Development will likely be **minor to moderate beneficial**.
- 305** The likely effect of the Proposed Development on the townscape settings of the surrounding statutorily listed buildings will range from **no effect** to a **moderate-major beneficial** effect. Locally listed buildings were considered as part of the assessment of effect on the townscape character areas within which the listed buildings are located.
- 306** The 'Visual Impact Assessment' (VIA), consisting of comparing the AVRs for both the 'existing' and 'proposed' scenarios, considered a range of views. The Proposed Development will have a **neutral or minor to major beneficial** effect on all views in which it will be visible.

- 307** Overall, the Proposed Development will reinforce the distinct character of the Elder Street Conservation Area and provide a stronger sense of place, particular to each part of the Site and the local area in general. New routes across the Site will enhance permeability, townscape quality of the conservation area and the surviving pockets of historic development in the wider area. The Proposed Development will positively address the streets with active edges and respond to the varied townscape character of the different street frontage within the Elder Street Conservation Area (including its varied townscape context).
- 308** Considered both in the round and in detail, in relation to views and other receptors identified in this assessment, the effect of the Proposed Development will be **beneficial** and will be greatest and most noticeable in the immediate vicinity of the Site. The Proposed Development will enhance the local townscape, successfully integrating the retained buildings and façades, as a valuable and positive element in terms of use, built form and design in the local area.

### **Townscape and Visual Impact Assessment - Update 2015**

#### **March 2015 ES Addendum**

- 309** The amendments to the Proposed Development, involving the removal of the glazed bridge links between building S1 and S1c and the reduction in the floor to ceiling heights of block S1c, required the following townscape views images to be updated: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 15, 16 and 17. The assessment of the amended views do not change the likely effects concluded in the December 2014 ES. Therefore the Townscape and Visual Impact Assessment effects as set out in the December 2014 ES remain valid.

#### **November 2015 Amendments**

- 310** The November 2015 Amendment comprises the retention of 12-13 Blossom Street and required the following views to be updated: 6, 7, 8, 12 and 14. Also, consideration of the other development schemes that have come forward since the preparation of the March 2015 TVIA Addendum require the following cumulative view images to be updated: 1, 2, 3, 4, 5, 6, 7, 11, 12, 13, 16, 17.
- 311** The assessment of the updated views, to account for the Amended Proposed Development and updated cumulative schemes, does not significantly change the likely effects as presented in the March 2015 TVIA Addendum. As such, the conclusions set out in the March 2015 TVIA Addendum and December 2014 TVIA remain valid.

## **Cumulative Effects**

- 312** **Chapter 16: Effect Interactions** of the ES assesses the effect of the Proposed Development in combination with the potential environmental and socio-economic effects of other developments in the surrounding area.
- 313** For the cumulative assessment, two types of effect have been considered:
- The effect interactions (referred as 'Type 1'), being the combined effects of individual effects for the project, for example noise, airborne dust or traffic effects on a single receptor; and
  - The combined effects of several development schemes (referred as 'Type 2') which may, on an individual basis be insignificant but, cumulatively, have a significant effect.

### *Combined Effect of Individual Effects*

- 314** **Chapter 16: Effect Interactions** presents the Type 1 (effect interactions) cumulative effects assessment throughout the demolition and construction stage of the Proposed Development, and the potential for effect interactions.
- 315** The residual effects (within each of the technical Chapters of **ES Volume 1**) have been reviewed against the resource / receptor or receptor groups they affect. Where there is more than one effect on a particular receptor, the potential for effect interactions will be determined. Only residual beneficial or adverse effects classified as being of minor, moderate, major have been considered. Residual negligible or neutral effects have been excluded from the Type 1 (effect interactions) cumulative effects assessment as, by virtue of their definition, are considered to be imperceptible to a receptor or resource.

### *Demolition and Construction*

- 316** There is potential for a series of potential effect interactions to take place during the demolition and construction phase of the Proposed Development, for the following resources / receptors / receptor groups:
- *Neighbouring Residential Property* have the potential to experience temporary and localised (i.e. dependent on the stage and location of the activities) an adverse combined effect in relation to air quality (dust emissions) and noise from the proposed works;
  - *Neighbouring and Local Commercial Properties and Business* also have the potential to experience temporary and localised adverse combined effect in relation to air quality and noise;

- *Demolition and Construction Workers* are likely to experience the combined effect of air quality and noise;
- *Local Population and Resources* – visitors to the Elder Gardens (Folgate Street) may also experience a potential temporary combined effect in terms of air quality and noise; and
- *Pedestrians and Users of the Cycle Network* also have the potential to experience a combined adverse effect in relation to air quality and noise when travelling in proximity of the Site, as well as the additional effect of temporary road and footway closures and diversions.

#### Completed Operational Development

**317** There is also the potential for combined effects of individual effects once the Proposed Development is built and operational to:

- *Neighbouring Residential Property* - residents who live within close proximity to the Site will experience the beneficial effects the scheme will bring to the immediate area, in terms of the provision of public open space, suitable microclimate for those moving within the surrounding public realm, and enhancement the character of the area from design of the new buildings and the retention of the historic elements within the Site. Despite the Proposed Development being within the benchmarks to be 'air quality neutral', the combined beneficial effect may however be lightly off-set in terms of the very low (imperceptible) emissions contributing to existing elevated pollution levels for the borough;
- *Neighbouring and Local Commercial Properties and Business* are also likely to benefit from the combined effect brought by the improved permeability, microclimate conditions and visual enhancement of the area. Local commercial properties and businesses will also benefit from the likely additional spending brought to the local area from the employment and residential provision to be generated on-site;
- *Future On-Site Users* of the Site will also experience a beneficial combined effect in relation to an improved open space and a suitable microclimate both within the Site and surrounding public realm. Users will also experience transport related effects in terms of reduced pedestrian delay and severance due to the improved permeability, as well as improved pedestrian amenity and facilities.
- *Pedestrian Cycle Network* – Users are likely to experience reduced pedestrian delay and

severance due to the improved permeability of the Site, as well as improved pedestrian amenity and facilities, with the beneficial effects of ease of movement in and around the Site enhanced with a comfortable microclimate at entrances and pedestrian thoroughfares. There is the potential for solar impacts with the potential to compromise those moving on the road network in proximity of the Site, however the solar glare impacts occur only for short periods, during certain times of the day.

#### **Cumulative Effects - Combined Effect of Individual Effects - Update 2015**

##### **March 2015 ES Addendum**

- 318** Each technical chapter has been reviewed for the residual effects for the Revised Scheme against the resource / receptor or receptor groups they affect.
- 319** Overall, the conclusions presented in each of the technical chapters remain unchanged in terms of likely effects and significance, and therefore the assessment presented in the December 2014 ES remain valid.

##### **November 2015 Amendments**

- 320** Each technical chapter has been reviewed for the residual effects for the Amended Proposed Development against the resource / receptor or receptor groups they affect.
- 321** Whilst the technical assessments and some residual effects (i.e. air quality) have been updated, with the exception of the updated effect interaction discussed below in terms of the likely effect on air quality, the conclusions drawn in respect of the potential for effect interactions does not change from those presented within the December 2014 ES and March 2015 ES Addendum, and therefore remain valid.

##### **Neighbouring Residential Property – Update 2015**

- 322** The nature of the likely effects (moderate-major adverse) identified on external receptors is emphasised by the updated IAQM and EPUK significance criteria, which increases the likelihood of moderate and major adverse effects occurring where total pollutant concentrations are already elevated beyond the relevant objective value. In this instance, concentrations are elevated beyond the objective value mainly as a result of high backgrounds pollutant concentrations, rather than the contribution predicted as a result of the Amended Proposed Development. This is confirmed by the air quality neutral assessment, which concludes that road traffic emissions associated with the Amended Proposed Development is below the benchmark values and that the Amended Proposed Development remains Air Quality Neutral.

### *Combined Effect of Proposed Development with Other Development Schemes*

- 323** The EIA has undertaken the Type 2 (combined effects) cumulative effects assessment (i.e. schemes that have been granted planning permission, including schemes already under construction) that may have an additive effect on the surrounding area within 1km and have a gross external area of more than 10,000m<sup>2</sup>. Some schemes that do not fit within the above criteria (i.e. have been submitted for planning but are pending a decision) have also been included within this assessment due to their proximity to the Site or scale of development.
- 324** The list of schemes identified for inclusion in the assessment of combined cumulative effects and their respective boroughs and planning application reference is provided as follows and is illustrated in Figure 9.

### ***Combined Effect of Proposed Development with Other Development Schemes - Update 2015***

#### ***March 2015 ES Addendum***

- 325** The status of the cumulative schemes identified in the December 2014 ES had been reviewed and it was confirmed that the list of cumulative schemes assessed for the December 2014 ES remain valid for consideration for the March 2015 Addendum.

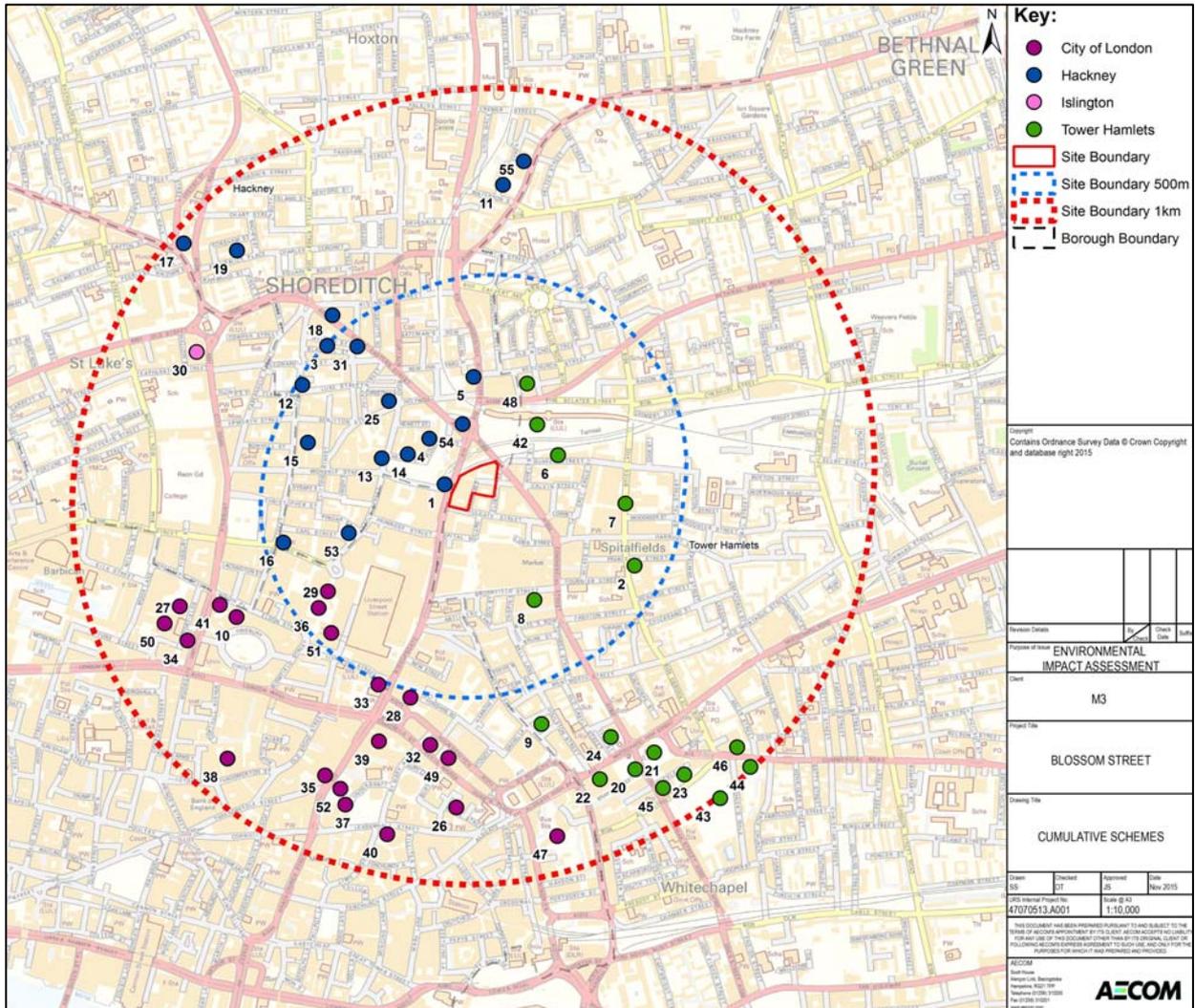
#### ***November 2015 Amendments***

- 326** Since the submission of the March 2015 Addendum, there have been several new applications come forward for development, including applications for revisions of the proposed development schemes considered within the list of other development schemes (i.e. cumulative schemes) presented in the December 2014 ES.
- 327** An updated list of developments has been considered for assessment and presented below. The location of each scheme considered in the assessment of cumulative effects is shown in Figure 8A, which replaces the corresponding figure (Figure 9) presented in the December 2014 NTS.
1. Principal Place (LBH) (2011/0698);
  2. 86 Brick Lane (LBTH) (PA/13/00494);
  3. 10 – 50 Willow Street (LBH) (2010/1067);
  4. The Stage Shoreditch (LBH) (2012/3871);
  5. 187 - 193 Shoreditch High Street and land bounded by Shoreditch High Street (LBH) (2012/3792);
  6. Silwex House (LBTH) (PA/07/02310);

7. Land within former Truman's Brewery Site, on corner of Spital Street and Buxton Street (LBTH) (PA/12/00090);
8. London Fruit & Wool Exchange, Brushfield St, 99–101 Commercial Street, 54 Brushfield St & Whites Row Car Park, London (LBTH) (PA/11/02220);
9. Site At 3-11 Goulston Street And 4-6 And 16-22 Middlesex Street, London (LBTH) (PA/12/02045);
10. River Plate House 7 - 11 Finsbury Circus (north) (COL) (12/00812/CAC);
11. 1-13 Long Street (LBH) (2012/2013);
12. 49-51 Paul Street (LBH) (2012/0816);
13. 115 Curtain Road (LBH) (2012/0789);
14. Electricity Substation (LBH) (2012/3873);
15. 12-20 Paul Street & 83-105 Clifton Street (LBH) (2011/1922);
16. 5-29 Sun Street, 1-17 Crown Place 8-16 Earl Street and 54 Wilson Street (LBH) (2009/2464);
17. 145 City Road (LBH) (2012/3259);
18. 84-86 Great Eastern Street and 1-3 Rivington Street (LBH) (2009/2405); and new application 2015/1834);
19. Site bound by Corsham Street, Brunswick Place and Baches Street (LBH) (PA/14/00255);
20. Former Beagle House Now Known As Maersk House (LBTH) (PA/14/00255); and new application PA/15/01209);
21. Aldgate Place (LBTH) (PA/13/218);
22. Aldgate Tower (LBTH) (PA/04/01190);
23. Site At 61-75 Alie Street And 16-17 Plough Street And 20 Buckle Street, Alie Street (LBTH) (PA/07/1201 and PA/10/1096);
24. Former Site At 1 Commercial Street And 111 To 120 Whitechapel High Street (LBTH) (PA/05/229);
25. 65-75 Scrutton Street and 45 Curtain Road (LBH) (2011/3593);
26. Mitre Square (COL) (10/00371/FUL MAJ);
27. Tenter House 45 Moorfields (COL) (11/00297/OUTL);
28. Land bounded by Stone House & Staple Hall (COL) (10/00152/FUL EIA);
29. 5 Broadgate (COL) (10/00904/FUL EIA);
30. 210 - 218 Old Street, 70-100 City Road, 32-37 Featherstone Street and 13-15 Mallow Street (LBI) (P101833);
31. 61-67 Great Eastern Street, 5 Ravey Street and 93 Leonard Street (LBI) (2012/0506);

- 32. 60-60 St Mary Axe (COL) (08/00739/FUL EIA);
- 33. 117, 119 & 121 Bishopsgate, Aldermans House, 34-37 Liverpool Street, 1 Aldermans Walk & part of White Hart Court (COL) (09/00192/FUL MAJ);
- 34. 101 Moorgate (COL) (11/00773/FUL EIA);
- 35. 15 Bishopsgate (COL) (12/00309/FULL); and Revised application (14/01251/FULMAJ);
- 36. 3 Broadgate Circle (COL) (12/00431/FULL);
- 37. 1 Angel Court & 33 Throgmorton Street (COL) (10/00889/FUL);
- 38. 22-24 Bishopsgate, 38 Bishopsgate (Crosby Court) & 4 Crosby Square (COL) (06/01123/FUL EIA); and new application 15/00764/FULEIA);
- 39. 61 St Mary Axe, 80-86 Bishopsgate, 88-90 Bishopsgate, 12-20 Camomile Street, 15-16 St Helens Place & 33-35 St Mary Axe (COL) (11/00332/FUL EIA) and (06/00796/FUL EIA);
- 40. 52-54 Lime Street & 21-26 Leadenhall, 27 & 27A Leadenhall Street & 4-5 Billiter Street (COL) (12/00870/FUL EIA);
- 41. 120 Moorgate (COL) (11/00231/FUL MAJ);
- 42. Bishopsgate Goodsyrd (LBTH) (PA/14/2011); and amendments application PA/14/02011 (LBTH) and 2014/2425 (LBH));
- 43. Goodman's Fields Site (LBTH) (PA/11/03587); and new application South East block Of Goodmans Fields, 74 Alie Street, London (PA/14/02817);
- 44. 60 Commercial Road (LBTH) (PA/10/1481);
- 45. 15-17 Leman Street (LBTH) (PA/14/00286 and (PA/11/03693); and
- 46. 27 Commercial Road (LBTH) (PA/13/2338).
- 47. 15-16 Minories & 62 Aldgate High Street London EC3N 1AX (COL) (13/01055/FULMAJ);
- 48. Land bounded by 2-10 Bethnal Green Road, 1-5 Chance Street (Huntingdon Industrial Estate) and 30-32 Redchurch Street (LBTH) (PA/13/01638);

**Figure 8A Location of the Cumulative Schemes in Relation to the Site**



49. **Bevis Marks House 24 Bevis Marks London EC3A 7JB (COL) (14/00433/FULMAJ);**
50. **21 Moorfields, Land Bounded By Moorfields, Fore Street Avenue, Moor Lane & New Union Street, London, EC2P 2HT (COL) (14/01179/FULEIA);**
51. **100 Liverpool Street & 8-12 Broadgate, London EC2M 2RH (COL) (14/01285/FULEIA);**
52. **22 Bishopsgate, London, EC2N (COL) (15/00764/FULEIA);**
53. **13 - 14 Appold Street Hackney London EC2A 2NB (LBH) (2015/1685);**
54. **201-207 Shoreditch High Street and 1 Fairchild Street Hackney London E1 6LG (LBH) (2015/2403); and**
55. **97-137 Hackney Road London E2 8ET (LBH) (2015/3455).**

**328** The Type 2 (combined effects) cumulative effects assessment has been undertaken, both during the demolition and construction phase; and once the Proposed Development is completed and operational. A summary of the cumulative effects is provided below.

#### *Demolition and Construction*

**329** A likely beneficial cumulative effect of the construction of the Other Development schemes and the Proposed Development will be the generation of employment opportunities at a local level, as well as for the Greater London economy.

From the majority of technical subjects covered within the ES, the Proposed Development is not expected to significantly contribute to adverse cumulative effects with Other Development schemes during the demolition and construction phase, as long as standard mitigation measures (as has been detailed within this ES) are implemented and adhered to, such as appropriate traffic management and routing; provision of hoarding surrounding the Site, implementing best practice and adhering to the protocols and procedures detailed within the LBTH CoCP, GLA and Defra guidance, as well as industry guidance provided by organisations such as IAQM and BRE.

**330** It is assumed that the demolition and construction works associated with the other development schemes would adhere to legislative requirements, and industry guidance and best practice. But despite this, the practicality is that there remains the potential for cumulative effects to arise, particularly with respect to dust, noise and waste.

**331** However the potential effects would be localised and dependant on the proximity of the proposed schemes relative to the Site, as well as being dependent on the associated timing and the

duration of their construction program (i.e. overlap), and in particular the timing and duration of those construction activities generating the effects. The Principal Contractor will meet with neighbouring developers of other construction schemes and LBTH prior to works being undertaken on-site to discuss potential clashes and to mitigate the impact, if necessary. The Principal Contractor will consult in relation to the programme and potential for local impacts during the construction phase to ensure that works are planned so as not to cause unnecessary disruption.

#### *Completed Operational Development*

**332** As with the demolition and construction phase, the implementation of standard best practice (i.e. scheme designed to achieve appropriate operational noise limits; legislative requirements for land contamination and remediation will be followed; management techniques for handling operational waste in accordance with policy and guidance) will help to avoid or minimise any cumulative effects on the surrounding environment. However, this in itself may not be sufficient when considered in relation to the existing baseline. For example, any increase in NO<sub>2</sub> concentrations in terms of air quality when considering predicted cumulative traffic flows (i.e. year 2019) will be of adverse significance given that the background concentrations for the LBTH already exceed the air quality objective (note: the air quality neutral assessment concluded that the contribution in terms of emissions arising from the Proposed Development is within the benchmark values and is considered as being 'neutral').

**333** Under the cumulative scenario in terms of daylight and sunlight level on surrounding existing residential properties, there is the potential for adverse effects, particularly when taking into account the Bishopsgate Goodsyard development which has a notable impact compared to when considering the Proposed Development in isolation. However the residual levels are characteristic of a dense urban environment and it is considered that the overall likely effect on daylight levels would be considered as **minor adverse**.

**334** In line with the principles relating to planning obligations set out in the LBTH Planning Obligations SPD, it is assumed that each of the Other Development schemes would negotiate appropriate contributions (i.e. financial or in-kind contributions) which would help in the provision of meeting the local community needs in terms of social infrastructure and improve the local urban environment, in areas such as education, amenity provision (i.e. open space, landscaping), and health services.

**335** On completion of the Proposed Development there is the potential for **beneficial combined cumulative effects** relating to:

- If all the proposed schemes are realised, along with the Proposed Development, they will provide a substantial amount of new residential housing and positively contribute to meeting the Mayor of London's and LBTH's housing targets in terms of dwelling mixes, types and tenures;
- The realisation of all the proposed schemes will cumulatively contribute to the provision of new commercial, leisure and amenity space to help meet the needs of the new population and surrounding neighbourhoods. The new employment space will provide job opportunities for existing and new residents to the area, as well as increased spending on local goods and services;
- If assume that the approach to evaluating whether the land for the Other Development schemes is contaminated adheres to the legislative requirements and guidance, then should remediation of these Sites involve the removal of contaminated land, this will have a beneficial effects on the overall ground condition for the local area and associated beneficial effects on groundwater;
- Accounting for the proposed schemes in the surrounding area will have a generally beneficial effect on wind conditions at the Site. It has been assessed (as a worst case scenario, in the absence of any landscaping for the wind tunnel tests) that the microclimate for pedestrian thoroughfares, entrance and amenity locations would experience conditions the same or calmer compared to the Proposed Development in isolation;
- Increased capacity to the local TWUL sewer network, whereby if all schemes considered provide attenuation measures to at least 50% existing peak run-off rate (requirement of NPPF, London Plan), then there will be a beneficial effect in terms of local flood risk, as well as to the quality of the River Thames by contributing to the reduction of the number of discharges from the Combined Sewerage Outfalls; and
- In terms of views, there would be no change to the likely effects as a result of the consideration of the other development schemes within the viewpoints assessed. In all cases where there is a likely cumulative effect, such an effect will be beneficial.

### **Combined Effect of Proposed Development with Other Development Schemes - Update 2015**

#### **March 2015 ES Addendum**

- 336** Each technical chapter has been reviewed for the likely cumulative effects arising from the other development schemes, in combination with the Amended Proposed Development.
- 337** As the list of cumulative schemes remained unchanged, the technical chapters concluded that the assessments presented in the 2014 ES remain valid.

#### **November 2015 Amendments**

- 338** The Type 2 (combined effects) cumulative effects presented in the December 2014 ES (for both the demolition and construction, and once the amended Proposed Development is completed and occupied) have been updated in line with the updated list of cumulative scheme that have come forward since the preparation of the March 2015 ES Addendum.
- 339** Taking into account the location of the additional schemes, together with their nature, scale and that the schemes adopt industry standard best practice measures and compliance with policy, it is considered that the updated cumulative list for consideration is expected to have minimal change and not alter the conclusions of the cumulative effects reported in the March 2015 ES Addendum. As such, the conclusions set out within the March 2015 ES Addendum and the December 2014 ES remain valid..

## **Residual Effects and Conclusions**

- 340** Residual effects are defined as those effects that remain following the implementation of mitigation measures. Mitigation measures relate to each of the key phases (design; demolition and construction; or operation) of the Proposed Development and are discussed in full in the relevant technical chapters of **ES Volume I**. Each technical chapter also contains detailed summary of both positive (beneficial) and negative (adverse) residual effects arising.
- 341** **Chapter 17: Residual Effects and Conclusions** provides an overview and conclusions of the residual effects of the Proposed Development.
- Demolition and Construction*
- 342** The following are the key residual effects and conclusions identified from the assessments to arise during the demolition and construction phase:
- 343** Throughout the demolition and construction programme, the majority of residual effects identified have been assessed as being sufficiently mitigated in terms of the measures proposed and not being significant to warrant further assessment or measures over and above those already proposed;

- 344 Likely to be temporary, **minor adverse** effects relating to local waste infrastructure, water resources (groundwater system), construction dust, noise and vibration, pedestrian and cycle network closures, and built heritage effects to listed buildings and the Elder Street Conservation Area;
- 345 Likely to be temporary **negligible to moderate adverse** effects relating to noise and vibration effects to 1 Blossom Street and 9 Folgate Street; and
- 346 Likely to be a temporary **major adverse** effect on St Mary Spital Priory Scheduled Monument and later medieval features associated with the Priory. Prior written permission, known as Scheduled Monument Consent (SMC), will be required from the Secretary of State for works physically affecting a scheduled monument.
- 347 The Applicant will develop and implement a Demolition and Construction Environmental Management Plan (DCEMP) which will outline how will implement best practice and adhere to the protocols and procedures detailed within the LBTH CoCP, GLA and Defra guidance, as well as industry schemes such as 'Considerate Contractors Scheme' and guidance provided by organisations such as IAQM and BRE. The DCEMP will include roles and responsibilities, detail on control measures and activities to be undertaken to minimise environmental effects, and monitoring and record-keeping requirements.
- Completed Operational Development*
- 348 The following are the key residual effects and conclusions identified from the assessments to arise during the completed development / operational phase:
- 349 On completion of the Proposed Development, the majority of likely residual effects have been assessed as not being significant, with likely effects ranging from **minor adverse, negligible to minor beneficial**. The Proposed Development is also likely to generate significant effects within the local and wider surrounding area;
- 350 The residential element of the Proposed Development will provide a positive step towards meeting the objectives and targets for new housing provision (i.e. market, affordable) within LBTH and Greater London as a whole (minor beneficial effect);
- 351 The office-led scheme, supplemented by retail floor space (i.e. shops and restaurants / cafes), will offer beneficial opportunities in terms of employment and increased spending within the local area;
- 352 Will provide a high quality scheme that will provide a significant positive visual contribution to the urban character of the local and wider surrounding area, incorporating into the scheme the locally listed and non-designated buildings and structures of heritage value and significance on site, and in doing so positively contributing to the setting of the designated heritage assets in the surrounding area, as well as the enhancement of the character of the Elder Street Conservation Area;
- 353 Offer beneficial opportunities in terms of employment opportunities and increased spending within the local area;
- 354 Incorporate a drainage strategy which has been designed to attenuate surface water run-off rates, benefitting the local sewer network and reducing the potential risk of flood on-site and to the surrounding area;
- 355 Ecological enhancement to increase the biodiversity of the Site, through the provision of plantings at roof level, native trees and shrubs, in order to create suitable habitats and foraging opportunities;
- 356 Proposed Development offers amenity for occupiers and visitors to the Site, and those working and residing within the surrounding local area, which is largely deficient in terms of open space and play space;
- 357 Proposed Development seeks to minimise energy use and emissions through an energy strategy that adopts a centralised site-wide system that is based on electric supply which will not generate additional emissions at the location of the Site.
- 358 Despite the very low NO<sub>2</sub> contributions to the existing elevated pollution levels that are above the Air Quality Strategy Objective threshold identified for LBTH, the results of the 'air quality neutral' assessment conclude that the development is 'neutral' in terms of its emissions, falling within the benchmarks for transport and the fact that no on-site emissions of NO<sub>2</sub> and PM<sub>10</sub> are generated by virtue of the proposed energy strategy.
- 359 There is the potential for the Proposed Development to affect neighbouring residential developments in terms of daylight / sunlight, as well as the potential for the instance of solar glare at some junctions, albeit the effect would be temporary and/or at a junction which experiences minor, slow traffic (i.e. Fleur de Lis Street).
- 360 Overall, the Proposed Development accords with the overall objectives of planning policies at national, regional and local levels, and is considered to be in accordance with the Government's objectives for sustainable development. It is acknowledged that the Proposed Development may result in some adverse effects, particularly during the demolition and construction phase. However, the positive benefits of the redevelopment of the Site and its contribution to the surrounding area, in terms of the amenity provision, amenity, heritage, environmental,

commercial and social aspects, are considered to outweigh these.

### **Residual Effects and Conclusions - Update 2015**

#### **March 2015 ES Addendum**

- 361** Each technical chapter has been reviewed for the likely cumulative effects arising from the other development schemes, in combination with the Amended Proposed Development.
- 362** In terms of archaeology, the assessment of the Revised Scheme has enabled a more detailed review of the overlay of the Proposed Development on the Site. As such the assessment of effects on the Priory and Hospital of St Mary Spital Scheduled Monument has been updated to consider the fact that the only areas of the Priory and Hospital of St Mary Spital that are of the highest significance are in the southern part of S1. This is where the intrusive works are small and limited to works that are essential for the redeveloped buildings to function efficiently or where new foundations are required such as under 14 and 15 Norton Folgate. All works in the north part of S1 are outside of the Priory. The works in S3 are in the gardens of the priory which, whilst scheduled, are of lower archaeological significance. This would result in a moderate adverse effect on the Scheduled Monument, rather than the major adverse effect reported in the December 2014 ES.
- 363** Overall, the remainder of the conclusions presented in each of the technical chapters remain unchanged in terms of likely effects and significance, and therefore the assessment presented in the December 2014 ES remain valid.

#### **November 2015 Amendments**

- 364** Each technical chapter has been reviewed for the residual effects for the Amended Proposed Development against the resource / receptor or receptor groups they affect.
- 365** Whilst the technical assessments and some residual effects (i.e. archaeology, air quality) have been updated, the residual effects do not change from those presented within the December 2014 ES and March 2015 ES Addendum, and therefore remain valid.
- 366** In terms of air quality, the nature of the likely effects identified on external receptors is emphasised by the updated IAQM and EPUK significance criteria, which increases the likelihood of moderate and major adverse effects occurring where total pollutant concentrations are already elevated beyond the relevant objective value. In this instance, concentrations are elevated beyond the objective value mainly as a result of high backgrounds pollutant concentrations, rather than

the contribution predicted as a result of the Amended Proposed Development. This is confirmed by the air quality neutral assessment, which concludes that road traffic emissions associated with the Amended Proposed Development is below the benchmark values and that the Amended Proposed Development remains Air Quality Neutral.

### **Environmental Statement Availability**

- 367** The ES is available for viewing by the public during normal office hours at the LBTH's Planning Department. Comments on the planning application should be forwarded to the LBTH at the following address:
- Planning Department  
The Town Hall  
Mulberry Place, 5 Clove Crescent,  
London, E14 2BG
- 368** Additional copies of the full ES (Volume I, II and III) and Non-Technical Summary are available in electronic format from URS AECOM at the following address:
- ~~URS~~ AECOM  
St Georges House  
5 St Georges Road  
Wimbledon  
London SW19 4DR

### **References**

- Ref. 1 Her Majesty's Stationary Office, (2011); The Town and Country Planning (Environmental Impact Assessment) Regulations 2011.
- Ref. 2 Department of Communities and Local Government (March 2012) National Planning Policy Framework.
- Ref. 3 Department of Communities and Local Government, (2014); Planning Practice Guidance.
- Ref. 4 Greater London Authority (2011); The London Plan Spatial Development Strategy for Greater London.
- Ref. 5 Mayor of London (2013); The London Plan Spatial Development Plan for Greater London Revised Early Minor Alterations Consistency with the National Planning Policy Framework, October 2013.
- Ref. 6 Mayor of London (2014) Draft Further Alterations to The London Plan, The Spatial Development Strategy for Greater London, Draft Further Alterations to the London Plan July 2011 Consolidated with Revised Early Minor Alterations October 2013.

- Ref. 7 London Borough of Tower Hamlets (2010): Local Development Framework - Core Strategy 2025 DPD. Adopted September 2010.
- Ref. 8 London Borough of Tower Hamlets, (2013): Managing Development Document, (MDD): Development Plan Document, (DPD).
- Ref. 9 Greater London Authority, (2012); London View Management Framework Supplementary Planning Guidance.
- Ref. 10 Her Majesty's Stationary Office, (2015); The Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2015.
- Ref. 11 Greater London Authority, (2015); The London Plan: Spatial Proposed Development Strategy for Greater London (Consolidated with Alterations since 2011).



