

Camden Lock Village
(Hawley Wharf)
Stanley Sidings Limited

Environmental Statement
Volume 3: Replacement
Townscape and Visual
Assessment

January 2012



Contents

	<u>Page</u>
1.0 Introduction	5
2.0 Methodology	7
3.0 Planning policy context	11
4.0 The Site and its surroundings	15
5.0 The Development	21
6.0 Views and visual assessment	27
7.0 Visual and townscape effects: conclusions	61
8.0 Demolition and construction effects	65
9.0 Cumulative effects	67
10.0 Mitigation	69
 Appendix	
A.0 Cityscape Verified View Methodology	71

1.0

INTRODUCTION

- 1.1 This volume of the Environmental Statement (ES) contains an assessment of the effect of the Development on townscape and visual amenity. It contains the following sections:
- a description of the method by which the assessment has been carried out, and of how the images in this report have been created;
 - a summary of the planning policy context relevant to the assessment;
 - a description and characterisation of the Site and its surroundings as existing;
 - a description and assessment of the Development;
 - an assessment of the visual effect of the Development on the identified views
 - conclusions concerning the effects of the Development on visual amenity and townscape
 - an assessment of the effects of demolition and construction operations;
 - an assessment of cumulative effects, taking into account other new development proposed in the area; and
 - consideration of the question of mitigation.

2.0

METHODOLOGY

2.1 This section explains the method that has been used to carry out the townscape and visual assessment. It is based broadly on the principles set out in the second (2002) edition of 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA), produced by the Landscape Institute with the Institute of Environmental Management and Assessment. However these principles are better suited to assessing landscape than townscape, and so they can form only a general guide to the method to be used.

2.2 Also relevant to the method of assessment are *By Design* (DETR/CABE, 2000), which sets out the aspects of urban form and the objectives of urban design against which townscape can be assessed.

Townscape character areas – assessment method

2.3 An assessment has been made of the Site and its surroundings in their existing state. This analyses the physical characteristics and the character of the townscape and considers the current status of the Site.

2.4 This was carried out following study of the historic development of the area which was made with reference to the following reports and publications:

- Camden Lock Village – historical report by Steven Levrant Heritage Architecture Ltd, 2009
- The Buildings of England – London 4: North, Cherry and Pevsner, Yael UP, 2002
- The London Encyclopedia, Weinreb and Hibbert, Macmillan, 1983

2.5 The present-day condition of the area was studied by site visits, supported by a study of maps and aerial photographs (available on the internet as an integrated set of data at www.maps.google.co.uk), and the 'Pevsner' volume referred to above. Site visits allow the accuracy of record data to be checked. Record photographs were taken on site visits.

2.6 Townscape is characterised by dividing the study area into geographical areas which have readily identifiable characteristics in common. These characteristics may include topography; other natural characteristics such as waterways; patterns of land use; urban grain; and building form. Where there are major elements of infrastructure such as roads and railways, these often serve to divide one area from another. The division of an urban area into townscape character areas is carried out by a combination of professional judgement and common sense based on site investigation on the ground, and the study of documents, as described above.

2.7 Designated heritage assets have been identified within 500m of the Site – an area of search considered to be appropriate given the scale of development proposed and the character of the surrounding townscape. Designated heritage assets within this area have been considered for the potential for the assets and / or their settings to be affected by the Development, in respect of effects on townscape and visual effects. These comprise conservation areas and listed buildings, with information derived

from the Heritage Gateway website and the local authority website. Those designated heritage assets that have the potential to be affected to a significant extent in terms of visual effects by the Development are noted in the assessment.

2.8 The London Borough of Camden does not have a local list.

2.9 Designated heritage assets - conservation areas and listed buildings - which fall within the various townscape character areas are discussed below. The consideration of designated heritage assets contained in this section, and the assessment of effects on them in this report as a whole, are made principally with regard to townscape and visual effect, as seen and experienced by a viewer. This is distinct from, though related to, the assessment of conservation areas and listed buildings considered in relation to their significance as heritage assets. While heritage assets form one aspect of the consideration in this assessment, it considers townscape as seen and experienced in the round. As the receptors and matters being assessed are different, it is possible for the Townscape and Visual assessment and the Built Heritage assessment (refer to Chapter 9 'Built Heritage' of Volume 1 of the ES) to reach different conclusions on the effect of the Development in respect of particular views, buildings or areas.

2.10 Reference should also be made to Chapter 9 'Built Heritage' in Volume 1 of the ES and its supporting technical appendices for a more detailed assessment of the effect of the Development on relevant conservation areas and listed buildings, considered as heritage assets.

2.11 Consideration of viewpoints and the wider historic environment is carried out as part of the general assessment of the townscape around the Site and the effect of the Development on this townscape, and the conclusions are given in the assessment. In respect of viewpoints designated in the London View Management Framework (LVMF - see Section 3 below), part of the Site falls within the designated view corridor from Parliament Hill to the Palace of Westminster, view 2B.1 in the LVMF, and the Site lies within the wider setting of LVMF view 4A.1 from Primrose Hill to St Paul's Cathedral.

Views and visual effects – method of assessment

2.12 The study area is centred on the Site and is limited to locations from which the Site can be seen, or from which new buildings on the Site will be seen at the height proposed. In general, it is considered that at a distance greater than this within the built up city centre area, development of the scale envisaged will only be a significant presence when seen from a very sensitive setting or across a large open area, where its prominence will be greater than when seen as part of the built up foreground as will normally be the case in London.

- 2.13 Possible locations of viewpoints within the study area are identified based on an examination of maps and aerial photographs; the documents referred to above; maps of conservation areas; maps and lists of listed buildings; and good prior knowledge of the area. The study area and the possible locations are visited to establish candidate viewpoints. A list of selected view locations is arrived at on the basis of the candidate viewpoint study. The aim is to provide a broad range of viewpoints from all points of the compass. The view locations have been agreed in consultation with the London Borough of Camden and English Heritage.
- 2.14 Three broad categories of viewing location are considered for establishing viewpoints:
- ‘typical’ townscape locations from particular points of the compass from which the development will be visible, from which the effect on other points nearby can be deduced.
 - locations of particular sensitivity, if any, including those viewpoints in which the Development may affect the settings of World Heritage Sites, listed buildings and conservation areas.
 - Locations, if any, where there is extensive open space between the viewer and the Development so that it will be prominent rather than obscured by foreground buildings. This includes areas of open space that are important in a local context.
- 2.15 The GLVIA uses the term ‘receptor’ to mean both elements of the physical landscape and townscape, and people who will see the development and its setting. In the case of townscape assessment, the latter are taken to be the general public affected by development, taking into account the differing interests and expectations likely to be found in residents, visitors and those who work in a place.
- 2.16 The assessment of the effects of any proposed development on existing townscape and views is a matter of judgement. The GLVIA recommends that assessment should state the basis on which judgements are made. The assessments are made on the basis of professional judgement which takes into account relevant planning policies and guidance. The assessment is based on the following method.
- 2.17 An assessment is made of the likely **significance** of the effect that the Development will have on townscape and views under consideration. This is a function of the **sensitivity** of the townscape or view as existing, and the **magnitude** of the change resulting from the Development.
- 2.18 The **sensitivity** of the townscape or view as existing is assessed as **substantial**, **moderate** or **minor**. This assessment takes into account the following, in decreasing order of importance:
- The setting of a World Heritage Site and/or Grade I Listed Building;
 - The setting of a Grade II* or Grade II Listed Building or a conservation area; and
 - Other areas.
- 2.19 The assessment of sensitivity also takes into account the amenity value of the viewing location and the area in which it is located. Locations such as parks and canalside walkways which are used for leisure purposes are considered to be more sensitive in visual terms than everyday streetscapes with no heritage designation.
- 2.20 The assessment of the sensitivity of the townscape or view under consideration is moderated to take into account a judgement about its quality in the round. For example: a World Heritage Site or a listed building may have a good or a poor setting, and a good quality setting is more sensitive to change than a poor quality setting; a listed building or a part of a conservation area may be a prominent aspect of a view, or it may be present in the view but only incidentally; conservation areas include within them areas of greater and lesser quality; and so on. Thus there is not necessarily a direct mapping between the categories listed above and the assessment of sensitivity as substantial, moderate or minor.
- 2.21 The **magnitude** of the change resulting from the Proposed Development is assessed as substantial, moderate, minor or negligible, using the following criteria:
- **Substantial**: considerable change to the townscape or view in marked contrast to the existing urban fabric;
 - **Moderate**: an obvious change to the townscape or view that would be readily noticeable to most viewers;
 - **Minor**: a slight change to the townscape or view that would not be easily noticed; and
 - **Negligible**: there would be no change, or minimal change, to the townscape or view.
- 2.22 These two measures are combined to provide a measure of the **significance** - **substantial**, **moderate** or **minor** - of the effect on townscape or views which will result from the Development, the most significant effects being effects of substantial magnitude on settings of substantial sensitivity.
- 2.23 Effects are assessed qualitatively as **beneficial**, **adverse**, **neutral** or **negligible**. The degree to which effects are beneficial or adverse is not necessarily related directly to the degree of sensitivity or to the magnitude, since within a given view or area of townscape that is being assessed, there may be both positive and negative effects as a result of the development. The assessment as beneficial or adverse is a ‘net equation’. A neutral effect is one in which the magnitude of change represented by the Development is more than negligible but the effect is judged, in the round, to be neither beneficial nor adverse in relation to the quality of the townscape or view in question (while neutral effects are not referred to in other studies in this ES, the use of the term in this assessment follows its use in the definition of the term ‘setting’ in PPS5 Planning for the Historic Environment). A negligible effect is an effect in which the magnitude of change is negligible or there is no effect, and can include effects which, considered in the round, are so small as to be judged insignificant in relation to the townscape or view in question.
- 2.24 For each of the identified views in the assessment which follows, there are images of the view as existing and as proposed. Where appropriate, the view as proposed is shown as a fully rendered image, showing the proposed new buildings in a realistic manner. In other cases, primarily longer distance views, the proposed buildings are shown diagrammatically, in a ‘wireline’ outline. The maximum and minimum volumes of school blocks S1 and S2 defined by the Parameter Plans (see below) are illustrated in diagrammatic form.
- 2.25 For each of the identified views, a description and assessment are given:
- A description of the view as existing, identifying its visual quality, its sensitivity to change and, where necessary, the reason for that sensitivity;
 - A description of the view as proposed, with an assessment, based on the method set out above, of the significance of the effect that the Development will have on the view.
- 2.26 The assessment of individual views, and the concluding section concerning effect on townscape, consider the effect on the townscape and views as they will be experienced by viewers in reality. Photographic images of townscape are no more than an approximation to this, for a number of reasons:
- Viewers have peripheral vision; their view is not restricted by borders as a photograph is, and they can move their eyes and heads to take in a wide field of view when standing in one place.
 - Viewpoints themselves are not generally fixed. Townscape is experienced for the most part as a progression of views or vistas by people who are moving through streets or spaces rather than standing still.

- Photographs do not reflect the perception of depth of field as experienced by the human viewer due to parallax; nor is it generally possible for photomontage images to reflect the effects of atmospheric perspective, which are in any case changeable.
- Townscape is experienced not by the eye alone but by the interpretation by the mind of what the eye sees, considered in the light of experience, knowledge and memory.

2.27 The general conclusions about the effect of the Development on the townscape considered in the round should also be taken into account when considering individual views.

2.28 In respect of the spatial scale over which visual effects occur, the effects apply over the distance between the viewer and the Site in the case under consideration; that is, they are local effects in all cases except the LVMF views that are illustrated.

2.29 The planning application is in outline only in respect of school blocks S1 and S2, with Parameter Plans defining maximum and minimum dimensions in plan and in height, and in the case of school block S2, a zone within which the block is to be located. The principles set out in the Hawley Wharf School Design Principles provide guidance on the design of the school blocks. The Design Principles have been prepared with the intention that the local planning authority, upon granting planning permission, will impose a condition that requires all future applications for approval of reserved matters in respect of the outline application area in Area B to conform with the Hawley Wharf School Design Principles.

2.30 The assessment in relation to the school blocks S1 and S2 is based on the Parameter Plans and the Design Principles. The assessment considers the maximum and minimum parameter cases, and it considers the cases with block S2 at its eastmost and westmost locations. The visual and townscape impact of school blocks S1 and S2 when seen at close quarters will be dependent on the articulation of the building form and the quality of the detailing and materials, which are matters not fixed at this stage, but are governed by the Design Principles. The assessment is based on the reasonable assumption that buildings will be of an appropriate and high standard of architecture, detail and materials as set out in the Design Principles and in national, London-wide and local design policies and guidance. This assumption is considered to be robust since these details would be closely controlled by the local planning authority by way of planning conditions. Reserved matters applications can be subject to further townscape and visual assessment if deemed necessary by the local planning authority.

3.0

PLANNING

POLICY CONTEXT

- 3.1 This section contains a brief overview of aspects of national, London-wide and local planning policies and guidance that are particularly relevant to the appearance and visual effect of the Development. For the purposes of this report, it is those policies concerned with design, built heritage and townscape matters that are of the greatest relevance.

PPS1

- 3.2 The Government's principal overarching planning guidance PPS1 *'Delivering sustainable development'* states that *'good design ensures attractive usable, durable and adaptable places and is a key element in achieving sustainable development. Good design is indivisible from good planning'* and that *'high quality and inclusive design should be the aim of all those involved in the development process.'*
- 3.3 Paragraphs 33-39 inclusive of PPS1 set out the requirements for high quality and inclusive design. Paragraph 37 states that planning authorities should have regard to good practice set out in *'By Design – Urban design in the planning system'* and other publications.
- 3.4 Paragraph 34 states that *'design which is inappropriate in its context, or which fails to take the opportunities available for improving the character and quality of an area and the way it functions, should not be accepted'*.
- 3.5 Paragraph 38 of PPS1 states that *'local planning authorities should not attempt to impose architectural styles or particular tastes and they should not stifle innovation, originality or initiative through unsubstantiated requirements to conform to certain development forms or styles.'*

Planning Policy Statement 5 (PPS5) – Planning for the Historic Environment

- 3.6 PPS5 sets out guidance on planning for the historic environment and on the design of new buildings which affect the historic environment. This is relevant to the Development as part of the Site lies in the Regent's Canal Conservation Area, and there is a listed building on the Site. There are also a number of other conservation areas and listed buildings in the wider area around the Site.
- 3.7 Paragraph HE6.1, on the information requirements for applications for consent affecting heritage assets, notes that an applicant should provide *'a description of the significance of the heritage assets affected and the contribution of their setting to that significance. The level of detail should be proportionate to the importance of the heritage asset and no more than is sufficient to understand the potential impact of the proposal on the significance of the heritage asset...'*

- 3.8 Paragraph HE7.2, providing guidance on deciding applications, states that *'In considering the impact of a proposal on any heritage asset, local planning authorities should take into account the particular nature of the significance of the heritage asset and the value that it holds for this and future generations.'*

- 3.9 Paragraph HE7.5 concerns new development and states that local authorities should take into account *'the desirability of new development making a positive contribution to the character and local distinctiveness of the historic environment. The consideration of design should include scale, height, massing, alignment, materials and use.'*

- 3.10 Paragraph HE9.1 concerns the consideration of applications for consent relating to designated heritage assets. It states that *'Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Loss affecting any designated heritage asset should require clear and convincing justification...'*

- 3.11 PPS5 defines setting as *'The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.'*

- 3.12 Paragraph HE10.1 concerns development that affects the setting of a designated heritage asset. It states that *'When considering applications for development that affect the setting of a heritage asset, local planning authorities should treat favourably applications that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset. When considering applications that do not do this, local planning authorities should weigh any such harm against the wider benefits of the application.'*

- 3.13 PPS5 is accompanied by a *'Historic Environment Planning Practice Guide'* (English Heritage, 2010) which includes guidance on assessing the implications of change affecting heritage assets and the settings of heritage assets.

- By Design**
- 3.14 PPS1 explains that good design is about more than visual appearance. In assessing the effect of a project on townscape, it is important to consider urban design considerations in the round.
- 3.15 The good practice guidance document ‘*By Design - Urban design in the planning system: towards better practice*’ (CABE / DETR, 2000) sets out the ‘*objectives of urban design*’, which are general principles, and ‘*aspects of development form*’, the physical expression of urban design which ‘*influences the pattern of uses, activity and movement in a place, and the experience of those who visit, live or work there*’. Project proposals, in attempting to meet the objectives of urban design, will do so most successfully by taking into account the aspects of development form which are particular to the site and its setting.
- 3.16 The guidance explains eight ‘*aspects of development form*’ which form a useful basis for structuring an understanding of townscape:
- Layout: urban structure. The framework of routes and spaces that connect locally and more widely, and the way developments, routes and open spaces relate to one another.
 - Layout: urban grain. The pattern of the arrangement of street blocks, plots and their buildings in a settlement.
 - Landscape: The character and appearance of land, including its shape, form, ecology, natural features, colours and elements, and the way these components combine.
 - Density and mix. The amount of development on a given piece of land and the range of uses.
 - Scale: height. Scale is the size of a building in relation to its surroundings, or the size of parts of a building or its details, particularly in relation to the size of a person. Height determines the effect of development on views, vistas and skylines.
 - Scale: massing. The combined effect of the arrangement, volume and shape of a building or group of buildings in relation to other buildings and spaces.
 - Appearance: details. The craftsmanship, building techniques, decoration, styles and lighting of a building or structure.
 - Appearance: materials. The texture, colour, pattern and durability of materials, and how they are used.

- 3.17 *By Design* also sets out seven ‘*objectives of urban design*’, which it suggests are to be sought in creating a successful place. They are abstract objectives; the guidance suggests that the design of a project should take into account how the objectives can be translated into reality by virtue of the aspects of form proposed. The seven objectives of urban design are:
- Character – a place with its own identity.
 - Continuity and enclosure – a place where public and private spaces are clearly distinguished.
 - Quality of the public realm – a place with successful and attractive outdoor areas.
 - Ease of movement – a place that is easy to get to and move through.
 - Legibility – a place that has a clear image and is easy to understand.
 - Adaptability – a place that can change easily.
 - Diversity – a place with variety and choice.

**The London Plan
Spatial Development Strategy for Greater London,
July 2011**

- 3.18 The London Plan is ‘*the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.*’ The policies most relevant to townscape, conservation and visual assessment are contained in Chapter Seven ‘*London’s Living Places and Spaces*’.
- 3.19 Policy 7.1, on ‘*Building London’s Neighbourhoods and Communities*’, states that “*The design of new buildings and the spaces they create should help reinforce or enhance the character, legibility, permeability and accessibility of the neighbourhood.*” Policy 7.4 expands on the theme of local character and states that ‘*Development should have regard to the form, function, and structure of an area, place or street and the scale, mass and orientation of surrounding buildings.*”
- 3.20 Policy 7.6 on ‘*Architecture*’ states that ‘*Architecture should make a positive contribution to a coherent public realm, streetscape and wider cityscape. It should incorporate the highest quality materials and design appropriate to its context.*’ It goes on to set out a list of requirements of new buildings and structures including, inter alia, that they should be “*of the highest architectural quality*”; they should “*be of a proportion, composition, scale and orientation that enhances, activates and appropriately defines the public realm*”; they should include details and materials that “*complement, not necessarily replicate*” local architectural character; they should not cause “*unacceptable harm to the amenity of surrounding land and buildings, particularly residential buildings*”; and they should “*optimise the potential of sites*”.

- 3.21 Policy 7.7 relates to the location and design of tall and large buildings. It states that tall and large buildings “*should be part of a plan-led approach*” to development of an area and should not have “*an unacceptably harmful impact on their surroundings.*” In particular, tall and large buildings are required, inter alia, to “*relate well to the form, proportion, composition, scale and character of surrounding buildings, urban grain and public realm (including landscape features) particularly at street level*”; they should “*individually or as a group, improve the legibility of an area, by emphasising a point of civic or visual significance where appropriate, and enhance the skyline and image of London*”; they should incorporate “*the highest standards of architecture and materials*”; and they should have ground floor activities that relate positively to surroundings streets and “*contribute to improving the permeability of the site and wider area, where possible.*”
- 3.22 Policy 7.8 on ‘*Heritage Assets and Archaeology*’ states that “*Development affecting heritage assets and their settings should conserve their significance, by being sympathetic to their form, scale, materials and architectural details.*” Policy 7.10 on ‘*World Heritage Sites*’ states that “*Development should not cause adverse impacts on World Heritage Sites or their settings...*”
- 3.23 Policies 7.11 and 7.12 relate to strategic views and the management of them. In July 2010 the Mayor published the ‘*London View Management Framework Revised Supplementary Planning Guidance*’ (‘LVMF’) which is designed to provide further clarity and guidance on the London Plan’s policies for the management of these views. Two of the views in the LVMF, from assessment points 2B.1 and 4A.1, are relevant to this Site. A draft revised version of the LVMF was issued for consultation in July 2011; the proposed revisions would not result in any changes that would affect consideration of development on the Site.

London Borough of Camden Local Development Framework (LDF)

- 3.24 LBC’s cores strategy policy ‘CS14 - *Promoting high quality places and conserving our heritage*’ deals with design and heritage.
- 3.25 Policy CS14 sets out what will be required of new development in order to ensure that it is ‘*attractive, safe and easy to use*’, including ‘*the highest standard of design that respects local context and character*’; ‘*preserving Camden’s rich and diverse heritage assets and their settings, including conservation areas, listed buildings...*’; and ‘*protecting important views of St Paul’s Cathedral and the Palace of Westminster from sites inside and outside the borough and protecting important local views.*’
- 3.26 In paragraph 14.24, important local views are said to include ‘*views relating to the Regent’s Canal*’ and ‘*views into and from conservation areas*’.

- 3.27 The character of the various elements within Camden is discussed in the Core Strategy. The town centre of Camden is identified as being a key element in the central part of the borough. It is noted that centres such as Camden Town ‘*developed in a piecemeal fashion along historic routes into London*’. Camden Town ‘*is strongly characterised by its markets and entertainment*’ which are said to ‘*influence the style and appearance of development, which is in many cases colourful and individual.*’ The character of the Regent’s Canal is also discussed, and it is noted as providing ‘*an area of nature conservation interest and amenity space along its course through King’s Cross and Camden Town to Regent’s Park.*’
- 3.28 Policy CS15, Protecting and improving our parks and open spaces and encouraging biodiversity, makes specific reference to ways in which LBC will seek to ‘*preserve and enhance*’ the Regent’s Canal, including ‘*applying the guidance in the Regent’s Canal Conservation Area Management Strategy*’ and ‘*working with.....other land owners/ developers, users and the local community to improve the Canal and towpath.*’
- 3.29 Policy CS14 cross refers to policies in the ‘*Camden Development Policies*’ on design (policy DP24) and heritage (policy DP25). These are broadly consistent with the national guidance referred to above.

**Camden Planning Guidance
1 - Design**

- 3.30 In 2011 LBC adopted a Supplementary Planning Document ‘*Camden Planning Guidance 1 Design*’. It contains policies on design and heritage that are broadly consistent with national policy and guidance on these subjects.
- Hawley Wharf Area Planning Framework**
- 3.31 In 2009 LBC adopted the Hawley Wharf Area Planning Framework. It covers the whole of the Site and some adjacent areas.
- 3.32 Section 6 of the Planning Framework deals with urban design and public realm. It sets out design principles which are broadly consistent with *By Design* and national historic environment policy and guidance. It notes that the area includes important views, especially along the canal, and also notes the opportunity to open up new views.

- 3.33 Section 6 divides the area covered by the document into five sub-areas. It sets out a characterisation of each and discusses views, townscape and opportunities for improvement. The sub areas identified are:
- the canalside land;
 - the Camden High Street/Chalk Farm Road frontage;
 - land between the railway viaducts and the Castlehaven Road frontage;
 - land north of the railways including the Hawley Road frontage; and
 - land fronting Kentish Town Road.
- 3.34 These areas correspond to five ‘*general areas of development opportunity*’ identified in Section 2 of this SPD.
- 3.35 The aspirations set out in the SPD that are most relevant to the subject matter of this assessment are:
- Making the best use of development opportunities to significantly enhance the attractiveness and contribution of the area to Camden Town as a whole;
 - Building on town centre strengths and unique qualities;
 - Fostering a mix of appropriate town centre uses including retail, market retail, leisure uses, new homes (and affordable housing), access to work and training opportunities and creating new business space;
 - High quality design which understands, values and responds positively to local character, heritage and the canal;
 - Ensuring new development meets the highest attainable standards of sustainable design and construction;
 - Integrating activities and neighbourhoods and ensuring that new development delivers benefits to the local community by providing improved amenities that are accessible to local residents as well as visitors and tourists;
 - Creating safe and attractive streets, public spaces and new public realm; and
 - Making walking and cycling more attractive as part of a sustainable transport and movement pattern.

Regent’s Canal Conservation Area Appraisal and Management Statement

- 3.36 Part of the Site lies in the Regent’s Canal Conservation Area (‘CA’), a linear conservation area which covers about 2km of the canal from King Cross to Camden Town together with sites on either side of the canal. Camden Borough Council has published the Regent’s Canal Conservation Area Appraisal and Management Statement, dated 2008 (the ‘CA Appraisal’). The document identifies Hawley Wharf as an opportunity site.
- 3.37 The CA Appraisal divides the Conservation Area into three sub areas. The Site is in sub area one, which is centred on Camden Lock. The CA Appraisal notes that ‘*The view east from Hampstead Road Bridge towards Hawley Locks and Kentish Town Locks reveals the steepest fall along the canal with the waterway dropping significantly over the three flights of lock adjacent to the former TV-AM buildings. The Hawley Wharf site is currently vacant awaiting redevelopment. The wharf has an open aspect, which is framed to the north by the railway viaduct and to the south by the former TV-AM building, which sits on the canal edge.*’
- 3.38 The CA Appraisal set out the following guidance for new development: ‘*The conservation area is varied in scale and new design should respect the scale of the particular location. Appropriate design for the conservation area should complement the appearance, character and setting of the existing buildings and structures, the canal, and the environment as a whole. The enclosure or openness of particular sections of the canal should be respected as this quality contributes significantly to its varying character. Building heights should not interfere with views to local landmarks. Developments should respect and where possible enhance central London panoramas and other views from within and outside the conservation area.*’
- 3.39 The CA Appraisal contains general statements about the design of new development which are broadly consistent with national policy and guidance.

4.0

The Site and its surroundings

- 4.1 The Site (which has been referred to in general terms as Hawley Wharf) is located close to the centre of Camden Town and within the area known colloquially as Camden Lock, north of Camden Town underground station. It occupies a significant proportion of an area of land bounded by Regent's Canal to the south, Chalk Farm Road to the west, Castlehaven Road and Hawley Road to the north / north-east, and Kentish Town Road to the east. Part of the Site lies in the Regent's Canal Conservation Area. The Site is crossed by two public roads, Torbay Street and Leybourne Road, and by rail viaducts. There are a number of existing buildings on the Site, some of which are to be retained and some of which are to be demolished as part of the Development. These are described below.

The Site

- 4.2 The townscape in and around the Site is dominated by Victorian brick rail viaducts about 8-10 m high. The viaducts carry passenger and goods trains – principally the London Overground services. The rail lines have overhead electric cables carried on galvanised steel gantries, which rise to a greater height than most of the nearby buildings.
- 4.3 Coming from the east, a single viaduct crosses the Kentish Town Road boundary of the Site, then diverges into two viaducts, the Northwest-East Viaduct heading north to cross Castlehaven Road, and the East-West viaduct heading west to cross the Castlehaven Road / Chalk Farm Road junction. The viaducts divide the Site into three areas, connected by at-grade routes through the viaduct arches. The linear area next to the canal further divides naturally into two sub areas, one at each end of the Site. These four areas are described in turn below.
- 4.4 **Area A** is a strip of land between the East-West Viaduct and the canal, bounded by Chalk Farm Road to the west and Kentish Town Road to the east. At its west end fronting Chalk Farm Road is 1-6 Chalk Farm Road, a Victorian terrace in poor condition, three storeys high in stock brick, nos. 1-5 set back from the pavement with ground floor shop units projecting towards the street in the standard London pattern. Beside these is a path down from Chalk Farm Road to the canal towpath which runs along the north (Site) side of the canal here. The remainder of Area A is occupied by single-storey temporary market buildings.
- 4.5 There is some tree planting at the back of the towpath including some prominent ash trees next to the Chalk Farm Road bridge.
- 4.6 There are few positive townscape qualities to this area considered in its own right. 1-6 Chalk Farm Road are said in the CA Appraisal to make a positive contribution to the CA. Their townscape contribution is comparable with that made by any row of Victorian buildings of this type, which is standard throughout inner London.
- 4.7 **Area B** lies between the Northwest-East Viaduct and Hawley Road. The area is crossed by Torbay Street which gives access under the viaduct to Leybourne Road in Area C. The northern boundary of Area B, the Hawley Road frontage, is occupied by a row of two and three-storey nineteenth century residential buildings, 1-17 (odd) Hawley Road, in groups of one, two and three buildings. No. 1 Hawley Road, the earliest, is listed at Grade II. It has a very run down appearance. Behind these houses is a run down area of single storey workshops and open yards, together with some two storey Victorian cottages on Torbay Street.
- 4.8 There are some trees both north and south of the Hawley Road houses, none of any notable quality, and some of those on Hawley Road are unfortunately close to the houses and crowd them out visually to some extent.
- 4.9 The listed house and other Victorian houses on Hawley Road are a group typical of the period, with some limited positive townscape qualities, considered in their own right, when seen from Hawley Road. However, they are in poor condition, their setting seen from the front is poor, and this is exacerbated by the fact that Hawley Road is a busy one way street unpleasant for pedestrians. Their setting at the back of the houses is very poor.
- 4.10 This area has no other positive townscape qualities.
- 4.11 **Area C** lies between the two viaducts and is bounded to the north by Castlehaven Road. It is crossed by Leybourne Road, connecting via Torbay Street through to Hawley Road, and Haven Street. The Castlehaven Road frontage is occupied by three buildings: 4-8 Castlehaven Road, a nondescript four storey building in brick with ground floor commercial units, adjoining the Hawley Arms pub which does not form part of the Site (see below); 12 Castlehaven Road, a two storey commercial 1980s building faced in concrete blockwork; and 14-16 Castlehaven Road, a pair of plain mid Victorian terraced houses, three storeys high, in brick, with commercial units at ground floor level.
- 4.12 There are a few small trees in this area but none of significance.
- 4.13 There are no positive townscape qualities to this area.
- 4.14 **Area D.** Most of Area D, east of Area A, is occupied by a nondescript collection of four-storey 1980s buildings in office use, running back from a frontage on Kentish Town Road, with surface car parking. The south elevation of these buildings is visible across a cleared development site between Area D and the canal; planning permission has previously been granted to develop this land.
- 4.15 There are a few small trees adjacent to this area but none of significance.
- 4.16 There are no positive townscape qualities to this area.

The immediate surroundings of the Site

- 4.17 To the **south of the Site** is the Regent’s Canal, running roughly east-west here. The level of the canal drops from west to east via a sequence of three locks: Hampstead Road Lock, also known as Camden Lock, to the west of Chalk Farm Road; Hawley Lock facing the Site; and Kentish Town Lock to the east of the Site. There is a towpath along the north side of the canal next to the Site which continues below the road bridges at either end of this stretch of canal. The south elevation of these buildings is visible across a cleared development site between Area D and the canal; planning permission has previously been granted to develop this land, but this permission has now expired.
- 4.18 To the **south-west of the Site** is Camden High Street / Chalk Farm Road. The road is a historic road from central London to Hampstead. Today it is a busy A road and a bus route with one way traffic, heading north, in this stretch. It is lined by street frontage buildings, mostly three storey high Victorian terraced houses with shops at ground floor level. The shop units and the street life associated with them have a distinctive character related to that of the Camden Lock market, which is a major draw for visitors.
- 4.19 To the **north-west of the Site** is Castlehaven Road. This is part of a one way loop taking southbound traffic from Chalk Farm towards central London, so it carries significant vehicular traffic including buses, but the number of pedestrians is significantly less than in Camden High Street, and the north side of the street is mainly residential. The townscape is fragmented, with the remains of the coherent Victorian townscape that can be seen on historic maps interspersed with later development which is generally coarser grained and less clearly related to the street pattern. On the north side of the road is Castlehaven Open Space, a small park.
- 4.20 To the **north of the Site** is Hawley Road. Its character is similar to that of Castlehaven Road and it is a continuation of the one-way loop. On the north side is the south end of a large area of postwar public housing, the Clarence Way Estate, in blocks up to eight storeys high. On the south side, the street is fronted by Victorian detached and semidetached villas, most of them on the Site but some not, and later residential infill, and two nondescript single storey shop / food takeaway units next to the listed 1 Hawley Road.

Historical development of the area

- 4.21 An account of the historical development of the area is given in Chapter 9 ‘Built Heritage’ of Volume 1 of the ES. A summary is given below.
- 4.22 Significant development of Camden Town began at the end of the eighteenth century and the beginning of the nineteenth century, centred on the old road from London to Hampstead, today’s Camden High Street. Considerable change took place within a few decades as residential streets were built; a new road, Camden Road, was laid out towards the north-east; and the Regents Canal was built. By the 1860s/70s the area was fully developed and the main rail line to Euston and the north London line viaducts had also been completed.
- 4.23 Pockets of industry and services developed in the areas around the rail lines and canals. Perhaps influenced by the dominance of infrastructure, the residential areas were not fashionable and suffered social decline through the end of the nineteenth and first half of twentieth century, until gentrification began to happen in some residential streets, generally those further from the town centre, from the 1960s onwards. Infill development such as that facing Castlehaven Gardens has taken place in the vicinity of the Site in the postwar years. The Clarence Way estate north of Hawley Road, begun in the 1940s, is the largest postwar redevelopment in the immediate vicinity of the Site.
- 4.24 The most significant change in the area immediately around the Site in recent decades has been the emergence since the 1970s of Camden Lock markets and the associated activity in the wider area as a major draw for very large numbers of visitors, many from abroad. The buildings are a mix of re-used older buildings interspersed with some substantial recent additions, with an overall feeling of an ad hoc and informal approach to planning. The commercial activity, with stalls and shops selling clothes, bric-à-brac, fast food and other things with a prevailing ‘alternative’ flavour and aimed mainly at the youth market, is very particular to the area.
- 4.25 The resulting townscape and urban grain in the wider area around the Site is varied. In the vicinity of the Site there is a mix of buildings that vary considerably in type, form, age, use, scale and external materials. Areas of relatively coherent development, mostly Victorian housing, can be found slightly further from the Site and the town centre. A broad-brush characterisation of the townscape character areas around the Site follows.

Townscape character areas



Fig 1. Character areas

Area 1 – the canal and adjoining areas

- 4.26 The Regent’s Canal itself and the areas immediately on either side of it have a distinctive character. The nature of the buildings on either side of the canal, and their relationships with the canal itself, are varied, contributing to an informal character which is picturesque in places. Most of this area lies in the Regents Canal CA, which is referred to further below.
- 4.27 The character is strongest in the section of canal west of the Site, between Chalk Farm Road as far as Oval Road (the next road to cross the canal west of Chalk Farm Road); and to a lesser degree, between Chalk Farm Road and Kentish Town Road (opposite the Site). In each case there is a stretch of water about 200-300m long with a substantial road bridge at each end; the canal comprises a sequence of narrow locks and wide basins rather than linear channel; the course of the canal meanders; there are good quality trees, including several attractive ashes and willows, at intervals along the edge of the canal; and there is a towpath along the north side which is well used and related to market activity.
- 4.28 The stretch of canal west of Chalk Farm Road, which includes the listed Hampstead Road lock, is the most picturesque stretch in central Camden. There is commercial activity and public access on both sides, the two

- sides being linked by the listed footbridge, and there are areas of open air market open to the towpath, surrounded by the varied buildings of Camden Lock market. These and other buildings in this area are varied in age, scale and materials, and in their relationship with the canal. Several of the nineteenth and twentieth century buildings seen from Chalk Farm Road looking west along the canal are substantial, and large-grained. Several of the buildings and bridges in this area are listed.
- 4.29 The part of the canal which adjoins the Site, east of Chalk Farm Road, which includes two further locks, is less lively and attractive. There is little activity or public access on the south side, where the former TV/AM building comes to the water’s edge opposite the Site; and the towpath on the north side is separated from the Site by a fence.
- 4.30 Between the south boundary of the Site at its east end and the canal is a cleared site awaiting redevelopment. It has a frontage to Kentish Town Road. Planning consent has previously been granted for a redevelopment comprising a 4/5 storey mixed use building; this consent has now expired.
- 4.31 East of Kentish Town Road, the canal is flanked by recent housing, 3 / 4 storeys, on either side. The towpath continues along the north side of the canal and there is no public access to the south side.
- 4.32 This is an area of moderate sensitivity to change because of the conservation area and the listed buildings, and because of its status as a tourist destination.
- Area 2 – Camden High Street / Chalk Farm Road**
- 4.33 The stretch of Camden High Street / Chalk Farm Road between the major road junction with Parkway / Camden Road / Kentish Town Road and the railway bridge has a character which is similar to the stretches of road north and south of it in terms of built form, but which is strongly influenced by the character of the markets in terms of the pattern of activity. The humped canal bridge (listed at Grade II) forms a distinct break in the streetscape, with views over Camden Lock market to east and west.
- 4.34 Much of the street is fronted by three storey stock brick terraces with shop units at ground floor level. Most of these are Victorian; some are more recent. The base buildings are generally standard for their period and of no particular quality or interest, but many of the Victorian buildings have been modified by retail tenants in an exotic fashion with applied sculptural elements and so on. The Pevsner guide characterises the areas as ‘lined with scruffy early C19 terraces above the crowded shops which have become an overspill from the market at Camden Lock’.
- 4.35 The rail bridge which crosses the junction between Chalk Farm Road and Castlehaven Road provides a strong sense of separation between the areas north and south of it, although the road is continuous. The bridge itself, in painted metal decorated with signage, is visually distinctive.

- 4.36 North of the rail bridge, the east side of Chalk Farm Road continues with a typical inner London main road character, with Victorian terraced buildings interspersed with later infill, most of the ground floor frontages being commercial. The stretch closest to the rail bridge is more coherent; it becomes more fragmented as one progresses north.
- 4.37 The west side north of the rail bridge is very different in character, with much of the development set back behind blank brick walls: the buildings of Stanley Sidings, some listed, and then the Morrisons supermarket development.
- 4.38 This is an area of moderate sensitivity to change because of the conservation area and listed buildings and structures, and because of the area’s status as a tourist destination.

Area 3 – Castlehaven Road (west of the Northwest-East Viaduct) and environs

- 4.39 Castlehaven Road is dominated by one-way traffic, and has a railway bridge at each end of the stretch opposite the Site. On its south side are some Victorian remnants, including the Hawley Arms pub, and at no. 12, a two-storey 1980s building containing workspace. The north side is largely occupied by a landscaped area known as Castlehaven Open Space, created in an area formerly occupied in the nineteenth century by terraced housing. It is laid to grass, crossed by paths and with substantial trees on three sides. There is a community building on the east side of the space, for the Castlehaven Community Association, with a fenced off area of playground. The gardens are is fronted by terraces of postwar housing, one at right angles to Castlehaven Road overlooking its west side, and one on its north side, at the end of which is a former Victorian pub. The Victorian brick viaduct encloses the east side of Castlehaven Gardens. Running north beyond its north-east corner, opposite the former pub, is a short row of Victorian villas on Hawley Road which are seen from the gardens.
- 4.40 The Castlehaven Road frontage of the Site has fragmented quality and there is little of architectural or townscape interest. There is a lack of enclosure, and the gaps do not offer anything of interest to see other than the viaducts.
- 4.41 This is an area of low to moderate sensitivity to change because of the amenity value of Castlehaven Open Space.

Area 4 – Hawley Road (east of the Northwest-East Viaduct) and environs

- 4.42 Hawley Road is also dominated by one-way traffic. The two sides have different characters. Much of the south side, on either side of Torbay Street is occupied by 2/3 storey Victorian houses, mostly run down, in groups of one, two and three houses, mostly set back from the back of pavement behind small front gardens. Some of these, including the listed building at 1 Hawley Road, are on the Site. At the west end of the south side, turning the corner is a recent block of flats, 3 / 4 storeys high, in brick with a rendered base, nondescript in character.
- 4.43 The north side of Hawley Road opposite the Site is dominated by the south part of the large Clarence Way Estate, red brick council housing built from the 1940s onwards: 4/6 storey blocks close to the street, and between them a large 8 storey block set back behind an area of grass and trees, the group laid out as a formal composition centred on the line of Torbay Street opposite. At the east end of the north side is a 2 / 3 storey Victorian pub, now called Quinns, built to the back of pavement, and painted in bright yellow with bright blue detail.
- 4.44 East of this is the junction with Kentish Town Road, a main road, and beyond this Jeffreys Street, a residential side street of Victorian terraced houses, in the Jeffreys Street CA (see below).
- 4.45 This is an area of low sensitivity to change generally, but moderate sensitivity in respect of the settings of the listed building and the CA.
- Conservation areas**
- 4.46 As noted above, part of the Site lies in the **Regents Canal Conservation Area**.
- 4.47 The CA Appraisal divides the Conservation Area into three sub areas. The Site is in sub area one, which is centred on Camden Lock. The appraisal notes that ‘The view east from Hampstead Road Bridge towards Hawley Locks and Kentish Town Locks reveals the steepest fall along the canal with the waterway dropping significantly over the three flights of lock adjacent to the former TV-AM buildings. The Hawley Wharf site is currently vacant awaiting redevelopment. The wharf has an open aspect, which is framed to the north by the railway viaduct and to the south by the former TV-AM building, which sits on the canal edge.’
- 4.48 Two further conservation areas lie not far from the Site. The **Camden Town Conservation Area** is centred on Camden High Street and extends northwards as far as Buck Street and Inverness Street, about 100m south of the Site at its closest.

- 4.49
- A Camden Town Conservation Area Appraisal and Management Strategy was adopted by LBC in 2007. The appraisal divides the CA into two character areas; the Site is closest to ‘*Sub area 1: Commercial*’ which is focussed on the area around Camden Town tube station, and other sub area, ‘*Sub area 2: residential*’ is too far from the Site for there to be any potential effect resulting from the Development.
- 4.50
- The appraisal identifies key views including ‘*Views to the north along Camden High Street towards the Regent’s Canal with distant views of the treeline of Hampstead Heath*’.
- 4.51
- The **Jeffreys Street Conservation Area** lies east of the Site; its western boundary is about 60m from the Site at its closest.
- 4.52
- A Jeffreys Street Conservation Area Statement was adopted by LBC in 2003. The Statement divides the CA into two sub-areas, sub area one being the area closest to the Site. The CA is characterised as ‘*an enclave of quiet, predominantly residential, streets and narrow lanes between the busy thoroughfares of Camden Street and Royal College Street*’.
- 4.53
- Jeffreys Street itself is a street of C19 terraced houses, most of which are listed at Grade II. It has a quiet, enclosed character. The group of C19 houses on Kentish Town Road at either side of the end of Jeffreys Street, some of which are also listed, are also within the CA; their setting is much more open and of poorer quality, as they face a busy five-way traffic-light controlled main road junction.
- 4.54
- Other conservation areas** in the locality are further from the Site, and it is apparent from a site visit that there is no potential for their settings to be affected to a significant degree by the Development. The CA’s, other than those already discussed, of which part is within 500m or so of the Site are the Primrose Hill, Regents Park, Camden Broadway, Camden Square, Rochester, Bartholomew Estate, Inkerman, West Kentish Town and Harmood Street CA’s.

Listed buildings

- 4.55
- 1 Hawley Road, listed at Grade II, is a two storey C19 house on the Site. It is described in Chapter 9 ‘Built Heritage’ of Volume 1 of the ES.
- 4.56
- The present townscape setting of 1 Hawley Road is not good. The building is in poor condition and it is flanked by a mediocre two storey extension to the west and nondescript modern single storey retail / food takeaway units to its east. A tree in its front garden crowds out the building. There is considerable scope for improvement to the building and its setting.
- 4.57
- There are a number of other listed buildings and structures within 500m of the Site, all listed at Grade II.

- 4.58
- Most of these fall into two groups, one group west of the Site around the canal, and the other group east of the Site in Jeffreys Street and Kentish Town Road.
- 4.59
- The canal group, along the canal between Chalk Farm Road and Oval Road, comprises, from east to west:
 - Hampstead Road Bridge
 - Regents Canal Information Centre (former lock keeper’s cottage)
 - Hampstead Road Lock
 - Roving Bridge
 - Former Interchange warehouse
 - Interchange canal towpath bridge
 - Former Gilbey House
- 4.60
- The setting of these listed buildings is as characterised in Area 1 above, and is generally of moderate to good townscape quality.
- 4.61
- The Jeffreys Street / Kentish Town Road group comprises:
 - 1 and 1A Jeffreys Street
 - 3-9 Jeffreys Street
 - 11-33 Jeffreys Street
 - 4-20 Jeffreys Street
 - 22-28 Jeffreys Street
 - 1B, 1C, 1D and 1E Jeffreys Street and 46 Kentish Town Road
 - 48 and 50 Kentish Town Road
 - 52-64 Kentish Town Road
 - 55 Kentish Town Road
 - 57-63 Kentish Town Road
- 4.62
- The setting of these listed buildings is as characterised in Area 4 above. The townscape quality of Jeffreys Street is moderate to good but that of the Kentish Town Road buildings is poor to moderate.
- 4.63
- There are a number of other listed buildings and structures within 500m of the Site, also all listed at Grade II, but from inspection on Site it is apparent that these will have no significant intervisibility with the proposed development, or where there is intervisibility, there will be no significant effect on their setting. The closest such buildings to the Site are:
 - Stanley Sidings Stables (north of the Chalk Farm Road rail bridge)
 - The Elephant House, Hawley Crescent
 - Arlington House, Arlington Road

Existing townscape and conclusions

- 4.64
- The character of Camden town centre as a whole is captured well in the Pevsner guide: ‘*the fabric of the centre of Camden Town is still essentially C19, lively and scruffy, a mixture of shabby terraces and robust industrial, canal and railway survivals, with the Camden Lock markets, overflowing with C20 youth, dominating the N end.*’ This character persists today.
- 3.65
- The character of the Site and the area immediately around it is significantly influenced by the canal and the railways. The Camden Town stretch of the canal has a strong townscape character, and in central Camden it tends to be perceived as a sequence of ‘*places*’, as much as a linear element, for the reasons given above. The railway viaducts by contrast tend to divide up the townscape in the way that it is perceived, although as is characteristic of inner London, their layout is almost entirely unrelated to the pattern of streets and buildings that existed before the railway came, much of which remains. Because the viaducts are so dominant relative to the buildings, the result is a rather confused urban structure.
- 4.66
- The building stock is predominantly Victorian, but in the vicinity of the Site there is not a strong sense of visual coherence other than in limited areas. This is true of the original Victorian townscape, but in any case that townscape is not intact in this area over any extended area and there are many examples of sites that have been rebuilt at all periods between the Victorian era and now. In that respect this is a typical commercial district of inner London; it is the canal and the market that make it distinctive.
- 4.67
- The Site is run down and while it has reasonably good pedestrian permeability in theory, in that cross-routes exist, the conditions are such that few use the routes not directly connected with the market. It is obvious that appropriate redevelopment would be beneficial to the Site and its surroundings, in terms of the appearance of the Site and the objectives of urban design more generally. The Site is identified as an opportunity site both in the Hawley Wharf Planning Framework and in the CA appraisal.

5.0

The Development

- 5.1 The Development comprises new buildings with a variety of uses on sites A, B, C and D, connected by a new network of public routes and spaces. Most of the ground floor of the Site is publicly accessible on foot via routes from each of the surrounding streets.
 - 5.2 The majority of **Area A** is occupied by a new retail building on 5 levels, **Building A**. This is connected to the retained terrace at **Numbers 1 to 6 Chalk Farm Road**, which is restored for retail use. This in turn is joined to a new building, **Numbers 7 / 8 Chalk Farm Road**, added to extend the northern end of the terrace facing Chalk Farm Road, to replace the pub which formerly occupied this part of the Site.
 - 5.3 The main part of **Building A** is distinctive in appearance. Its elevations are composed of large brick arches resting on brick piers. Within the openings formed are open galleries with balustrades which act as circulation routes serving the retail space in the building. The accommodation is divided into two parts at ground floor level, on either side of a public route connecting the canalside and a new open space, the **Canal Space**, with Area C, via one of the arches of the rail viaduct. The top storey of Building A is expressed as a separate element, in the form of two glazed pavilions set back from the main building line.
 - 5.4 On **Area B** are (1) new housing, comprising two linked blocks, **Buildings W** and **X**, and (2) a new school building, comprising two linked blocks, school block **S1** and school block **S2**. Building X and school block S1 have a frontage to Hawley Road. The school building adjoins the listed 1 Hawley Road, which is retained and refurbished. The buildings lie on either side of a new north-south pedestrian route which replaces the present route along Torbay Street and continues through to the canal, running under both rail viaducts, via the **Arches Space** which faces the canal between Area A and Area D.
 - 5.5 Unlike the other buildings which form part of the Development, the school building has not been designed in detail, but is submitted in outline form, defined by Parameter Plans and written Design Principles.
 - 5.6 Each pair of blocks is L-shaped in plan. The residential accommodation is arranged with a 3/4 storey element, Building X on Hawley Road and a 9 storey element, Building W, running south toward the viaduct.
 - 5.7 The school also has a wing on Hawley Road (school block S1) and a wing running south towards the viaduct (school block S2). The heights of these two blocks are determined by maximum and minimum figures defined on the Parameter Plans.
 - 5.8 On **Area C** are two new mixed use buildings: **Building C1**, a linear building providing a street frontage to Castlehaven Road; and **Building C2**, with a triangular plan form, occupying the east part of this area. These two buildings face and define a new public open space, the **Community Space**, which is triangular in plan, and the third side of which is formed by the East-West Viaduct. There is an open pedestrian route below building C1 connecting the Community Space with Castlehaven Road.
 - 5.9 The building on Castlehaven Road, C1, comprises seven levels, with retail space at ground floor level and flats at the upper levels.
 - 5.10 The eastern building, C2, is nine storeys high and comprises flexible office and business space at the lowest three levels and flats at the upper levels. The building fills the triangular footprint at the office levels and is divided into two elements at the residential levels, facing each other across a landscaped terrace.
 - 5.11 On **Area D** is a new mixed use building, **Building D**, occupying a similar footprint to the existing building on this part of the Site. It is 5 levels and comprises cafe and business space at ground floor level and flats at the upper levels.
 - 5.12 The predominant external material of the new buildings across the Development is brick. Building W is clad in clay tiles. Set back upper floors are clad in clear and opaque glass.
 - 5.13 Materials are not defined for the outline component of the Development, but the Design Principles document states that the predominant material will be one of or a combination of the following: brick, terracotta and coated metal.
 - 5.14 The public realm design proposes a network of public landscaped routes and spaces giving access from Chalk Farm Road, Castlehaven Road, Hawley Road and Kentish Town Road, and connecting all of the buildings. These routes run along both viaducts and also connect all four streets surrounding the Site to the canal towpath via direct 'straight line' routes. In Areas A and C, most of these routes and spaces are faced by active commercial frontages.
- ### Assessment of architectural approach
- 5.15 The architecture of the Development, in respect of the building for which detailed designs are provided as part of the planning application (i.e. all buildings except school blocks S1 and S2) has coherence across the different buildings, with consistency deriving from the use of brickwork and clay tile cladding across the piece, and a crisp modern architectural language.

- 5.16
- Building A is the most distinctive and original building, its appearance clearly inspired the rail viaducts, but visually quirky and slightly surprising, very much in the spirit of Camden Lock. The open galleries will be full of people during business hours so that this multi-level building will share the obvious vitality and life of the existing market areas – the reverse of the conventional ‘big blank box’ modern retail building, and making the project highly site-specific.
- 5.17
- The other buildings are calmer, designed as solid urban buildings clearly related visually to Victorian brick buildings, both residential and commercial, but in a crisp style appropriate to the twenty-first century. This Site is large enough for the new buildings to have a character of their own, and this is achieved by the buildings proposed; but the visual connections with the existing context are clearly apparent.

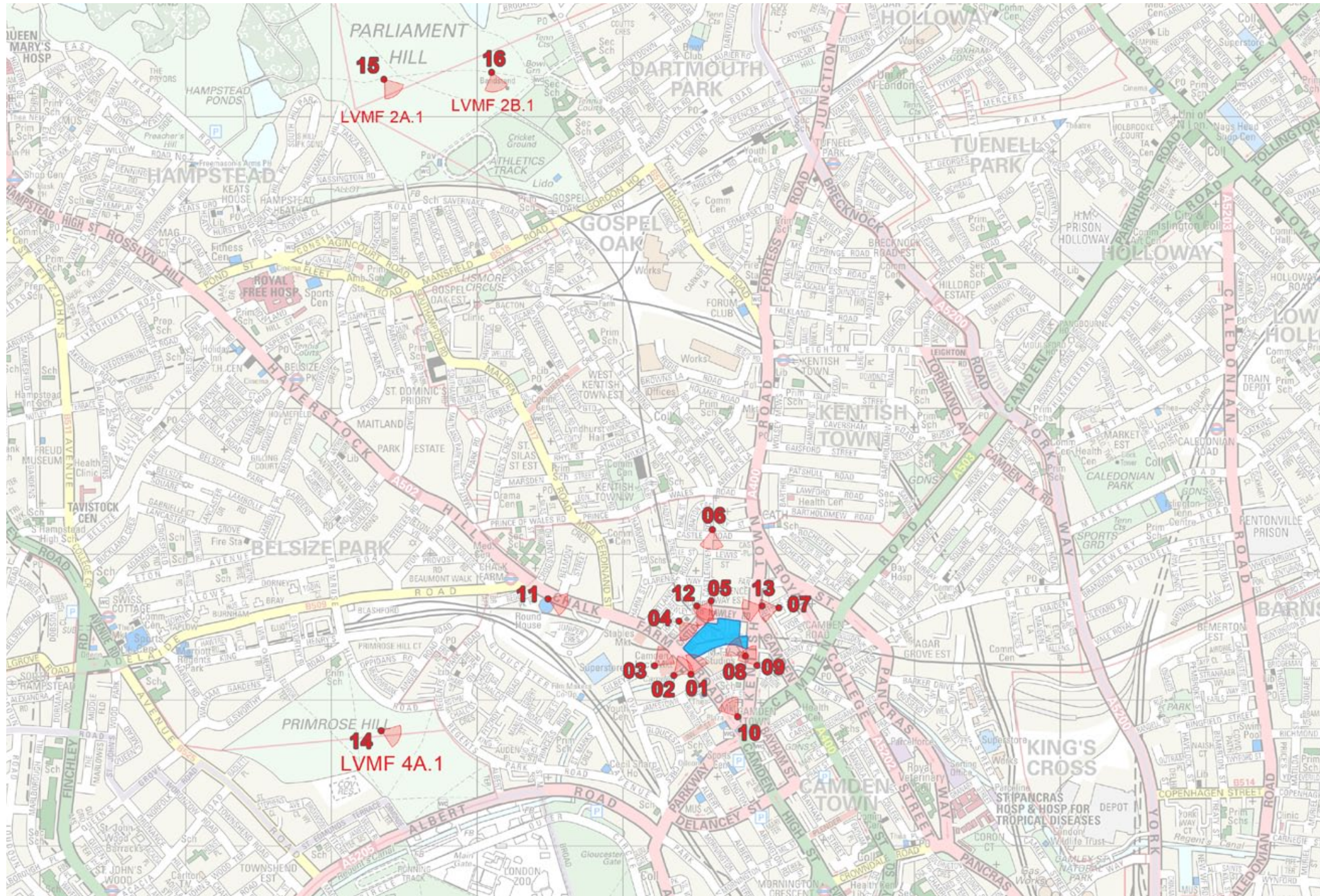
6.0

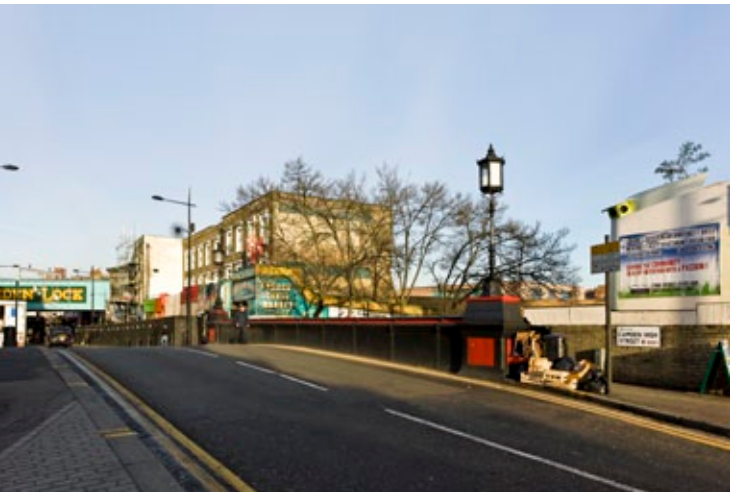
Views and visual assessment

Table 1: Table of Views

View	Location	Page	Style	Ref	OS-E	OS-N	Height (AOD)	Heading	Lens	Field of View	Film	Date	Time
01	Chalk Farm Road Bridge	28	AVR3	D4260	528741.34	184106.67	30.33 m	351.52°	24 mm	74°	Digital	19/12/08	09:59
02	Camden Lock Footbridge	30	AVR3	D4266	528669.19	184074.89	32.83 m	40.69°	24 mm	74°	Digital	19/12/08	11:30
03	Camden Lock Place	32	AVR3	D4268	528628.27	184125.82	29.86 m	49.45°	35 mm	54°	Digital	19/12/08	12:45
04	Castlehaven Open Space	34	AVR3	D5929	528695.09	184285.33	27.14 m	138.27°	24 mm	74°	Digital	09/12/10	13:41
05	Hawley Road / Castlehaven Road junction	36	AVR3	D4261	528793.48	184308.55	26.41 m	206.76°	24 mm	74°	Digital	19/12/08	10:18
06	Castlehaven Road	38	AVR1	D4262	528800.33	184554.09	28.26 m	183.39°	35 mm	54°	Digital	19/12/08	10:34
07	Jeffreys Street	40	AVR3	D5930	529033.03	184320.43	27.35 m	247.05°	24 mm	74°	Digital	09/12/10	12:59
08	Kentish Town Road Bridge (west side)	42	AVR3	D4265	528938.01	184146.49	28.26 m	289.00°	24 mm	74°	Digital	19/12/08	11:11
09	Kentish Town Road Bridge (east side)	44	AVR3	D5636	528949.41	184139.39	27.62 m	301.00°	24 mm	115°	Digital	24/08/10	09:56
10	Camden High Street	46	AVR1	D4259	528883.08	183917.48	27.34 m	326.38°	24 mm	74°	Digital	19/12/08	09:45
11	Chalk Farm Road	48	AVR1	D4267	528257.87	184352.55	129.11 m	108.72°	35 mm	54°	Digital	19/12/08	12:24
12	Hawley Road looking east	50	AVR3	D6625	528767.93	184307.67	26.41 m	206.76°	24 mm	74°	Digital	23/06/11	06:18
13	Hawley Road looking west	52	AVR3	D4263	528961.40	184290.51	126.22 m	259.22°	24 mm	74°	Digital	19/12/08	10:52
14	Primrose Hill to St Paul's Cathedral (LVMF view 4A.1)	54	AVR1	D6606	527657.30	183893.00	68.29 m	82.80°	50 mm	40°	Digital	04/08/10	17:38
15	Parliament Hill to St Paul's Cathedral (LVMF view 2A.1)	56	AVR1	D6186	527665.40	186131.50	98.10 m	138.70°	50 mm	40°	Digital	08/03/11	17:08
16	Parliament Hill to Palace of Westminster (LVMF view 2B.1)	58	AVR1	D4628	528043.10	186154.50	71.61 m	161.60°	50 mm	40°	Digital	24/06/09	09:57

Fig 2. Views map





View 01 Page 28



View 02 Page 30



View 03 Page 32



View 04 Page 34



View 05 Page 36



View 06 Page 38



View 07W Page 40



View 08 Page 42



View 09 Page 44



View 10 Page 46



View 11 Page 48



View 12 Page 50



View 13 Page 52



View 14 Page 54

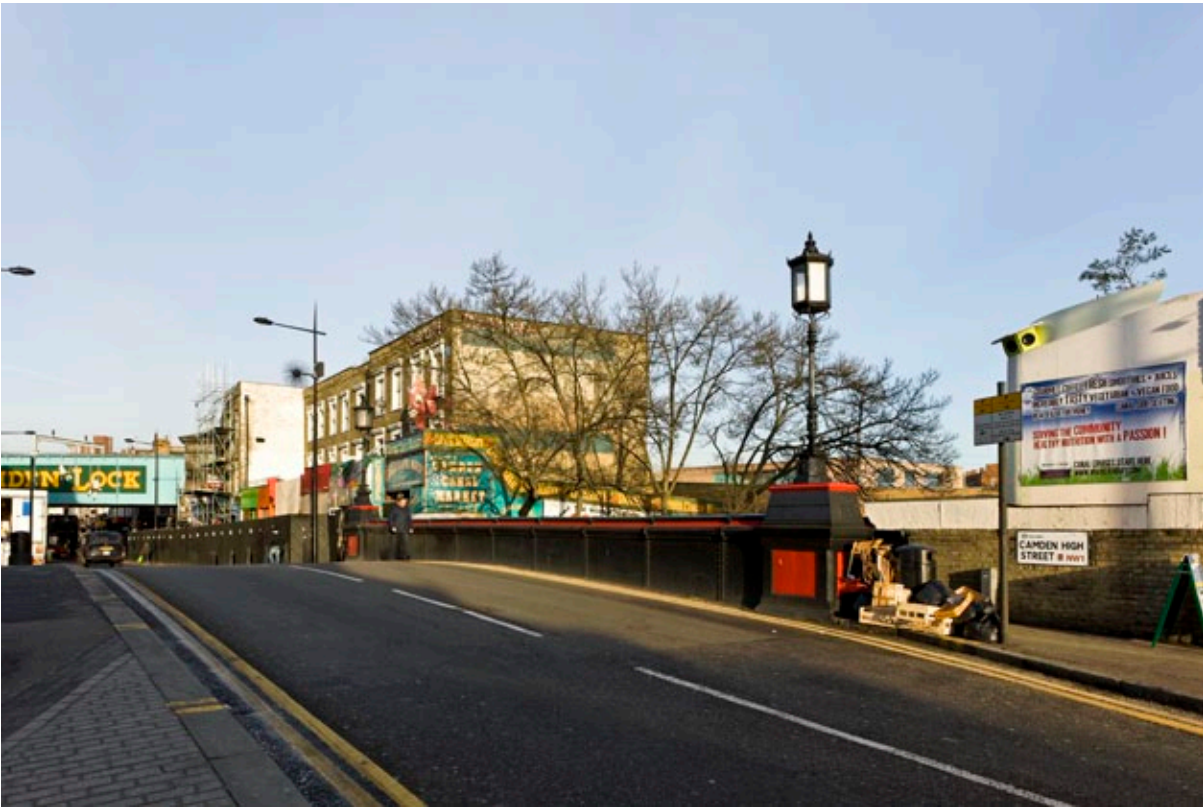


View 15 Page 56



View 16 Page 58

View 01 Chalk Farm Road Bridge



Existing view

View as Existing

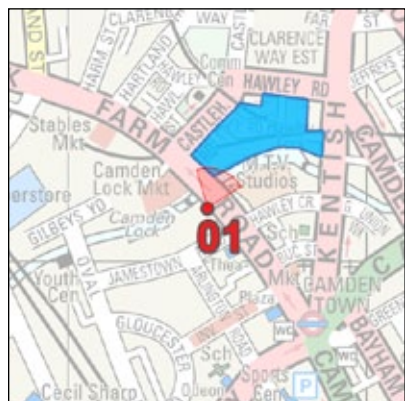
- 6.1 This view is dominated by the Hampstead Road Bridge and the terrace 1-6 Chalk Farm Road beyond it. The blank flank walls to no. 1 and no. 6 are as prominent as the street frontage. The ash trees to the south of the terrace are also prominent, and considerably more so when in leaf. The top of the existing building on the Site at 12 Castlehaven Road can be made out on the right behind the lamp standard.
- 6.2 The brightly painted railway bridge over Chalk Farm Road, with its 'Camden Lock' graphic and its galvanised steel gantry, obstructs view of most of what lies north of here along Chalk Farm Road.
- 6.3 Most of what can be seen from here lies in the Regent's Canal Conservation Area. The road bridge is listed at Grade II. The terrace is listed in the CA appraisal as making a positive contribution to the CA.
- 6.4 There are no very positive or noteworthy visual qualities to this view. However, it is a view of moderate sensitivity to change because of the CA.



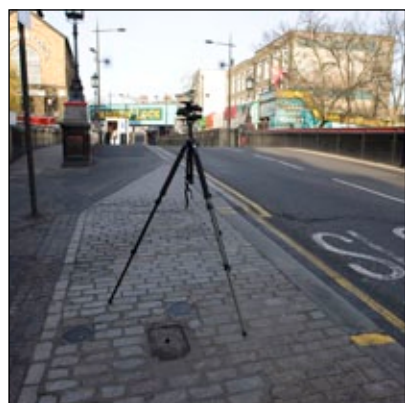
Proposed view

View as Proposed

- 6.5 The southwest corner of Building A is seen to the east of 1-6 Chalk Farm Road. The main brick volume of the new building appears at about the same height as the terrace, with the set back pavilion storey rising above this. Its distinctive appearance will provide a visually rich addition to a varied street scene and will suggest its use, as will the large numbers of people who will be seen on the open galleries during business hours. The building's apparent height is consistent with what can be seen in the existing townscape.
- 6.6 Considerably less of the new building will be seen from here when the trees are in leaf.
- 6.7 This is a moderate change to the view, of moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

528741.34E, 184106.67N.

Height of camera 30.33 m AOD.

Heading of camera 351.52°.

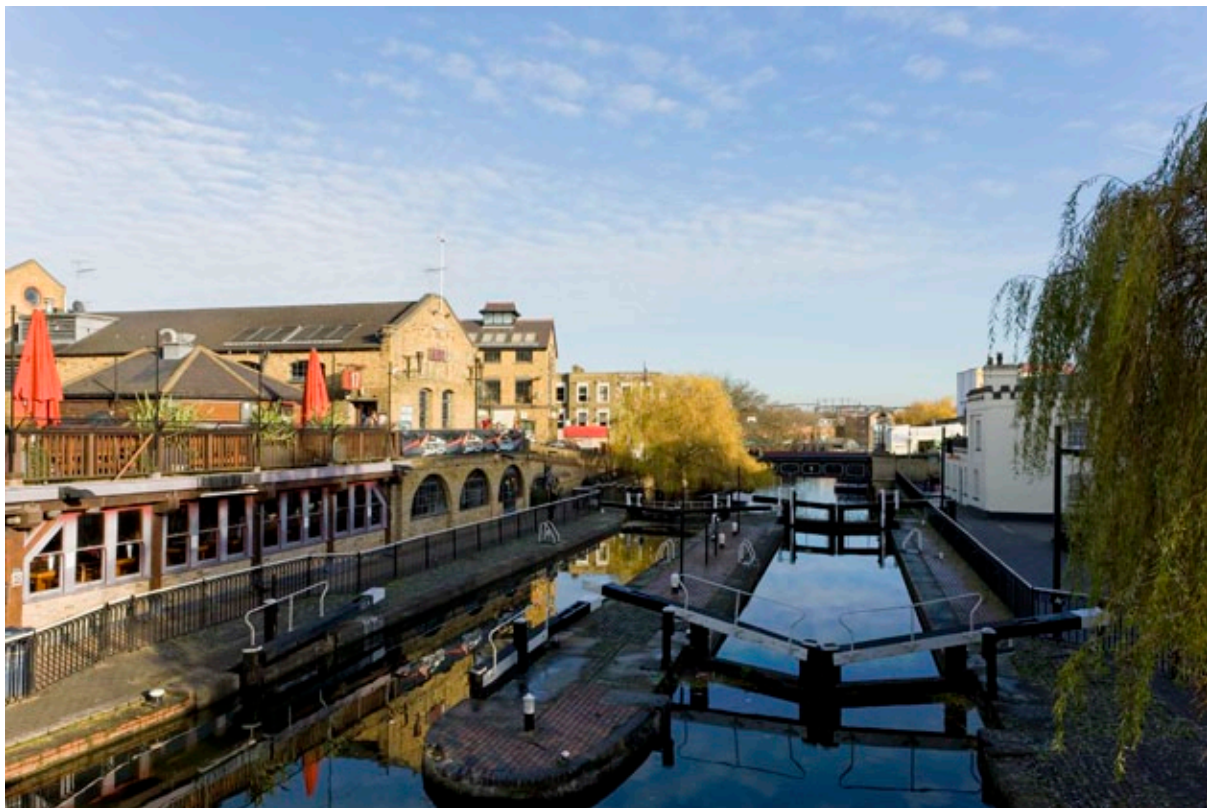
Lens 24 mm. Field of view 74°.

Date 19/12/08. Time 09:59.



Proposed view

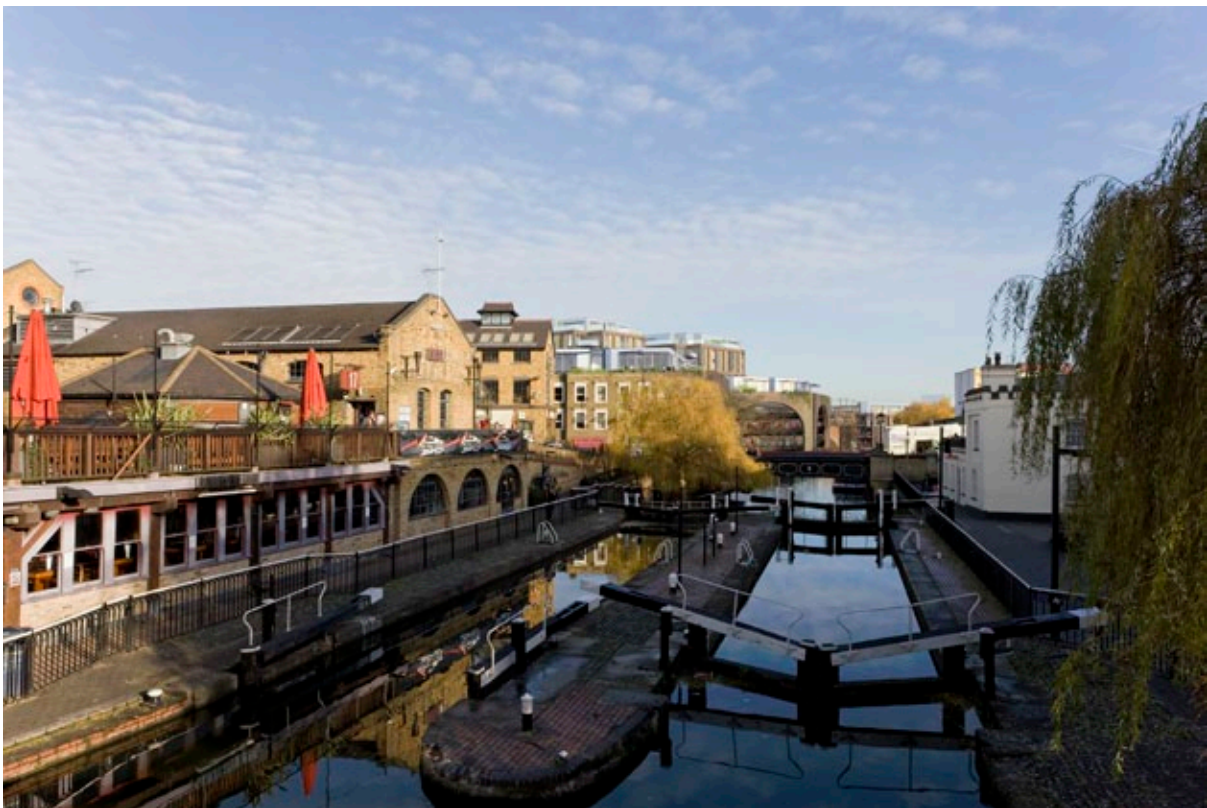
View 02 Camden Lock Footbridge



Existing view

View as Existing

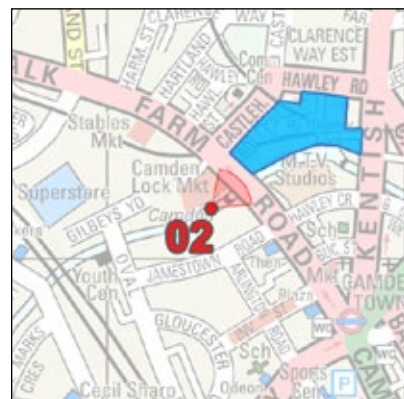
- 6.8 This view is taken from the listed roving bridge, looking east along the canal towards Hampstead Road Lock and Hampstead Road Bridge. Various buildings of Camden Lock market line the north side of the canal, and the south end of 1-6 Chalk Farm Road is visible beyond them in the centre of the image. The eye is drawn to the perspectival quality of the canal lined by a fairly informal arrangement of buildings on either side. It is the water, the lock, the towpaths and the trees rather than the slightly miscellaneous collection of buildings that contribute most to the attractive qualities of the view. Overhead gantries on the rail viaduct terminate the perspective along the canal.
- 6.9 Most of what can be seen from here lies in the Regent’s Canal Conservation Area. The lock, the bridge and the crenellated former lock keeper’s cottage on the right are listed at Grade II (the crenellations date from 1975). The terrace is listed in the CA appraisal as making a positive contribution to the CA.
- 6.10 This is a view of moderate quality, and of moderate sensitivity to change because of the CA and listed buildings.



Proposed view

View as Proposed

- 6.11 Buildings A and D are seen facing the canal, with the top of Building C2 seen rising above Building A.
- 6.12 Building A with its distinctive appearance, and Buildings C2 and D with their calmer appearance, provide a visually interesting and visually related group of buildings that add something positive to a nondescript part of a varied existing view. The line of enclosure suggested by the buildings facing the canal as it curves round allows its course to be ‘read’ from here. The new buildings seen at different distances from the viewer will add layering and depth to the view. The buildings’ apparent heights are consistent with what can be seen in the existing townscape.
- 6.13 This is a moderate change to the view, of moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

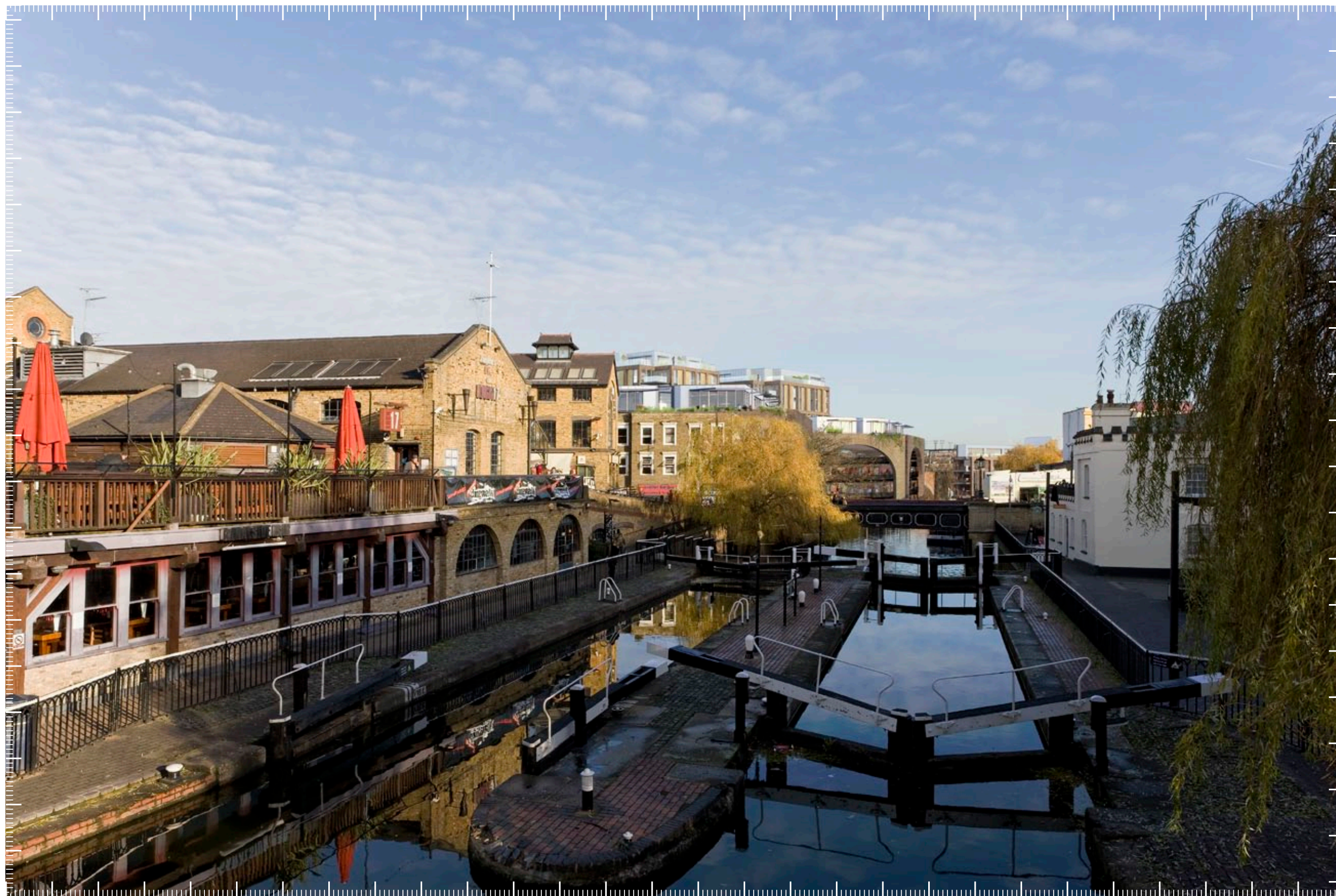
528669.19E, 184074.89N.

Height of camera 32.83 m AOD.

Heading of camera 40.69°.

Lens 24 mm. Field of view 74°.

Date 19/12/08. Time 11:30.



Proposed view

View 03 Camden Lock Place



Existing view

View as Existing

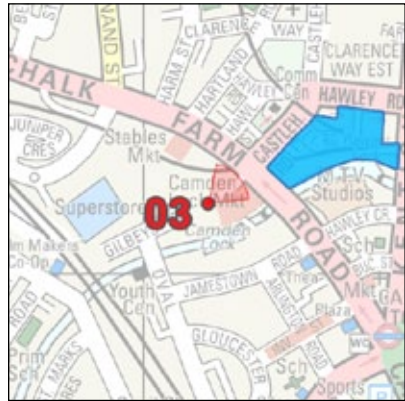
- 6.14 This view conveys the typical character of Camden Lock market with its mixed building stock, its streetscape of cobbles, York stone and granite kerbs, but more noticeable to most, its strong sense of life and commercial activity. A variety of types of building – new and glassy on the left, more sedate stock brickwork on the right - draw the eye toward the rail bridge with its prominent gantries, with the chimneys of buildings beyond visible over the bridge.
- 6.15 Most of what can be seen from here lies in the Regent’s Canal Conservation Area. The railway bridge and its hoarding are listed in the CA appraisal as making a positive contribution to the CA.
- 6.16 This is a view of moderate quality, and of moderate sensitivity to change because of the CA.



Proposed view

View as Proposed

- 6.17 Buildings C1 will be seen beyond the bridge, above and below it, with Building C2 rising above it in the distance, but the bridge will continue to provide a significant visual stop to the foreground, and the new buildings will not be very prominent from here.
- 6.18 This is a minor to moderate change to the view, of moderate significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

528628.27E, 184125.82N.

Height of camera 29.86 m AOD.

Heading of camera 49.45°.

Lens 35 mm. Field of view 54°.

Date 19/12/08. Time 12:45.



Proposed view

View 04 - Castlehaven Open Space



Existing view

View as Existing

- 6.19 This view towards the Site looking across Castlehaven Road is dominated by the grass, trees and playground of Castlehaven Open Space, framed by the rail viaduct on the left and a terrace of houses, about 20-30 years old, in red-purple brick. The street frontage buildings on the far side of the road are, from left to right, a pair of 3-storey Victorian houses, 14 and 16 Castlehaven Road; a 1980s 2-storey commercial building, 12 Castlehaven Road; a four storey building in stock brick and red brick 4-6 Castlehaven Road; and the Victorian Hawley Arms pub. The Castlehaven Road buildings have substantial gaps between them; the rail viaduct is seen beyond.
- 6.20 The view when there are leaves on the trees is very different; they screen most of what lies beyond them.
- 6.21 This is a view of no particular interest or positive qualities beyond those that derive from the presence of the grass and trees of the gardens. It is of low to moderate sensitivity to change.



Proposed view

View as Proposed

- 6.22 The street frontage buildings on the Site are replaced by a new street frontage building, Building C1, its main elevation brick, rising to 6 storeys, with the Hawley Arms retained next to it. Building C2 is seen to its left, its form coming to a point on the street frontage and its elevation seen above Building C1 and running back into the Site.
- 6.23 A group of mediocre existing buildings is replaced by new buildings of good quality. Building C1 provides continuity and enclosure to the street, and there are legible routes at each end through to the remainder of the Site, with the line of Building C1 indicating the alignment of the public route in front of it. The new buildings rise to a greater apparent height than the existing and retained buildings, but the scale is appropriate in visual terms to the open setting of Castlehaven Open Space.
- 6.24 Considerably less of the new buildings will be seen when there are leaves on the trees.
- 6.25 This is (in winter) a moderate to substantial change to the view, of moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference
528695.09E, 184285.33N.
Height of camera 27.14 m AOD.
Heading of camera 138.27°.
Lens 24 mm. Field of view 74°.
Date 09/12/10. Time 13:41.



Proposed view

View 05 Hawley Road / Castlehaven Road junction



Existing view

View as Existing

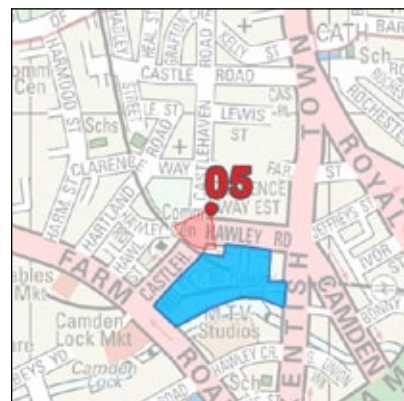
- 6.26 The Castlehaven Road frontage of the Site, seen in view 4 above, can be made out on the left of the road, beyond the nearer rail bridge; beyond that is the Hawley Arms and then the rail bridge over Chalk Farm Road. The block of flats in the foreground on the left is not in the Site. On the right is the Haven Youth Cafe.
- 6.27 This is a nondescript view with no positive qualities. It is of low sensitivity to change.



Proposed view

View as Proposed

- 6.28 The Castlehaven Road frontage of Building C1 is seen beyond the bridge, with the upper parts of Building C2 to its left, rising to about the same apparent height as the existing flats. The gap between the two new buildings signals the presence of the route into the Site. A fragmented frontage to Castlehaven Road is replaced with a coherent one.
- 6.29 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

528793.48E, 184308.55N.

Height of camera 26.41 m AOD.

Heading of camera 206.76°.

Lens 24 mm. Field of view 74°.

Date 19/12/08. Time 10:18.



Proposed view

View 06 Castlehaven Road



Existing view

View as Existing

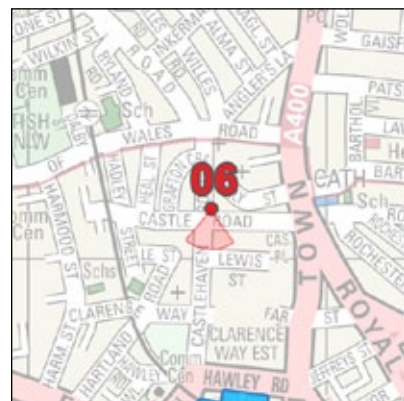
- 6.30 In this view down Castlehaven Road, the street is flanked by a variety of postwar housing, between 3 and 8 storeys high, in red brick. A miscellaneous collection of buildings, with no coherence and of little visual interest, is seen at the end of the street.
- 6.31 The view location lies at the edge of the Kelly Street Conservation Area but the view in this direction does not contribute anything positive to the CA's setting.
- 6.32 This is a nondescript view with no positive qualities. It is of minor to moderate sensitivity to change.



Proposed view

View as Proposed

- 6.33 Buildings C2 and C1 are seen at the end of the street, providing a new focus to a nondescript view and something of visual interest, which suggests the presence of the town centre beyond. The new buildings sit comfortably in the townscape, their form and apparent height compatible with the existing street scene.
- 6.34 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

528800.33E, 184554.09N.

Height of camera 28.26 m AOD.

Heading of camera 183.39°.

Lens 35 mm. Field of view 54°.

Date 19/12/08. Time 10:34.



Proposed view

View 07 - Jeffreys Street



Existing view



Proposed view

- View as Existing**
- 6.35 This is a typical Victorian domestic street scene, made up mainly of terraced housing, with a variety of houses types and details and materials. The buildings framing the trees at the end of the street are on the corners with Kentish Town Road. To the right of the trees, 1 Hawley Road and the adjoining houses in Kentish Town Road are visible, but not prominent from this distance.
 - 6.36 There is a strong perspectival quality (of the kind found in most straight terraced streets) that leads the eye to the end, but the buildings seen beyond the terraces do not have any composed quality in relation to the foreground or to each other and cannot be made out very clearly.
 - 6.37 When the trees at the end of the street are in leaf, they close off the street visually and little can be seen beyond them.
 - 6.38 This viewpoint lies in the Jeffreys Street CA, and most of the houses seen in the view are listed at Grade II.
 - 6.39 This is a view of moderate quality and moderate sensitivity to change.

- View as Proposed**
- 6.40 The new buildings on Area B, and behind them building C2, are seen on the skyline at the end of the street. Their apparent height is less than that of the existing buildings at the end of the street. They will not be prominent and will share the characteristics of the buildings beyond the end of the street that are described above.
 - 6.41 Considerably less of the new buildings will be seen when there are leaves on the trees.
 - 6.42 This is a minor to moderate change to the view, of minor to moderate significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

529033.03E, 184320.43N.

Height of camera 27.35 m AOD.

Heading of camera 247.05°.

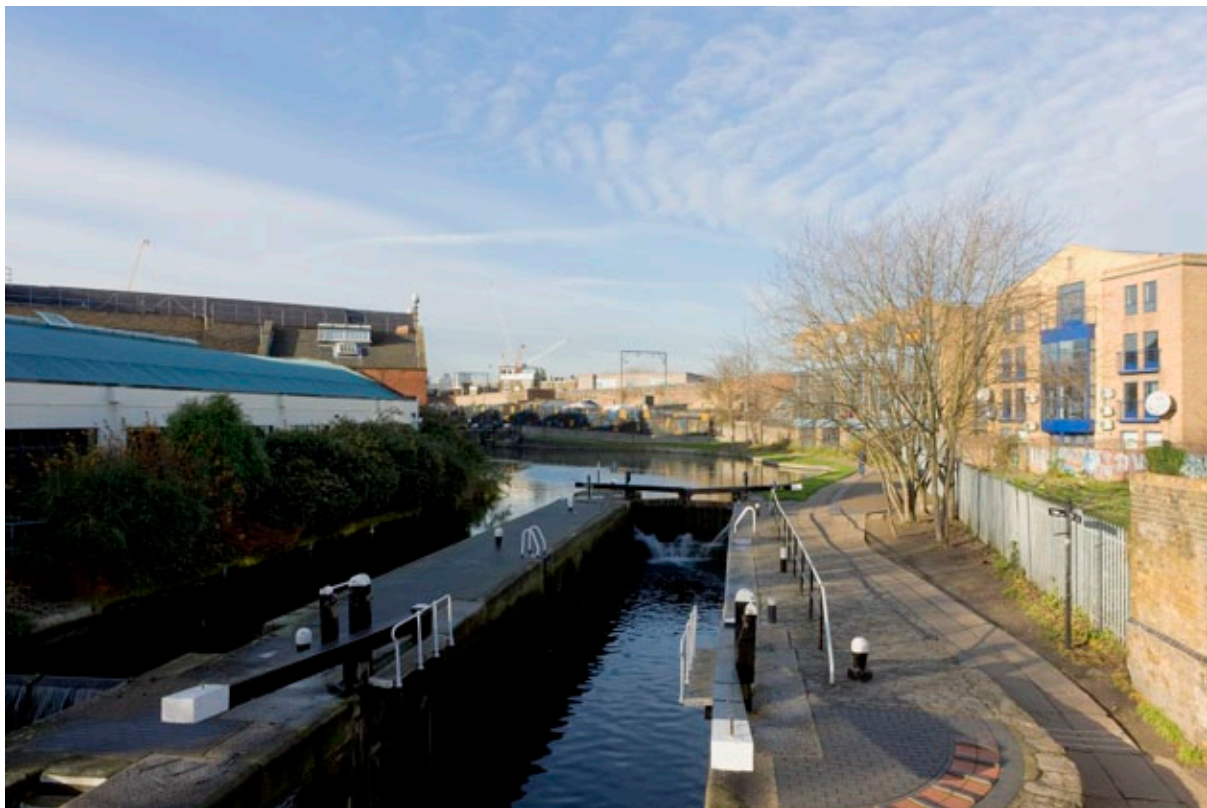
Lens 24 mm. Field of view 74°.

Date 09/12/10. Time 12:59.



Proposed view

View 08 Kentish Town Road Bridge (west side)



Existing view

View as Existing

- 6.43 Kentish Town lock and the canal and towpath, with the brick rail viaduct and its metal gantries seen beyond, form the centre of this view. The various buildings that can be seen in the backdrop and on either side are nondescript individually and incoherent as a group; an eggcup on the parapet of the former TV-AM building provides an isolated point of visual interest above canal level.
- 6.44 Much of what can be seen in the view, including the Site as far as the viaduct, lies in the Regents Canal CA. The CA Appraisal describes the Hawley Wharf area as having an open aspect, but there is nothing positive that results from this openness in this view; it is clearly a rather dull view by comparison with the more attractive character of the area of canal just west of here, which is much more built-up.
- 6.45 The view, at least in winter, has a slightly desolate quality, and is not of good quality. It is of minor to moderate sensitivity to change.



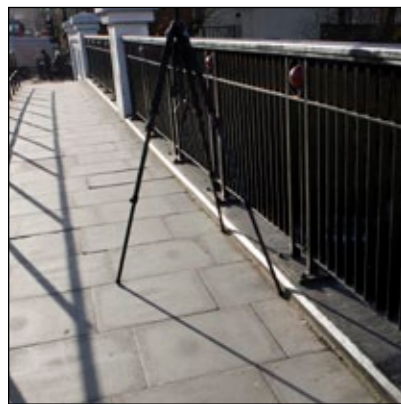
Proposed view

View as Proposed

- 6.46 Buildings A and D address the canal frontage in a coherent way, their orientation following and giving visual emphasis to the cranked line of the canal, and their apparent height comparable with that of the existing foreground buildings on the left. The upper parts of Building C2 are seen rising above and beyond the foreground buildings, giving a sense of the depth of the Site. The coherence lent to the group of new buildings by the common use of brickwork and glazed upper storeys is apparent.
- 6.47 This is a substantial change to the view, of moderate to substantial significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference
528938.01E, 184146.49N.
Height of camera 28.26 m AOD.
Heading of camera 289.00°.
Lens 24 mm. Field of view 74°.
Date 19/12/08. Time 11:11.

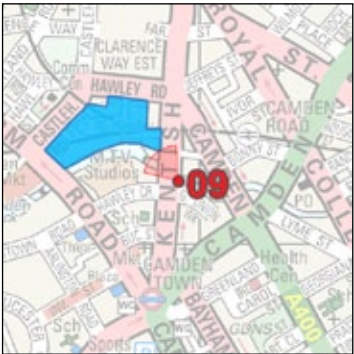


Proposed view

View 09 Kentish Town Road Bridge (east side)



Existing view



View Location



Camera Location

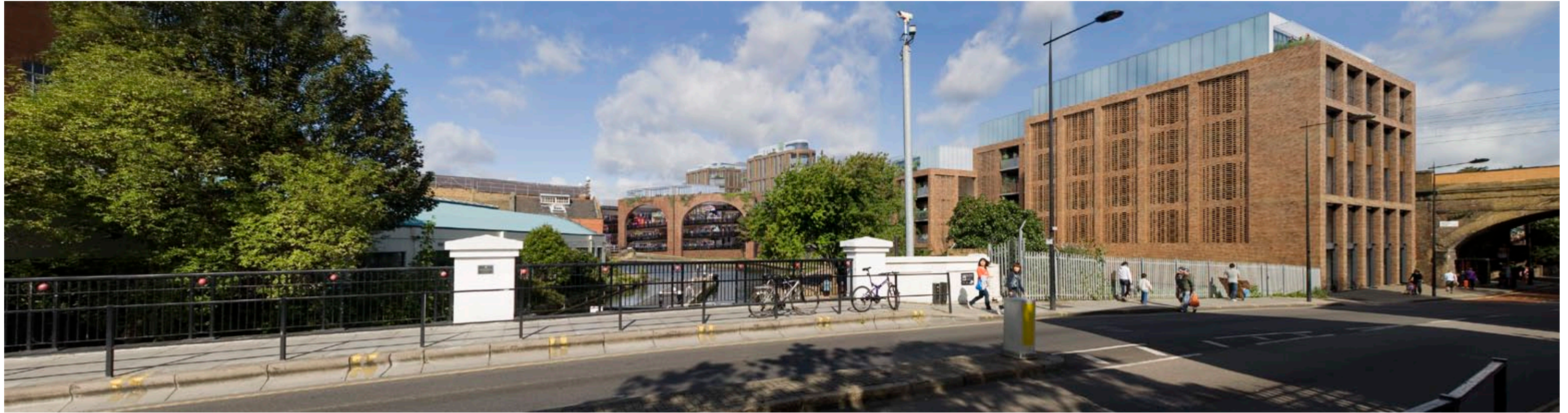
National Grid Reference
528949.41E, 184139.39N.
Height of camera 27.62 m AOD.
Heading of camera 301.00°.
Lens 24 mm. Field of view 115°.
Date 24/08/10. Time 09:56.

View as Existing

- 6.48 Various postwar buildings on the Site, four storeys high in brickwork, lie between the canal and the viaduct. In front of these lies a cleared site awaiting redevelopment; planning consent has previously been granted for a 4/5 storey mixed use building on the street frontage.
- 6.49 Most of what can be seen here lies in the Regents Canal CA.
- 6.50 The view is not of any particular townscape quality. It is of minor to moderate sensitivity to change.
- 6.51 This view is shown as a panorama in order to show the site of Building D in its wider context.

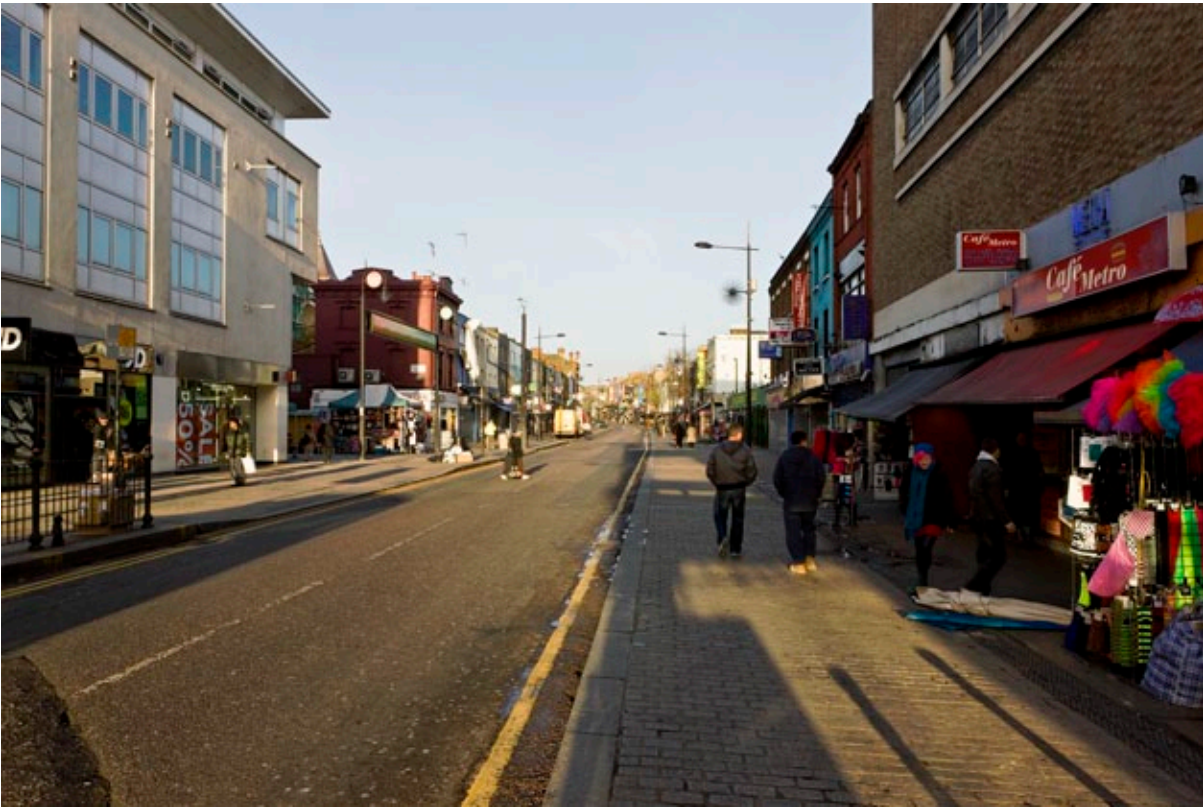
View as Proposed

- 6.52 On the Kentish Town Road frontage the existing building is replaced by a new street frontage building, higher at 5/6 rather than 4 storeys but comparable in its form and its townscape effect, and of a higher standard of design.
- 6.53 In the centre of the view beyond the canal, Building A and D address the canal frontage in a pleasing way, their orientation following and giving visual emphasis to the cranked line of the canal, and their apparent height comparable with that of the existing foreground buildings on the left. The upper parts of Building C2 are seen rising above and beyond the foreground buildings, giving a sense of the depth of the Site. The coherence lent to the group of new buildings by the common use of brickwork and glazed upper storeys is apparent.
- 6.54 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.
- 6.55 It can be expected that the development site in the foreground will be developed in due course, although there is no certainty of this; if this happened it would be likely to bring about a substantial change to this view.



Proposed view

View 10 Camden High Street



Existing view

View as Existing

- 6.56 This is a characteristic view of Camden High Street looking north from outside the tube station. As one progresses north, this stretch rapidly becomes dominated by shops and market activity of the ‘Camden Lock’ type, and during opening hours at least, it is people and commerce that dominate the view rather than the buildings on either side of the road, which are typical Victorian terraces, substantially altered or overlaid with signs of commercial activity in many cases.
- 6.57 The buildings in the foreground lie in the Camden Town CA.
- 6.58 The view is of minor to moderate sensitivity to change.



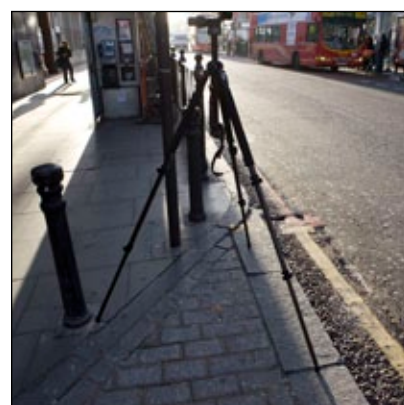
Proposed view

View as Proposed

- 6.59 The upper part of Building A will just be visible from this point, at the end of the street above the buildings on the right, but not prominent from here.
- 6.60 This is a negligible change to the view, of minor significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

528883.08E, 183917.48N.

Height of camera 27.34 m AOD.

Heading of camera 326.38°.

Lens 24 mm. Field of view 74°.

Date 19/12/08. Time 09:45.



Proposed view

View 11 Chalk Farm Road



Existing view

View as Existing

- 6.61 The view is dominated by modern buildings on either side in the foreground, with a fragmented streetscape of Victorian terraces seen on the left beyond. Chalk Farm Road runs gently downhill and curves to the right, so that buildings on the left of the road come into view.
- 6.62 The right hand side of the road lies in the Regents Canal CA.
- 6.63 The view is not of any particular townscape quality. It is of minor to moderate sensitivity to change.



Proposed view

View as Proposed

- 6.64 The upper parts of Buildings A and C1 are seen on the skyline at the end of the street but are not prominent from here, and their apparent height is no greater than the prevailing streetscape.
- 6.65 This is a minor change to the view, of minor significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

528257.87E, 184352.55N.

Height of camera 129.11 m AOD.

Heading of camera 108.72°.

Lens 35 mm. Field of view 54°.

Date 19/12/08. Time 12:24.



Proposed view

View 12 Hawley Road looking east



Existing view

View as Existing

- 6.66 In this view the south side of Hawley Road is dominated by the modern block of flats on the corner at 20-22 Hawley Road, which does not make a positive contribution to the townscape. A varied collection of Victorian houses stretches away from the corner along the north boundary of the Site, ending with the listed 1 Hawley Road, a small part of it just visible from here but barely noticeable. On the left of the street is the postwar housing of the Clarence Way estate. Seen at the end of the street beyond the traffic lights at the junction is a group of houses which are in the Jeffreys Street CA.
- 6.67 There are various trees along the frontage of the Site, but they do not have a good visual relationship with the buildings, as the front gardens are not large enough to accommodate them comfortably.
- 6.68 The view is not of any particular townscape quality. It is of minor sensitivity to change.

View as Proposed – maximum parameters for school building

- 6.69 The new residential buildings W and X on Area B of the Site are seen beyond and behind the existing buildings on Hawley Road. The new buildings are of good quality and they are of a scale appropriate to the main road that they face and the scale of the buildings on the other side of the street. Building X, the lower building, provides continuity and enclosure to the frontage, and front doors facing the street. The two parts of Building X effect a transition in scale from the existing houses to their west up to that of Building W. Seen from here, the new buildings rise to an apparent height no greater than that of the foreground buildings, and their presence in the streetscape serves to reduce the unfortunate visual dominance of 20-22 Hawley Road.



Proposed view

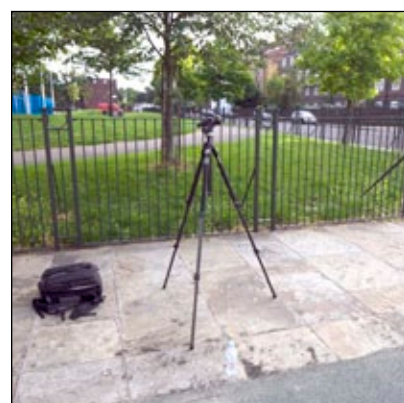
- 6.70 Block S1, the northern block of the school, is shown by illustrating the maximum volume defined the parameters, shown enclosed by a solid line. The minimum volume defined by the parameters is shown enclosed by a broken line.
- 6.71 Block S1 of the new school continues the Hawley Road frontage of the Development east of Building X. In the maximum parameter condition, its apparent height is comparable with that of the taller part of Building X, and its face aligns with the face of the lower part of Building X. The Design Principles stipulate that there will be articulation within a zone that corresponds to the zone between the taller and lower parts of Building X, and this will relate the two buildings visually.
- 6.72 The new buildings are larger than their existing neighbours but comparable in scale with existing buildings on the other side of the street, and as with those buildings, there are lower elements on the street and taller elements behind. The new buildings sit comfortably in the townscape, their form and apparent height compatible with the existing street scene.
- 6.73 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.

View as Proposed – minimum parameters for school building

- 6.74 In the minimum parameter condition, the north elevation of the new school will align with the north face of the taller part of Building X (which is the part closest to the school). Its apparent height will be intermediate between that of Building X and 1 Hawley Road and it will effect a transition in scale.
- 6.75 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

528767.93E, 184307.67N.

Height of camera 26.41 m AOD.

Heading of camera 206.76°.

Lens 24 mm. Field of view 74°.

Date 23/06/11. Time 06:18.



Proposed view

View 13 Hawley Road looking west



Existing view

View as Existing

- 6.76 The busy main road junction between Hawley Road and Kentish Town Road is dominated by the visual clutter of highways paraphernalia, and flanked by the Grade II listed 61-63 Kentish Town Road on the left, a semi-detached pair which presents a flank wall to Hawley Road, and Quinns pub on the right. The Grade II listed 1 Hawley Road, on the Site, lies beyond on the left, not very prominent from here, and then the various Victorian houses on the Hawley Road frontage of the Site beyond that.
- 6.77 The view is closed at the end of Hawley Road with a rail bridge, above which are seen the tower blocks of the Chalcots Estate on the skyline in the distance.
- 6.78 This is a view of minor to moderate sensitivity to change.

View as Proposed – maximum parameters for school building

- 6.79 Block S1, the northern block of the school, continues the Hawley Road frontage of the Development west of 1 Hawley Road. It is shown by illustrating the maximum volume defined the parameters, shown enclosed by a solid line. The minimum volume defined by the parameters is shown enclosed by a broken line.
- 6.80 In the maximum parameter condition, the apparent height of Block S1 is comparable with that of the taller part of Building X, seen beyond it, and its face aligns with the face of the lower part of Building X. The Design Principles stipulate that there will be articulation within a zone that corresponds to the zone between the taller and lower parts of Building X, and this will relate the two buildings visually.

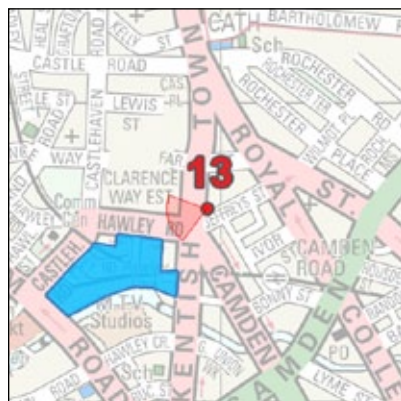


Proposed view

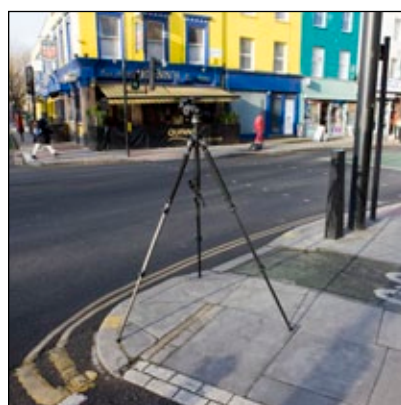
- 6.81 The new residential Building X on Area B of the Site continues the street frontage building to Hawley Road, its lower element echoing the volume of the Victorian semi-detached houses next to it and its higher element effecting a transition to the larger scale of Building W which is seen rising behind it.
- 6.82 This is a moderate change to the view, of minor to moderate significance. The effect is long term and beneficial.

View as Proposed – minimum parameters for school building

- 6.83 In the minimum parameter condition, the north elevation of the new school will align with the north face of the taller part of Building X (which is the part closest to the school). Its apparent height will be intermediate between that of Building X and 1 Hawley Road and it will effect a transition in scale.
- 6.84 This is a moderate change to the view, of minor to moderate significance. The effect is long-term and beneficial.



View Location



Camera Location

National Grid Reference

528961.40E, 184290.51N.

Height of camera 126.22 m AOD.

Heading of camera 259.22°.

Lens 24 mm. Field of view 74°.

Date 19/12/08. Time 10:52.



Proposed view

View 14 Primrose Hill to St Paul’s Cathedral (LVMF view 4A.1)



Existing view

View as Existing

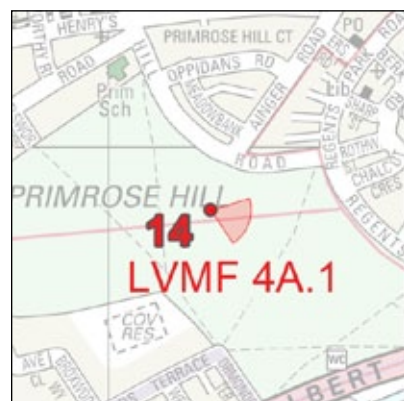
- 6.85 Camden Town lies well to the left of central London in this view and there is nothing noteworthy that can be made out in the townscape that can be seen beyond the foreground buildings which front onto Primrose Hill.
- 6.86 This is a view of substantial sensitivity in respect of views of St Paul’s Cathedral, but minor to moderate sensitivity to change in respect of the part of the view in the direction of the Site.



Proposed view

View as Proposed

- 6.87 The upper parts of the Development will be visible but not prominent from this point.
- 6.88 There is no effect on the settings of St Paul’s Cathedral, the Palace of Westminster or any of the other landmarks identified in the LVMF.
- 6.89 This is a minor change to the view, of minor significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

527657.30E, 183893.00N.

Height of camera 68.29 m AOD.

Heading of camera 82.80°.

Lens 50 mm. Field of view 40°.

Date 04/08/10. Time 17:38.



Proposed view

View 15 Parliament Hill to St Paul’s Cathedral (LVMF view 2A.1)



Existing view

View as Existing

- 6.90 The summit of Parliament Hill provides a panoramic view across a wide span of London. From this point St Paul’s Cathedral and the Palace of Westminster are both visible, and there is a Protected Vista protecting the view corridor from here to each of these landmarks. The Site lies between the two corridors.
- 6.91 This is a view of substantial sensitivity in respect of views of St Paul’s Cathedral, but minor to moderate sensitivity to change in respect of the part of the view in the direction of the Site.



Proposed view

View as Proposed

- 6.92 The upper parts of the Development will be visible from here (shown in black outline, in middle ground towards right hand side of image). The Development will not have a significant effect on this view and will not affect the views of St Paul’s Cathedral or the Palace of Westminster (visible from this view point, to the right of the border of this image).
- 6.93 This is a minor change to the view, of minor significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference

527665.40E 186131.50N.

Height of camera 98.10 m AOD.

Heading of camera 138.70°.

Lens 50 mm. Field of view 40°.

Date 08/03/11 Time 17:08.



Proposed view

View 16 Parliament Hill to Palace of Westminster (LVMF view 2B.1)



Existing view

View as Existing

- 6.94 The Palace of Westminster can be seen from this point, through a gap between tall buildings on either side.
- 6.95 This is a view of substantial sensitivity to change in respect of the visibility of the Palace of Westminster, because the view is designated (although the view of the Palace of Westminster is not of good quality).



Proposed view

View as Proposed

- 6.96 The Development, shown in outline with a dotted line, will be almost entirely obscured by the foreground trees in summer. Some of the upper parts of the Development will be seen through the trees in winter. There will be no effect on the ability to see the Palace of Westminster from this point.
- 6.97 This is a negligible change to the view, of minor significance. The effect is long-term and neutral.



View Location



Camera Location

National Grid Reference
528043.10E, 186154.50N.
Height of camera 71.61 m AOD.
Heading of camera 161.60°.
Lens 24mm. Field of view 74°.
Date 24/06/09. Time 09:57.



Proposed view

7.0

Visual and townscape effects: conclusions

7.1 Informed by the views assessment, it is possible to assess the effect of the Development on each of the townscape areas previously identified. As explained above in the section on the guidance *By Design*, such effects are not limited to visual effects; the assessment takes into account other aspects of urban design.

7.2 All of the effects of the Development described in this section are long-term effects.

7.3 All of the effects of the Development described in this section are local in scale, except for the effects on the LVMF views which apply over the extent to which the panoramas in question are visible.

Area 1 – the canal and adjoining areas

7.4 The visual effect of the Development on this area is shown in views 1, 2, 3, 8 and 9.

7.5 The Development will transform a run down and unattractive area through the construction of a visually rich and attractive group of good quality new buildings with a variety of uses, set in a new hard and soft landscape of routes and spaces providing good pedestrian permeability and connectivity. In respect of Area 1, the Development will bring a modern version of the liveliness and visual interest of the existing Camden Market complex west of Chalk Farm Road bridge to the Site east of the bridge. The building facing the canal will provide a distinctive new frontage appropriate to its use and to this town centre location.

7.6 The effect on this townscape area will be moderate to substantial and beneficial.

Area 2 – Camden High Street / Chalk Farm Road

7.7 The visual effect of the Development on this area is shown in views 1, 10 and 11.

7.8 The principal townscape effect will be the restoration of 1-6 Chalk Farm Road and the addition of the new building to its north. This will be a significant improvement to the street.

7.9 The remainder of the Development will be a minor visual presence from some points north and south of the Chalk Farm Road canal bridge but it will not be very noticeable other than from the vicinity of the bridge itself, from which it will be prominent. It will form an attractive modern counterpoint to the existing market complex on the other side of Chalk Farm Road, extending the critical mass of buildings in this area at a scale appropriate to the town centre location.

7.10 The effect on this townscape area will be moderate and beneficial.

Area 3 – Castlehaven Road (west of the Northwest-East Viaduct) and environs

7.11 The visual effect of the Development on this area is shown in view 4.

7.12 The principal townscape effects on this area will be:

- The provision of a good quality new frontage to Castlehaven Road, replacing nondescript existing buildings. The scale of the new buildings will be appropriate to the main road and the existing open space that they face. This will offer continuity and enclosure in the place of the present fragmented frontage.
- The infilling of the backlands part of the Site in this area, which will be a very significant townscape benefit, replacing a run down and underused area which is entirely inappropriate to the town centre location.

The routes through from this area to the canal will be direct, attractive and lively, whereas the present routes are distinctly uninviting. The Development will improve greatly on the quality of the connectivity of this area.

7.13 The effect on this townscape area will be moderate to substantial and beneficial.

Area 4 – Hawley Road (east of the Northwest-East Viaduct) and environs

7.14 The visual effect of the Development on this area is shown in views 5, 6, 7, 12 and 13.

7.15 The principal townscape effects will be:

- The provision of a good quality new residential frontage to Castlehaven Road, replacing nondescript and run down existing buildings. The scale of the new buildings will be appropriate to the scale of the main road that they face.
- The infilling of the backlands of the Site in this area, which will be a very significant townscape benefit, replacing a run down and underused area which is entirely inappropriate to the location. The variation in the location of school block S2 that is possible as a result of the definitions in the Parameter Plans has been taken into account in reaching this conclusion and the conclusion applies whatever the location of school block S2 within limits provided for.

7.16 The effect on this townscape area will be moderate to substantial and beneficial.

- Conservation areas**
- 7.17 The visual effect of the Development on the **Regents Canal CA** is shown in views 1, 2, 3, 8 and 9. The comments made concerning townscape area 1 above apply to the effect on this CA.
- 7.18 In respect of the design guidance for new development set out in the CA appraisal and referred to above, the design of the Development has been informed by this guidance and it achieves the objectives set out. The new designs respect the scale of particular locations, as explained in the above assessment. The designs of the new buildings complement the appearance, character and setting of existing buildings and structures, the canal, and the environment of this part of the CA as a whole. The building heights proposed do not interfere with significant views.
- 7.19 The CA appraisal states that *‘the enclosure or openness of particular sections of the canal should be respected as this quality contributes significantly to its varying character’*. While the existing openness of the Site itself will largely disappear as a result of the Development, the openness does not make a positive contribution to the character or appearance of the CA, as the views above of the Site as existing demonstrate. Other stretches of the canal between Camden and King’s Cross benefit from qualities of openness of an attractive semi-rural character, but the Site is not like that at all, and its underdevelopment is uncharacteristic of and inappropriate to a town centre location. The Development will enhance the townscape distinction along the length of the canal between built up town centre and less built up periphery. The sense of enclosure along the canal edge of the Site offered by the Development is comparable with that found enclosing the canal on the other side of Chalk Farm Road, and will enhance the character and appearance of the CA.
- 7.20 The effect on the townscape of the Regents Canal CA will be moderate and beneficial.
- 7.21 The visual effect of the Development on the **Jeffreys Street CA** is shown in view 7. The comments made concerning view 7 above apply to the impact on this CA.
- 7.22 The effect on townscape of this conservation area will be minor. Its effect will be neutral.
- 7.23 The effect on the other CAs considered above, the **Camden Town CA** and **Kelly Street CA**, will be negligible because of the distance of these CA’s from the Site and the limited visibility of the Development from them.

- Listed buildings**
- 7.24 The visual effect of the Development on the setting of **1 Hawley Road** is shown from one location in view 12, but it is seen from elsewhere in Hawley Road and there is also a visual and townscape relationship between the Development and the rear of the building. The existing setting of 1 Hawley Road is poor in respect of townscape and visual amenity. The neighbouring buildings, with the exception of the single storey moped shop and the adjacent unit, are of comparable age and form and scale to the listed building, but those which are on the Site are in poor condition and with a poor landscape setting. Their loss and replacement by a new development which is larger in scale results in the listed building having a slightly less visually coherent setting in respect of built form, but this is balanced by the fact that the buildings being replaced are of poor quality and are being replaced by new buildings of good quality, and that there is a very substantial overall improvement in townscape quality across the whole of Area B, including the backlands area which forms part of the setting of the listed building. Considered in the round, therefore, the effect of the Development on the setting of 1 Hawley Road will be moderate and adverse; but it is capable of mitigation to result in a moderate and beneficial effect through detailed design in accordance with the Design Principles at the reserved matters stage. The variation in the location of school block S2 that is possible as a result of the definitions in the Parameter Plans has been taken into account in reaching this conclusion and the conclusion applies whatever the location of school block S2 within limits provided for.
- 7.25 The visual effect of the Development on the setting of the canal group of listed buildings (as set out above at section 4) will be moderate and beneficial.
- 7.26 The visual effect of the Development on the setting of the Jeffreys Street / Kentish Town Road group of listed buildings (as set out above at section 4) will be minor and neutral.

- LVMF views**
- 7.27 The visual effect of the Development on the LVMF views considered above is minor and neutral.

- Urban design considerations**
- 7.28 In addition to the assessment of views and townscape areas, it is possible to consider the effect of the Development considered as a whole on its surroundings in respect of the **aspects of urban form** set out in *By Design* and referred to above.

- 7.29 It is apparent from the planning application drawings, the Design and Access Statement and the views in this document that the design of the Development is informed by consideration of the form of its surroundings.
- 7.30 In respect of **urban structure and urban grain**, the proposed buildings are consistent with the established pattern on and around the Site. The form of the urban structure is largely retained, although enhanced in quality, and the grain of the new buildings is comparable with that which exists in the vicinity of the canal in the centre of Camden.
- 7.31 In respect of **height and scale**, the buildings are also comparable with other buildings in the vicinity of the canal. Building C2, at 9 storeys high, is taller than other buildings in the area but not significantly so, and its scale is mediated by that of the other new buildings around it, as are the taller elements of the new buildings in Area B. The view illustrations demonstrate that the new buildings sit comfortably in their townscape setting and while they are prominent in certain views, their distinctive appearance and crisp, high quality architecture are appropriate to this prominence.
- 7.32 In respect of **materials and details**, the Development makes use of brick as the predominant external material. This is the most common material used in existing buildings in the area, in the form of both London stock bricks and red bricks, although a variety of other materials are found as well. The use of brick in the new buildings will lend therefore contribute to the coherence of the wider townscape.
- 7.33 The Development makes significant contributions to all of the **objectives of urban design** set out in *By Design* and referred to above.
- 7.34 It provides **continuity and enclosure** to the frontage to the canal, to the existing street frontages, and to the new routes and public spaces within the Site. It will be a place with **character** and its own **identity**, but one that is clearly derived from elements of its townscape setting; in particular, it derives from, and enhances, the particular canalside character of Camden Lock market. It will offer a high quality design for the **public realm**, with new hard and soft landscape provided to a variety of attractive outdoor areas. The layout makes a major contribution to **ease of pedestrian movement** in the area, by improving greatly on the quality and directness of pedestrian routes and adding new routes across the Site. The development will contribute to **legibility**, with its clear and easily understood layout and image. While residential uses are inherently likely to remain, the non-residential elements of the scheme are **adaptable** to provide for future change. And finally the scheme is **diverse** and offers variety and choice, in respect of the differentiated areas of the Site, and the different types of building form and types of building use proposed.

Conclusions

- 7.35 The Development successfully delivers all of the design aspirations of the Hawley Wharf Area Planning Framework, set out above. In particular the Development significantly enhances the attractiveness and contribution of this presently run down area to Camden Town as a whole, builds on the town centre's strengths and qualities, and provides a mix of appropriate uses. As explained in the above assessment and the Design and Access Statement, the architecture offers high quality designs which understand, value and respond positively to local character, heritage and the canal. The public realm design creates safe and attractive streets, routes and public spaces, and makes walking and cycling on the Site more attractive.
- 7.36 The degree of change brought about by the Development is significant. In particular, a presently very underdeveloped Site will be developed to a greater density than its surroundings. The present state of underdevelopment is inappropriate to this town centre location, and there are no positive or beneficial qualities of this present state that are harmed by the Development; it is entirely beneficial.
- 7.37 Given the scale of development proposed, there will be no significant effects on the wider townscape or on heritage assets beyond the areas and buildings considered in the above assessment.
- 7.38 The preceding views and assessment demonstrate that the design achieves the project's ambitions as set out in the DAS, and is consistent with the relevant requirements of national and local policy and guidance.

8.0

Demolition and construction effects

- 8.1 Construction effects are broadly covered in Chapter 6 of Volume 1 of the ES. This section considers the visual effects of the construction process.
- 8.2 There are no special visual effects that are generated as a result of the construction process outside of those that are inherent in constructing buildings of the type proposed.
- 8.3 The most significant medium and long range visual effects associated with the construction process will be the presence of tower cranes. Their presence is inevitable in connection with construction of the type and scale envisaged.
- 8.4 The top of a tower crane is likely to be higher than the top of the building, so it will be more visible than the finished building. This temporary state of affairs is common as a consequence of building activity and there is no practical way of avoiding it.
- 8.5 During construction the perimeter of the Site will be surrounded by hoarding in the conventional manner.
- 8.6 Visual and townscape effects of demolition and construction would be temporary, local effects of **moderate adverse** significance. There would be temporary local effects of **moderate adverse** significance on the settings of the conservation areas and listed buildings referred to above.
- 8.7 As well as visual effects, these effects would include effects on townscape in respect of pedestrian permeability and amenity. Given the importance of the tourist economy to Camden town centre and the high pedestrian usage of the canal towpath, there would be temporary local effects of **moderate adverse** significance, during demolition and construction, relating to the ability to move around in and around the Site, and the effects on amenity of doing so in the vicinity of a major construction site.

9.0

Cumulative effects

- 9.1 One proposed development in the vicinity of the Site is considered in the Environmental Statement in respect of potential cumulative effects.
- 9.2 **13 Hawley Crescent & 29 Kentish Town Road.** This site is located approximately 180m southwest of the Site. For details of this scheme see Chapter 19, Cumulative Effects, of Volume 1 of the ES. There is no significant intervisibility with the Site and at the scale of development envisaged there is no cumulative townscape effect.
- 9.3 In the LVMF views illustrated (views 14, 15, 16) a number of major projects for tall buildings in the City of London and Docklands that have been granted planning permission will be visible. None of these projects is close to the Site and none will have a cumulative effect relevant to consideration of the effects of the Development.

10.0

Mitigation

- 10.1 Chapter 4 of Volume 1 of the Environmental Statement describes the evolution of the design, which included the exploration of a number of options. The iterative design process for a complex project on an urban site such as the subject of this assessment is inherently one whereby visual effects are taken into account at each stage. Any unacceptable visual effects are mitigated by the design team as an integral part of the design development iterations. The comments of the local authority's planning officers, based on detailed knowledge of the Site and surroundings and of planning policies affecting them, and the feedback received during design development in consultations, are part of the input into this process.
- 10.2 By virtue of the careful attention that has been given to the design of the new buildings and the public realm through this thorough process, therefore, the completed Development in the form in which it is submitted for planning permission does not give rise to any adverse townscape or visual effects. This conclusion is based on the method of assessment of the outline elements of the application set out in section 2 above.

A.0

Cityscape verified view methodology

- A.1

Methodology overview

The methodology applied by Cityscape Digital Limited to produce the verified images or views contained in this document is described below. In the drafting of this methodology and the production and presentation of the images, guidance has been taken from the Second Edition of the good practice Guidelines for Landscape and Visual Impact Assessment 2002 produced by the Landscape Institute and Institute of Environmental Management & Assessment also the 2007 London Management Framework Draft SPG. The disciplines employed are of the highest possible levels of accuracy and photo-realism which are achievable with today's standards of architectural photography and computer-generated models.
- A.2

View selection

The viewpoints have been selected through a process of consultation with relevant statutory consultees and having regard to relevant planning policy and guidance.

CAMERA MATCHING PROCESS FOR DIGITAL PHOTOGRAPHY					
OUTSOURCED OPERATION:		INHOUSE OPERATION:		Page	
		1.3	PHOTOGRAPHY	72	
		1.4	Digital Photography		
		1.5	Lenses		
		1.6	Digital Camera		
		1.7	Position, Time and Date Recording		
		1.8	RAW FILE CONVERSION AND DIGITAL IMAGE CORRECTION	73	
		1.9	Raw File Conversion		
		1.10	Digital Image Correction		
		1.11	SURVEY		74
		1.12	Survey		
		1.13	MODELLING POSITION	75	
		1.14	Height and Position Check		
		1.15	CAMERA MATCHING	76	
		1.16	Cityscape`s Database		
		1.17	Creation of Scheme Model		
		1.18	Camera Matching Process		
		1.19	Wireline Image		
		1.20	RENDERING	77	
		1.21	Rendering		
		1.22	Texturing		
		1.23	Lighting and Sun Direction		
		1.24	POST-PRODUCTION	78	
		1.25	Post Production		

A.3 Photography

A.4 Digital photography

With the latest advances in Digital Photography it is now possible to match the quality of plate photography. Due to the added benefits of time saving and flexibility Cityscape now employ full time in-house digital photographers.

A.5 Lenses

For local views a wide angle lens of 24mm or 35mm was used in order to capture as much of the proposal and its surroundings as possible. Intermediate distance views were photographed with a standard 35mm to 70mm. For views illustrated as panoramas, 24mm or wide angle 14mm lenses were used. As a guide the following combinations are commonly used:

Distance to subject	View	Canon Digital SLR, 1DS Mark III
0 - 800 metres	Local	24mm to 50mm 'L' series
800 to 5000 metres	Intermediate	24mm to 70mm 'L' series zoom
5000+ metres	Distant	70mm to 200mm 'L' series zoom

Examples of these views are shown in Figures 4, 5 and 6.

A.6 Digital camera

Cityscape used a Canon 1DSMK3 (shown in figure 1) Digital SLR, a high resolution digital camera for the digital photography. Also used were Canon's 'L' series professional tilt and shift lenses which produce high quality images that are suitable for the camera-matching process without the need for processing and scanning.

A.7 Position, time and date recording

The photographer was provided with (i) an Ordnance Survey map indicating the position of each viewpoint from which the required photographs were to be taken, and (ii) a digital photograph taken by Cityscape of the desired view. For each shot the camera was positioned at a height of 1.65 metres above the ground level which closely approximates the human eye altitude. A point vertically beneath the centre of the lens was marked on the ground as a survey reference point and two digital reference photographs were taken of (i) the camera / tripod location and (ii) the survey reference point (as shown in Figures 2 and 3). The date and time of the photograph were recorded by the camera.



1) Canon 1DSMK3 Digital Camera
2) Camera Location
3) Survey reference point
4) Local view
5) Intermediate view
6) Distant view



A.8 Raw File Conversion and Digital Image Correction

A.9 Raw file conversion

Canon cameras produce a raw file format, which is then processed digitally for both high detail and colour accuracy. The final image is outputted as a tiff¹ file.

A.10 Digital image correction

The digital images were then loaded into Cityscape's computers running Adobe Photoshop² software to prepare the digital image for the next stage of camera matching (see section 1.16). The image is also 'bank'³ corrected which means ensuring that the horizon in each digital image is precisely horizontal.

In spite of the selection of the most advanced photographic equipment, lenses are circular which results in a degree of distortion on the perimeter of images. The outer edges of an image are therefore not taken into consideration; this eliminates the risk of inaccuracy. Figure 20 in section 1.16 illustrates the 'safe' or non-distortive area of an image which is marked by the red circle.

The adjusted or corrected digital image, known as the 'background plate', is then saved to the Cityscape computer system ready for the camera matching process (see section 1.16). In preparation for the survey (see section 1.12) Cityscape marks up each background plate selecting a number of points in the view, such as corners of buildings, for survey (see Figures 7 and 8).

¹ TIFF is the name given to a specific format of image file stored digitally on a computer.

² Adobe Photoshop® is the industry standard image editing software.

³ By aligning the vanishing points.



7)

7) Background plate highlighting critical survey points in purple and secondary survey strings in red
8) Area of interest to be surveyed as shown in Figure 7



8)

A.11 GPS Survey

A.12 Survey

Marshall Survey Associates Ltd. (MSA) were contracted to undertake the survey of (i) each viewpoint as marked on the ground beneath the camera at the time the photograph was taken (and recorded by way of digital photograph (see section 8.1 above)) and (ii) all the required points on the relevant buildings (as marked on the background plate).

The survey was co-ordinated onto the Ordnance Survey National Grid (OSGB36) by using Global Positioning System (GPS) equipment (see, for example, Figure 9) and processing software. The Ordnance Survey National Grid (OSGB36) was chosen as it is the most widely used and because it also allows the captured data to be incorporated into other available digital products (such as Ordnance Survey maps). The height datum used was Ordnance Survey Newlyn Datum and was also derived using the GPS. MSA uses a baseline consisting of two semi-permanent GPS base stations (see Figure 10). These stations are located approximately 5730 metres apart and positioned so as to optimise the results for the area of operation (see location map, Figure 14). The base stations are tied into the National GPS Network and are constantly receiving and storing data which allows their position to be monitored and evaluated over long periods of operation. By using the same base stations throughout the survey MSA ensure the consistency of the results obtained.

Using the Real Time Kinematic method a real time correction is supplied by each base station to the rover (shown in Figure 11) (over the GSM⁵ network) physically undertaking the field survey. This enables the rover to determine the co-ordinates of its location instantaneously (i.e. in ‘real time’). The rover receives a ‘corrected’ fix (co-ordinates) from each base station. If the two independent fixes are each within a certain preset tolerance, the rover then averages the two fixes received. The viewpoints are, with a few exceptions, surveyed using this technique. This method of GPS survey (Real Time Kinematic) produces results to an accuracy in plan and height of between 15mm-50mm as outlined in the “Guidelines for the use of GPS in Land Surveying” produced by the Royal Institute of Chartered Surveyors.

The particular points on each building as marked up on the background plate are surveyed using conventional survey techniques utilising an electronic theodolite and reflectorless laser technology (shown in Figures 12 and 13). There are two methods used to fix the building details, namely polar observations⁶ and intersection observations⁷. The position of the theodolite is fixed by the rover as described above. In certain circumstances, a viewpoint may need to be surveyed using conventional survey techniques as opposed to Real Time Kinematic, if, for example, the viewpoint is in a position where GPS information cannot be received.

⁵ GSM network: the mobile phone network.
⁶ Polar observation is the measurement of a distance and direction to a point from a known baseline in order to obtain co-ordinates for the point. The baseline is a line between two known stations.
⁷ Intersection observation is the co-ordination of a point using directions only from two ends of a baseline.



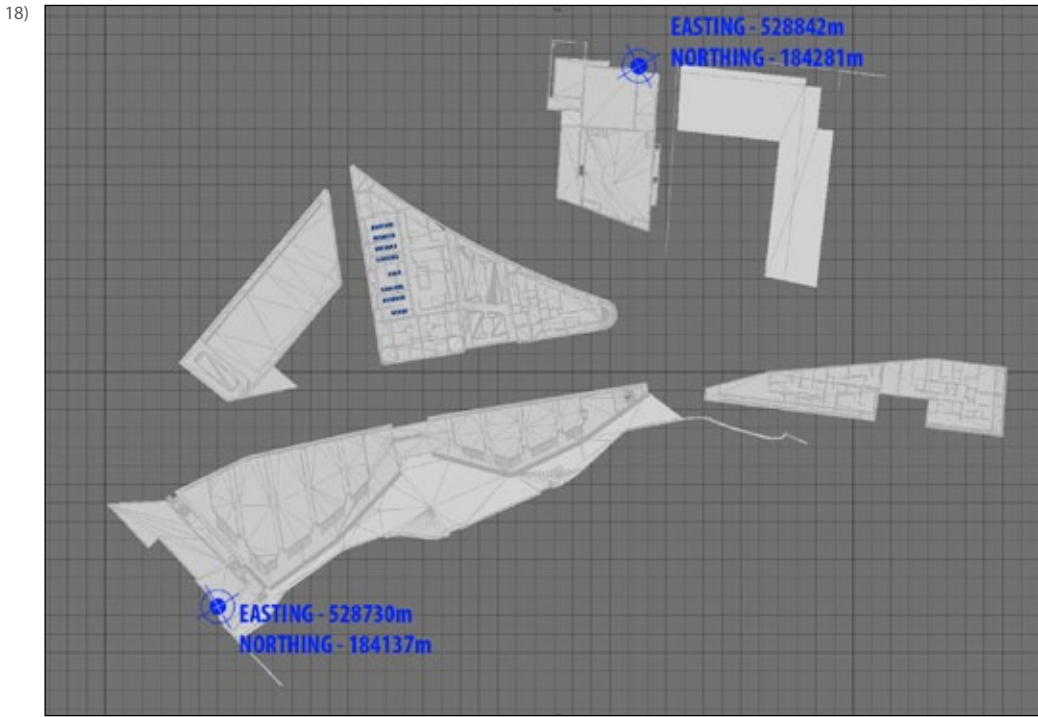
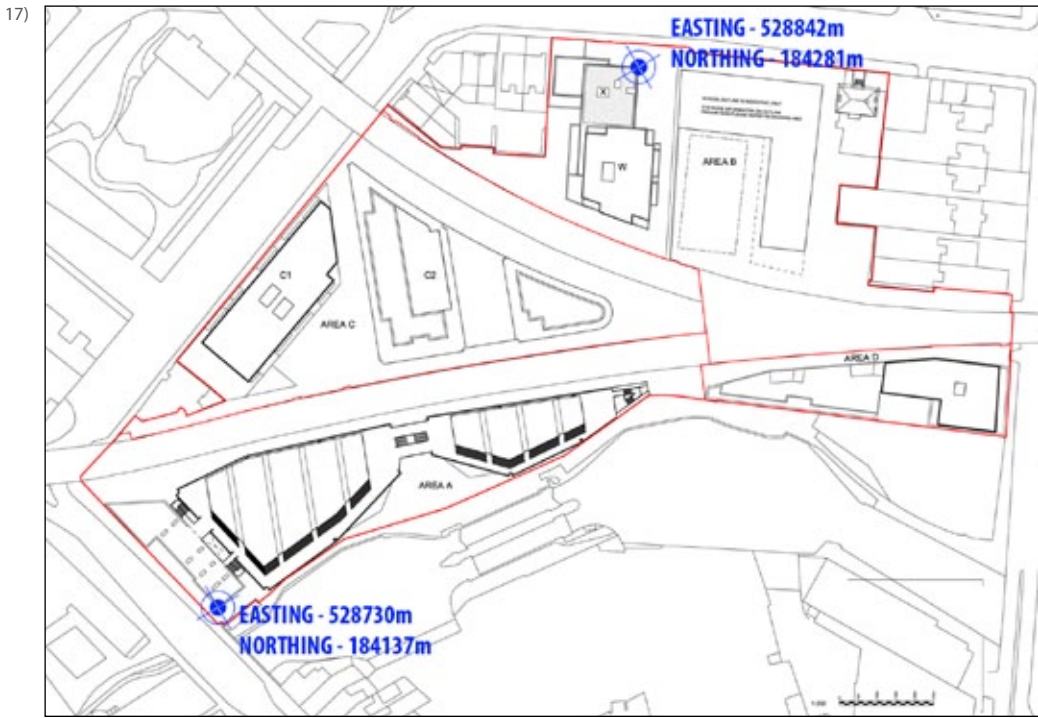
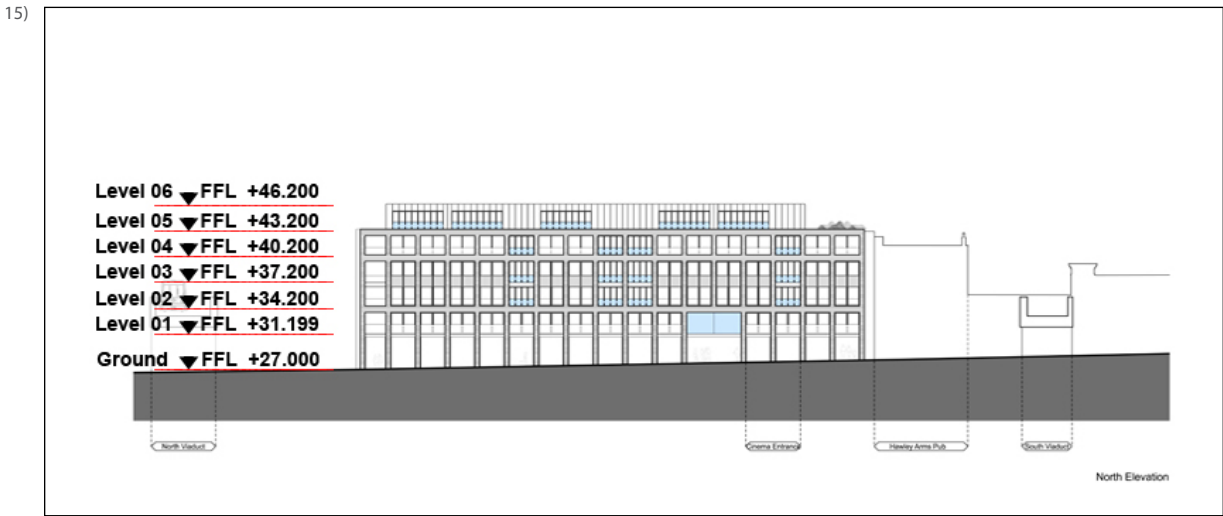
9) GPS System
10) Marshall Survey semi-permanent GPS base station
11) Field survey being carried out using a GPS rover
12) Electronic Theodolite
13) Field survey being carried out by St. Paul's Cathedral
14) Location of Marshall Survey's GPS base stations



A.13 Model Positioning

A.14 Height and position check

The model is positioned using a site plan provided by the architect. This is then overlaid onto OS positioned survey from ProMap. Once the building has been positioned in Lightwave confirmation of height and position is requested from MAKE Architects, and AHMM Architects. Two clear reference points are agreed and used to confirm the site plan and Ordnance Survey. The height is cross checked against the architects section and given in metres Above Ordnance Survey Datum (AOD).



15) Architects section
16) Cityscape model section
17) Architects plan
18) Cityscape model plan

A.15 Camera Matching

A.1 Cityscape’s database of surveyed buildings in central London
Cityscape has built up a comprehensive database of survey information on buildings and locations in central London; the database contains both GPS survey information and information regarding the dimensions and elevations of buildings gathered from architects and other sources. Figure 19 shows a selection of GPS located models (yellow) within Cityscape’s database which effectively represents a 3D verified computer ‘model’ of some prominent buildings in central London. The term ‘3D model’ has been adopted with caution in this methodology as it is thought to be slightly misleading because not every building in central London is included in the database although the majority of those buildings which form part of the ‘skyline’ are included.

The outlines of buildings are created by connecting the surveyed points or from the information obtained from architects’ drawings of particular buildings. By way of example of the high level of detail and accuracy, approximately 300 points have been GPS surveyed on the dome of St. Paul’s. The database ‘view’ (as shown in Figure 19) is ‘verified’ as each building is positioned using coordinates acquired from GPS surveys. In many instances, the various co-ordinates of a particular building featured in one of the background plates are already held by Cityscape as part of their database of London. In such cases the survey information of buildings and locations provided by MSA (see section 4.11 above) is used to cross-check and confirm the accuracy of these buildings. Where such information is not held by Cityscape, it is, where appropriate, used to add detail to Cityscape’s database. The survey information provided by MSA is in all cases used in the verification process of camera matching.

A.2 Creation of scheme model
A wireframe⁸ 3D model of the proposed scheme is created by Cityscape from plans and elevations provided by the architects, MAKE, and from survey information of the ground levels on site and various other points on and around the site, such as the edge of adjacent roads and bollards etc. provided by MSA.

A.3 Camera matching process
The following information is required for the camera matching process:

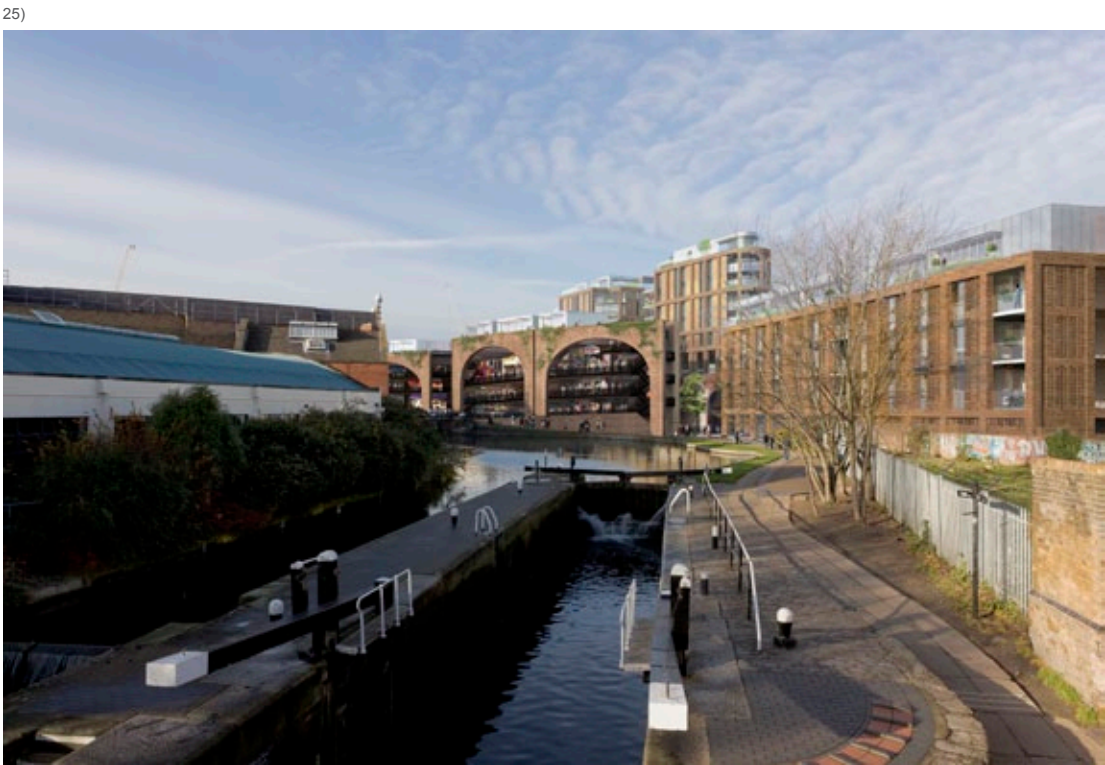
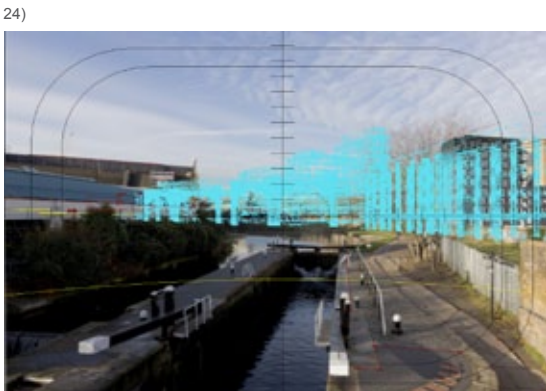
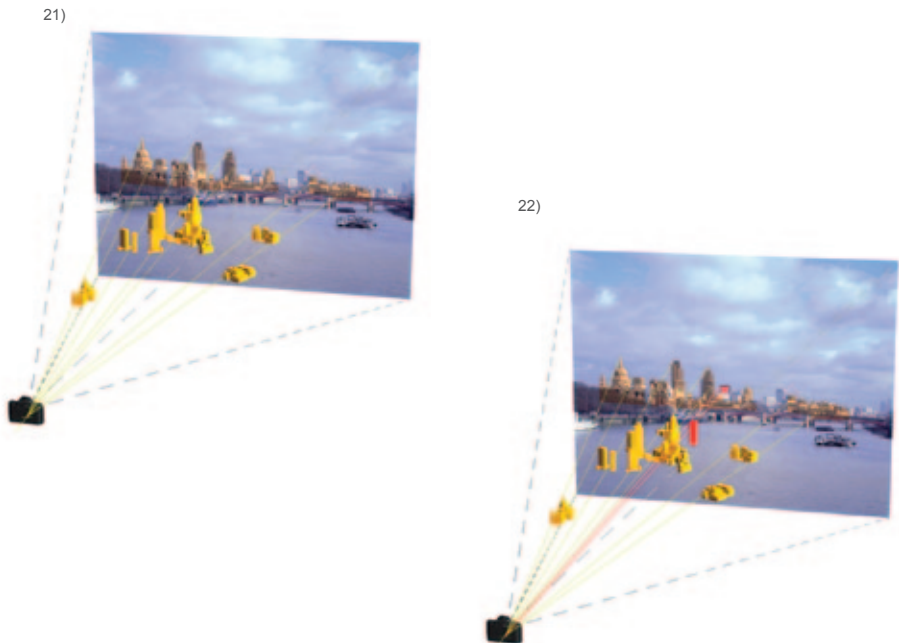
- Specific details of the camera and lens used to take the photograph and therefore the field of view 10 (see section 1.3);
- The adjusted or corrected digital image i.e. the ‘background plate’ (see section 1.8);
- The GPS surveyed viewpoint co-ordinates (see section 4.11);
- The GPS surveyed co-ordinates of particular points on the buildings within the photograph (the background plate) (see section 4.11);
- Selected models from Cityscape’s database (see section 4.11);
- The GPS surveyed co-ordinates of the site of the proposed scheme (see section 4.11);
- A 3D model of the proposed scheme (see section 4.13).

A background plate (the corrected digital image) is opened on computer screen (for example, Figure 20), the information listed above is then used to situate Cityscape’s virtual camera such that the 3D model aligns exactly over the background plate (as shown in Figures 21 and 24) (i.e. a ‘virtual viewer’ within the 3D model would therefore be standing exactly on the same viewpoint from which the original photograph was taken (Figure 23). This is the camera matching process.

A.4 Wireline image
Cityscape is then able to insert the wireframe 3D model of the proposed scheme into the view in the correct location and scale producing a verified wireline image of the proposal (shown in Figures 22 & 25).

The camera matching process is repeated for each view and a wireline image of the proposal from each viewpoint is then produced. The wireline image enables a quantitative analysis of the impact of the proposed scheme on views.

⁸ A wireframe is a 3D model, a wireline is a single line representing the outline of the building.



19) Selected GPS located models (yellow) from Cityscape’s database, situated on Cityscape’s London digital terrain model
20) Background plate & selected 3D models as seen by the computer camera. Red circle highlights the safe or non-distortive area of the image
21) Background plate matched to the 3D GPS located models
22) The camera matched background plate with an example of a proposed scheme included in red
23) Background plate: digital photograph, size and bank corrected as described in section 3
24) Camera matching: the background plate matched in the 3D GPS located models
25) The camera matched background plate with the proposed scheme included

A.20 Rendering

A.21 Rendering

Rendering is a technical term referring to the process of creating a two-dimensional output image from the 3D model.

A.22 Texturing

In order to assist a more qualitative assessment of the proposals, the output image needs to be a photo-realistic reflection of what the proposed scheme would look like once constructed. The process of transforming the wireframe 3D scheme model (see Section 8) into one that can be used to create a photo-realistic image is called texturing⁹.

Prior to rendering, Cityscape requires details from the architect regarding the proposed materials (e.g. type of glass, steel, aluminium etc.) to be utilised. Cityscape also use high resolution photographic imagery of real world material samples, supplied by the client or the manufacturer, to create accurate photorealistic textures for use in all our images. This information is used to produce the appearance and qualities in the image that most closely relates to the real materials to be used (as shown in Figures 26 and 27).

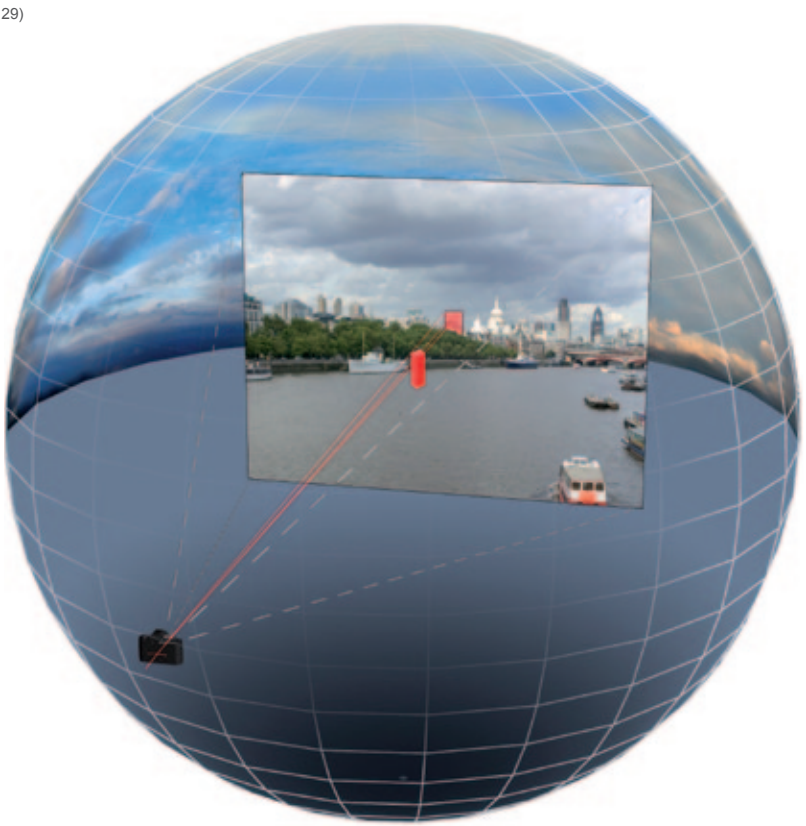
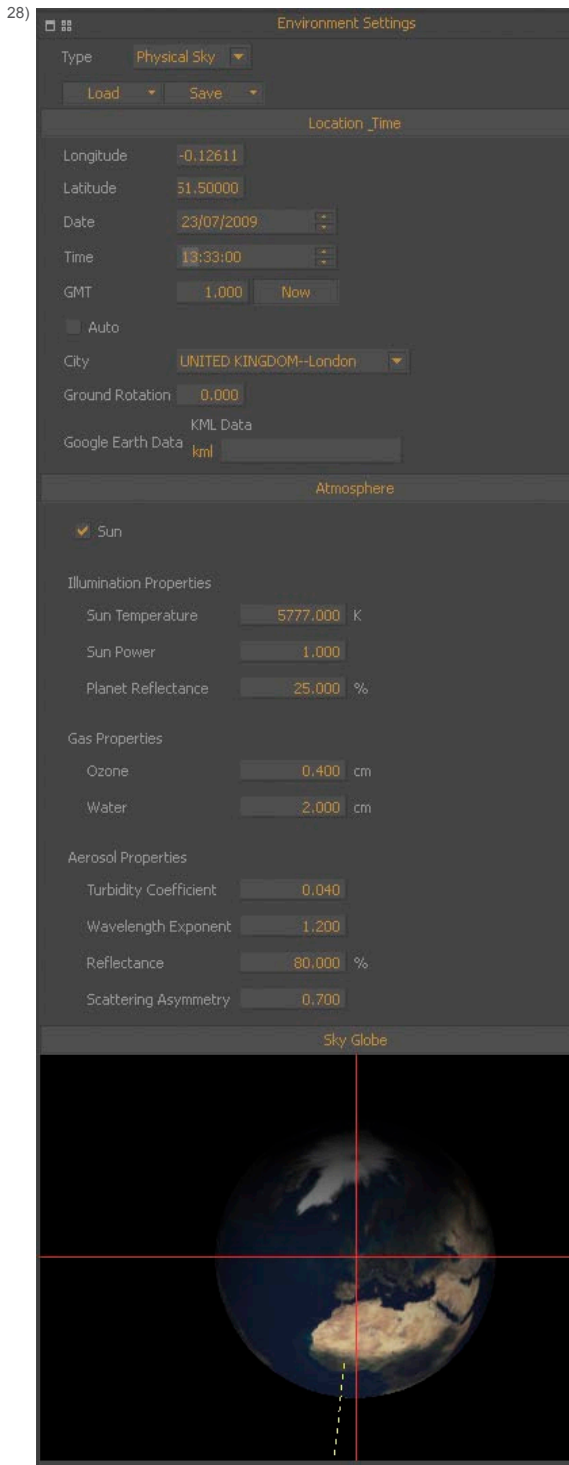
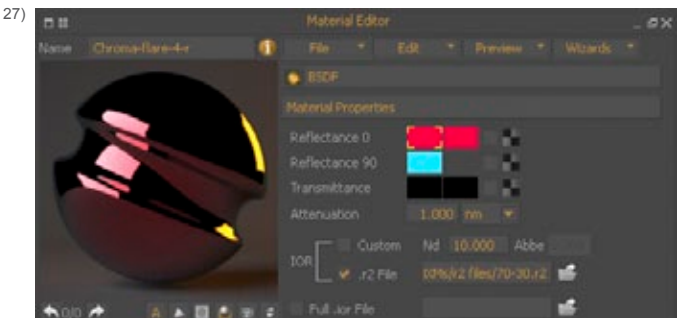
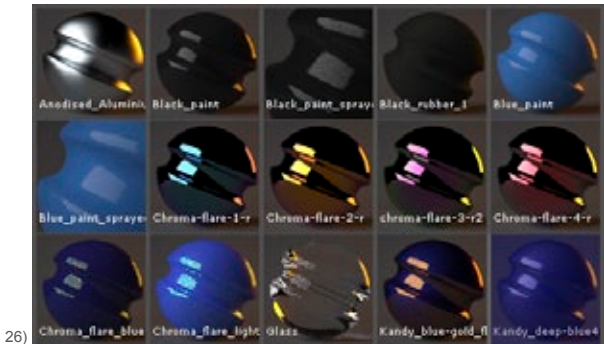
A.23 Lighting and sun direction

The next stage is to light the model. Cityscape utilises High Dynamic Range (HDR) Imaging¹⁰ for all its environmental lighting. The date (including the year) and time of the photograph and the latitude and longitude of the city are input (see Figure 28) into the unbiased physically accurate render engine. Cityscape selects a ‘sky’ (e.g. clear blue, grey, overcast, varying cloud density, varying weather conditions) from the hundreds of ‘skies’ held within the HDR database to resemble as closely as possible the sky in the background plate. The 3D model of the proposed scheme is placed within the selected sky (see Figure 25) and using the material properties also entered, the computer calculates the effects of the sky conditions (including the sun) on the appearance of the proposed scheme.

An image of the proposed scheme is produced showing the effect of light and sun (as shown in Figure 30). The selection of the matching sky is the only subjective input at this stage.

⁹ Texturing is often referred to as part of the rendering process, however, in the industry, it is a process that occurs prior to the rendering process.

¹⁰ An industry standard technique for rendering images with a high dynamic range (HDR); e.g. sky images. HDR images capture a greater exposure latitude than standard images. Using HDR, a light probe image can record the colour and brightness of every light source.



26) Screenshot of some materials in the 3D rendering package
27) Screenshot of material and surface properties
28) Screenshot of environment information (time, date and year) entered to locate the sun correctly (see section 7.3)
29) Example of a proposed scheme highlighted in red within the selected sky and rendered onto the background plate
30) Example of rendered scheme using High Dynamic Range Imaging

A.24 Post Production

A.25 Post production

Finally the rendered image of the scheme model is inserted and positioned against the camera matched background plate. Once in position the rendered images are edited using Adobe Photoshop®. Masks are created in Photoshop where the line of sight to the rendered image of the proposed scheme is interrupted by foreground buildings (as shown in Figure 32).

The result is a verified image or view of the proposed scheme (as shown in Figure 33).

31) Original un-edited background plate
32) Background plate with rendered scheme positioned using the camera matching process Red area highlights the Photoshop mask that hides the unseen portion of the render
33) Shows a photo-realistic verified image



