UKCMRI, London

EIA SCOPING REPORT

UKCMRI Construction Limited

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1. INTRODUCTION

1.1 Background

UKCMRI Construction Limited (hereafter referred to as 'The Applicant' or UKCMRI) intends to seek planning permission for construction of a biomedical research facility at 1-2 Brill Place (hereafter refered to as 'the Site'), within the administrative boundary of the London Borough of Camden (LBC).

The Application Site has an area of approximately 1.47 hectares (ha) and is bounded by Ossulston Street to the west, Brill Place to the north, Midland Road to the east and the British Library, associated car park and vacant land to the south of the site. St. Pancras Station is located opposite the site, adjacent to Midland Road providing International rail connections via the Eurostar, National rail services via the Midland Mainline, First Capital Connect, South Eastern Services to Kent, Thameslink and the London Underground via the Northern Line, Victoria, Circle, Hammersmith and City and Metropolitan line. Other stations in close proximity to the Site include King's Cross Station located approximately 250 metres (m) to the east (mainline and London Undergound Limited (LUL) services).

The Site is centred upon National Grid Reference (NGR) TQ 298 830. A site location plan and a redline boundary for the Site are provided as Figures 1 and 2 respectively within Appendix A.

1.2 The Need for an Environmental Impact Assessment (EIA)

Applications for developments that are covered by the Town and Country Planning Environmental Impact Assessment (EIA) (England and Wales) Regulations 1999 (as amended 2006 and 2007) are termed 'EIA applications'. Screening of developments to identify whether an EIA is necessary is based on the likelihood of significant impacts arising from the project. EIA applications are divided into Schedule 1 and Schedule 2 applications under the Regulations, which govern all applications post 14 March 1999.

Schedule 1 developments constitute those, which are likely to have significant effects such as major chemical or petrochemical projects and construction of ground or air transport infrastructure. For all other developments, which fall under Schedule 2, the need for an EIA is determined on the basis of set criteria as follows:

1. It is within one of the classes of development stated in Schedule 2; AND
2. EITHER it exceeds the size threshold for that class of development in Schedule 2; OR it is in a sensitive area; AND
3. It is likely to have significant effects on the environment.

The Proposed Development is an 'urban development project' because it falls into one of the classes stated in Schedule 2. With regard to criteria 2 above for an 'urban development project' item 10 of the Schedule 2 states that an EIA is required if; "*The area of the development exceeds 0.5 hectares*."

There is no definitive classification within Schedule 2 of the EIA Regulations. However, because of the unique purpose of the Proposed Development, its location within an urban area, its exceedance of the size threshold for the class of development and the likelihood of significant effects on the environment, an EIA will be undertaken and an Environmental Statement (ES)

submitted in support of the planning application, in line with EIA Regulations and relevant guidance.

1.3 The Purpose of Scoping in the EIA Process

Scoping forms the first stage of the EIA process. It refers to the activity of identifying those environmental aspects that may be significantly affected by the Proposed Development. In doing so, the potential significance of impacts associated with each environmental aspect becomes more clearly defined resulting in the identification of a number of priority issues to be addressed in the EIA. This process focuses the assessment on the issues critical to the achievement of planning consent in relation to both national and regional regulations and on a more local scale taking guidance from the regional specific Planning Policy for LBC.

Regulation 10 of EIA Legislation for the European Union provides that an applicant may ask the Local Planning Authority to state in writing its opinion as to the scope of the ES. The purpose of this document is to provide LBC with the opportunity to comment, along with other consultees, on the scope of work proposed for the EIA and the content of the ES.

1.4 Structure of the Scoping Report

The remainder of the Scoping Report is structured as follows:

- **Section 2** describes the existing Site and the surrounding area;
- **Section 3** provides a description of the Proposed Development;
- **Section 4** summarises the consultations that have taken place to date and those planned during the EIA process;
- **Section 5** lists the sensitive receptors that have the potential to be affected by the proposals;
- **Section 6** presents the broad principles of the EIA methodology and a summary of the scope and methodology proposed to assess the key environmental issues;
- **Section 7** summarises the key issues and potential environmental effects of the proposals; and
- **Section 8** outlines the proposed structure of the ES.

2. THE SITE AND ITS SURROUNDINGS

2.1 Existing Site Description

As mentioned previously, the 1.47 ha site is located in the LBC and is bounded to the west by Ossulston Street, Brill Place to the north, Midland Road to the east and the British Library and associated car park to the south of the site. Being in a central London location, it benefits from excellent public transport links including St. Pancras Station, located approximately 50m to the southeast; King's Cross Station, approximately 250m to the east and Euston Station, located approximately 300m to the southwest.

The Site falls completely outside the background assessment area for strategic views to St. Paul's from Blackheath Point, as defined within the London Plan: London View Management Framework.

A series of three pre-fabricated buildings currently exist on the eastern half of the site, however the Site is under demolition, which is due for completion in the next few months. The buildings are three storeys in height and are occupied by contractors responsible for the Channel Tunnel Rail Link (CTRL) and associated works at St. Pancras Station. The northeast corner of the Site is hardstanding.

2.2 The Surrounding Area

The buildings in the immediate vicinity of the site are predominantly residential and public buildings and local landmarks such as The British Library. The King's Cross/St. Pancras Conservation Area is located directly east of the site bordering onto Midland Road and extending further east including St. Pancras and King's Cross Stations. The Regents Canal Conservation Area adjoins the King's Cross/St. Pancras Conservation Area and is located approximately 300m northeast of the Site and extends further northwest along Regents Canal for approximately 2000m. The listed buildings within the immediate vicinity of the site, include:

- The British Library, situated directly south of the Site;
- Grade I listed St. Pancras Station, located approximately 50m southeast of the Site;
- Grade I listed King's Cross Station, located approximately 300m east of the Site;
- Grade II listed Walker House (north side of southern block) including The Cock Tavern Public House on Phoenix Road located approximately 70m west of the Site;
- Grade II listed Chamberlain House, 86-100 Chalton Street, located approximately 80m southwest of the Site;
- Grade II listed 44-58 Chalton Street, including shops along Phoenix Road, located approximately 80m southwest of the Site; and
- Grade II listed Levita House, 16A-76A Chalton Street, attached shops, screen & Somers Town Coffee House, located approximately 130m southwest of the Site.

There are two areas of open space located in close proximity to the Site:

- St Pancras Gardens located approximately 330m north of the Proposed Development; and
- Purchese Street open space located approximately 30m north of the Proposed Development.

3. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The Proposed Development involves the phased construction of a ground plus four to seven storey building. The building will be aligned parallel with Brill Place and step up in height from approximately four storeys in the west to seven storeys in the east adjacent to St. Pancras Station.

The building will be used as a biomedical research centre. The total Gross External Area (GEA) of the building is likely to be approximately 57,400 square metres (m^2) accommodating laboratories, offices, laboratory support and associated uses throughout the building. Plant associated with the building and associated facilities will be located on various floors within the Proposed Development. One basement level is proposed, approximately 6m in depth which will extend across the building footprint.

There will be no provision for managed car parking, but allowance will be made for a certain amount of disabled parking spaces and limited parking to accommodate visiting service engineers. Bicycles parking will be in accordance with LBC Unitary Development Plan (UDP) Parking Standards, subject to detailed design.

Landscaping is also proposed at ground level. The main entrance to the building will be situated on Midland Road opposite the concourse exit from St. Pancras Station. A separate servicing entrance is planned along Brill Place.

At this stage the design is not fixed, and is subject to an on-going evolutionary process in response to the consultation process outlined below. The design will be frozen, prior to full assessment, following the consultation process.

4. CONSULTATION

Consultation is a vital pat of an ongoing design process and important to the development of a comprehensive and balanced ES. Views of the interested parties serve to focus the environmental studies and to identify specific issues that require further investigation.

For the consultation process it will be important to involve key consultees in the evolution of the design and preliminary assessment of environmental impacts. These will include, but not be limited to:

- London Borough of Camden (LBC);
- Greater London Authority (GLA);
- Commission for Architecture in the Built Environment (CABE);
- Government Office for London (GOL):
- London Development Agency (LDA);
- Environment Agency (EA);
- English Heritage;
- Transport for London (TfL);
- British Library; and
- Local residents and other interested parties.

5. POTENTIAL ENVIRONMENTAL SENSITIVITIES/SENSITIVE RECEPTORS

When undertaking an EIA it is important to understand which receptors will be considered as part of the assessment. A site walkover has been undertaken and initial studies have revealed the following potential sensitive receptors to the Proposed Development:

- Occupants of residential flats located along Ossulston Street, Phoenix Road, Midland Road and Coopers Lane, off Brill Place;
- Local pedestrians, cyclists and road users;
- British Library;
- Users of Purchese Street open space;
- Occupants of nearby retail units;
- Listed Buildings in the vicinity (e.g. the Grade I listed St. Pancras and King's Cross Stations and the Grade II listed Levita House);
- Background strategic views from St. Paul's across the western half of the Site; and
- Key short, medium and long-distance views.

6. ISSUES TO BE ADDRESSED BY THE EIA

6.1 Introduction

The EIA and associated technical studies will reflect current legislation and relevant guidelines and will be carried out in accordance with statutory guidance including the requirements for the contents of an ES. For the EIA to be an effective decision-making tool, the ES needs to focus on the most potentially significant environmental issues. These issues have been identified through a desk-based study including a review of existing reports and a site walkover. The following sub-sections describe the works proposed to fulfil the requirements of the EIA process.

6.2 Methodology including Cumulative Impact Assessment

The EIA will address the direct effects of the Proposed Development in addition to the indirect; cumulative; short, medium and long term; temporary; permanent; beneficial and adverse effects arising from the development. This will involve a review of the baseline conditions at the Site, identification of sensitive receptors and an assessment of the significance of any impacts predicted. The main mitigation measures envisaged in order to avoid, reduce or remedy significant adverse effects will also be described. The concluding chapters will provide a summary of the cumulative and residual impacts. The significance of residual impacts will be defined in accordance with a standard set of significance criteria or criteria specific to a technical discipline, if appropriate.

The methodology will define the baseline against which the environmental impacts will be assessed. This will include the following scenarios:

- The Site as existing;

- The Proposed Development; and
- The Proposed Development in addition to a number of other schemes identified in order to assess the potential for cumulative impacts.

The EIA will address the potential cumulative impacts of the Proposed Development in relation to other developments in proximity to the proposal site that may have an additive impact on the surrounding area. Schemes that will be considered within the cumulative assessment comprise those:

- Proposed by way of the submission of a planning application, consented/with a resolution to grant consent or under construction;
- Located within a 500m radius of the Site; and
- Which result in an increase of more than 10,000m² GEA in floor area.

The cumulative schemes to be assessed are listed in Table 1 below:

Table 1: Cumulative Schemes

Site Location	Planning Permission Granted	Proposed Floorspace /Unit Mix(GEA)
Kings Cross Central	22 December 06	455,000m² office space; 2,000 residential (incl. 900 affordable units) and 650 student accommodation units; 46,500m² retail space; a tertiary education facility; extensive public open space; theatres; cinema's and community facilities.
Triton Square (1 & 2 Regent's Place and 1 Osnaburgh Street)	24 April 08	34,100m² office space; 151 residential units; a community theatre; retail and a new public square.

The significance of residual cumulative impacts will also be defined in accordance with a standard set of significance criteria or criteria specific to a technical discipline, if appropriate.

It should be noted that the Townscape and Visual Impact Assessment may include other schemes that are located outside of the 500m zone, if they have the potential to impact cumulatively with the Proposed Development in visual terms.

A Non-Technical Summary (NTS) will be produced as a separate document in accordance with the EIA Regulations. In addition, a compilation of technical data and associated information required to support the content of the ES, will be included within a Technical Appendices document.

6.3 Alternatives and Design Evolution

The EIA process provides an opportunity to consider alternative development options with their respective environmental impacts before a final decision is taken on the design. In accordance with EIA regulations and statutory guidance, the ES will describe those alternatives, which were considered by the Applicant and design team, including:

- 'Do nothing scenario' – the consequences of no development taking place;
- 'Alternative sites' – examination of an alternative location for the development and the rationale behind the selection of the preferred site; and
- 'Alternative designs' – the ES will summarise the evolution of the current design proposal, the modifications which have taken place to date and the environmental considerations which have led to those modifications. A summary of the main alternatives considered, such as alternative mixes of use; floor heights and bulking; and materials used will be presented, together with a justification for the final design.

6.4 The Proposed Development

In order to comply with the EIA Regulations, a description of the Proposed Development will be provided, with sufficient detail to enable the likely significant environmental effects to be properly assessed, i.e:

- A description of the physical characteristics of the whole development (including information on the site, design and size) and the land use requirements during the construction and operational phases;
- A description of the main characteristics of the production processes, for instance, the nature and quantity of the materials used; and
- An estimate, by type and quantity of expected residues and emissions (water, air, and soil pollution, noise, vibration, light, heat, radiation etc.) resulting from the operation of the Proposed Development.

6.5 Policy Context

A summary of the Planning Statement (a separate document to be submitted in support of the planning application) will be provided within the ES document. It will have regard to the following national Planning Policy Guidance (PPG) Notes and Planning Policy Statements (PPSs):

- PPS1 Delivering Sustainable Development;
- PPG4 Industrial and Commercial Development and small Firms;
- PPS6 Planning for Town Centres;
- PPS9 Biodiversity and Geological Conservation;
- PPS10 Planning for Sustainable Waste Management;
- PPG13 Transport;
- PPG15 Planning and the Historic Environment;
- PPG16 Archaeology and Planning;
- PPS22 Renewable Energy;

- PPS23 Planning and Pollution Control;
- PPG24 Planning and Noise; and
- PPS25 Development and Flood Risk.

Furthermore, particular reference will be made to the guidance contained within a number of other relevant documents including:

- The London Plan: Spatial Development Strategy for Greater London (GLA, 2004);
- Draft Further Alterations to the London Plan (GLA, 2006);
- Central London Sub-Regional Development Framework (2006);
- London View Management Framework Supplementary Planning Guidance (SPG) (GLA, 2007);
- Sustainable Design and Construction SPG (GLA, 2006);
- Accessible London: Achieving an Inclusive Environment SPG (GLA, 2004); and
- LBC's Replacement Unitary Development Plan (UDP) (LBC, 2006).

In addition to this, legislation, policy and guidance relating to each technical aspect will be discussed specifically within each chapter. The following sub-sections summarise the scope of the technical assessments considered necessary for the UKCMRI EIA.

6.6 Construction

Construction works will potentially comprise activities such as enabling works, service diversion, site preparation, substructure, superstructure and fit out. Establishment of construction traffic flows (using a Construction Method Statement) would also be provided.

The ES will provide details of specific construction activities; their anticipated duration and an indicative programme of works. An outline Construction Method Statement (CMS) will also be provided, detailing specific mitigation measures to be followed to reduce nuisance impacts from, for example:

- Construction traffic;
- Changes to access and public rights of way;
- Noise and vibration;
- Utilities diversion;
- Dust generation;
- Soil removal; and
- Waste generation.

The CMS will take into account the requirements of the national Considerate Constructors Scheme and LBC's revised 'Code of Construction Practice' (LBC, 2005), developed by them to ensure that activities are undertaken in a way that has minimal impact upon the environment. Details of recycling targets, carbon dioxide (CO_2)/energy monitoring and water consumption will be provided.

Construction waste would be dealt with according to the CMS and operational waste would be disposed of in accordance with appropriate national, regional and local waste regulations.

6.7 Sustainability and Energy Strategy

The sustainability chapter within the ES will address national, regional and local policy guidance which are set to promote sustainability principles, particularly with regard to the reuse of land and buildings, air quality and land contamination issues, energy conservation, materials and water usage.

The proposed laboratory accommodation within the Proposed Development will be assessed against a bespoke protocol developed by Building Research Establishment (BRE). The bespoke assessment will provide a framework and benchmarks for a sustainable design strategy. A sensitivity analysis will also be carried out on the bespoke BREEAM rating to test the impact of different credits on achieving the desired rating.

Sustainability measures are proposed to adhere to sustainability principles. These measures include: reuse of material and product specification to limit Hydrochlorofluorocarbon (HCFC) generation and ozone depletion; and incorporation of water and energy saving devices.

For the ES, this assessment takes into account the following:

- Land and materials use;
- Materials specification and usage (life cycle) in relation to CO_2 generation and ozone depletion;
- Energy renewables and consumption;
- Water consumption;
- Waste minimisation; and
- Public transport accessibility.

The London Plan and LBC's Replacement UDP contain policies that promote sustainability principles, particularly with regard to the reuse of land and buildings, energy conservation, materials and water usage. A stand-alone Sustainability Statement will be developed from a workshop that will address all of the above issues and include a bespoke BREEAM Assessment conducted using a BRE protocol as well as a checklist covering the LBC and GLA Supplementary Planning Guidance (SPG) issues.

The stand-alone Energy Strategy will be summarised as part of the Sustainability Chapter.

6.8 Traffic and Transportation

A comprehensive Transport Assessment (TA) will be undertaken in line with local and national planning policy. This study will be submitted as a separate document in support of the planning application. The ES will provide a summary of the key issues, the conclusions of the TA and the likely significance of identified impacts.

An interim Workplace Travel Plan will be produced for inclusion as an appendix to the TA report.

Consultations with various parties will be ongoing during the preparation of the scheme proposals and the TA. The assessment work to be undertaken will comprise:

- Establishment of baseline movement flows for road traffic based on available data from recent surveys and/or LBC;
- Review of external accessibility issues covering public transport (rail, LUL and bus); vehicles (cars, taxis, motorcycles, bicycles, delivery and servicing vehicles); and pedestrian links;
- Consideration of options for the enhancement of pedestrian circulation and potential improvements to the public realm;
- Consideration of the design and layout arrangements between the building and the public highway including building servicing access and delivery traffic, parking and pedestrian access;
- Identification of trip generation, modal split and distribution for the building covering employee journeys to work and business visitors;
- Identification of scheme effects through calculation of changes in road traffic, pedestrian traffic and public transport passenger loadings; and
- Consideration of mitigation measures where appropriate to reduce adverse effects of changes in trip generation and distribution.

The TA will take into account statutory guidance as provided by PPG13 and guidelines developed by TfL and Department for Transport.

6.9 Air Quality

The entire LBC has been designated an Air Quality Management Area (AQMA) due to nitrogen dioxide (NO_2) and fine particulate matter (PM_{10}) concentrations exceeding the national Air Quality Strategy (AQS) objectives; local monitoring data from the nearby Bloomsbury AURN background automatic monitoring station, for example, reveals that NO_2 concentrations currently easily exceed the objectives throughout the local area.

It is proposed that a desk-based assessment will be undertaken to determine baseline conditions and the potential impacts to local air quality attributed to the Proposed Development. Baseline, or existing, background air quality will be determined using nearby representative automatic monitoring stations, supplemented by LBC and Department of Environment, Food and Rural Affairs (DEFRA) diffusion tube data where necessary.

Any heating/combustion plant associated with the completed development (e.g. Combined Heat and Power units or boilers for heating and hot water provision) will be assessed qualitatively if data is sparse, or quantitatively using the ADMS-4 or AERMOD atmospheric dispersion model if sufficient data is available to estimate the pollutant flux and likely stack or flue parameters. Similarly, chemical emissions from atmospheric release points associated with fume cupboards and laboratory ventilation systems, for example, will also be modelled using this same method, for both typical and emergency release scenarios.

It is proposed to conduct atmospheric dispersion modelling using the ADMS-Roads model to determine NO_2 and PM_{10} concentrations. Dispersion modelling will only be undertaken if the predicted increase in road traffic attributed to the Proposed Development exceeds 500 vehicles per day (or 200 heavy goods vehicles (HGVs)), or 5% on any roads with more than 10,000 vehicles/day. This criteria is based on the DMRB guidance and Environmental Protection UK (EPUK) publication 'Development Control: Planning for Air Quality', which advise under which circumstances it is necessary to conduct an assessment of road traffic emissions. In the event that road traffic movements do require assessment, a number of traffic scenarios will be modelled including present-day and a given future date, both with and without the Proposed Development.

In addition, potential impacts and nuisance from dust and site plant exhaust emissions generated during the construction phase will be screened using estimated data and where appropriate, including deriving emission factors from CORINAIR for construction site plant and applying the BRE case study for dust generation from a typical construction site. Following determination of the likely impacts, a standard suite of mitigation measures will be recommended for the control of dust and site plant emissions during construction works, with specific attention paid to LBC's revised 'Code of Construction Practice' (LBC, 2005). Additional site-specific mitigation measures will be proposed as necessary, in order to minimise or remove adverse impacts to local air quality.

Given the subjectivity that often occurs when attempting to assign a level of significance to a given air quality impact, URS has produced a set of quantitative significance criteria for air quality based on the EPUK "Development Control: Planning for Air Quality". Consideration will also be paid to the Significance Criteria present in the London Councils' recently released 'Air Quality and Planning Guidance' (London Councils, 2007).

6.10 Noise and Vibration

The construction and operational phases of the Proposed Development have the potential to cause noise and vibration nuisance effects on neighbouring sensitive receptors. A baseline noise assessment will be undertaken which will establish both background noise levels at the sensitive receptors and ambient levels at the boundary of the existing buildings.

A construction phase impact assessment will be undertaken based on construction activity, plant use and traffic movement information. Noise levels at receptors will be calculated using British Standard (BS) 5228 and DEFRA data and procedures. Vibration risks will be assessed based on the types of plant used and their proximity to receptors, using guidance in BS5228. Mitigation measures will be proposed, including work procedures, screening, working hours and monitoring activities to determine the reduction in noise and vibration and therefore the overall residual impact.

The ambient noise levels at the façades of the buildings will be reviewed in conjunction with recommended noise limits for the various internal spaces (BS8233). Mitigation measures such as façade sound insulation and ventilation attenuation requirements will be recommended, as necessary.

Noise associated with the operation of the completed development will be assessed, in particular, any noise associated with building services and ground floor amenities will be considered. Noise limits will be set using BS4142, taking into account the measured background noise and mitigation measures identified such that operational noise impacts will be negligible. Traffic noise levels will be assessed by comparing future baseline flows at opening year with the equivalent 'with development' flows at opening year. Mitigation measures will be detailed as necessary.

6.11 Wind

The ES will include a wind assessment, which will provide a detailed quantitative analysis of the pedestrian level wind environment. A scale model of the Proposed Development and surrounding buildings will be manufactured (at 1:300 scale) and tested in a boundary layer wind tunnel test facility. Mean and peak wind speeds will be measured around the proposed and existing buildings for all wind directions. These results will be combined with long-term meteorological statistics for the area. The results of this analysis will then be compared with the well established Lawson Comfort Criteria to determine the suitability of the different areas for sitting, standing, entering a building, leisure walking, business walking or crossing the road.

The assessment will identify whether any mitigation measures will be required. The results of the assessment will be presented within an ES chapter.

6.12 Daylight, Sunlight, Overshadowing, Solar Glare and Light Pollution

Daylight/sunlight, overshadowing, light spillage and solar glare effects of the Proposed Development will be addressed within the ES. The methodology for the assessment of daylight, sunlight and overshadowing matters is set out in the BRE Handbook 'Site Layout Planning for Daylight and Sunlight 1991'. The BRE Handbook also acknowledges that good site layout planning for daylight and sunlight should not limit itself to providing good natural light inside buildings. Sunlight in the space between buildings has an important impact on the overall appearance and ambiance of a development. The Handbook also gives guidance on overshadowing to amenity areas and gardens. It is intended to be used in conjunction with the interior daylight recommendations in the British Standard BS8206 Part II and the Applications Manual Window Design of the Chartered Institute of Building Services Engineers (CIBSE).

The potential impact of the Proposed Development on daylight, sunlight and overshadowing will be assessed in relation to adjacent residential buildings and public open spaces. There are residential units to the west and north of the site with the potential to be impacted in relation to daylight and sunlight. Detailed research has been undertaken in order to accurately understand the existing levels of daylight and sunlight within these residential units, and the scheme has been sympathetically designed to respect the daylight and sunlight amenity to these residential units to an appropriate degree. There is also an amenity space to the north east of the Site, which has been considered in regard to any overshadowing impact from the scheme.

Light Pollution is defined as any light emitting from artificial sources into spaces where this light would be unwanted, such as spillage of electric light from office or commercial buildings onto streets or into residential accommodation such as bedrooms, where this would cause inconvenience to their occupants. Quantitative criteria for acceptable levels of light pollution are detailed within the Institution of Light Engineers (ILE) document entitled 'Guidance Notes for the Reduction of Light Pollution'. The light emanating from the existing site will be compared against that from the Proposed Development and an assessment of the level of impact made.

The BRE Guidelines makes the following statement regarding the potential for reflected solar glare upon a Proposed Development: "*Glare or solar dazzle can occur when sunlight is reflected from a glazed façade. This can affect road users outside and the occupants of adjoining buildings*."

Solar glare is particularly important at pedestrian and vehicular junctions where the glare can cause temporary blinding of either vehicle operators or pedestrians at such junctions. An analysis of the potential for the development to reflect glare will be made from a selection of key viewpoints located at pedestrian and vehicular junctions.

The results of the daylight/sunlight and overshadowing and if required the light spillage and solar glare assessments will be incorporated into an ES chapter with a supporting technical appendix. It is unlikely that a light pollution assessment will be required due to the distance of the Site from sensitive receptors. Similarly, the site is not located on any busy highways for which solar glare would cause an impact.

6.13 Water Resources and Flood Risk

Data obtained from the EA website indicates that the site is not located within a floodplain or a flood warning area. However, a Flood Risk Assessment (FRA) is required because the site is over 1 ha and will be undertaken with the scope agreed in advance with the EA. A drainage assessment will also be carried out in line with PPS25.

The EA will be consulted as to the extent of assessment required for the proposed site regarding water resources. This consultation request will include consideration of factors such as the provision for climate change. Mitigation measures are highly dependant on the significance of the effect identified, however provision will be made where necessary following consultation with the EA. The application of standard mitigation measures during the construction phase should ensure protection of groundwater and the site drainage system. However, the ES will verify any potential impacts to local water resources from the construction and operational phases, provide appropriate mitigation measures if necessary and evaluate the significance of any residual impacts predicted.

The generation of surface water runoff will be assessed and the proposed methods used to reduce run-off from the Site including Sustainable Urban Drainage Systems (SUDS) will be included within the ES.

6.14 Ground Conditions

The EIA will confirm the Site's contaminative status through a desktop study of potential soil contamination with respect to the new regime for contaminated land set out in Part IIA of the Environmental Protection Act (1990). The desktop study will refer to a site specific Envirocheck

Report and will take account of historical and existing operations/services within the redline boundary in order to assess the potential for contaminative activities to have taken place on the Site. In addition to this it will evaluate the potential sources of contamination associated with the Proposed Development.

This will be supplemented by a site walkover to obtain more information on existing potential site sources of contamination. Measures for the clean up (remediation) of any contaminated land encountered during the construction phase will be identified within the ES. Similarly, mitigation measures will be employed to eliminate the risk of mobilising contaminants during construction.

The application of standard mitigation measures during the construction phase should ensure protection of groundwater and the site drainage system. However, the ES will verify any potential impacts to site drainage and groundwater resources from the construction and operational phases of the Proposed Development.

6.15 Archaeology

The site is not located within an Archaeological Priority Area and there are no scheduled ancient monuments within the site boundaries however a full archaeology assessment will be included within the ES. A desk based study including archaeological monitoring of geotechnical test pits, will be undertaken by the Museum of London Archaeology Services (MoLAS) to determine the potential for any archaeological survival within the boundary of the Proposed Development.

Determination of the current baseline for archaeology will be achieved through on-site monitoring and the analysis of known archaeological features and ancient monuments within a study area of approximately 1 kilometre (km) radius centred on the Site.

The desktop archaeological study will make use of existing information to establish the archaeological and historical significance of the Site (in the local, regional and national context). The key focus to be adopted will be to ensure that a clear and concise description is prepared of the historical and archaeological resources. This information will be used to assess the likely impact of the proposals on surviving monuments or potential archaeology.

The desktop assessment will involve preparing an inventory of recorded archaeological and historical resources of the area, and presenting the results as schedules cross-referenced to map bases and text. The study (and on site monitoring) will consider the impact of the Proposed Development on the existing archaeological resources and appropriate mitigation measures will be proposed, if necessary.

6.16 Ecology

The ES will include an Ecological Impact Assessment (EcIA) to highlight the potential impacts on ecological receptors associated with the Proposed Development. This EcIA will be reported as part of the ES in the Ecology Chapter.

At present the site comprises a mixture of buildings and hard-standing with some vegetated areas. Overall, the ecological potential of the site is expected to be limited. The nearest statutory sites in terms of nature conservation are two Local Nature Reserves (LNRs) which are:

- Camley Street Nature Park (located approximately 300m north of the Site); and

- Barnsbury Wood (located approximately 1300m north east of the Site).

In addition, two non statutory sites, namely St. Pancras Gardens and Purchese Street Open Space are also located close to the development and will need to be considered in any impact assessment.

To confirm the ecological status of the Site, the EcIA will include a desktop study an extended Phase I Habitat Survey. Baseline data on notable species of flora and fauna and surrounding sites of ecological value/importance will be sourced from Greenspace Information for Greater London (GiGL). The potential for the Site to support the protected species or species of conservation concern (e.g. bats, black redstarts) will be confirmed through this process. Any ecological receptors that are likely to be significantly impacted by the Proposal Development will be identified and assessed within the EcIA. Where possible mitigation measures for significant adverse impacts will be suggested alongside and measures to enhance the ecology of the Proposed Development and local area. The EcIA will be completed in line with the Ecological Impact Assessment Guidelines produced by the Institute of Ecology and Environmental Management (IEEM).

6.17 Socio-economics

For the purposes of the ES, consideration will be given to the scheme in terms of the following:

- Role of the scheme in meeting biomedical research and training requirements;
- Role of the scheme in the generation of direct and indirect employment opportunities at the local and regional level;
- Public amenity and access; and
- Assessment of impacts to public services.

A socio-economic assessment will be undertaken to assess the impact of the Proposed Development on baseline conditions within the local and wider area. The methodology for assessing socio-economic impacts will follow standard EIA guidance and will involve:

- Review of baseline conditions at the site, locality and the surrounding area;
- Assessment of research and training demand and justification for the proposed use;
- Review of community service and uses;
- Consideration of local policy, plans and development constraints; and
- Assessment of the likely scale, permanence and significance of impacts.

The social and economic policy context review will consider relevant policy at various levels including: local (LBC replacement UDP), regional (GLA, London Development Agency, Mayor of London) and national (in terms of urban regeneration and neighbourhood renewal).

6.18 Townscape and Visual Impact Assessment

The ES will include an assessment of the Proposed Development in relation to its local and wider setting by considering a number of pre-selected views. The selection of views is based

upon national, regional and local guidance and policy designations; such as conservation areas, listed buildings and strategic views and on the potential visibility of the Proposed Development within the surrounding area. On the basis of an initial site visit, appraisal of the local townscape and with reference to relevant policy, viewpoints have been selected and are listed below. The locations of the views are further illustrated in Appendix B.

1. Kenwood London View Management Framework (LVMF) 3A.1– (views from here also protected in Camden UDP);
2. Kenwood Primrose Hill LVMF 4A.1– (views from here also protected in Camden UDP);
3. Regent's Park, near Sports Hub – (views from here protected in Camden UDP);
4. Ossulston Street – (Estate Listed Grade II) A South;
5. Phoenix Road/ junction with Chalton Street;
6. Ossulston Street – (Estate Listed Grade II) B North;
7. Purchese Street Park;
8. Purchase Street/ junction with Polygon Road;
9. Charrington Street/Platt Street;
10. Camley Street Natural Park – (views of/across/from Regent's Canal protected by Camden UDP);
11. Pancras/Midland Road/ A5202 junction B;
12. ;Midland Road junction Brill Place (panoramic);
13. Entrance to International Station A;
14. Entrance to International Station B;
15. Side of St. Pancras Station; and
16. Camden Town Hall Euston Road/ junction with Judd Street.

Accurate Visual Representations (rendered and in outline) of the Proposed Development will be inserted into the selected views to demonstrate its potential impact on the townscape, taking into account the proposed building materials – such as its possible reflective qualities - and daylight and seasonal conditions, as appropriate. The assessment will involve:

- An appraisal of the existing (baseline) conditions, with reference to the history and evolution of the townscape;
- An evaluation of the key townscape features, such as conservations areas, listed buildings and landmark buildings; and
- An assessment of the level and nature of impact on the views.

7. SUMMARY OF KEY ISSUES

Table 2 below provides a summary of the potential environmental and socio-economic issues associated with the Proposed Development.

Table 2: Summary of Key Issues

Environmental/Socio-economic Issue	
Transportation and Access	Potential changes to local traffic flow patterns during construction Potential disruption to pedestrians, cyclists and road vehicle users during the construction works Impacts to the capacity of the public transport network
Construction	Potential noise and vibration nuisance to the residential community, the public, local businesses and services Airborne dust generation/nuisance to local business, residents, office workers and pedestrians Increase in waste generation/litter/visual pollution Temporary disruption to local traffic flows, goods and services delivery
Air Quality	Generation of dust emissions arising from construction activities Potential impacts to air quality from combustion plant emissions and fume cupboard vents (i.e. operational releases to atmosphere from point sources)
Noise and Vibration	Noise and vibration from construction activities Potential noise disturbance from operational activities and servicing
Ground Conditions	The potential to create a source – receptor pathway to surface and ground waters should contamination be encountered during the construction phase Potential impacts to health for construction workers and end users of the site should any contamination be encountered
Socio-Economics	Generation of direct construction employment, associated goods and services Generation of permanent jobs i.e. operational employment Impact on local and regional spending Impact on local economic investment Community and business disturbance through site works
Water Resources and Flood Risk	Potential impacts to surface and ground waters arising from construction activities A potential increase in surface water run-off from the site
Wind	Changes to the speed and direction of wind affecting the local wind environment and pedestrians
Sustainability	Use of construction materials and methods Energy consumption and energy efficiency of the Proposed Development. Water consumption of the Proposed Development. Waste minimisation/ waste management Potential use of ozone-depleting materials and CO_2 emissions
Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare	Potential daylight and sunlight impacts to neighbouring properties Potential overshadowing of public amenity areas Potential solar glare to road users and pedestrians in the area Potential light pollution to surrounding area.
Archaeology	Potential disturbance of archaeological deposits present on-site during construction activities Potential removal of archaeological deposits

Environmental/Socio-economic Issue	
Ecology	Potential impacts on existing ecological resources on the Site The opportunity to increase the ecological value of the site
Townscape and Visual	The visual impact of construction works on the surrounding area and from nearby sensitive receptors Changes to the local and wider setting of the site Changes to the local and wider setting of listed buildings and conservation areas Changes to short, medium and long distance views Potential improvements to both the built environment open space within and close to the site

8. PROPOSED STRUCTURE OF THE ENVIRONMENTAL STATEMENT

The ES will comprise the following set of documents.

Non-Technical Summary (NTS): this document will provide a summary of the key issues and findings of the EIA. The NTS will be presented in non-technical language to assist the reader to understand the site context, the Proposed Development, the design alternatives, the environmental issues arising and proposed mitigation measures.

Volume I: Environmental Statement: This will contain the full text of the EIA with the proposed chapter headings as follows:

1. Introduction
2. Assessment Methodology
3. Alternatives and Design Evolution
4. The Proposed Development
5. Planning Policy Context
6. Construction
7. Sustainability
8. Traffic and Transportation
9. Air Quality
10. Noise and Vibration
11. Wind (Microclimate)
12. Daylight, Sunlight, Overshadowing, Light Pollution and Solar Glare
13. Water Resources and Flood Risk
14. Ground Conditions
15. Archaeology
16. Ecology

17. Socio-economics
18. Cumulative Impacts
19. Residual Impacts

Volume II: Townscape and Visual Impact Assessment: the ES will include a stand-alone Townscape and Visual Impact Assessment accompanied by a full set of views and verified images.

Volume III: Technical Appendices: these will provide supplementary details of the environmental studies conducted during the EIA including relevant data tables, figures and photographs.

Appendix A: Site Location Plan and Redline Boundary

Figure 1: Site Location Plan

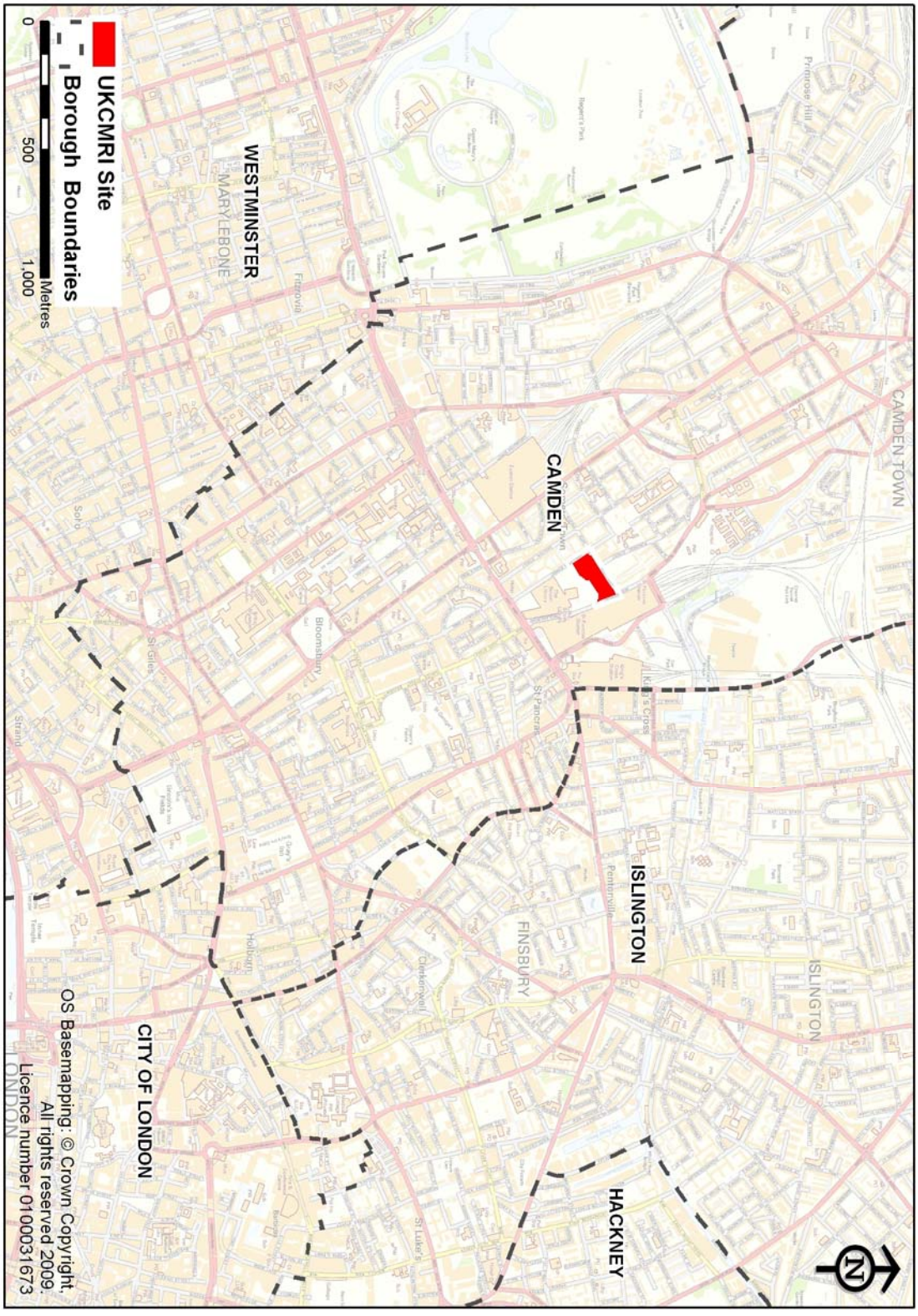
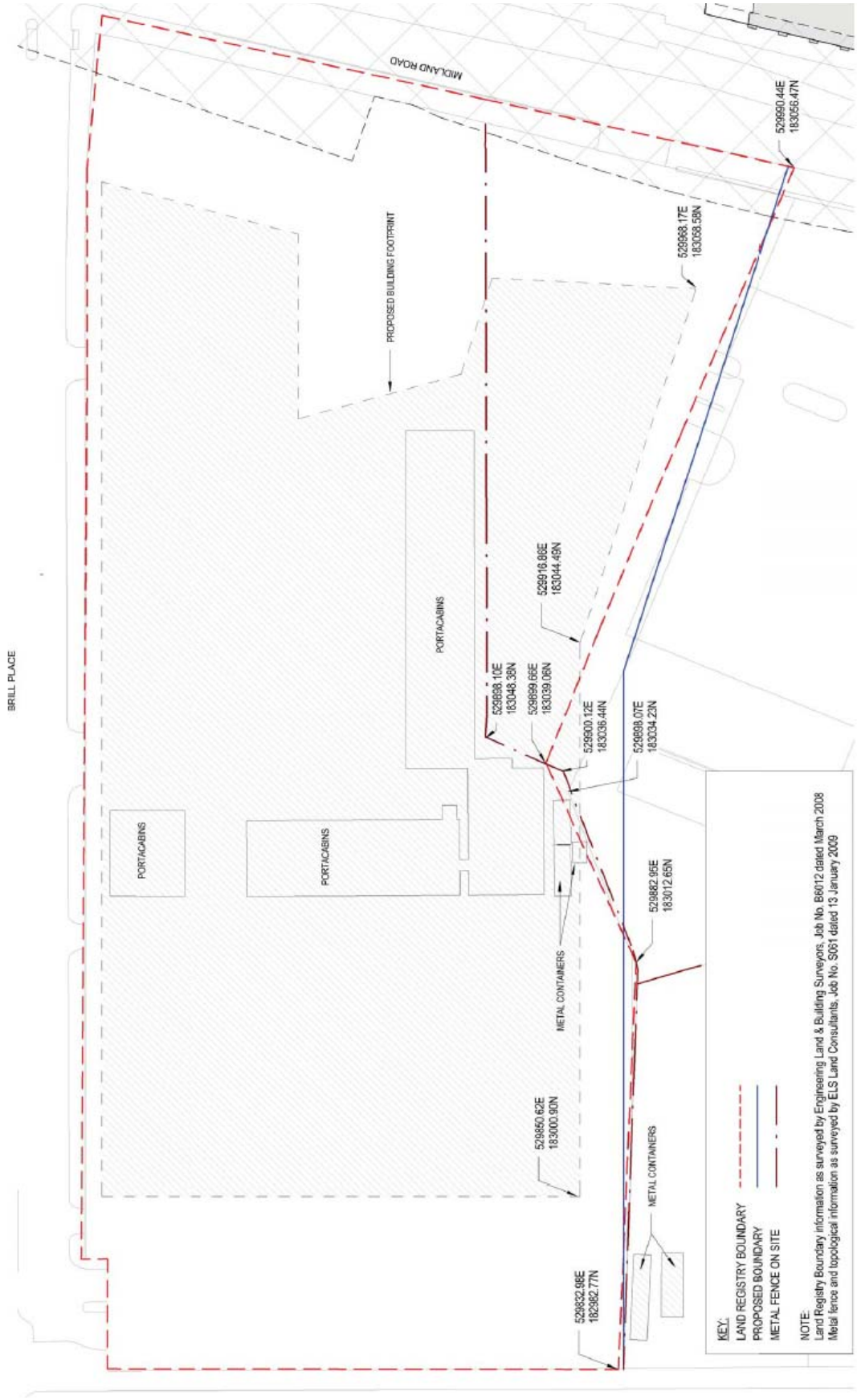


Figure 2: Proposed Boundary Plan



Appendix B

Figure 3a: List of Views (including long distance)

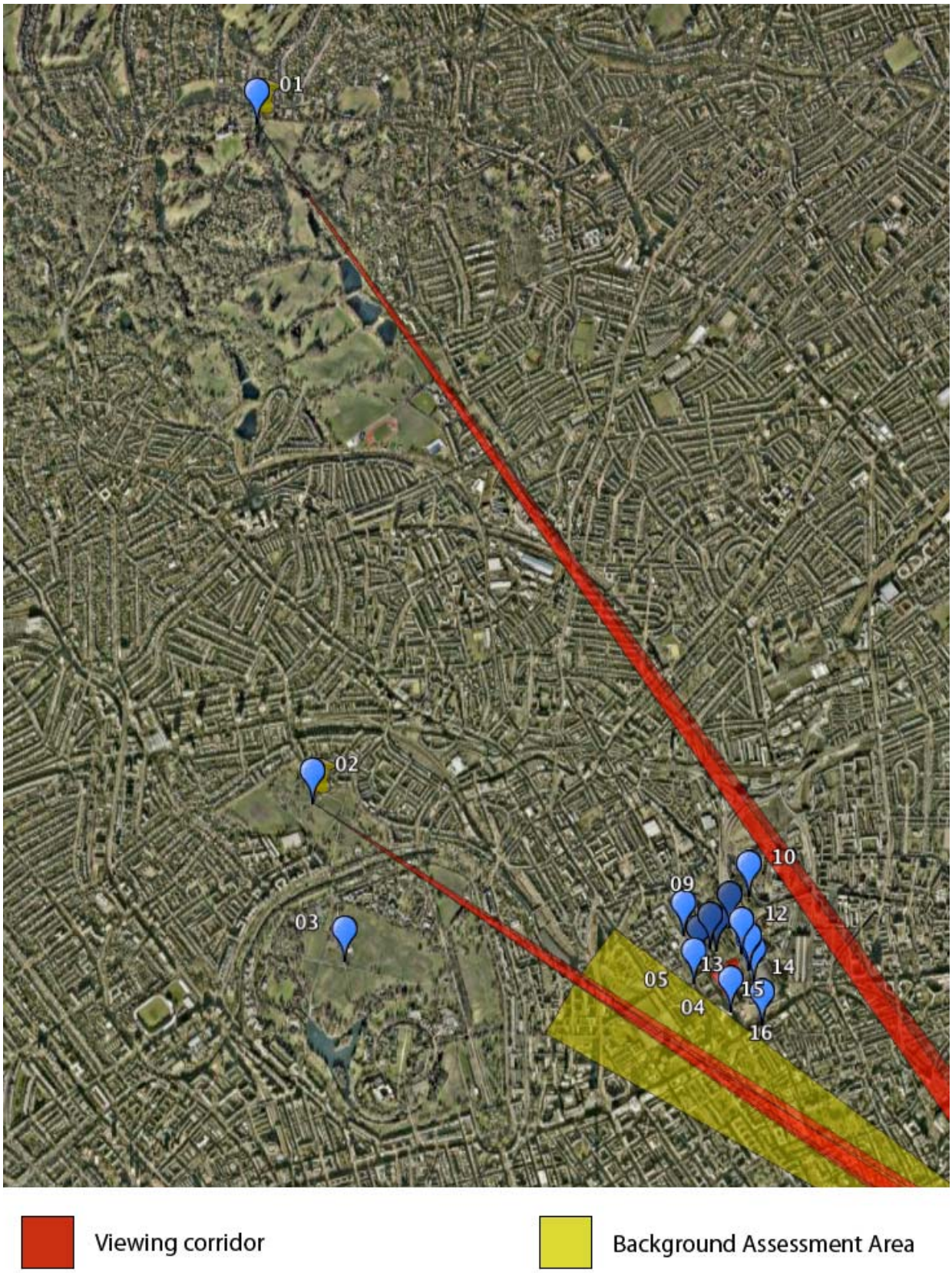


Figure 3b: List of Local Views