

Vauxhall Nine Elms Battersea

Opportunity Area Planning Framework

March 2012



MAYOR OF LONDON

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Acknowledgements

Project Team

Colin Wilson

Tava Walton

Claire O'Brien

Lee Campbell

Yogesh Patil

Jasper den Boeft

Far more people than it is possible to thank individually have contributed to the production of the framework. They include the major landowners and their planning, transport and design teams; officers of Transport for London, Design for London and English Heritage; consultants who have contributed to the various technical studies and reports; the design review team at Design Council CABE; and many others. Without them, neither the framework nor the progress that has already been made towards its implementation would have been possible.

Special thanks go to present and past officers and members of Lambeth and Wandsworth Councils for their continuing hard work and commitment to the project; and to Urban Graphics and Z Mapping for their assistance with the production of the document itself.

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Mayor's foreword



Boris Johnson, Mayor of London

I am delighted to introduce this Opportunity Area Planning Framework for Vauxhall Nine Elms Battersea.

London's population is growing and so is its economy. The London Plan identifies Opportunity Areas across the capital, identifying them as places in London with the potential to accommodate substantial numbers of new jobs and homes. Vauxhall Nine Elms Battersea is such an area. Its location in the city's Central Activities Zone, straddling the boundaries of the boroughs of Lambeth and Wandsworth, presents a unique set of challenges and opportunities that this spatial planning framework seeks to address by guiding the future development of the area.

The framework describes the area today, including its rich industrial heritage, which has so strongly influenced its character. It sets out current issues relating to the public realm, connectivity and legibility, and identifies some challenging transport issues. It identifies capacity for 16,000 new

homes and 20-25,000 jobs, supported in transport terms by a two-station extension of the Northern line from Kennington to Battersea via Nine Elms. It considers social infrastructure and open space requirements and sets a section 106 tariff for infrastructure provision, based on the recommendations of a Development Infrastructure funding study. The framework also provides guidance on building heights in the context of local and strategic views and heritage assets, and sets out environmental strategies for energy, waste, wharves and water.

The area has huge potential to make a significant contribution to London's economy. Considerable progress towards implementation of the framework has already been made since the consultation draft was published, and development is already underway. This has been achieved through collaborative and constructive working between key stakeholders including Lambeth and Wandsworth Councils, Transport for London, English Heritage, landowners and

developers, under the guidance of the Strategy Board. Sir Simon Milton was an integral part of this process until his untimely death and I am sure he would be proud of the progress made to date. I would like to pay tribute to his immense contribution to bring forward one of the most significant opportunity areas in Central London.

I look forward to continued joint working to address the challenges ahead, particularly the delivery of public realm and transport improvements including the Northern line extension and the linear park and the major development proposals that will transform the Opportunity Area over the coming years.



Sir Simon Milton (1961-2011)

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Executive summary

The project

The GLA has prepared a planning framework for the Vauxhall Nine Elms Battersea (VNEB) Opportunity Area (OA) in partnership with the London Boroughs (LBs) of Lambeth and Wandsworth, the London Development Agency (LDA), Transport for London (TfL) and English Heritage. The GLA has also worked with key landowners in the OA through a stakeholder consultation process. This final version of the framework supersedes the 2009 consultation draft.

As part of the Opportunity Area Planning Framework (OAPF), the GLA and TfL has undertaken a major transport study in conjunction with key stakeholders, which considers various options for improving public transport accessibility within the OA on the basis of a development capacity study set out in Technical Appendix 9. The key findings of the transport study and its strategic recommendations are set out in chapter six of this report.

The OAPF is supplementary planning guidance to the London Plan. It sets out the strategic policy framework for development within the OA, articulating the key policy directions established in the London Plan, Lambeth's Core Strategy and Wandsworth's Core Strategy and Site Specific Allocations Document.

Evidence base, research and analysis

The report establishes the existing socio-economic conditions in the OA through examining anticipated demographic change

and current indices of multiple deprivation, including income, employment, health and disability, education skills and training and crime and disorder. This data is set out in Technical Appendix 1 to the framework. In addition, the planning framework also identifies existing social infrastructure in and around the OA, including nurseries, schools, health centres, pharmacies, community centres and libraries and spatial gaps in coverage for existing communities.

A thorough analysis of built and heritage context is also provided in TA2 including an overview of historic development, identification of heritage assets, analysis of built form and urban grain, existing and consented tall buildings, local views, land-use, land ownership, infrastructure constraints, connectivity and location of social infrastructure in the OA. On the basis of this analysis the existing character areas of the OA are defined. English Heritage undertook a Historic Area Assessment of the OA (April 2009), which provided some very useful input to TA2 and assisted in the definition of character areas in the OA.

TA2 also considers previous initiatives for the area including a review of potential strategic interventions such as moving Nine Elms Lane.

The planning framework also includes a detailed views assessment set out in TA3, which identifies the key strategic views that are likely to be affected by development coming forward in the OA. TA2 and TA3

provide the evidence base for the public realm and tall buildings strategies set out in chapters 7 and 8 of this report respectively.

Transport and movement context, which strongly define the physical character of the OA, is set out in TA4 and considers the existing situation for all modes. TA4 identifies accessibility and capacity issues throughout the OA including Vauxhall. These are assessed further in the VNEB transport study and chapter 6 of the framework.

In addition an energy strategy for the OA has been produced in consultation with key stakeholders. For further details refer to TA5 of this report. The GLA has also undertaken a waste & wharves strategy and water strategy included in TA6 and TA7 of this report respectively.

Proposed interventions

The planning framework supports the delivery of a high density mixed use development scenario comprising 16,000 new homes and a range of 20,000 – 25,000 jobs.

This assumes that 200,000 square metres of mixed use development is delivered throughout the OA including major office development in Nine Elms, plus an indicative 60,000 square metres of new CAZ frontage, 160,000 square metres of new office and 80,000 square metres of other employment uses at Battersea Power Station. The planning framework also includes a smaller

CAZ frontage at Vauxhall in line with LB of Lambeth's aspirations for a small district centre set out in their UDP.

The development capacity study (TA9) assumed that all developments will meet the London Plan requirement for open space provision (on the basis of the Mayor's SPG on children's play space) and contribute to the provision of strategic open space provision in the form of a linear park in Nine Elms, connecting Vauxhall to Battersea Power Station.

In addition, significant public realm improvements and substantial social infrastructure delivery are proposed to support existing and new communities in the area. It is anticipated that new schools, health facilities, community centres and libraries will be required.

The planning framework also sets out the approach to tackling climate change through development in the OA. The key principles include establishing a district heating network in the OA, with the potential to link to Pimlico, Whitehall and Waterloo District Heating Networks (DHNs).

The design and layout of the public realm strategy provides the potential to integrate flood risk mitigation with residential intensification.

On the basis of the transport study, the planning framework supports a transport interventions package focusing on capacity enhancements to existing bus services,

the introduction of new and extended bus services and the delivery of a Northern Line Extension (NLE) from Kennington to Battersea via Nine Elms. In association with a package of other transport measures throughout the OA including improvements at Vauxhall interchange and gyratory, this will achieve the step change in public transport accessibility and capacity that is required to fully realise the development potential and support growth within the area.

Stewarts Road industrial area will be retained as SIL where intensification of employment uses will be delivered through improving access to key sites and upgrading the quality of the public realm. The planning framework supports the ongoing protection of the safeguarded wharves. The rationalisation of New Covent Garden Market (NCGM) land holdings is also supported, with the focus for ongoing operational activity on the Main Market site.

The OAPF also includes a tall buildings strategy, which supports an emerging cluster at Vauxhall within the parameters of the London Views Management Framework (LVMF). The tall buildings strategy establishes a series of parameters, which respond to the need to protect the setting of the Palace of Westminster World Heritage Site (WHS) from key river prospects including Waterloo, Hungerford and Westminster Bridges. It supports high density development within the OA in the form of 8 – 10 storey perimeter blocks with tall buildings in appropriate locations so that

they do not appear in the background of the Palace of Westminster WHS.

A development Infrastructure Funding Study (DIFS) was undertaken, which informed the development of a section 106 tariff to fund the full range of infrastructure required to support new development in the OA. TfL is progressing the preparation of a Transport Works Act Order application for the NLE on the understanding that the associated costs will be recovered from future section 106 and CIL payments. Subject to a funding and financing solution being agreed and final Mayoral sign-off, the anticipation is to submit this in early 2013.

Consultation

The draft framework was subject to public consultation in November 2009 - March 2010; eighty responses were received. A revised chapter 12 Section 106 & CIL was subject to consultation in February - March 2011; 25 responses were received.

The majority of respondents expressed support for the land use strategy and considered the growth poles at Battersea Power Station and Vauxhall to be appropriate. Opinions were divided in respect of the preferred development scenario, with landowners generally expressing support for revised scenario 5, and local residents and amenity societies generally opposed to the proposed density of development for a variety of reasons, including overcrowding in the area, pressure

on local services and increased traffic congestion.

Some respondents emphasised the need for family housing, affordable housing and houses with gardens as well as flats. Others commented that the new development should not have a high proportion of social housing and that the framework placed too much emphasis on the provision of family housing.

Opinions were also divided in respect of the tall buildings strategy. Strong opposition to the proposed heights was expressed by a number of local residents and amenity societies. Concerns included overshadowing of existing housing and open spaces, blocking views towards the river, social problems associated with high rise buildings, impact on ground level environment and negative impact on Westminster World Heritage Site and Battersea Power Station. Landowners were generally supportive of the tall buildings strategy, but some commented that setting maximum heights was too prescriptive and unjustified in policy terms.

There was general support for the public realm strategy but some local residents expressed concern that the linear park would be too small and would be overshadowed by tall buildings. The need for sufficient children's play space, recreational areas and allotments was raised by a number of respondents. Some landowners objected to the scale of the park and its disproportionate impact on specific sites.

Several respondents welcomed the proposals to improve the riverside path but others expressed concern about the impact of tall buildings on the riverside. Proposed improvements to north-south permeability were generally supported.

Some respondents commented that new jobs in the area should be targeted at existing residents and that measures should be put in place to ensure deprived communities benefit from the development.

A number of respondents identified existing poor air quality at Vauxhall and expressed concern that this would be exacerbated by new development.

The majority of respondents acknowledged the barrier that lack of transport accessibility in the area has and continues to have to growth in the area. Overall there is general support for the transport proposals set out for the OA and an acknowledgement that any development coming forward will be required to be truly accessible and focused on increasing the use of sustainable modes of travel. The phasing and timing of delivery of transport interventions is a common concern and there is a desire to ensure early delivery wherever possible.

A number of respondents raised concerns in relation to the assumptions upon which the transport analysis was based and therefore its conclusions. In addition the density of development and the burden it would place on transport and other infrastructure was highlighted. Other concerns raised related

to the approach to car parking in the area; highways impacts and worsening pollution as a result of increased traffic levels.

In general there was overall support for a Northern Line Extension and supporting interventions, the majority of respondents recognised the limitation that a tram or light rail transit (LRT) led solution would have and therefore little support for this was identified.

Strong support was identified for the NLE, respondents described it as 'key', 'essential' and 'a must' for the area. However, for many support is contingent on the NLE being delivered as part of a wider package of transport improvements including a station in the Nine Elms area. Of those respondents who did not support the proposal the key concerns centred around funding and phasing; impacts on current Northern Line crowding; impacts at Kennington and Oval stations; potential to frustrate/delay development in the area and level of consultation to date.

Respondents recognised the existing high level of public transport accessibility at Vauxhall. Key themes related to the need to improve the capacity of Vauxhall station and services and the need for further commitments to improvements at the Vauxhall gyratory.

There was a general acknowledgement by all that traffic levels in the area would increase significantly over the longer term in line with development, concerns highlights on future highways impacts and support for traffic management measures in the area and beyond where highways impacts extend outside the OA.

General support for improvements to Nine Elms Lane, Albert Embankment and Vauxhall Gyrotory in terms of 'humanising' these environments while acknowledging the strategic need to keep traffic flowing.

Many strong views on the need to redesign/remove/improve the Vauxhall Gyrotory, asking that the OAPF make further commitments to bring about change.

Very strong support identified for the approach to improving walking and cycling connections and permeability in the OA through a series of interventions set out in both the Transport and Public Realm sections. Support for improved linkages along key routes, new linear park and riverside. Strong support highlighted for the proposed Pedestrian and Cycle Bridge; however further feasibility; analysis and consultation with locals and neighbouring authorities will be required if this project progressed. Concerns were identified in relation to cycle safety in the area during on-going construction.

General support for improvements to bus services and new routes in the OA; support for need identified to improve Battersea Park, Vauxhall and Queenstown Road Stations; welcoming activation of railway arches in the area.

Concerns highlighted in relation to the on-going/long-term construction impacts in the OA; support for co-ordination and integration of construction activity in the area; concern that the OA under-plays the role of the river in terms of transportation of construction materials.

In response to consultation on revised chapter 12, 63 The majority of respondents recognised the need for new infrastructure in the OA and supported the principle of pooling section 106 contributions for this purpose. There were, however, concerns raised about the methodology used for developing the tariff and its relationship with Regulation 122 of the CIL Regulations and the transitional arrangements for phasing out section 106 and implementing CIL. A number of respondents emphasised the need for the OA to be excluded from the Mayoral CIL.

Several landowners commented on the potential impact of the tariff on development viability and emphasised the need for site specific financial appraisals to be undertaken to assess the viability of individual developments. The need for more clarity about how the charging mechanism would operate was a common theme – including the issue of net versus gross floorspace and clarification of the land use categories to which the tariff was intended to apply. Clarity was also requested in respect of the circumstances under which offsets against other planning obligations would be permitted. Some confusion was expressed over why four value areas but only two tariff zones were identified in the DIFS, and concerns were raised about the phasing of infrastructure contributions for individual developments.

The need for a clear strategy in respect of how and when infrastructure would be delivered was also raised by a number of respondents. A lack of clarity over the prioritisation of different types of

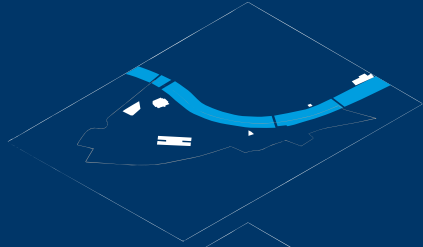
infrastructure was also identified, with respondents generally seeking more certainty over priority projects and the timing of delivery.

Some local residents and amenity societies raised concerns that some of the infrastructure requirements, particularly those relating to health and education provision, may have been underestimated and that existing facilities would be put under pressure as a result. They also expressed concern over the size of the funding gap and questioned how the deficit would be addressed. Some respondents expressed dissatisfaction with the priority being afforded to transport infrastructure at the expense of affordable housing, particularly in respect of the 15% affordable housing scenario, and considered that this did not comply with London Plan affordable housing policy. Concern over insufficient provision of open space, and the need for improvements to existing parks and open spaces, was also raised.

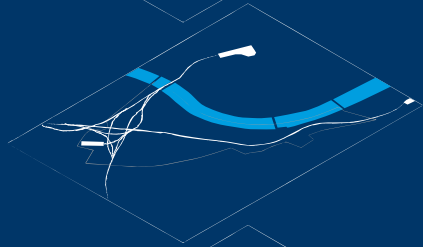
In drafting the final document, regard has been had to the representations received during the various consultation exercises and where appropriate the document has been amended accordingly. The final version is considered to strike a balance between conflicting views expressed over a number of issues. Importantly, the framework is consistent with London Plan policy and has the support of the boroughs.

Chapter 1

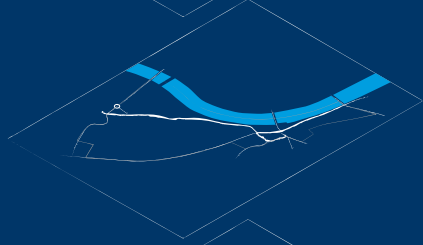
Introduction



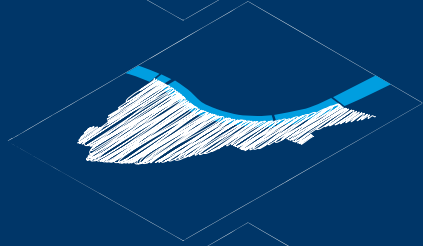
landmarks



railway viaducts



nine elms lane



opportunity area



borough boundaries



aerial image

Key principles

- Recognising the scale of the development opportunity in central London
- Overcoming historic and strategic barriers to the delivery of regeneration in the OA
- Setting out a co-ordinated spatial plan for the area which addresses the delivery of new infrastructure and how it will be paid for
- To realise the optimum development potential of the area with 16,000 new homes and 20,000 – 25,000 new jobs.
- To establish growth poles in the form of new CAZ frontages at Battersea Power Station and Vauxhall.
- To deliver a new mixed use residential neighbourhood and linear park in the heart of Nine Elms.
- To deliver a step change in public transport provision including a two-station extension of the Northern line from Kennington to Battersea Power Station with an intermediate station at Nine Elms, supported by a package of rail, bus, cycling, pedestrian and highway improvements.
- To deliver new open space, including a linear park, improved riverside walk and a high quality public realm.
- To create a sustainable place with new social infrastructure, a district heat network, utilities infrastructure and strategic flood mitigation measures.

1.1 The Vision

‘A new London quarter for the benefit of the whole community’

By 2030 the 195 hectares of the Vauxhall Nine Elms Battersea Opportunity Area will become an exemplar and distinctive quarter of central London. As an integral part of the London offer, defined by Lambeth Bridge through Vauxhall to Battersea Power Station and Chelsea Bridge, high quality buildings and public spaces will provide opportunities for jobs and the choice of a variety of homes. New cultural and leisure development in this Thames River front location, supported by high quality services, especially public transport, will make this a successful and sustainable place where people will want to be.

Nine Elms will be a prestigious destination for international investment anchored by the rejuvenated Battersea Power Station and the new US Embassy. A major new town centre at the former Power Station will provide the focus of much of the new economic activity. New Covent Garden food and flower market will be reconfigured to provide better facilities for its businesses and a public interface that will include new restaurants. This will provide the setting for a bustling 24/7 food quarter. Vauxhall Cross, which already benefits from an existing station will be transformed into an attractive, walkable neighbourhood, with a mix of uses and public spaces with streets that are not dominated by traffic.

A bold new linear park from Battersea Power Station through to Vauxhall will be a major feature in the sustainable development of the area together with improved green open spaces. The high quality public realm to be created here will be critical to ensuring that pedestrians and cyclists feel safe and secure. Convenient and attractive routes will connect the area together with existing neighbourhoods and the elegant Albert Embankment which is a defining characteristic of the South Bank.

New sustainable development will lead the way in construction, provision of extensive green infrastructure, minimising the use of energy and encouraging carbon reduction including a district heating network serving the whole area. The Northern Line Extension from Kennington to Battersea Power station and excellent public transport interchange facilities at Vauxhall will give the area essential new public transport connections.

The development of the whole area is expected to provide 16,000 new homes and an estimated 25,000 new jobs.

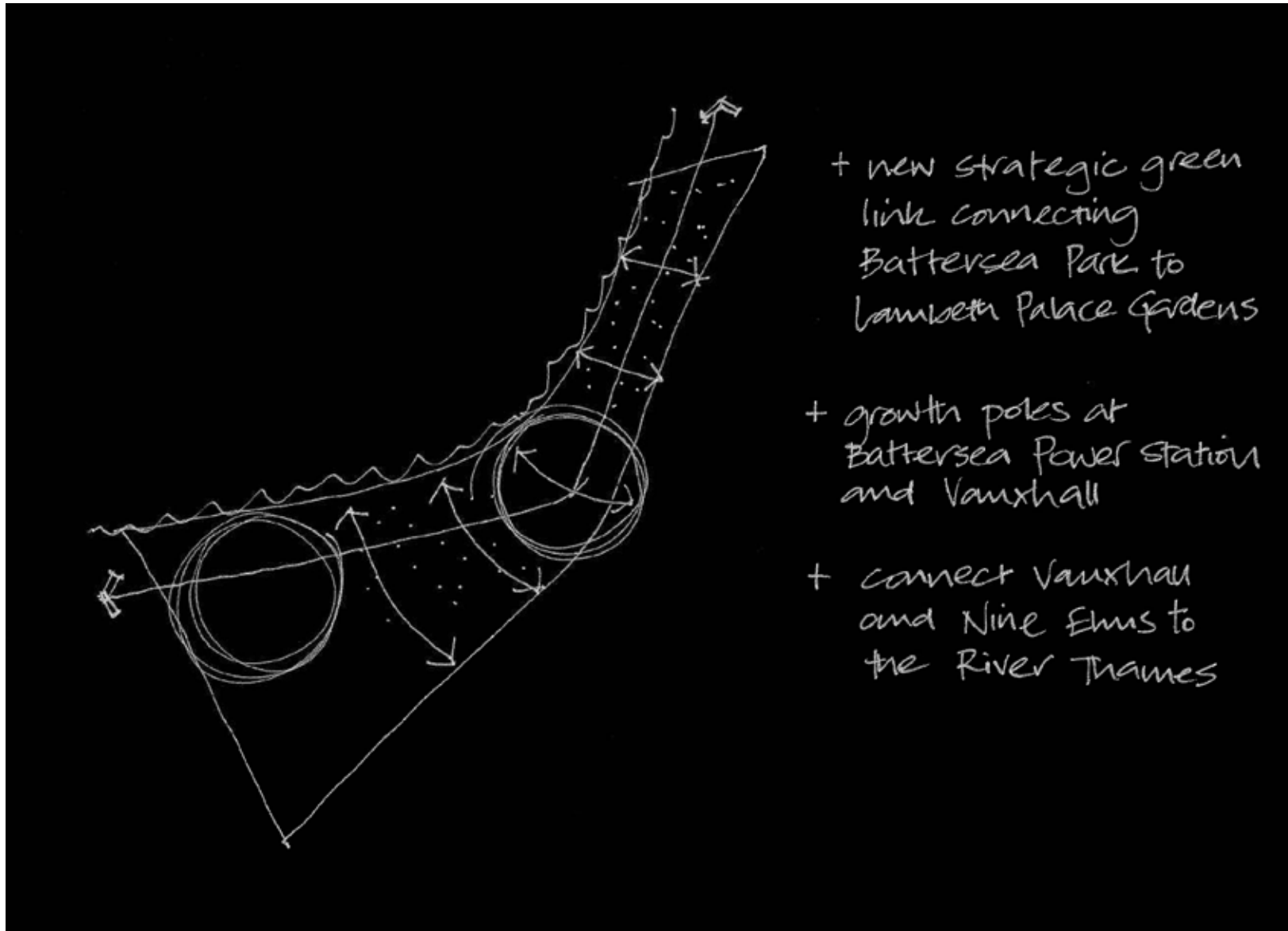


Figure 1.1 Vision for Vauxhall Nine Elms Battersea

1.2 Introduction to planning framework

The Opportunity Area Planning Framework (OAPF) for Vauxhall Nine Elms Battersea (VNEB) is a spatial planning document, which has been led by the Greater London Authority (GLA) in partnership with Transport for London (TfL), Lambeth and Wandsworth Councils and English Heritage. The partner organisations form the steering group for the project.

On behalf of the Mayor of London, the GLA has led the production of the document, utilising its unique function as the statutory strategic planning authority for London, working closely with the strategic transport and regeneration agencies, local planning authorities and specialist heritage and urban design bodies to produce the OAPF for VNEB. This final version of the framework supersedes the 2009 consultation draft.

The production of the OAPF has also been positively influenced by discussions with key landowners and developers in the Opportunity Area (OA) who formed the original stakeholder group for the project and are represented on the Strategy Board alongside the various public authorities.



Figure 1.2 The Opportunity Area in context



1.3 Introduction to the opportunity area

The VNEB OA comprises 195 hectares of land on the south bank of the River Thames between Lambeth Bridge to the north and Chelsea Bridge to the south west. It encompasses Albert Embankment, Vauxhall Cross, Nine Elms including New Covent Garden Market and Battersea Power Station. Its western boundary is largely formed by Queenstown Road and Silverthorne Road.

The northern part of the OA is located in the London Borough of Lambeth, with the southern part located in the London Borough of Wandsworth. The borough boundary bisects the OA to the west of Vauxhall Cross.

In its broader context the OA forms the western end of the south bank, is one of the central London Opportunity Areas (OAs), and its northern boundary is contiguous with the Waterloo OA, for which a planning framework was published by the GLA in October 2007 (see figure 2.2).

Figure 1.3 The opportunity area

1.4 Governance arrangements

Since the publication of the original draft OAPF in 2009, a Strategy Board has been set up for the OA to provide strategic leadership for the implementation of the framework. The Board is alternately chaired by the Leaders of Lambeth and Wandsworth Councils and is attended by officers of the public authorities and major landowners. The governance structure (see figure 1.4) comprises the Strategy Board and a series of subject-specific working groups and sub-groups.

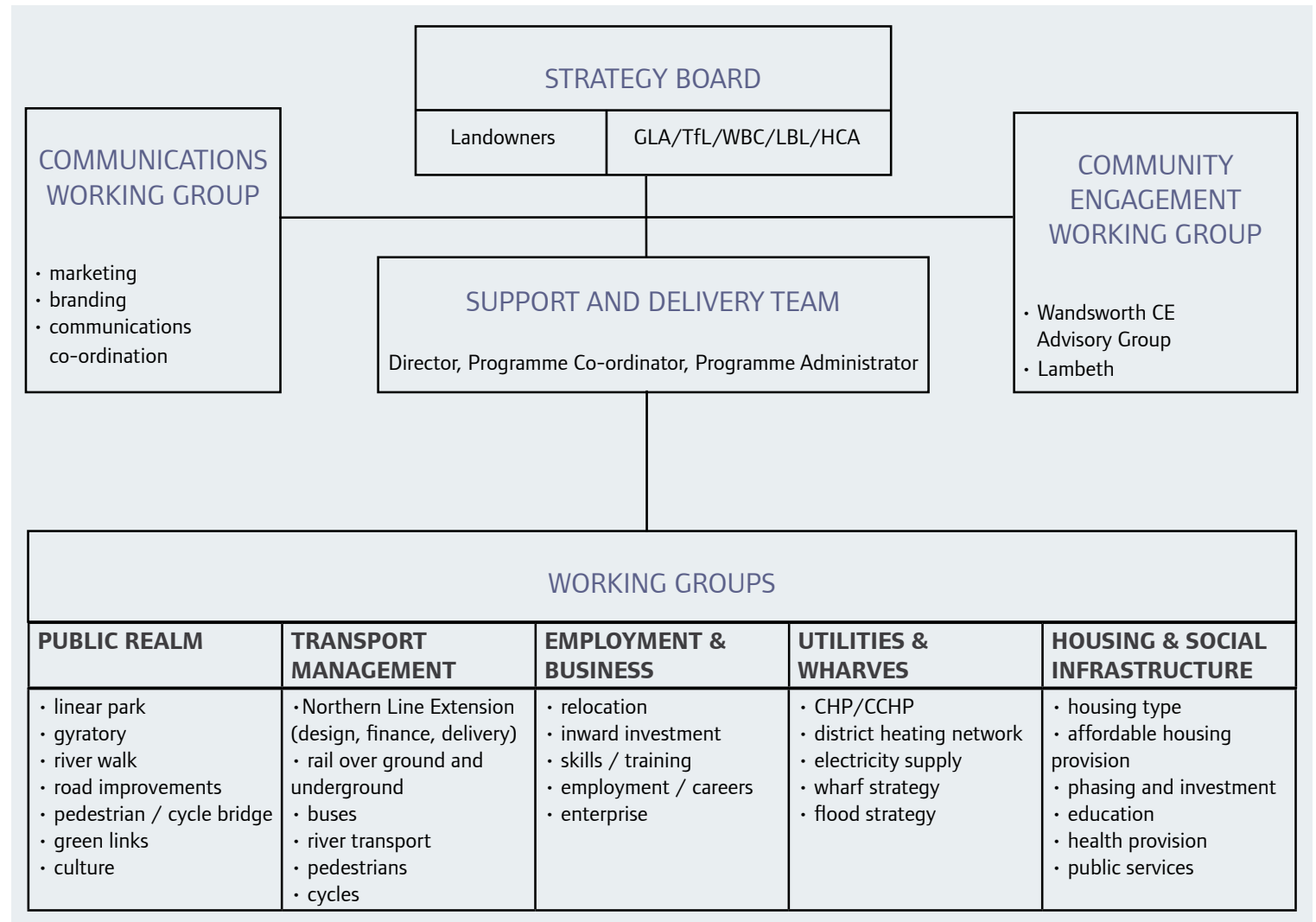
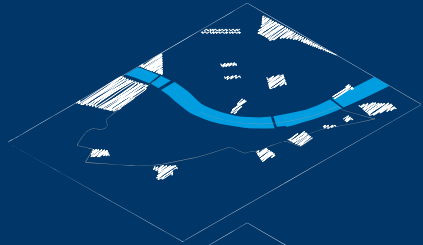


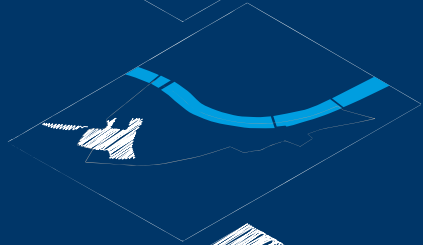
Figure 1.4 VNEB Governance and Delivery Structure

Chapter 2

Policy context



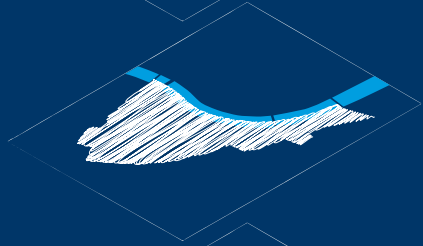
parks & gardens



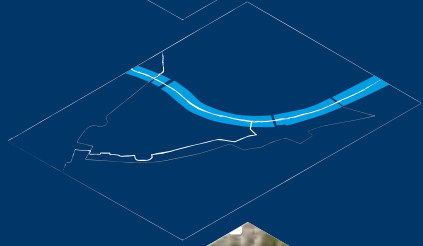
protected industrial areas



central activities zone



opportunity area



borough boundaries



aerial image

Key principles

- To deliver a cross borough planning framework
- To spatially define and protect the retained strategic industrial location (SIL) designation in the OA
- To set out in land use policy terms how the London Plan's objective of delivering Central Activities Zone (CAZ) uses in the OA will be achieved
- To align with Lambeth Council's Core Strategy (2011) and draft supplementary planning document (SPD) for Vauxhall
- To align with Wandsworth Council's strategy for mixed use high density development in Nine Elms and Battersea as set out in its Core Strategy (2010), Development Management Policies Document (2012) and Site Specific Allocations Document (2012) including the Area Spatial Strategy for Nine Elms
- To ensure that the OAPF gains material weight in planning decisions through extensive consultation

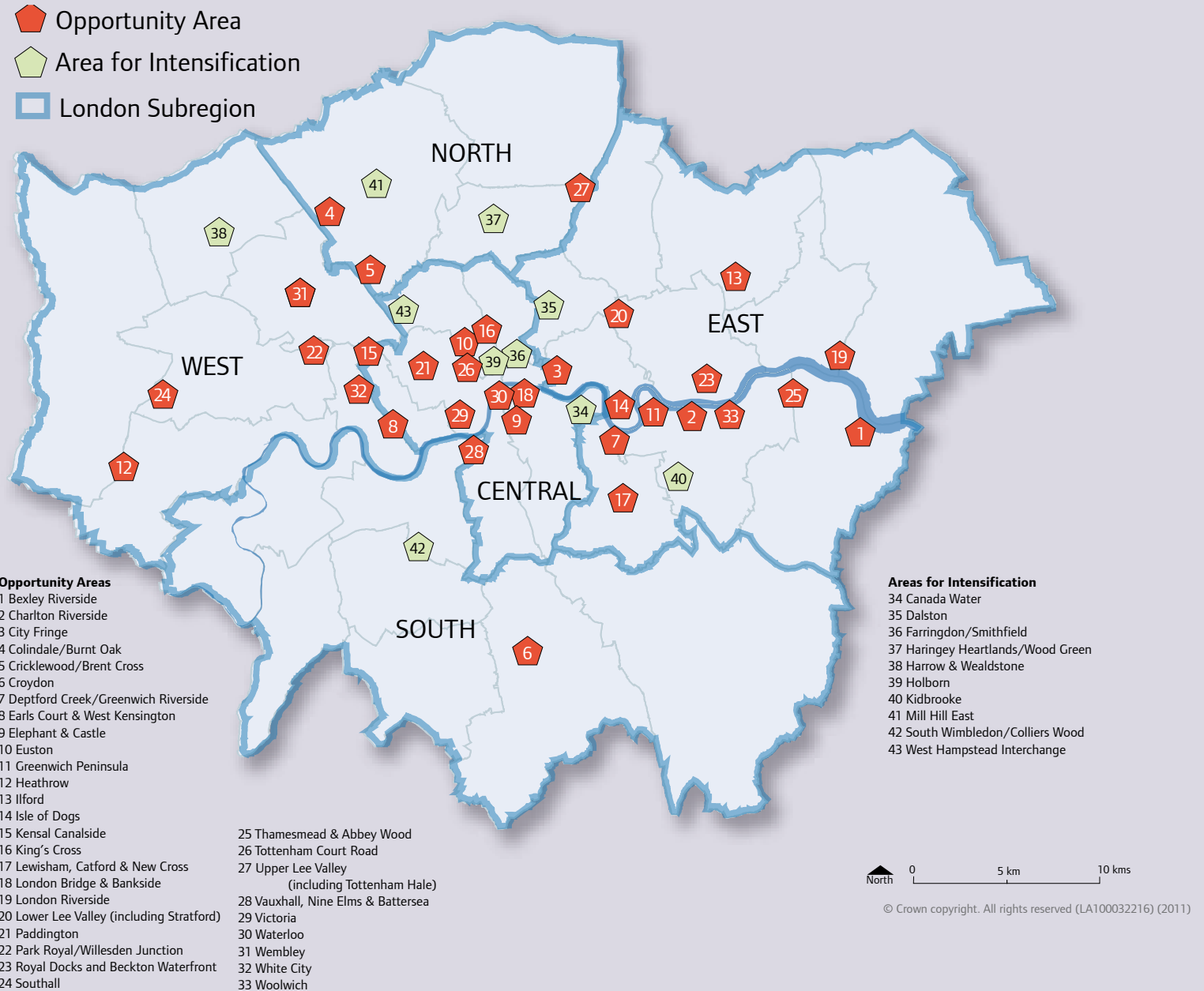


Figure 2.1 Opportunity areas

2.1 Strategic policy

London Plan

The London Plan identifies 33 opportunity areas and ten areas for intensification that can contribute to the delivery of the London Plan by providing substantial numbers of new jobs and homes. Typically, each opportunity area can accommodate at least 5,000 jobs or 2,500 new homes, with provision of other uses such as local shops, leisure, schools, health and social care facilities. Map 2.4 of the London Plan and figure 2.1 of the OAPF identify the opportunity areas and intensification areas.

London Plan policy 2.13 states that the Mayor will provide proactive encouragement, support and leadership for partnerships preparing and implementing OAPFs to realise these areas' growth potential in the terms of Annex 1. Paragraph 2.58 outlines the purpose of OAPFs:

“Planning frameworks for these areas should focus on implementation, identifying both the opportunities and challenges that need resolving such as land use, infrastructure, access, energy requirements, spatial integration, regeneration, investment, land assembly and phasing. With support from strategic partners they should set realistic programmes and timetables for delivery.”

Table A1.1 of Annex 1 sets out the strategic policy direction for all opportunity areas including Vauxhall-Nine Elms-Battersea. It identifies that VNEB is an integral part of the Central Activities Zone and has scope

for significant intensification and increase in housing and commercial capacity. It sets out an indicative employment capacity of 15,000 jobs and a minimum of 10,000 new homes, but recognises that dependent on the scale of public transport improvements, the minimum homes capacity could be increased to at least 16,000.

London Plan policies 2.10 and 2.11 set out strategic priorities and strategic functions for the Central Activities Zone. Strategic priorities include bringing forward and implementing development frameworks for CAZ opportunity and intensification areas to benefit local communities as well as providing additional high quality, strategic development capacity. Map 2.3 of the London Plan shows the indicative boundary of the CAZ.

It is the Mayor's intention to work with boroughs and other stakeholders to produce supplementary planning guidance to help inform the planning of the CAZ, and more detailed guidance for the opportunity areas within it.

For statutory monitoring and coordination purposes, the London Plan is based on a sub-regional structure. The Wandsworth part of the OA is located in the south sub-region, whilst the Lambeth part of the OA is located in the central sub-region. Under these circumstances, the need for partnership-based, cross boundary working is particularly important.

Use of Planning Obligations in the Funding of Crossrail SPG

The Crossrail SPG identifies the OA as a special case which is excluded from the charging area, on the basis that development in the area will be making contributions towards other regionally important transport infrastructure which will enable the quantitative and qualitative optimisation of development in ways that will make a significant contributions towards delivery of the objectives of the London Plan.

Mayoral Community Infrastructure Levy

The OA is included in the charging schedule for the Mayoral CIL to support the funding of Crossrail. The draft charging schedule (August 2011) sets a rate of £50 per square metre of development in Wandsworth and £35 per square metre in Lambeth. The Mayoral CIL will apply to all planning permissions issued on or after 1 April 2012. Further guidance on the application of CIL in the OA is contained in chapter 12.

Table A1.1 of Annex 1 of the London Plan

Vauxhall, Nine Elms, Battersea Opportunity Area

As an integral part of the CAZ, this Area has scope for significant intensification and increase in housing and commercial capacity.

To deliver the area’s full development potential will require major transport investment and the opportunity to extend the Northern Line into the area is being investigated. Dependent on the scale of public transport improvements, the minimum homes capacity could be increased to at least 16,000.

The Battersea Power Station site has the potential to become a new CAZ Frontage with potential for strategically significant mixed use development including residential, business, leisure, retail and service uses. Parts of the area may be suitable for tall buildings subject to London Plan/LDF design policies and criteria.

The extensive area of low density, low value industrial uses at Nine Elms conflicts with wider strategic objectives for CAZ and industrial uses should be rationalised whilst

sustaining capacity for those which are of particular importance to CAZ and capable of operating more intensively, such as the wholesale market and waste management provision.

This Plan continues the requirement of the 2008 version of the London Plan to de-designate part of the historic Strategic Industrial Location in order to facilitate redevelopment.

Safeguarded wharf capacity on the River Thames should continue to perform a key functional role and the use of waste to generate heat and power for developments should be investigated.

Stronger traffic management and easier pedestrian and cycle movement will contribute to significant environmental improvements in this location. Informed by a major transport capacity study, an OAPF is being prepared in partnership with the boroughs and other stakeholders.

West London Opportunity Areas

The Mayor is in the process of producing four opportunity area planning frameworks for West London, at Park Royal, White City, Earl’s Court and West Kensington and Vauxhall Nine Elms Battersea. The Mayor wants to ensure that development of these opportunity areas is sustainable and integrated and that crucially it can be supported by the London transport network. TfL have produced a sub-regional transport model to assess the longer term impacts of development and identify mitigation measures. Each of the framework areas performs a different function within the London economy.

White City is anchored by the retail offer at Shepherd’s Bush Metropolitan town centre and has potential for a mixed use commercial centre focused on creative, media biomedical research and development, as well as 4,500 new homes.

The regeneration of Earl’s Court and West Kensington will be residential-led with a new cultural destination.

Vauxhall Nine Elms Battersea will be integrated as a new mixed use part of the Central Activities Zone.

Park Royal provides an important strategic reservoir of industrial land which offers an opportunity for the relocation of industrial uses displaced from the other opportunity areas.



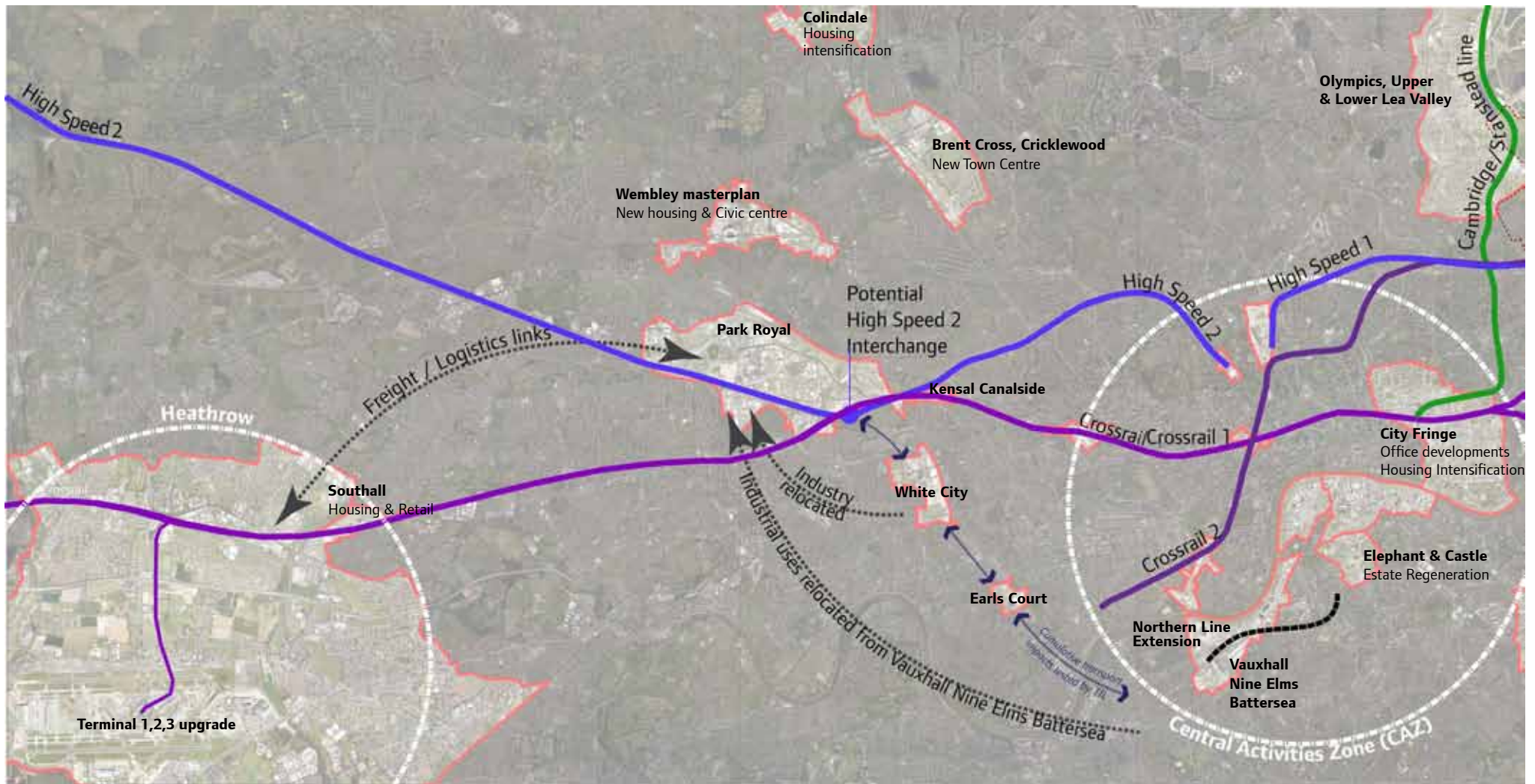
White City OAPF (consultation April 2011)



Earl's Court OAPF (consultation March 2011)



Park Royal OAPF (adopted January 2011)



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Figure 2.2 Opportunity areas and infrastructure in West London

2.2 Local policy

London Borough of Lambeth Core Strategy 2011

Lambeth Council adopted its Core Strategy in January 2011. Vauxhall is identified as an area of rapid change and a focus for growth in housing and jobs linked to the regeneration of the wider opportunity area.

Policy PN2: Vauxhall

The Council will support mixed use development at Vauxhall for employment uses, housing, retail, hotel, student accommodation, leisure, entertainment and other commercial and community uses in line with its Central Activity Zone designation and as part of the wider London Plan Vauxhall/Nine Elms/Battersea Opportunity Area, to develop a distinct heart, recognisable sense of place and definite identity with distinct quarters to achieve a sustainable and vibrant urban area and to fulfil its role as a coherent centre, as well as linking with and benefiting adjoining areas and their communities.

Overall, development will be supported to provide at least 3,500 new homes and 8,000 jobs in the Vauxhall area and appropriate community and public transport infrastructure improvements will be sought.

Draft Vauxhall Area SPD (July 2008)

Lambeth Council is producing a Supplementary Planning Document (SPD) for Vauxhall. The consultation draft issued in 2008 is currently being refreshed as part of the process to adoption.

The purpose of the SPD is to give guidance to how London Plan indicative capacity figures for homes and jobs may be met in the Lambeth part of the OA and to shape development in and around Vauxhall. It sets out a vision for Vauxhall to become “a place of growth with a distinct heart, Vauxhall will be a location with a strong sense of place and identity. It will have four distinct quarters, each with their own unique identity and qualities. The Vauxhall area will be highly connected with excellent linkages, particularly to the riverside and towards Battersea and Nine Elms, and a quality environment for pedestrians and cyclists. The area will be successful, active, cohesive and feature sustainable communities that are well-integrated.”

The SPD has clear links to the OAPF in terms of identifying and funding transport and social infrastructure provision and appropriate locations for tall buildings as part of the development process.

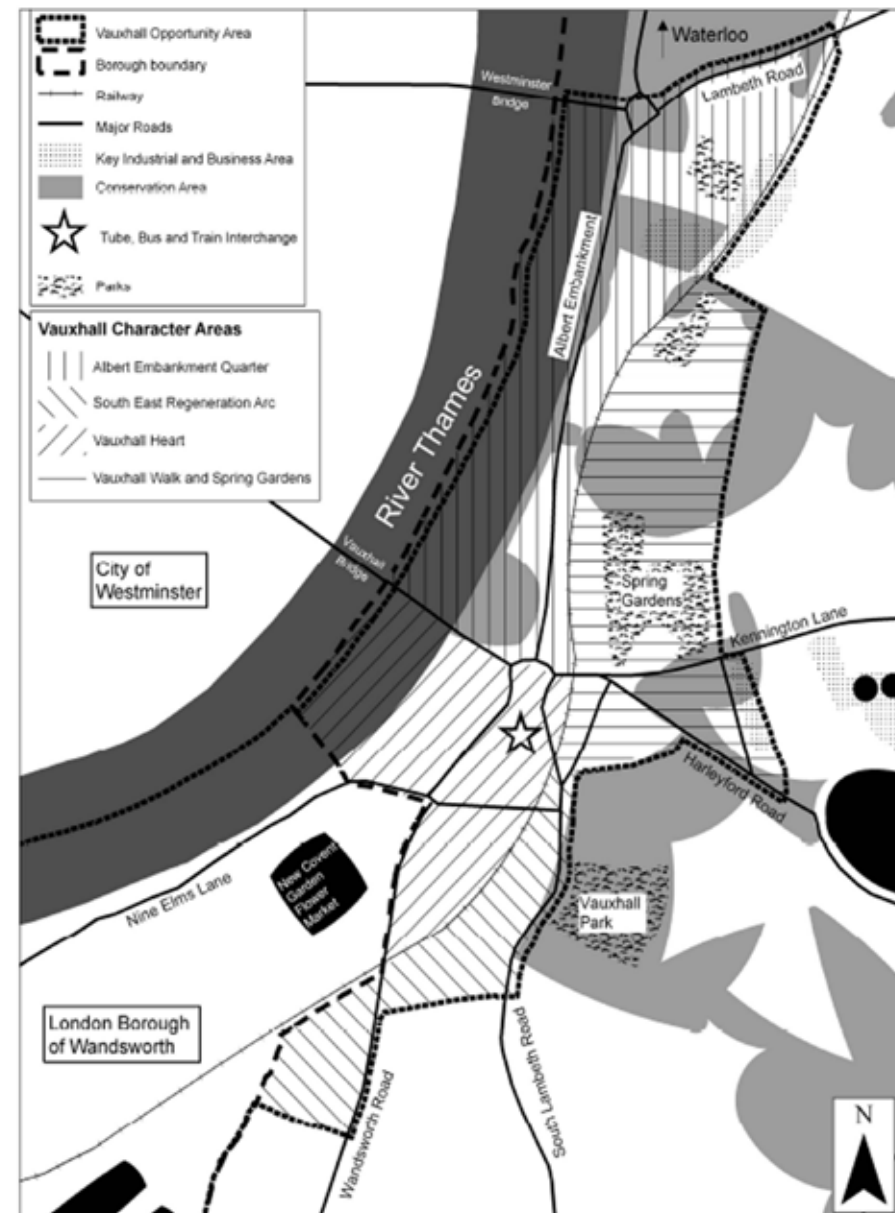


Figure 2.3 LB Lambeth Core Strategy

**London Borough of Wandsworth
Core Strategy 2010**

The Core Strategy identifies Nine Elms and north-east Battersea as the focus for considerable new development in the medium to long term and the potential for a dynamic new quarter providing new homes, jobs, social infrastructure, local shops and transport provision.

The Core Strategy identifies improvements to public transport provision as key to unlocking the development potential of the area.

Policy PL11 sets out detailed criteria for the development of the area.

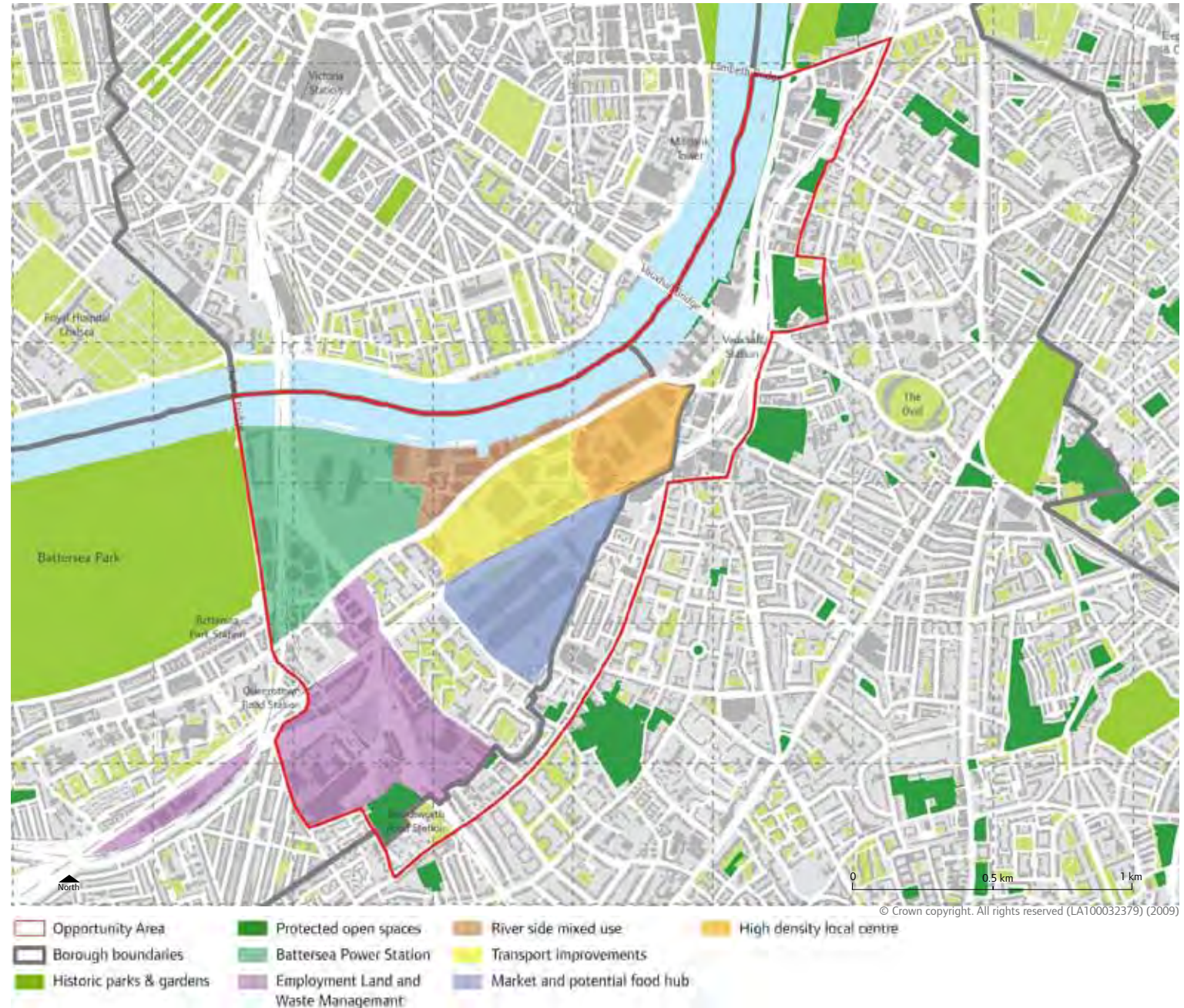


Figure 2.4 LB Wandsworth Core Strategy

Policy PL 11: Nine Elms and the adjoining area in north-east Battersea

a. High density mixed use development will be promoted around Battersea Power Station and nearby sites to help create a “sense of place” and a dynamic mixed use quarter, including local shops and services forming a potential CAZ frontage, with improved public transport links.

b. New homes and jobs along the riverside will be provided through the redevelopment of existing low density industrial and warehouse sites, taking care to ensure that existing operations of the three safeguarded wharves are not prejudiced.

c. South of Nine Elms Lane the retention, consolidation and intensification of the wholesale market within the NCGM site and the development of a food hub will be supported, enabling the release of land near Vauxhall, in particular the Flower Market site, for high density housing. There is scope to maximise the potential of the area to contribute to London’s housing and employment needs, providing that capacity for those specific uses serving central London is met and adequate improved public transport provided. New residential led mixed use development can be developed around a permeable framework of streets with new urban spaces to provide valuable amenity space and giving a spatial

setting and adding value to new urban development.

d. High density mixed use development will be promoted around Vauxhall to help create a sense of place and improve the centre including improving local shops and services. Improvements to public transport will be sought, as well as new public open spaces in line with Policy PL4. Tall buildings may be appropriate in this area subject to the qualifications set out in Policy IS3 and the criteria based policy on tall buildings to be included in the Development Management Policies Document.

e. The Stewarts Road/Silverthorne Road area, which forms part of the Queenstown Road SIL, will continue to provide a reservoir of land for industry, logistics and waste management and enhancements will be sought to the environment of and access to the industrial area.

f. The Council will work with the GLA and Lambeth on developing the Opportunity Area Planning Framework to guide the comprehensive redevelopment of the whole area and to ensure that adequate infrastructure is available, including significant new public transport provision and strategic sustainable energy infrastructure.

g. Funding will be sought from planning obligations linked to developments on sites within the Opportunity Area.

h. Development in the Vauxhall/Nine Elms/Battersea Opportunity Area (including part of Vauxhall in Lambeth) within the Central Activities Zone (CAZ) should aim to meet targets in the London Plan of at least 8,000 jobs and 3,500 homes by 2026. At least 1,500 homes should be provided in the Wandsworth part of the Opportunity Area by 2016/17, with the potential for a further 8,500 homes or more in the longer term dependent on the provision of any necessary infrastructure. The future targets for the Opportunity Area will be reviewed as part of the work on the Opportunity Area Planning Framework and will be taken into account in the Site Specific Allocations Document.

i. Further details on the quantum and mix of development in the Nine Elms area, recognising the potential of the area within the CAZ, and the associated infrastructure requirements, will be provided in the Site Specific Allocations Document including the Area Spatial Strategy for Queenstown Road to Nine Elms.



Site Specific Allocations Document (2012)

The Site Specific Allocations Document sets out an Area Spatial Strategy for Nine Elms, which was informed by the OAPF. It identifies potential to deliver around 13,400 new homes and 20,000 jobs in the Wandsworth part of the OA, to be supported by transport, social, community and green infrastructure.

The Area Spatial Strategy and associated diagrams include preferred locations for key infrastructure, including the location of a new primary school, together with Wandsworth's detailed strategy in relation to the development of Nine Elms.

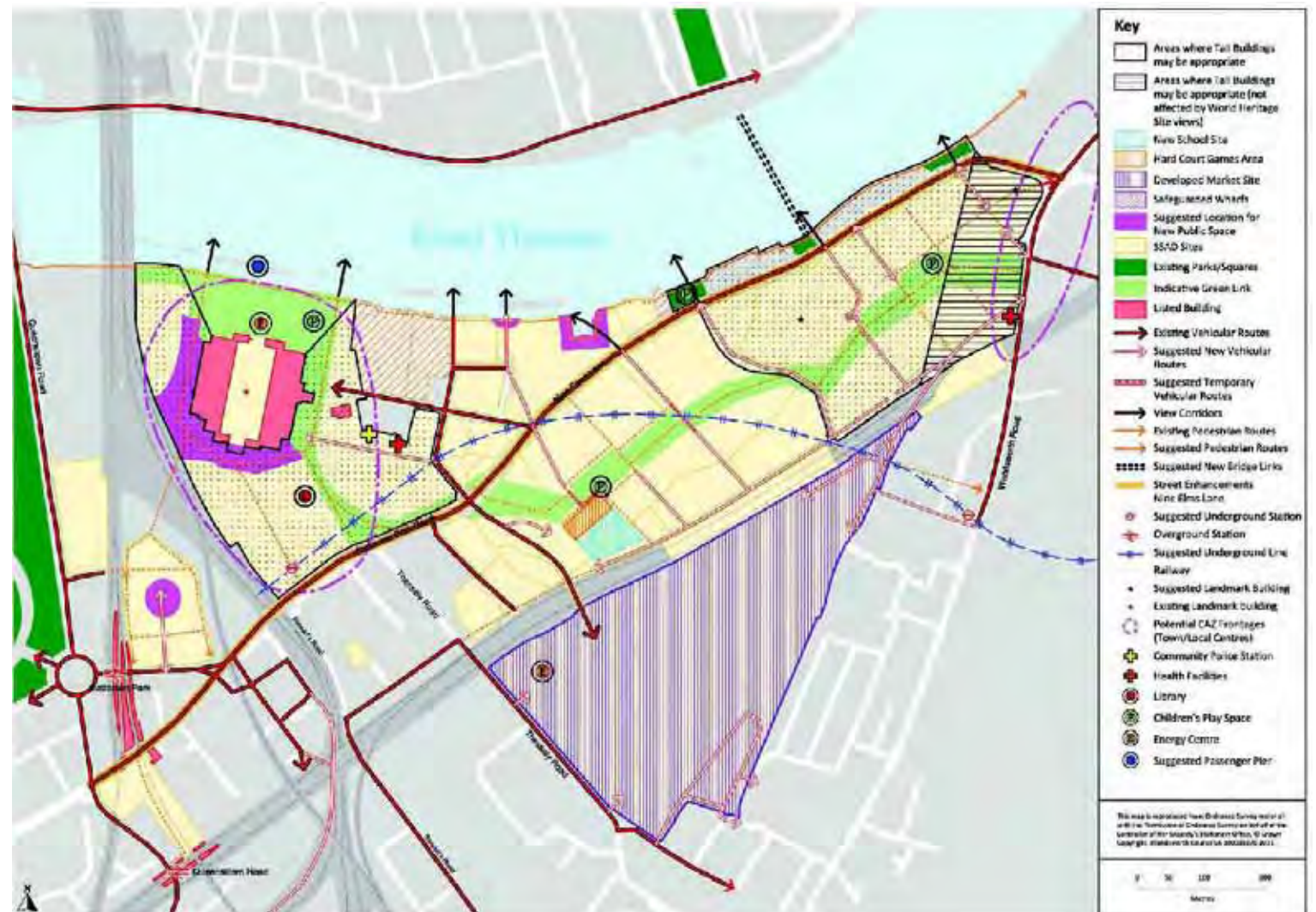


Figure 2.5 LB Wandsworth Area Spatial Strategy for Nine Elms

2.3 Material weight

OAPFs are produced in partnership with the Boroughs and enable strategic, cross Borough, area-wide co-ordination. Partnership working ensures better planning outcomes, which are based on local knowledge and consultation.

OAPFs do not create new policy but clarify it in a specific spatial context expressed in the form of words and diagrams. They also deliver consistency in policy terms and increase the likelihood of consensus being reached between planning authorities, key stakeholders and interested parties. They provide a platform for communicating between the strategic and local level, reinforcing common ground and resolving difficulties.

The content of each OAPF will vary based on the physical make up of the area, the range of development interests likely to come forward and the planning issues involved, but they all deal with a common set of principles.

Another key benefit of OAPFs is the opportunity to take a strategic and designed approach to spatial planning, specifically considering how key development sites fit together within the existing and emerging policy context.

Ultimately, OAPFs give greater certainty to the development process and achieve material weight through bringing together a sound evidence base upon which planning decisions are made, and through extensive consultation with key stakeholders, interested parties and the public.

In order to achieve maximum planning weight in decision making it is important that the OAPF is adopted only after a rigorous consultation process, which includes the following:

- It is consistent with the London Plan, from which its principle planning status is derived
- It is prepared in collaboration between the Boroughs and the GLA and is consistent with the Boroughs' adopted policy approach
- It is approved by the Mayor for consultation
- There is consultation with the Boroughs and other stakeholders
- It is subject to a full sustainability appraisal
- The results of the consultation are reported back to the Mayor and considered by him
- it is then formally adopted and published by the Mayor as Supplementary Planning Guidance to the London Plan
- it is used the boroughs as a material consideration in the determination of planning applications in the OA

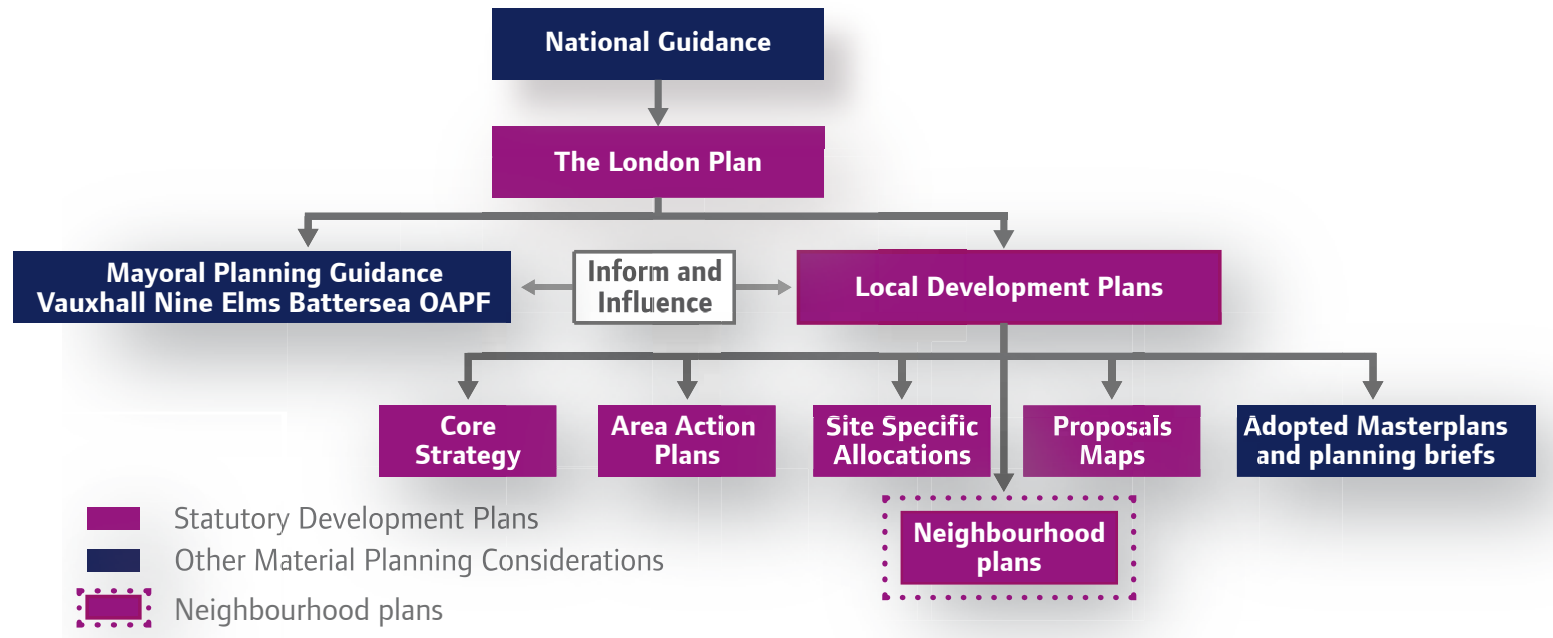


Figure 2.6 Material considerations



Planning Policy Statement 12: Creating strong safe and prosperous communities through Local Spatial Planning

Preparation of supplementary guidance by other bodies

6.3 Supplementary guidance to assist the delivery of development may be prepared by a government agency, Regional Planning Body or a County Council or other body where this would provide economies in production and the avoidance of duplication e.g. where the information in it would apply to areas greater than single districts. Such guidance would not be a supplementary planning document. However, if the same disciplines of consultation and sustainability appraisal (where necessary) are applied, such information might, subject to the circumstances of a particular case, be afforded weight commensurate with that of SPDs in decision making. This may be more likely if the district/borough/city councils to which it is intended to apply endorse the guidance, or if the document is an amplification of RSS policy and it has been prepared by an RPB.



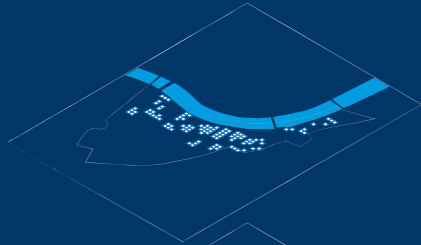
GOL Circular 1/2008:

2.22 From time to time the Mayor may consider it helpful to produce additional guidance to supplement the policies contained in the Spatial Development Strategy (SDS) and these may be taken into account as a material consideration. Such guidance could take the form of design guides, or area frameworks, or could supplement specific policies in the SDS. The guidance must itself be consistent with national guidance, as well as policies set out in the SDS. It should clearly be referenced to the relevant plan policy which it supplements. It should be issued separately from the SDS and made publicly available; consultation should be undertaken, and the status of the material should be made clear. Such material should be reviewed on a regular basis alongside reviews of the SDS.

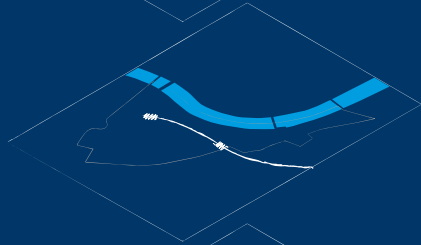


Chapter 3

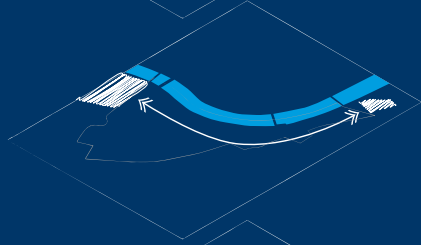
Planning framework



preferred option -
16,000 residential units
20,000 - 25,000 jobs



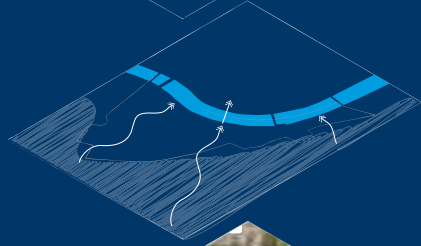
northern line extension



strategic green links



growth poles



connecting the river



aerial image

3.1 The Challenges

The OA presents a number of significant challenges in terms of delivering the scale of the development opportunity anticipated in this central location in London. At 195 hectares the OA is the largest remaining development opportunity within the CAZ and is vitally important in terms of strengthening London's CAZ and World City status, providing development capacity for a range of high value uses including the financial and business sector, institutions, communications, retail, tourism, culture and entertainment.

Perhaps the greatest barrier to enabling the transformation from low value industrial uses to high value CAZ uses is constrained public transport accessibility and capacity in the OA. GLA and TfL in conjunction with key stakeholders have undertaken a major transport study for VNEB considering a range of options for improving accessibility.

The OA historically suffers from a high degree of physical severance with fast moving strategic roads and elevated heavy rail infrastructure bisecting the area. The spatial fragmentation of existing residential communities to the south of the OA from the River Thames to the north is exacerbated by the industrial land uses that currently occupy the OA. Redevelopment of the area provides a unique opportunity to overcome these historic barriers and deliver new and improved connections for existing and new communities in and around the OA. Battersea Power Station will need to be conserved as the area's key heritage asset, and strategic views and the setting of the Westminster World Heritage Site will need to be protected.

The industrial and often inhospitable character of the OA is exacerbated by a deficiency in open space and a corresponding lack of social infrastructure. Where such uses do exist, they are located around the periphery and the quality of connections to them is generally poor. Through the delivery of high density housing and commercial uses, there is an opportunity to upgrade the existing public realm, provide strategic open space and new facilities such as schools and health services. An assessment of existing open space provision and opportunities to address deficiencies is set out in chapter 9. In social terms, a high level of deprivation surrounds the OA, with communities suffering from income, employment, health, education and skills deprivation. These communities should benefit directly from jobs created and infrastructure provided in the OA.

A key challenge will be connecting the surrounding communities, especially the most deprived ones, to the opportunities presented by new investment in the area. Active measures will be required to connect local people and businesses to new commercial, training and education opportunities and to improve access to education and health facilities. This will help integrate new development with the surrounding area and assist in tackling current problems of unemployment, low skills, poor health, crime and disorder. A socioeconomic analysis of the OA is included in TA2.

In addition to the physical barriers to regeneration, there is a need to change current perceptions of the area so that it is fully acknowledged as a vibrant, successful, sustainable and accessible part of central London.



Figure 3.1 The challenges

3.2 The Framework

The planning framework for the OA is based upon a simple conceptual approach, which seeks to deliver two growth poles in the form of new CAZ frontages at Battersea Power Station and Vauxhall. Albert Embankment and Nine Elms will be the focus for housing led mixed use intensification. High density residential with commercial development including retail and office uses will be delivered at Battersea Power Station and Vauxhall.

These growth poles and new neighbourhoods will be connected by a strategic green link from Battersea Park to Lambeth Palace including a new linear park in the heart of Nine Elms. The new mixed use residential areas will be connected to existing communities, the riverside and the rest of London with new public transport infrastructure, cycle routes and pedestrian linkages.

Stewarts Road industrial area will be retained as strategic industrial land (SIL) where intensification of employment uses will be encouraged through identifying opportunities for redevelopment, improving access to key sites and upgrading the quality of the public realm.

The planning framework is predicated on the delivery of a high density mixed use including approximately 16,000 new homes and 20,000 – 25,000 jobs. This was identified as the preferred development scenario on the basis of a development capacity study which tested five options (see chapter six).

It is assumed that 200,000 sq.m. of mixed use development is delivered throughout the OA, plus 60,000 sq.m. of retail, 160,000 sq.m. of new office and 80,000 sq.m. of other employment-related uses at Battersea Power Station.

At Vauxhall, improvements to the highway network, transport interchange and public realm will underpin and enable the creation of a high quality, sustainable place with a strong identity and a range of town centre uses including retail, leisure and office uses in the form of a new CAZ frontage.

Development should meet London Plan requirements for open space provision (on the basis of the Mayor's Providing for Children and Young People's Play and Informal Recreation SPG) and contribute to the provision of strategic open space provision in the form of a linear park in Nine Elms between Vauxhall and Battersea Power Station.

The development capacity approach was used as the basis for establishing the public transport, open space and social infrastructure requirements to support the mixed use intensification proposed. This study assumed that the space standards in the London Plan will be met for all new residential development.

The planning framework also sets out a tall buildings strategy, which supports an emerging cluster of tall buildings at Vauxhall without harming the setting or the Outstanding Universal Value of the Palace of Westminster and the Palace of Westminster

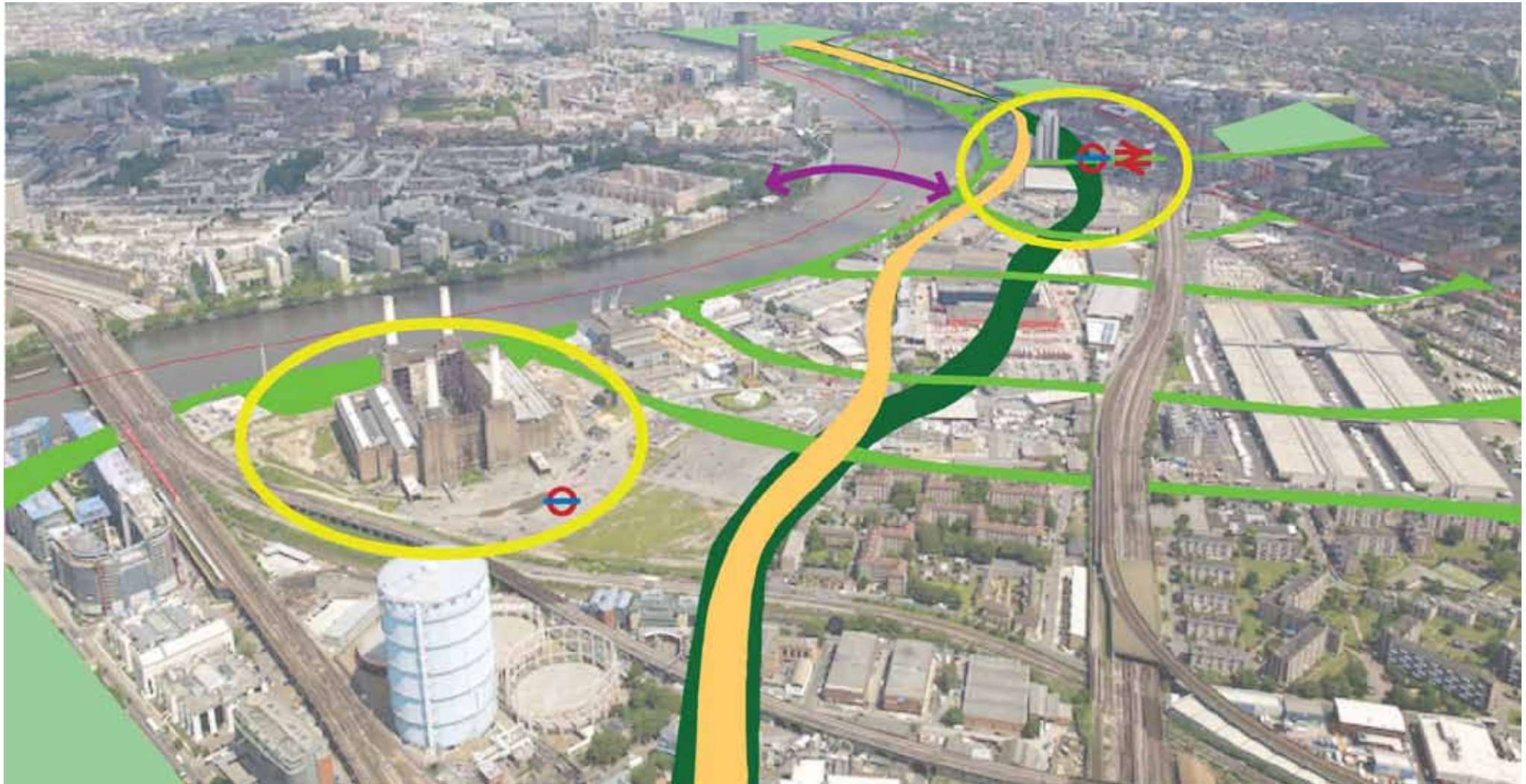
World Heritage Site from the river prospects or from within the World Heritage Site. It also sets out a series of parameters for high density development in the OA to guide the delivery of good quality master plans.

In terms of public transport interventions, the VNEB transport study recommends that in order to deliver the proposed number of new homes and jobs in the OA, a package of transport measures including a major transport intervention is required. On the basis of extensive transport modelling, a review of alternative options and a high level appraisal, the transport study recommends the delivery of the proposed Northern Line Extension (NLE) to Nine Elms and Battersea Power Station from Kennington. Further details of the transport study are set out in chapter 6.

The planning framework also includes a series of environmental interventions including a district heat network (DHN) with the potential to connect to Pimlico, Whitehall and Waterloo, strategic flood risk mitigation measures, protection of safeguarded wharves for waterborne freight handling purposes and a co-ordinated approach to the provision of utilities infrastructure to support the new development.

In order to ensure that the quantum of development proposed and associated public transport, highways, open space, public realm and social infrastructure requirements are deliverable, the GLA commissioned a Development Infrastructure Funding Study (DIFS) in partnership with TfL, Lambeth and Wandsworth Councils and key stakeholders

including major landowners. A section 106 tariff on new development is proposed to fund the majority of new infrastructure, as set out in chapter 10. Wandsworth Council has consulted on its draft CIL charging schedule which is consistent with the VNEB tariff. The examination into the Wandsworth CIL is expected in early 2012. The OA has been exempted from the Crossrail SPG on the basis that development in the area will be making contributions towards other regionally important transport infrastructure. It is, however, included in the draft charging schedule for the Mayoral CIL.



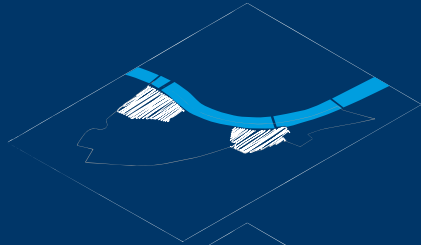
- Linear park
- Strategic green links
- Existing parks
- Road improvements
- Bridge
- New centres

Figure 3.2 Vision for Vauxhall Nine Elms Battersea



Chapter 4

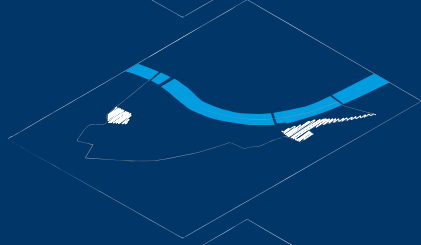
Land use strategy



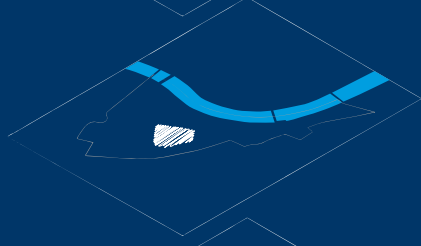
high density mixed use



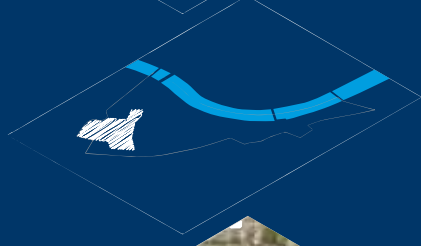
mixed use housing



limited intensification



market consolidation



industrial intensification



aerial image

Key principles

- High density residential-led mixed use intensification in the OA.
- High density mixed use intensification with potential for new CAZ frontages at Battersea Power Station and Vauxhall.
- Potential for new office/town centre development at Battersea Power Station.
- Retention and improved access to Stewarts Road industrial area (SIL).
- Retention and protection of safeguarded wharves for water borne cargo handling purposes.
- Creation of new employment opportunities associated with the provision of 20-25,000 new jobs

4.1 Policy overview

The land use strategy for the OA is predicated on two strategic planning considerations: firstly, that the OA is located in the Central Activities Zone (as indicatively defined in the London Plan), and secondly, that the SIL designation has been removed from the central part of the opportunity area, as defined in the Mayor's Industrial Capacity Supplementary Planning Guidance (SPG) to the London Plan.

The combined effect of these policy considerations, which are reflected in Wandsworth and Lambeth's Core Strategies, is a land use strategy for the OA which supports residential mixed use intensification on the basis of a step change in public transport accessibility and capacity in the OA. This will also deliver a substantial increase in jobs and housing in the area in association with new and improved public realm and social infrastructure provision.

4.2 Land use strategy

The land use strategy for the OA shows the retention of SIL in the Stewarts Road industrial area and the consolidation of New Covent Garden Market's wholesale fruit, vegetable and flower market operations on the Main Market site and release of surplus sites for redevelopment. The safeguarded wharves at Cringle Dock, Kirtling Wharf and Middle Wharf will also be protected for long-term water borne cargo handling uses.

Battersea Power Station and Vauxhall will be the foci for commercial land uses within the OA, with potential for a new CAZ frontage of scale at Battersea Power Station and a further smaller CAZ frontage at Vauxhall. Battersea Power Station and Vauxhall will also accommodate major office development, with the new US Embassy being located to the south of Vauxhall. High density residential development is also anticipated in these locations.

High density mixed use housing-led intensification is anticipated on Albert Embankment, in Nine Elms, and along the riverside. Limited intensification is anticipated around Spring Gardens, Battersea Park and Queenstown Road stations.

A strategic green link connecting Lambeth Palace in the north to Battersea Park in the west, including new strategic open space in the form of a linear park in Nine Elms is also envisaged as a unifying element within the land-use strategy. The definitions provided in Figure 4.1 are explained in more detail below:

High density mixed use housing-led intensification

These areas will come forward for housing-led development with a mix of commercial and community uses to support existing and emerging communities. At Albert Embankment, Lambeth’s employment-retention policies will continue to apply,

High density mixed use focal point for office, retail and housing

These areas will be the focus for new commercial developments including office and retail uses. These areas will also bring forward a significant element of housing. The existing safeguarded wharves will be retained for river borne cargo handling purposes.

Limited intensification

These areas are more sensitive in terms of their existing land use or proximity to existing housing. Key sites are likely to be suitable for high density development which would need to take account of sensitive adjacent land uses.

SIL - consolidation and intensification

Industrial activity within the OA will be concentrated in this area, attracting new occupiers and accommodating the ongoing requirements of existing businesses operating within it.

NCGM Main Market site - consolidation and intensification

This area will become the heart of CGMA’s ongoing operations within the OA.

Existing housing – retained

The existing housing areas in the OA will be retained.

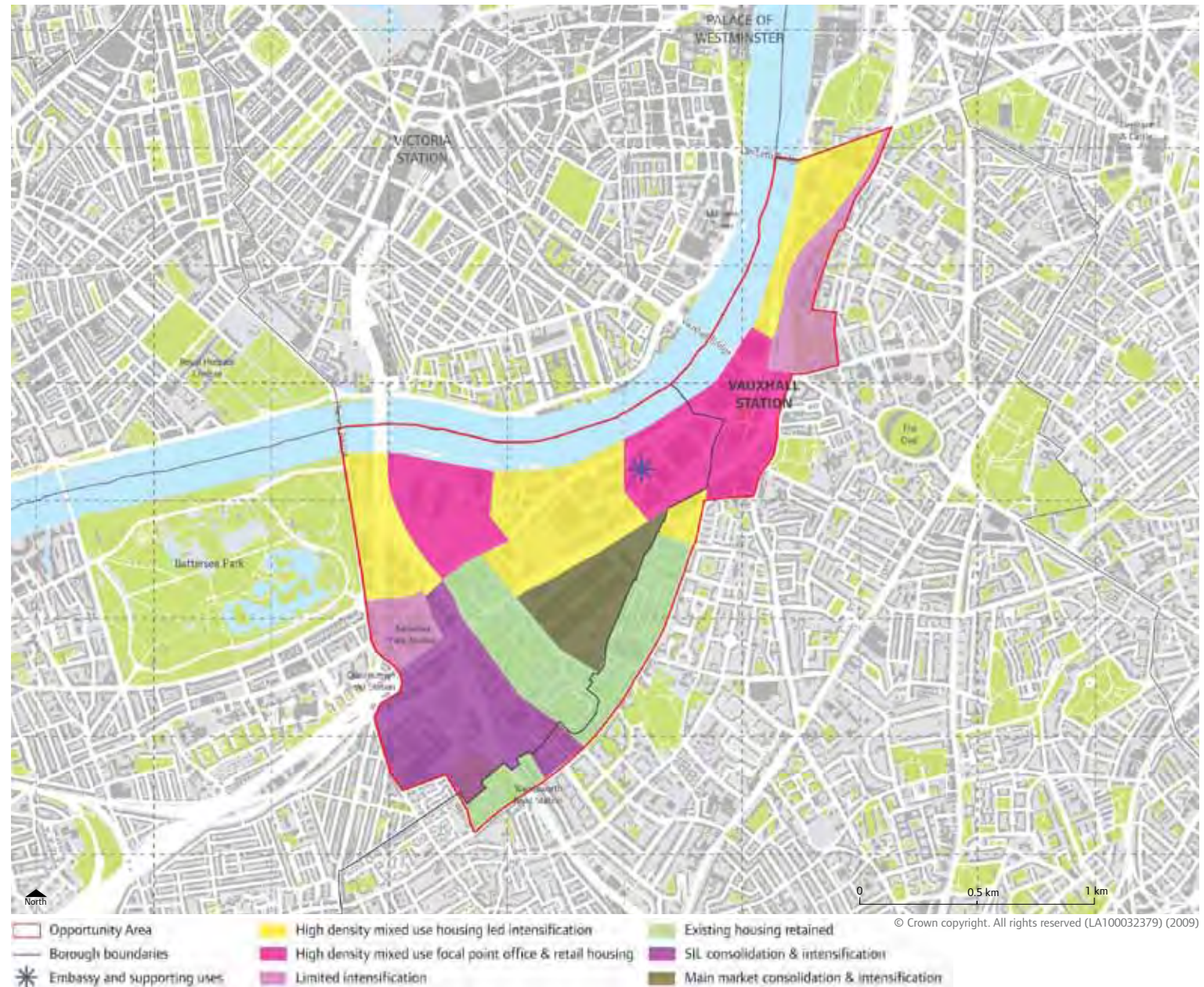


Figure 4.1 Land use strategy

4.3 Employment

With the removal of the SIL designation covering the central part of Nine Elms, the focus for the retention and intensification of industrial uses within the OA is the Stewarts Road industrial area, which is reflected in the Wandsworth Core Strategy. It is anticipated that existing employment at Stewarts Road industrial area will be retained with the potential for the creation of new jobs through consolidation and intensification based upon improvements to access and public realm.

Whilst the SIL designation has been removed in the central part of Nine Elms, the New Covent Garden main market site will be retained. CGMA is a major employer in the locality and seeks to redevelop some of its land holdings in order to continue to operate a successful wholesale market business on the main market site in the long term. It is anticipated that existing employment levels at NCGM will be retained.

Wandsworth Council's most recent data suggests that there are approximately 1,200 businesses operating in the Queenstown ward, which extends slightly beyond than the OA, generating in the region of 14,000 jobs.

These jobs are in key sectors such as transport and logistics, food and drink, wholesale distribution and knowledge based industries. The cluster of transport, logistics and distribution activities within Nine Elms is well established. Given the uplift in land values in the OA on the basis of land use policy changes, the planning framework envisages that many of the existing businesses in Nine Elms will relocate.

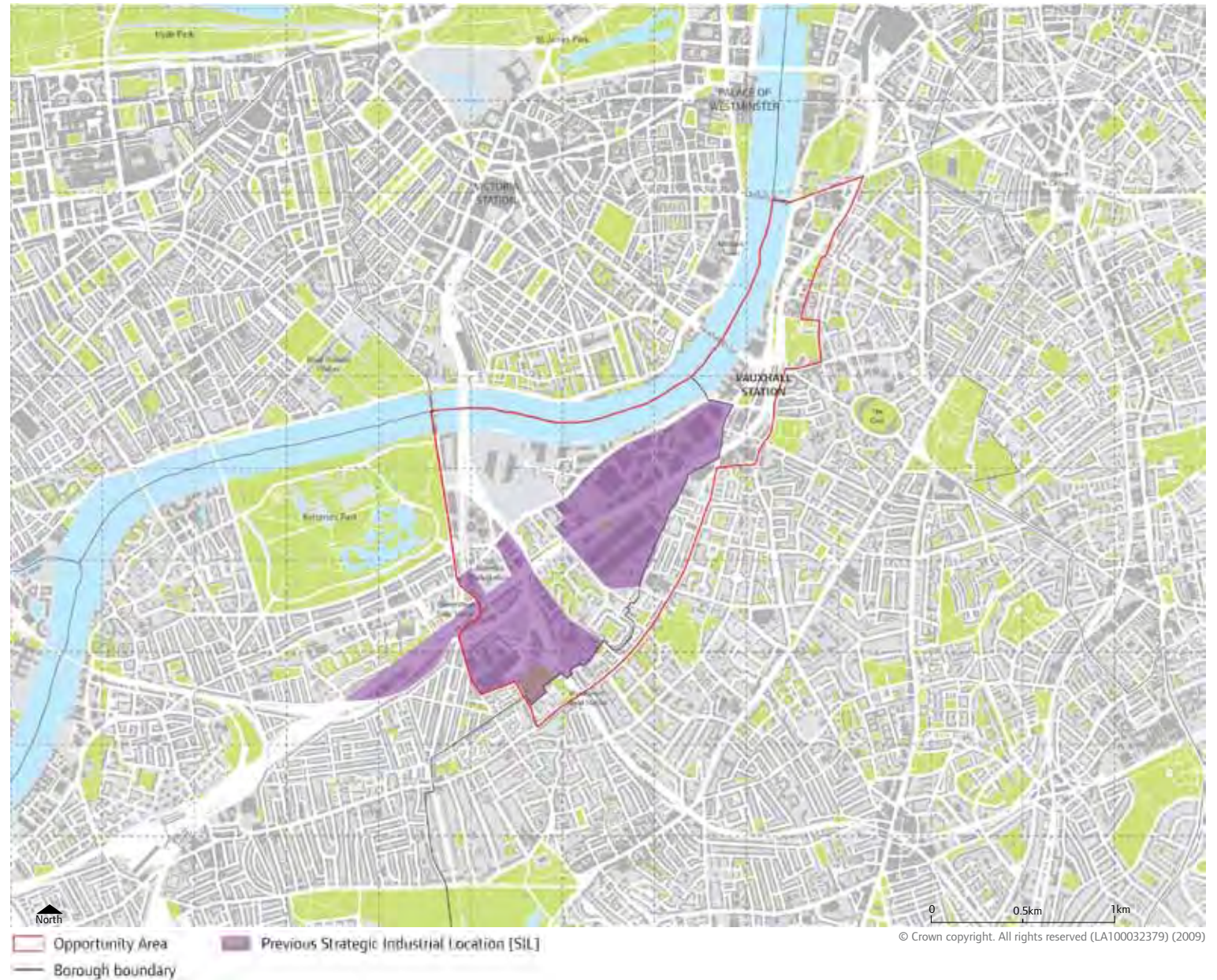


Figure 4.2 Previous SIL designation

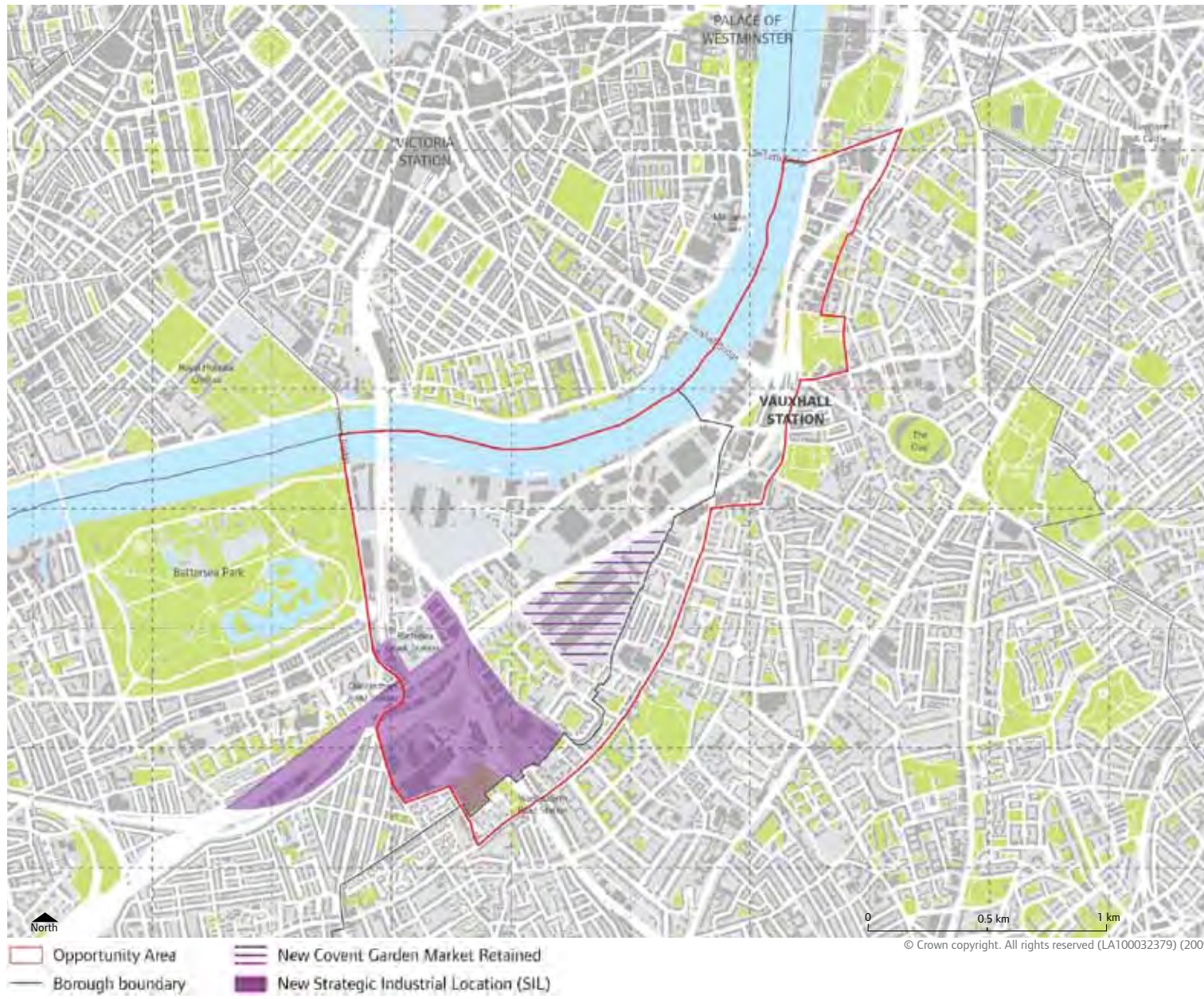


Figure 4.3 New SIL designation

Whilst there is potential for relocation to the Stewarts Road industrial area, this is currently limited by poor accessibility and layout. Access improvements to key sites would be required. A series of opportunities are set out in the Stewarts Road study undertaken by Wandsworth Council. These are:

- - defining a key role for Stewarts Road within the VNEB OA and Lambeth and Wandsworth
- - maximising the use of the railway lines, sidings and arches
- - creating coherent employment typology quarters
- - diversifying the employment base
- - softening hard and hostile edges
- - new built edges
- - integrated parking strategy

Both boroughs are concerned to retain as many relocated firms and the associated jobs within the area as possible. Businesses that do not need to be located near to central London will be encouraged to relocate to alternative SIL locations within London or in locally significant industrial areas.

If proximity to CAZ is required due to servicing the central London economy, businesses will be sought to be retained, either in rationalised premises on existing sites in the OA, or alternative locations within the OA such as Stewarts Road industrial area or alternative industrial locations in the inner area (see figure 2.2).

Wandsworth Council is committed to maintaining constant engagement with businesses in the opportunity area and will provide relocation advice and assistance to businesses on a case-by-case basis in conjunction with local agents.

In relation to the broad land use strategy, the planning framework estimates in the region of 20,000 – 25,000 new jobs in the OA. This is based upon delivery of 200,000 square metres of mixed use employment uses in the OA (office, retail and other), plus a further 160,000 square metres of office, 60,000 square metres of retail and 80,000 square metres of other employment uses at Battersea Power Station. This estimate is based upon the development capacity study and a review of planned schemes in the OA. Up to 50,000 square metres of employment floorspace has been approved as part of the new US Embassy scheme.

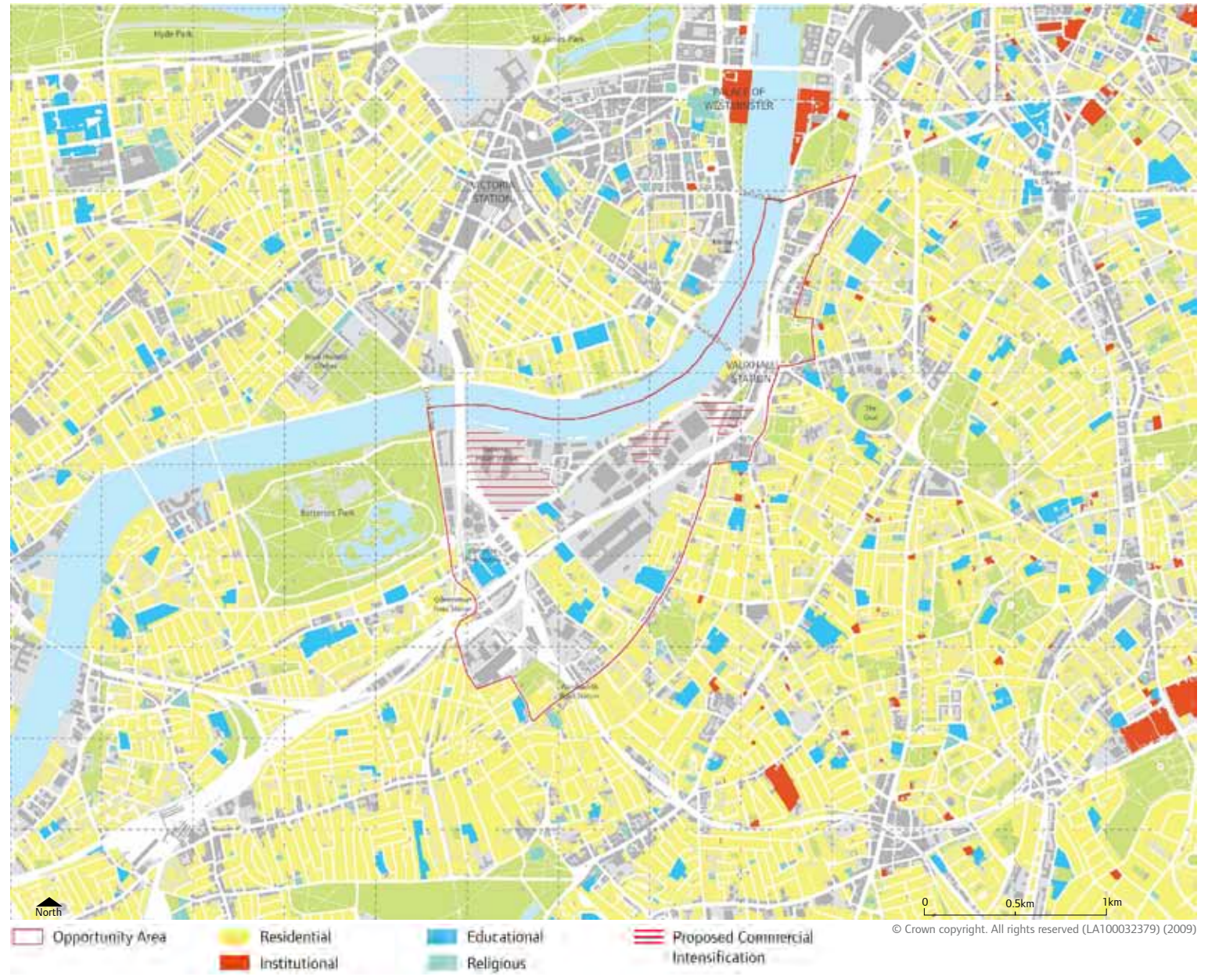


Figure 4.4 Proposed Commercial Intensification

4.4 Housing

There is relatively little housing within the OA at present (see figure 4.4). A key strand of the land use strategy is the intensification of the OA with high density housing. Figure 5.5 shows the major opportunity to deliver new homes at Battersea Power Station, Nine Elms, Vauxhall and Albert Embankment.

To support this housing intensification, new social infrastructure will be required as identified in the DIFS report. The infrastructure requirements of the area will need to be kept under review as further information on the new and expected population of the area becomes available. The baseline for assessing social infrastructure provision is included in the development capacity study in chapter 6 of this document.

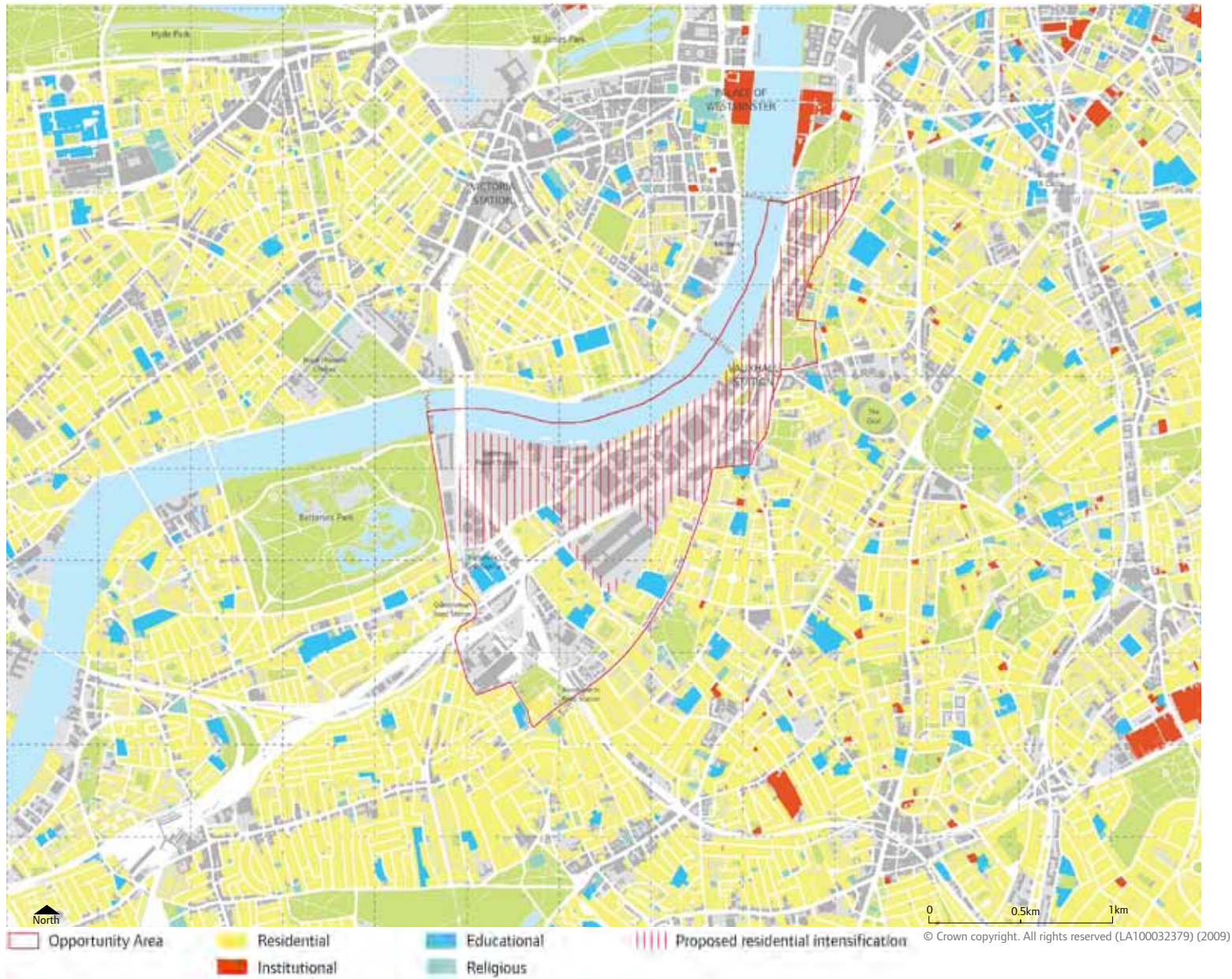


Figure 4.5 Proposed residential intensification

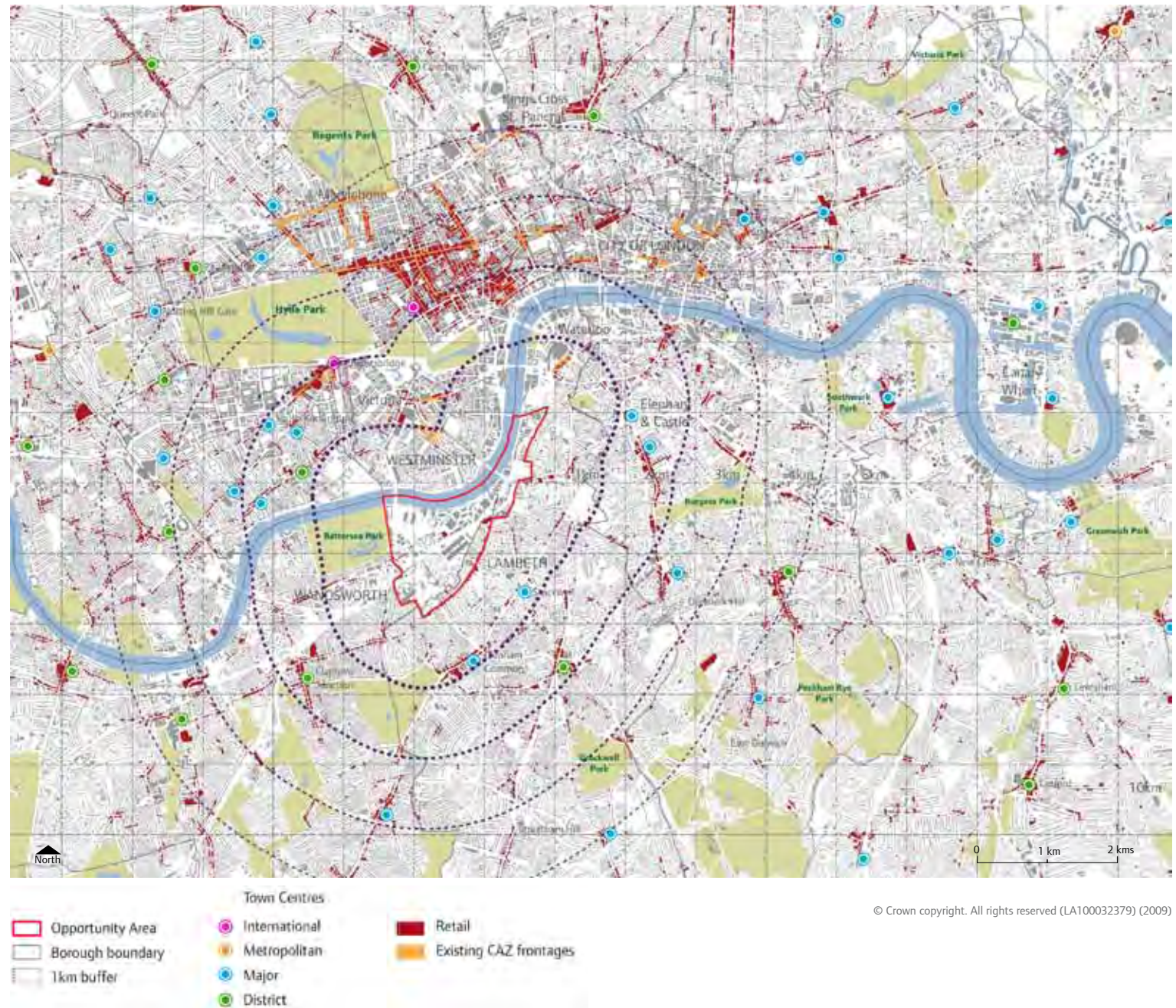
4.5 Retail

Figure 4.6 shows that the OA is relatively poorly served in terms of access to major and district town centres. Whilst the OA is well connected to the West End by tube, there is an under provision of retail uses within a 2km radius.

Within the OA itself the only significant retail provision is the Sainsbury's on Wandsworth Road, with smaller parades of local shops on Wandsworth Road, Battersea Park Road and Harleyford Road, none of which are particularly well located to serve intensification in the OA. There is also some relatively new provision at St George Wharf, Vauxhall.

There is a potential opportunity to deliver a new CAZ frontage of significant scale at Battersea Power Station, as identified in table A2.2 of the London Plan. The approved scheme for the Power Station (September 2011) includes c.65,000 square metres of retail, food and drink uses and c.6,000 square metres of leisure uses. This level of retail floorspace was deemed acceptable on the basis of a retail impact assessment undertaken on behalf of Wandsworth Council as part of the assessment of the planning application.

There is also an opportunity to deliver a smaller CAZ frontage at Vauxhall, as also identified in table A2.2 of the London Plan, which will act as a focal point for redevelopment in the area.



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Figure 4.6 Retail land use and existing town centres in close proximity to the OA

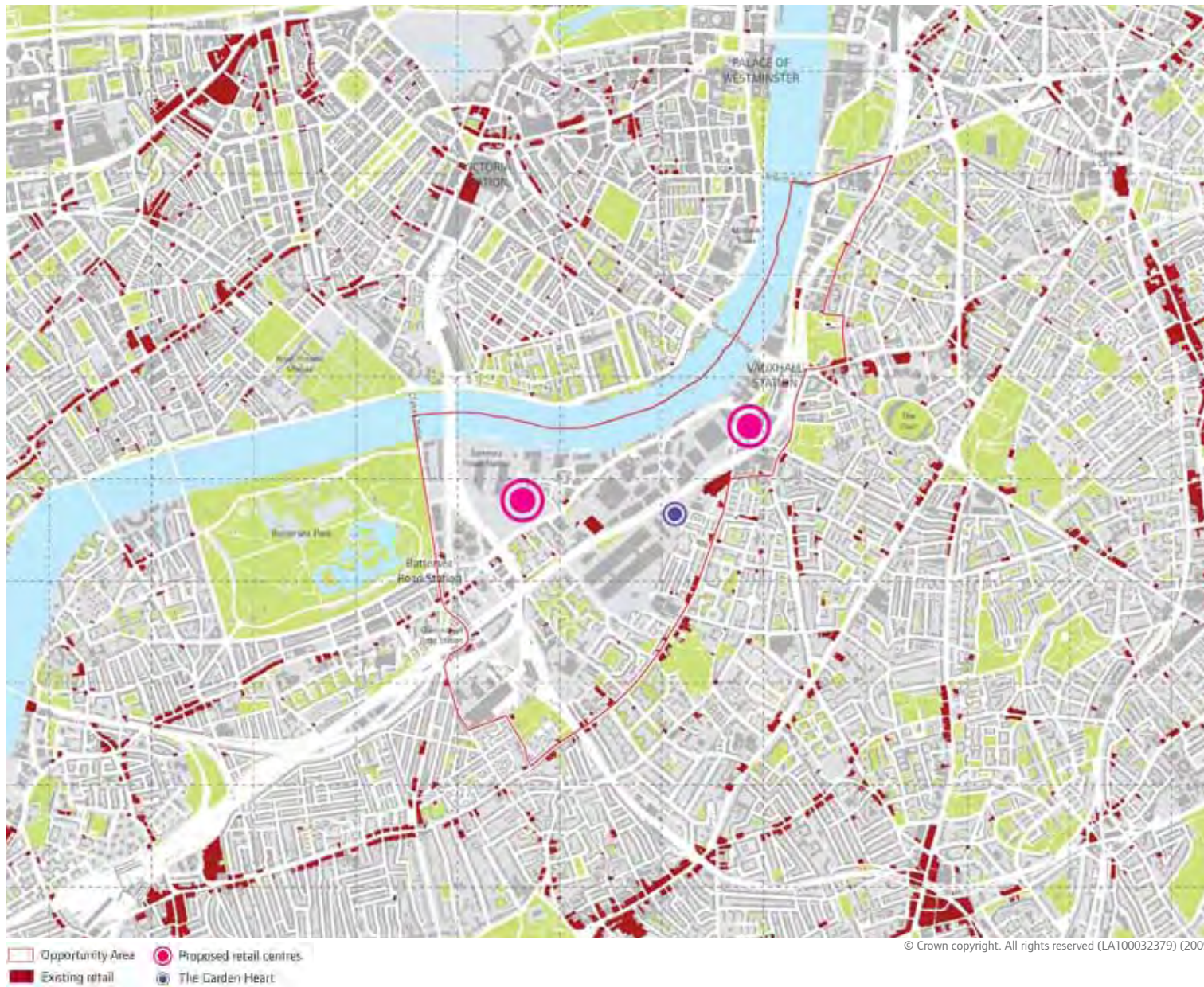


Figure 4.7 Existing and proposed retail in the OA

In other parts of the opportunity area, small scale retail use could play a supporting role as part of residential-led mixed use development, but should perform a local function and not lead to the creation of a continuous retail theme throughout the opportunity area or become a destination in its own right. Local supporting retail should be concentrated along Nine Elms Lane.

Sites for retail and other main town centre uses should be identified according to the sequential approach to site selection. Planning applications for schemes that include main town centre uses should be assessed for their impact on other centres, planned provision and against other considerations as set out in Planning Policy Statement 4: Planning for Sustainable Economic Growth.

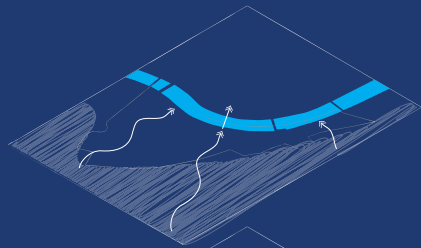
The form of these developments will be a key issue in terms of improving the vitality of the OA. Retail development could come forward in a number of forms including traditional shopping streets with ground floor shop frontages particularly along Queens Lane and at Vauxhall. Retail development should deliver a good quality public realm, which is well connected to the existing movement network.

There is also an opportunity for spin-off activities from NCGM to improve the local retail offer in the OA and build the cultural identity of the area upon fresh produce in a similar manner to Borough Market. This is currently being developed by CCMA as “The Garden Heart”.

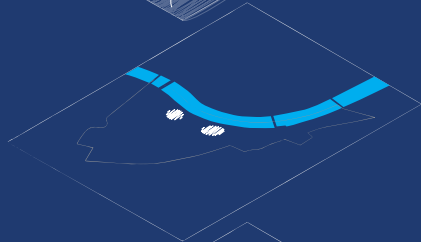


Chapter 5

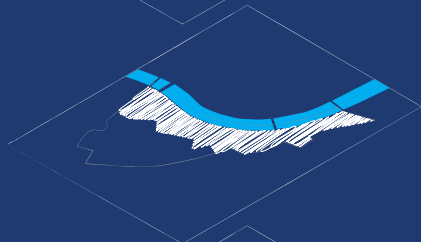
Housing and social infrastructure strategy



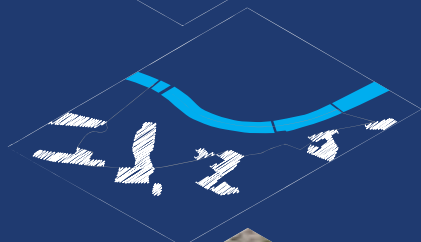
new connections to the river



new social infrastructure



residential intensification



housing estates



aerial image

Key principles

- To deliver 16,000 new homes in accordance with the preferred development scenario
- To provide affordable housing in accordance with the section 106 tariff scenarios set out in chapter 10
- To deliver a policy-compliant affordable housing tenure mix
- All new residential development to be of the highest quality and meet or exceed London Plan space standards
- New housing to be supported by high quality social infrastructure including health and education facilities and open space

5.1 Housing policy overview

The London Plan

The London Plan seeks to increase housing supply across London with a target of at least 32,210 net additional homes a year over the plan period. It sets annual average housing provision monitoring targets for each borough, with a target of 1,195 a year in Lambeth and 1,145 a year in Wandsworth.

Policy 3.11 seeks to maximise affordable housing provision and ensure an average of at least 13,200 more affordable homes per year over the plan period.

Policy 3.12 states that on individual schemes, the maximum reasonable amount of affordable housing should be sought, taking account of their individual circumstances including development viability, public subsidy, the implications of phased development including provisions for re-appraising the viability of schemes prior to implementation, and other scheme requirements.

60% of affordable housing provision should be for social rent and 40% for intermediate rent or sale (policy 3.11). The Early Minor Alterations to the London Plan (February 2012) seek to incorporate affordable rented accommodation within the 60% portion of the strategic tenure split.

The quality of individual homes and their neighbourhoods are key Mayoral priorities. London Plan policy 3.5 sets out the Mayor's expectations for the quality and design of housing developments. Table 3.3 sets out minimum space standards with which new developments are expected to conform.

The London Plan also seeks to deliver mixed and balanced communities (policy 3.9) and a choice of homes of different types and sizes (policy 3.8).

Wandsworth Core Strategy

Core Strategy policy IS5 seeks the maximum reasonable amount of affordable housing having regard to the boroughwide housing and affordable housing targets, the need to encourage rather than restrain residential development and the individual circumstances of the site. On individual sites, at least 33% of homes should be affordable, and a mix of social rented (70%) and intermediate (30%) will be sought. Economic viability assessments are required where less than 50% affordable housing is proposed or where the proportion of social rented and intermediate housing is not in accordance with policy.

Lambeth Core Strategy

Core Strategy policy S2 states that 50% of housing should be affordable where public subsidy is available, or 40% without public subsidy, subject to housing priorities and where relevant to independently validated evidence of viability. The mix of housing should be 70% social rented and 30% intermediate.

5.2 Development capacity study

The preferred development scenario was arrived at following a development capacity study (TAB) which informed the consultation draft OAPF.

In order to test development capacity in the OA, a block model was created which could accommodate different levels of residential and commercial development.

The initial task was to define broad development areas, where it was anticipated that development would be likely to take place. The development capacity study was deliberately not site-specific and did not take account of constraints such as land ownership boundaries existing operational issues or localised infrastructure constraints.

Certain areas were excluded from the development capacity study on the basis that it was considered that redevelopment would be unlikely in the plan period; these areas included Stewarts Road industrial area, existing areas of housing, most of the New Covent Garden Main Market site and the safeguarded wharves.

Five initial options were tested against completed schemes to establish whether the density ranges being tested were deliverable and to demonstrate what different densities would look like in terms of built form. The initial options were within the London Plan density range and it was assumed that all developments would provide sufficient open space to meet their own requirements, in addition to the strategic open space provision.

The preferred development scenario, which comprises 16,000 new homes and 20-25,000 jobs, was arrived at through a process of refinement of the original options and consultation on the draft OAPF.

5.3 Housing and affordable housing requirements

Affordable housing

For the purposes of testing viability and setting tariff charging levels, the development infrastructure funding study (DIFS - see chapter 10) considered two alternative affordable housing scenarios – 15% and 40%.

In line with borough priorities, 40% affordable housing (with the associated tariff charging levels) will normally be expected on sites in Lambeth, although for sites in close proximity to the proposed station at Nine Elms and those which may not be suitable for family housing, 15% affordable housing may be considered.

Given the need to maximise financial contributions towards the provision of infrastructure required to support development in the OA, and to minimise the associated funding gap, 15% affordable housing (with the associated tariff charging levels) will normally be expected in the Wandsworth part of the OA.

In order to satisfy London Plan and borough affordable housing policies, viability assessments will still be required in order to demonstrate that the maximum reasonable

amount of affordable housing is being delivered on individual sites, in the context of other infrastructure requirements and the application of the DIFS tariff and CIL.

Housing quality and housing choice

The OAPF promotes high density development based on 8 – 10 storey perimeter blocks with tall buildings in appropriate locations.

London Plan policy 3.5 sets out the Mayor's expectations in respect of the quality and design of new housing. Guidance on implementation of this policy is provided by the Mayor's London Housing Design Guide and the draft Housing SPG (December 2011). In view of the density of development anticipated in the OA, it is essential that new housing is of the highest quality and meets or exceeds the space standards set out in London Plan table 3.3. All new housing in the OA should be built to Lifetime Homes standards and that at least 10% of new housing is designed to be wheelchair accessible or easily adaptable for a wheelchair user.

Particular attention will need to be paid to the relationship between new homes and the retained industrial uses, safeguarded wharves and road and rail infrastructure. Individual schemes will be expected to minimise the potential for conflicts of use and disturbance and protect the amenity of future residential occupiers through appropriate design and internal layout.

5.4 Social infrastructure policy overview

London Plan

London Plan policies 3.16 to 3.19 seek additional and enhanced social infrastructure provision, high quality health and social care facilities, early years, primary and secondary and further and higher education facilities and sport and recreation facilities.

Policy 3.16 states that boroughs should ensure that adequate social infrastructure provision is made to support new developments, and that adequate provision for social infrastructure is particularly important in areas of major new development and regeneration and should be addressed in opportunity area planning frameworks and other relevant area action plans.

Wandsworth Core Strategy

Core Strategy policy IS6 supports the provision and/or improvement of facilities for community services including education and childcare, health and social welfare, police and other emergency services and the prison service. It also supports the provision of infrastructure necessary to support development, particularly in areas of major change, in accordance with the Infrastructure Schedule appended to the Core Strategy.

Lambeth Core Strategy

Core Strategy policy S10 identifies the need to secure planning obligations including (but not limited to) contributions towards education, healthcare, libraries, sport, leisure, cultural and community facilities.

5.5 Existing communities

Although the majority of the OA is currently in employment and industrial use, there are well established residential communities located within and around it. London Plan policy 2.12 recognises a need to identify, protect and enhance predominantly residential neighbourhoods within CAZ, and to ensure that the social infrastructure needs of both local residents and the large numbers of visitors and workers in the CAZ are met.

It is essential that development in the OA does not compromise the amenities or environment of existing communities in and around the OA, some of which are extremely deprived. Opportunities to improve access to education, skills and training, healthcare, childcare, employment and open space for existing communities should be maximised through the provision of new, and improvement of existing, social and physical infrastructure.

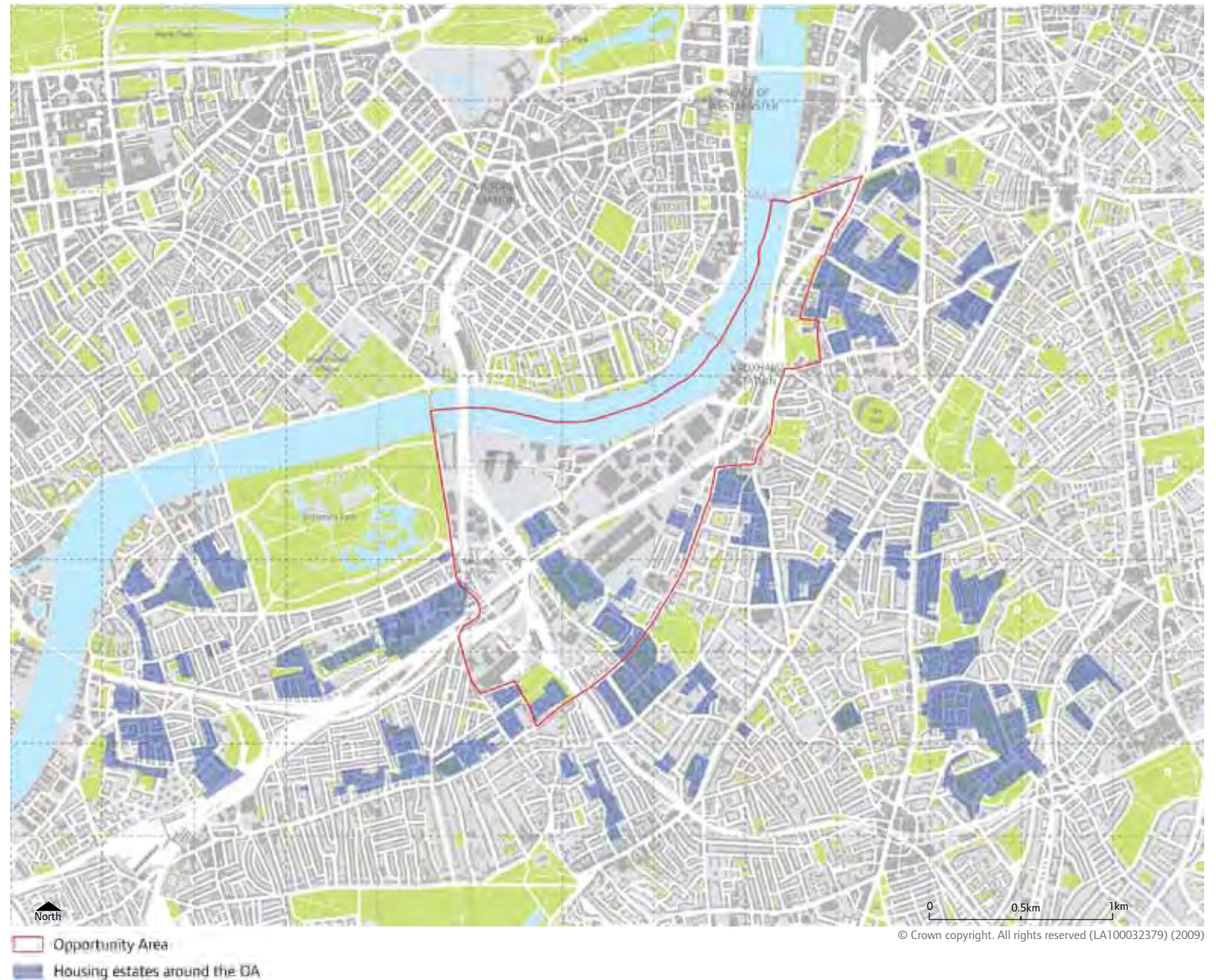


Figure 5.1 Existing housing in the OA

5.6 Social infrastructure requirements

The DIFS considered the need for the full range of social infrastructure – education, police, primary health care, community centres, libraries and youth provision – required to support the preferred development scenario.

In order to establish the social infrastructure requirements associated with the preferred development scenario, a population and child yield analysis, using the boroughs’ own preferred analysis methods, was undertaken on the basis of the two alternative affordable housing scenarios. The total new population is expected to be between 24,300 and 25,500. The results of the child yield analysis are set out in figure 5.1 and are lower than those originally anticipated in the development capacity study.

The infrastructure requirements identified were identified in consultation with key stakeholders and service providers.

The key requirements for education, health and community facilities in the OA are set out below.

	Wandsworth part of the OA	Lambeth part of the OA	Total for the OA
15% affordable housing	2,881	424	3,305
40% affordable housing	4,534	595	5,129

Table 5.1 – Child yield analysis results

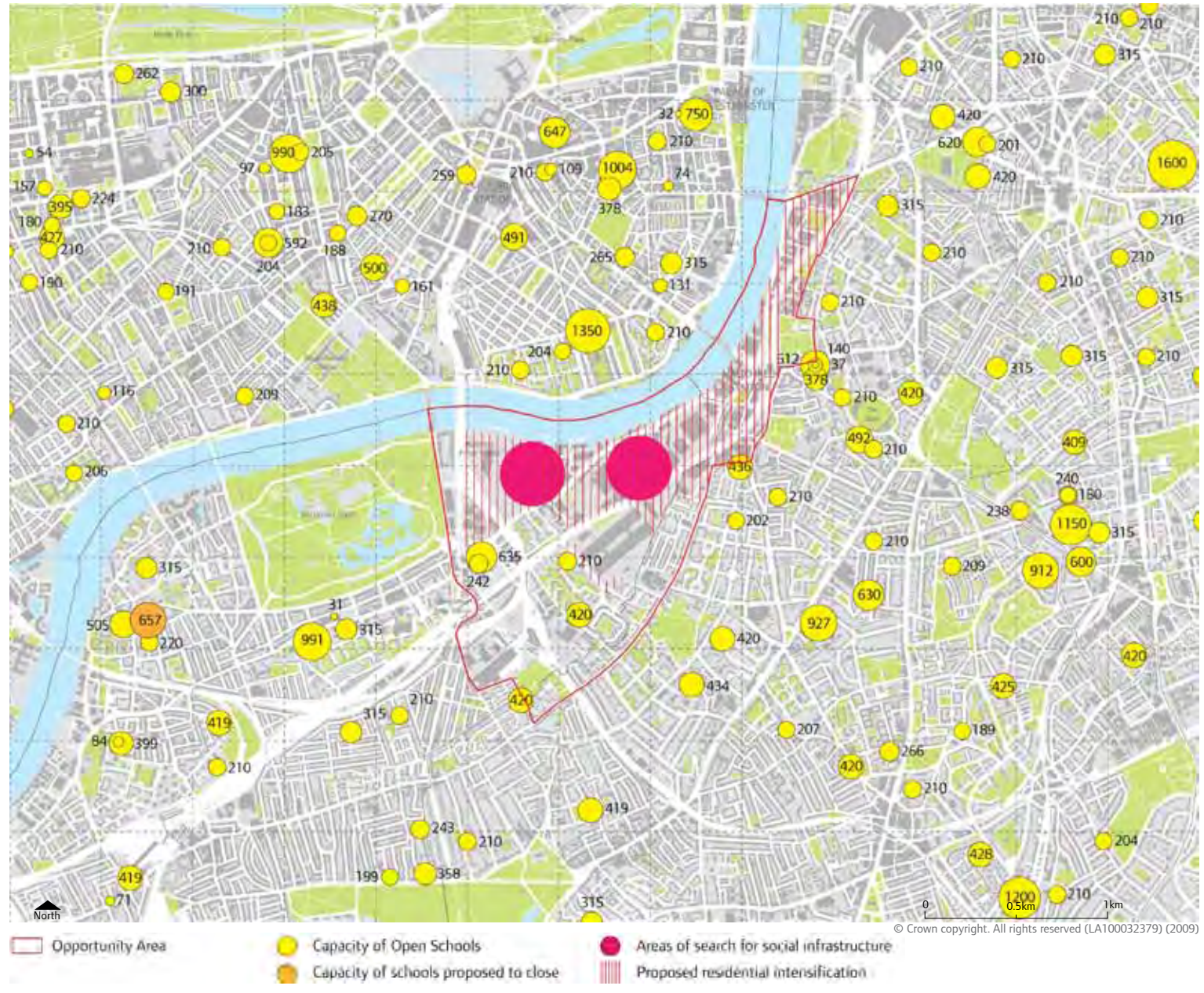


Figure 5.2 Capacity of Schools in and around the OA (2009)

Education

In order to support the preferred development scenario, six forms of primary school entry are likely to be required, comprising a 4-form entry school in Wandsworth and a 2-form entry school in Lambeth.

Two forms of pre-school entry are likely to be required in Wandsworth and one form of pre-school entry in Lambeth. These could be provided at the new primary schools.

The child yield analysis does not demonstrate a need for a new secondary school, but expansion of existing secondary schools will be required.

Health

Based on the population estimates and the likely demographic profile of new residents, there is likely to be a requirement for eleven additional GPs in the OA. These could be provided in two health centres of six and five GPs and supporting services, with the first likely to be required around 2018 and the second around 2024.

The expected population growth could also generate an increased demand for acute and emergency care, maternity, mental health and community health services. Some of this demand could be provided for in a locally based urgent care centre in the OA.

Community facilities

There is likely to be a need for two multi-use community facilities, one in each borough, in order to provide for childcare, youth facilities, adult learning and employment skills services, and to meet the space needs of community and voluntary sector organisations. Wandsworth Council has also identified a need for a new library to serve the Wandsworth part of the OA.

Other

A need for a Police Neighbourhood and Transport Team base has been identified, but the impacts of the preferred development scenario on emergency services provision are otherwise considered to be small.

It is expected that there will be needs for arts and cultural facilities. These could be standalone facilities or could be located with other social infrastructure such as multi-use community facilities or schools.

A need for a construction training facility has also been identified in order to maximise local people's access to jobs during the construction period.

5.7 Delivery of social infrastructure facilities

High quality social infrastructure has a major role to play in supporting growth in the OA. All new developments will be expected to support and enhance education, health and community facilities provision in order to ensure the needs arising from new development in the OA are properly mitigated and do not adversely affect access to services by the existing community.

Development should contribute towards the provision of social infrastructure, either through on-site space provision or financial contributions, or a combination of the two. Opportunities for co-location of services should be maximised. The size and location of new facilities should be determined by and coordinated between the boroughs, developers and service providers in order to ensure that the facilities are delivered in the most appropriate locations and at the time they are required.

Wandsworth's Area Spatial Strategy map for Nine Elms North (figure 2.4) identifies appropriate locations within the OA for a library, primary school, health and police facilities.

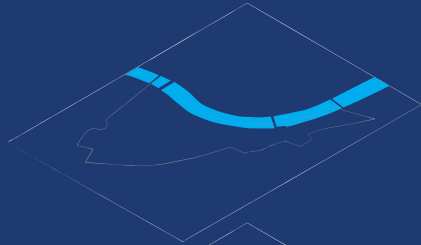
A detailed and costed infrastructure programme, with priorities agreed by the boroughs, is set out in the DIFS report (TA9), which will be periodically reviewed.

5.8 On-site play space and private open space

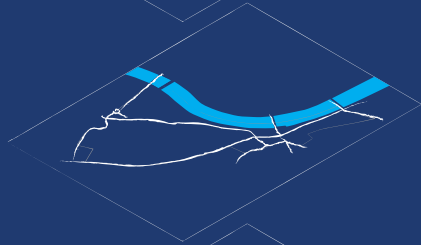
In addition to new strategic open space to be delivered in accordance with the public realm strategy, developments will be expected to deliver private amenity space and on-site children's play space. It is envisaged that the majority of this space will be provided externally and at grade. Private residential amenity space should be provided in the form of private balconies and terraces on upper levels and gardens at lower levels and should meet London Housing Design Guide standards for the provision of private amenity space. Enclosed winter gardens may be appropriate in locations where facades would be exposed to unfavourable noise or other environmental conditions. Additional communal amenity space should be provided in the form of roof gardens and terraces, which could also perform a biodiversity function.

Chapter 6

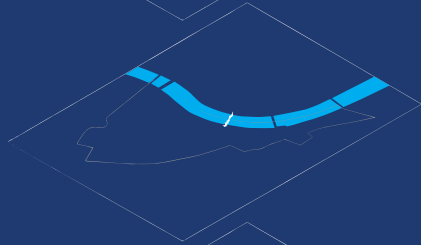
Transport Strategy



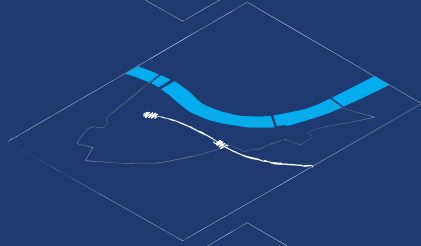
retention of river freight facility



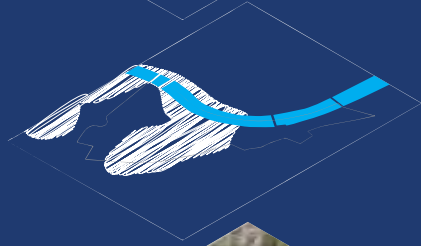
improved bus/cycle connections



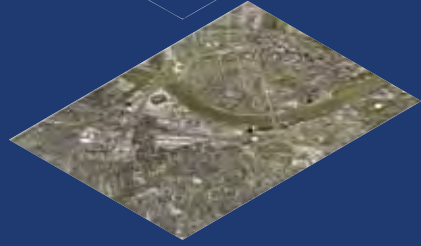
new pedestrian bridge



northern line extension



poor connectivity (low PTAL)



aerial image

Key principles

- To outline the aims and objectives of the VNEB transport study
- To understand the likely impacts on public transport and highway networks as a result of the development scenarios set out in the development capacity study
- To demonstrate the need for new transport services and infrastructure
- To identify the key strategic infrastructure required to support development within the OA
- To identify the optimum transport packages and set out recommendations to support the preferred development scenario.

6.1 Policy context

The London Plan seeks to ensure integration between transport and development. This is encouraged through patterns and forms of development that reduce the need to travel especially by car as well as improving public transport, walking and cycling accessibility for areas of greatest demand and for areas designated for development and regeneration including the Central Activities Zone and Opportunity Areas.

High density development with high trip generation characteristics is only considered acceptable in locations which have good access to public transport and where the existing levels of transport capacity are sufficient to absorb the impacts of that development.

In addition to the transport goals set out within the Mayors Transport Strategy (2010) there are a range of supporting policies set out within the London Plan aimed at delivering the Mayor's transport vision.

London Plan policy 6.1 focuses on the need to integrate transport and development through a range of approaches such as reducing the need to travel, especially by car and improving the capacity and accessibility of public transport, walking and cycling.

In addition to this Policy 6.2 states that at a strategic level the Mayor will work with partners to increase the capacity of public transport in London by securing funding for and implementing the schemes and improvements set out in table 6.1 of the plan. This includes an extension of the Northern Line from Kennington to Battersea to support the regeneration of the VNEB Opportunity

area, tube station congestion relief schemes through a targeted station capacity enhancement programme and further Vauxhall gyratory improvement works to improve facilities and conditions for pedestrians and cyclists, and to smooth traffic flow.

All new major developments are assessed by the GLA, TfL and the boroughs against the relevant planning policies to ensure that they meet the above criteria or provide adequate mitigation or transport improvements to allow the development to proceed.

At borough level there are a number of policies which support the growth of the OA including significant transport infrastructure and accessibility improvements, including Lambeth Core Strategy policies PS4 and PN2 and Wandsworth Core Strategy policy PL11(d).

It is important to note that TfL has no capital allocations for new infrastructure or improvements to public transport services, which may be considered necessary to enable growth within the OA.

TA4 Transport and movement context sets out an overview of the existing transport situation in the OA. While some areas of the OA, such as Vauxhall and Albert Embankment have good access to public transport it is clear that the lack of adequate transport infrastructure in the Nine Elms and Battersea areas coupled with capacity problems on existing services and stations across the whole VNEB area will present a potential barrier to development and sustainable growth within the OA.

6.2 VNEB Transport study

The key strategic objectives for transport and the OA are:

- i. To mitigate the impact of additional traffic and pedestrian trips associated with the development, especially on the highways network and public transport infrastructure; and
- ii. To ensure that the area's economic potential is realised by improving accessibility to the development sites by walking, cycling, public transport, taxi and goods vehicles.

In order to inform the development of the OAPF, a strategic transport study was undertaken by TfL. Following the publication of the draft OAPF further analysis was undertaken to refine the original outputs in line with the recommendations of the OAPF, particularly in relation to the preferred development scenario.

The aim of the transport study was to identify the impact of the original five development scenarios as set out in the development capacity study (TA8) on the public transport and highway networks. Further work has concentrated on the preferred development scenario.

The study also investigated a range of possible transport packages/ interventions against each of these development scenarios, identifying an optimum transport solutions package for each.

The transport study and subsequent analysis involved five key work streams:

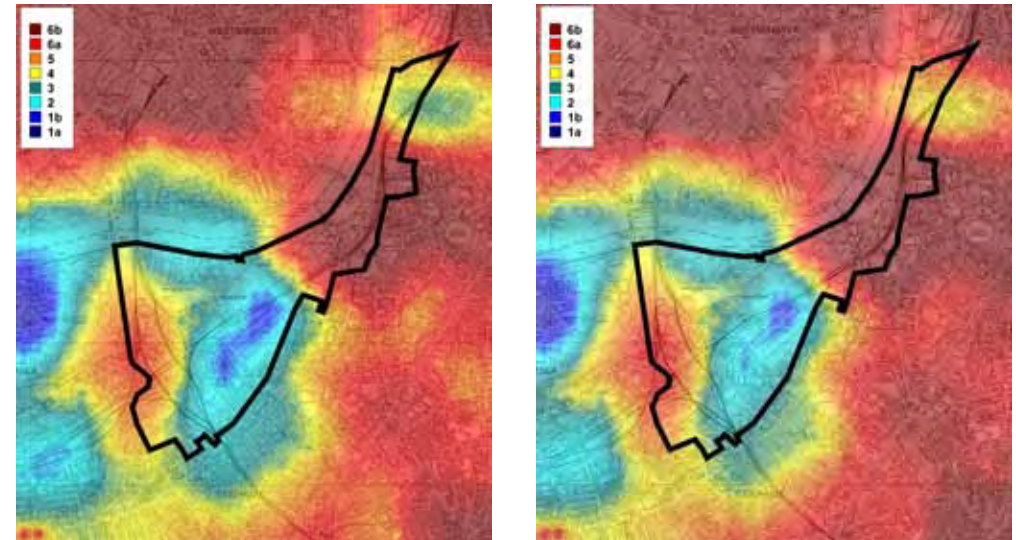
1. Travel **demand forecasting** for each development scenario using the London Transportation Studies (LTS) model as a base
2. High level strategic public transport (RAILPLAN) and highway assignment (SATURN) **modelling**
3. Definition of a range of high level **transport packages/initiatives** to support the range of OA development scenarios established by GLA for the Planning Framework
4. Development and use of a high level two-stage **appraisal** process to assess the transport initiatives against study-specific, central Government and TfL objectives
5. **Consultation** with key stakeholders; TfL Businesses, the London Boroughs of Lambeth and Wandsworth and key landowners in the OA.

Committed and proposed transport schemes

All transport schemes and system changes that are committed in the TfL business plan were included in the 2016 and 2026 base cases for the transport study. These include schemes such as Crossrail, suburban train capacity increases as part of the National Rail High Level Output Statement (HLOS), planned London Underground improvements and bus frequency increases across the network. Some of the committed schemes such as improvements to the Victoria Line and capacity enhancements on South West and Southern Trains will provide benefits for the OA through increased frequency and capacity,

however given the existing levels of demand it is anticipated that any new capacity will be filled quickly.

As illustrated in Figure 6.1 the public transport accessibility level (PTAL) changes very little if all the above schemes are implemented. PTALs are more sensitive to the geographic coverage of public transport infrastructure than to changes in existing service levels, and the committed schemes do not add any new coverage in the OA.



(Source: VNEB OA Transport Study, TfL (2009))

Figure 6.1 PTAL comparison map 2006 - 2026

Development Scenarios and OA Trip Forecasts

Following publication of the consultation draft OAPF, further work was carried out to assess the transport impact of the preferred development scenario. The methodology used to do this was identical to that used to assess the original five scenarios, with the exception of the removal of borough balancing. The approach now taken has been agreed with the local authorities and aligns with that being taken in a number of other opportunity areas across London.

Table 6.1 illustrates the change in trips to/from the OA in the AM peak period as a result of the preferred development scenario. It shows that the increase in the number of trips is broadly even into and out of the OA and that public transport has by far the highest mode share, accounting for over 50% of the additional trips, followed by walking and cycling with 30% and car with 20%.

Table 6.1 Change in trips (AM peak) into/out of the OA associated with the preferred development scenario

	Car	Public Transport	Walk and Cycle	Total
In	3,500	10,000	6,500	20,000
Out	3,500	11,500	7,500	22,500
Total	7,000	21,500	14,000	42,500

6.3 Transport impacts without new transport infrastructure (2026)

Impact on Public Transport – Flows

Figure 6.2 illustrates that as development density increases, passenger flows on National Rail, London Underground and London Buses generally increase, with a significant increase on routes through Vauxhall.

The higher density scenarios involve an intensification of employment uses in the OA, centred on key sites. This leads to significant increases in inbound as well as outbound morning peak public transport trips to and from the OA, increases in patronage particularly on services through Vauxhall Interchange and to a lesser extent at Waterloo and Victoria Stations.

The substantial increase in employment density related to the preferred development scenario in particular gives rise to large increases in bus, rail and underground patronage in and around the OA.

Impact on Public Transport – Levels of Service

In relation to the impacts of increased development on public transport morning peak Levels of Service the study considers that:

- There would be significant increases in patronage on bus services as a result of OA development, focused on services that currently use Vauxhall bus station.
- Underground and rail crowding ratios remain generally constant when considered against increasing development scenarios, although pressures at key National Rail and London Underground stations such as Vauxhall and Battersea Park increase considerably.
- There would be no discernable changes in crowding levels on the surrounding rail network, however the section between Clapham Junction and Battersea Park experiences a significant increase.

The apparent low impact on levels of service, particularly on the underground and rail network can be explained as a result of the committed transport improvements and the already high levels of crowding experienced on the network.



2008 to 2026 reference case

(Source: VNEB OA Transport Study, TfL (2009))



2026 reference case to preferred development scenario

Figure 6.2 Public transport volume changes, morning peak (7-10am) comparing 2008 to 2026 reference case + preferred development scenario

Impact on Station Characteristics and Performance

The key stations within the OA such as Vauxhall Underground and Vauxhall National Rail station already experience problems in terms of capacity and congestion particularly during the AM and PM peak periods. When considered alongside the proposed OA development scenarios and assuming no transport interventions further to those already committed these problems are likely to intensify.

Of all the stations within the OA, Vauxhall Underground station is forecast to experience the greatest increase in passengers. The preferred development scenario results in similar overall passenger numbers at Vauxhall interchange to that associated with the original scenario 5 and would result in demand exceeding escalator capacity during the morning peak hour. It would also further increase the number of passengers alighting at the underground station which would push demand further beyond capacity during the morning peak hour.

TfL has developed congestion relief plans for Vauxhall Underground station aimed at improving gate line and ticket hall capacity as well as step free access. This is now a committed and fully funded scheme in the TfL business plan and works are expected to commence in 2013 and complete in 2015. The 2026 reference case assumes that these improvements are in place.

Figure 6.3 demonstrates that the additional flows associated with the preferred development scenario would result in increasing capacity issues caused by insufficient escalator capacity at the Vauxhall underground station.

London Underground has advised that increasing escalator capacity at Vauxhall is likely to be a very significant and costly engineering challenge. The viability of such a project is therefore uncertain and is compounded by the risk of adding to capacity problems on the Victoria line at this point - prior to it reaching the strategically more important parts of the Victoria Line between Victoria and Kings Cross St Pancras.

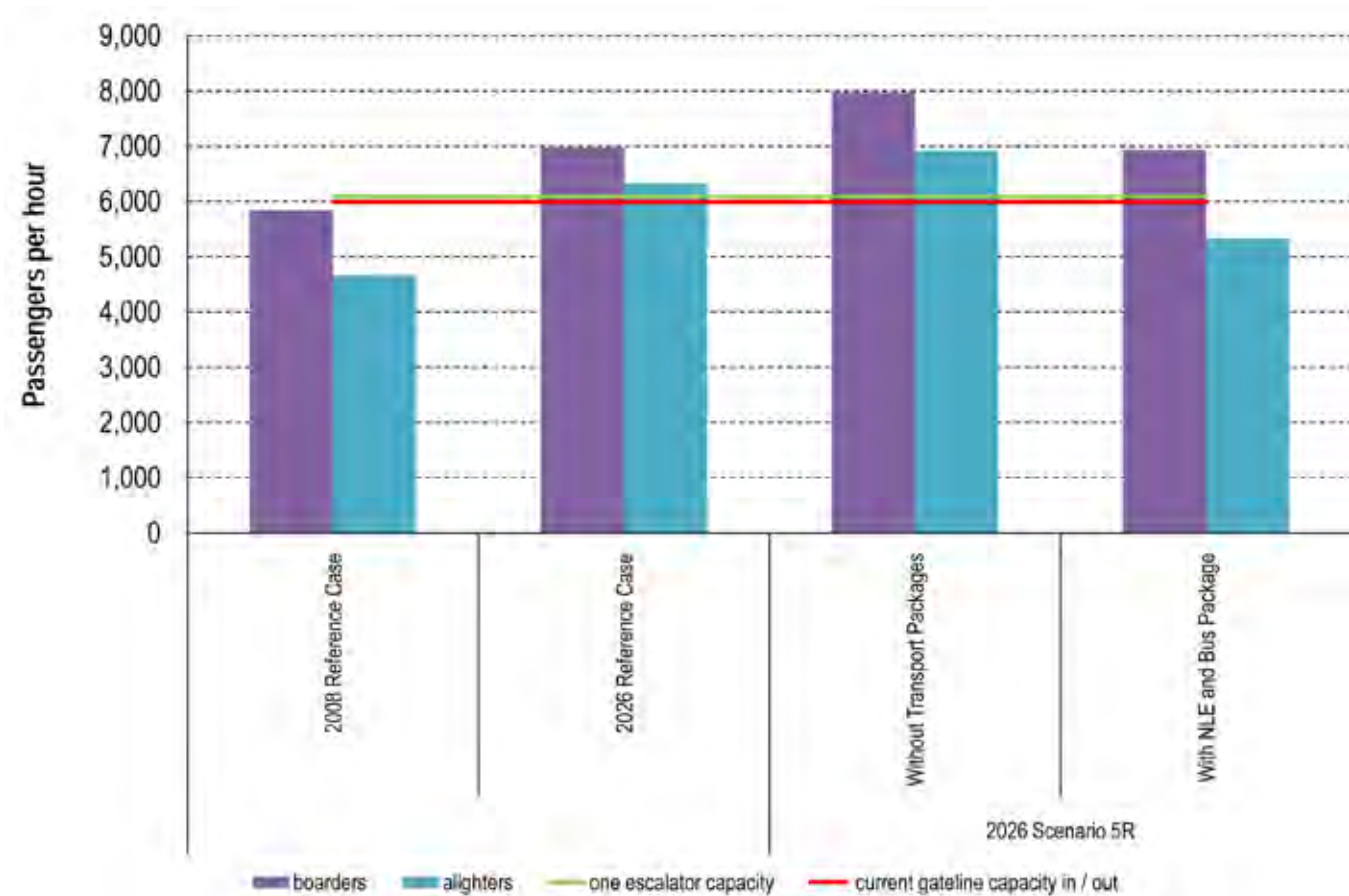


Figure 6.3 – Vauxhall underground Station: Victoria Line Boarder and Alighters (am peak hour)

(Source: VNEB OA Transport Study, TfL (2009))

In relation to Battersea Park Station, the preferred development scenario roughly triples the existing total demand. This suggests that the station will experience significant pressures if demand is not managed, constrained or enhancements made to the station. A key concern is the narrow stairways and platforms, in particular platform 4.

The pattern of demand at the station shifts between 2008 and 2026, with the number of boarders increasing significantly and a drop in the number of alighters.

Station capacity analysis for all the main stations within the OA has been undertaken; the key findings are summarised in Table 6.2. This illustrates the characteristics and performance of each of these stations (2026 plus the preferred development scenario).

Station	Characteristics and performance
Vauxhall (NR)	The 2026 Reference Case forecasts an increase in the number of boarding passengers on platforms 7/8, which will result in increased congestion and potential for conflict with alighting passengers on the staircases. The overall change as a result of the development scenarios is forecast to be low.
Vauxhall (Underground)	Improvements to the interchange are required with the current demand flows. There are planned LUL measures to increase gate-line capacity to match escalator capacity as the station is currently constrained during the morning peak. Work is scheduled to commence in 2013 and complete in 2015. In the 2026 reference case, it is important that all three escalators are in service as the projected number of boarding and alighting passengers is forecast to be in excess of the capacity of a single escalator. The preferred development scenario would result in total escalator capacity being significantly exceeded over the peak hour, due to a considerable increase in alighting passengers. This is likely to lead to regular gateline/station closures at the busiest times.
Battersea Park	Battersea Park would see a doubling of boarding and alighting passengers in the preferred development scenario from the 2026 reference case. The concentration of operations on platforms 3 and 4 would increase pressure on the stairs to platform 4. This would be further worsened by the overall increase in passengers using the London bound platform and the higher proportion of boarders would worsen conflict with alighting passengers, especially at the stair-head where space is limited. Network Rail has considered improvements to the station including a possible second station entrance, but funding is not identified in its investment programme.
Queenstown Road	A significant increase of over 30% from the 2026 reference case in the number of people boarding services at Queenstown Road in the preferred development scenario would be matched by a doubling of alighting passengers. Overall passenger numbers remain relatively low and no significant problems are anticipated, but this will need to be kept under review as the station is in a generally poor condition.

Table 6.2 – Station Characteristics and Performance (2026 + Development Scenarios)

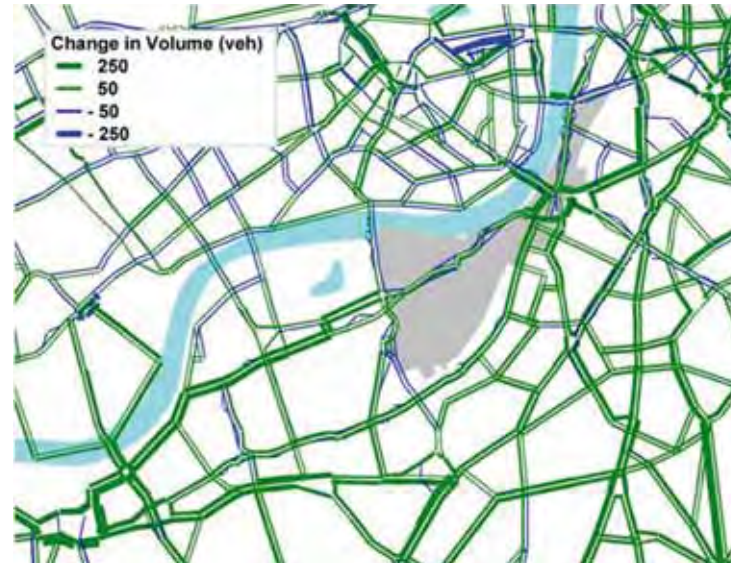
Impact on Highways – Change in flows

When considered alongside the forecast no development (2026) situation, the strategic highways model developed as part of the transport study and updated to reflect the preferred development scenario indicates that a steady increase in highway traffic volume changes will occur as a residential and employment density increases (Figure 6.4).

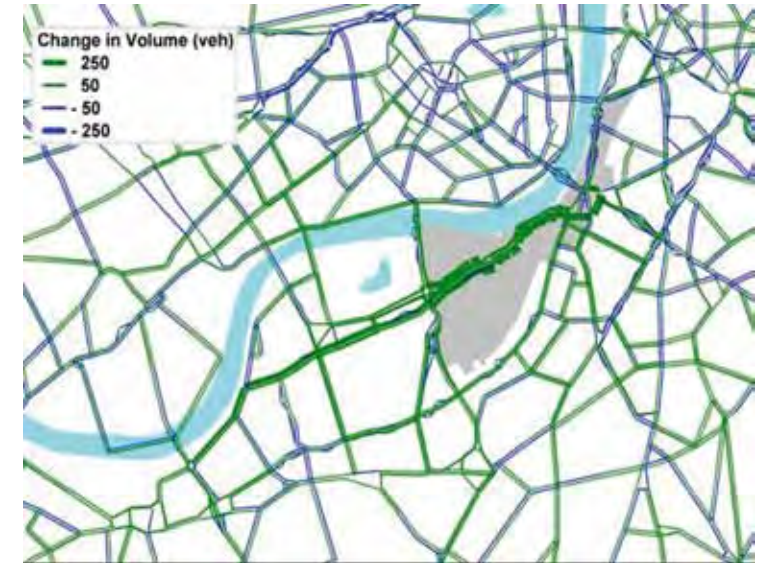
The key arterial routes running through the OA and connecting to the bridges experience the greatest current and future traffic volumes, with increases exacerbating existing problems at Vauxhall, Chelsea and Lambeth Road Bridges and key junctions within the OA.

The Vauxhall gyratory experiences the greatest current and forecast volume of traffic in the OA. With preferred development scenario levels of traffic, highways modelling indicates that the current junction capacity may be inadequate which, if unmitigated, would lead to increased congestion on major routes into the Vauxhall area which itself would lead to re-routing of traffic along parallel routes and local borough roads.

The potential impacts that have been identified highlight the need for a restraint based approach to car parking for all land uses. This will help to reduce unnecessary car journeys and encourage the use of more sustainable modes such as public transport, cycling and walking. There will also be a need to undertake selective junction



2008 to 2026 reference case



2026 reference case to preferred development scenario

Figure 6.4 Highway Traffic Volume Changes- Morning Peak Hour (8-9am), comparing 2008 to 2026 Reference Case, and preferred development scenario (Source: VNEB OA Transport Study, TfL (2009))

improvements, e.g. at Queen's Circus and at the junction of Battersea Park Road with Queenstown Road.

There is also a requirement to look in more detail at the potential impact of traffic generated or attracted to the OA on key routes/junctions outside the OA. This work is to be undertaken by TfL, in conjunction with Lambeth and Wandsworth.

6.4 The need for new services and infrastructure

The Transport Study identified a range of transport packages in relation to each of the five development scenarios. These packages were comprised of four key strategic transport interventions, and include:

London Underground

A number of improvements to the underground were considered including:

- Bakerloo Line extension from Elephant and Castle to the OA
- Waterloo and City Line extension from Waterloo to the OA
- Northern Line (Charing Cross branch) extension from Kennington to the OA

All these options would have the effect of improving OA linkage to other parts of the CAZ and wider central London. Following initial investigations the Bakerloo and Waterloo & City Line extensions were ruled out as they were considered unfeasible in terms of providing the most direct and cost effective link.

The Northern Line Extension (NLE) proposal is the preferred option due to the fact that it:

- offers the most direct link to central London particularly to Waterloo and the West End;
- provides a good level of access to the City of London via interchange at Kennington and Waterloo and is now supported by the boroughs and majority of developers in the area.

The NLE also has the following benefits over other underground extension and light rail transit options:

- it reduces demand and provides relief to Vauxhall underground station
- it reduces use of the Victoria line by in the order of 3-4,000 trips northbound and 2-3,000 trips southbound (a 4-6% reduction on the Stockwell – Victoria section of the line)
- it is the only option that provides relief to Battersea Park station through a reduction in boarding passengers in the AM peak

A number of Northern Line Extension alignments and station options have been considered. Following extensive public consultation and detailed option analysis, the route from Kennington to the Battersea Power Station site via an intermediate station in Nine Elms (as illustrated in figure 6.5) is now supported as the preferred route alignment. The main benefit of this route option is that it serves the areas of the OA which currently



Figure 6.5: Preferred Northern Line extension route alignment

experience the lowest levels of access to public transport. Furthermore, a station in the Nine Elms area would not only serve this part of the OA but would bring benefits for existing communities and also bring some relief to Vauxhall Station.

Further discussion and analysis regarding the location of the intermediate station is ongoing. Based on the preferred route alignment, a total of eleven station locations were initially identified. Further assessment

reduced this to three possible options as shown on figure 6.6. TfL has completed an additional assessment on these three options (March 2012). This recommends that options three and four should be considered further; however, the potential impact on the highway network and construction and deliverability issues need further investigation. Both options could allow for an integrated master plan that would deliver the wider public realm aspirations for the OA. However, option four

presents a solution which potentially enables better integration with the development of surrounding sites including Banham's, Covent Garden Market and Sainsbury's.

The NLE will be taken forward through a Transport and Works Act Order application. This work is being led by TfL and supported by Lambeth and Wandsworth Councils. An application is expected in early 2013.



-  Option 2
-  Option 3
-  Option 4

Figure 6.6: Northern Line extension intermediate station location options

Enhanced and new bus services and new routes

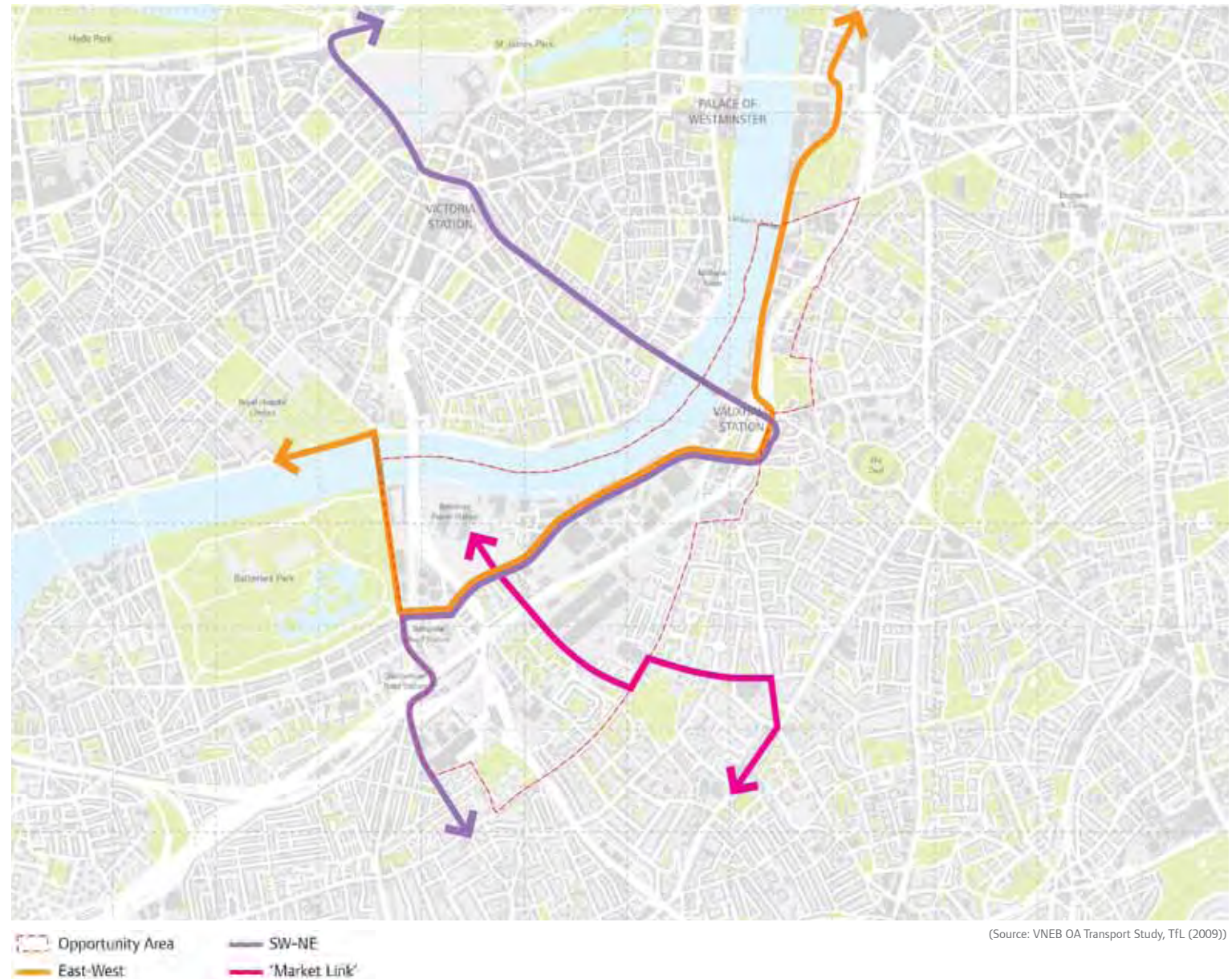
A high level package of bus service improvements including service-level increases and new routes serving the OA has been identified. This includes increased service levels of up to 20% on existing bus routes to serve the OA. One of the new/ extended routes considered is identified on Figure 6.6 as the 'Market Link'; this proposes a link from the OA with Stockwell to the south-east.

The details of all these new and enhanced routes are subject to further investigation and agreement.

Light Rail Transit

Initially, a spur running from Battersea Power Station, along Nine Elms Lane via Vauxhall and Albert Embankment and linking into the previously proposed Cross River Tram route to the south of Waterloo was considered as a potential option to provide better connectivity to the OA.

However, given the likely impacts of a LRT/tram option on highway capacity and constraints in terms of passenger capacity, potential impacts on interchange at Vauxhall and a lack of running and depot space this initiative was not taken forward.



(Source: VNEB OA Transport Study, TfL (2009))

Figure 6.7 – Indicative new and enhanced bus routes and services

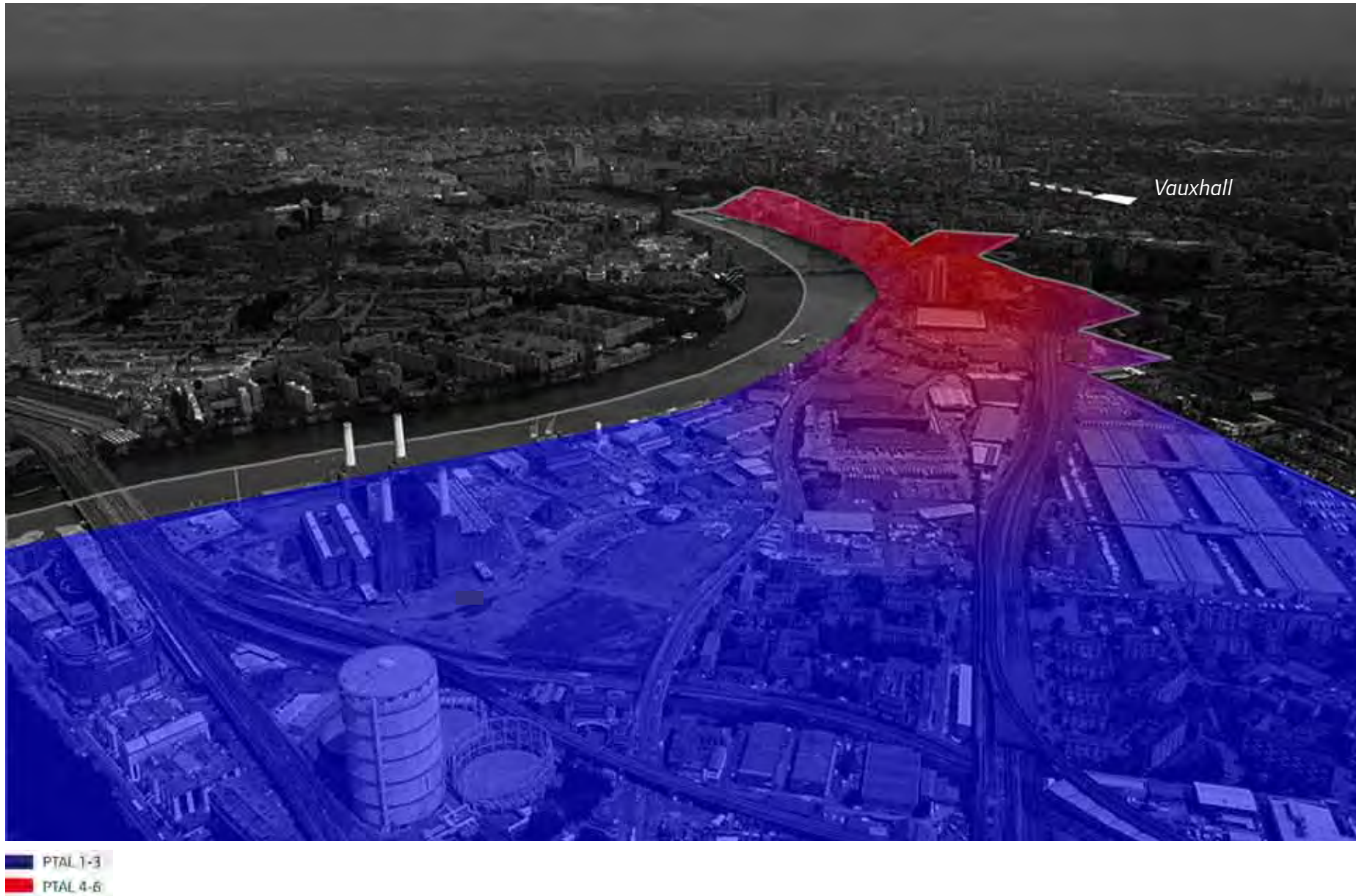


Figure 6.8: PTAL before Northern Line extension

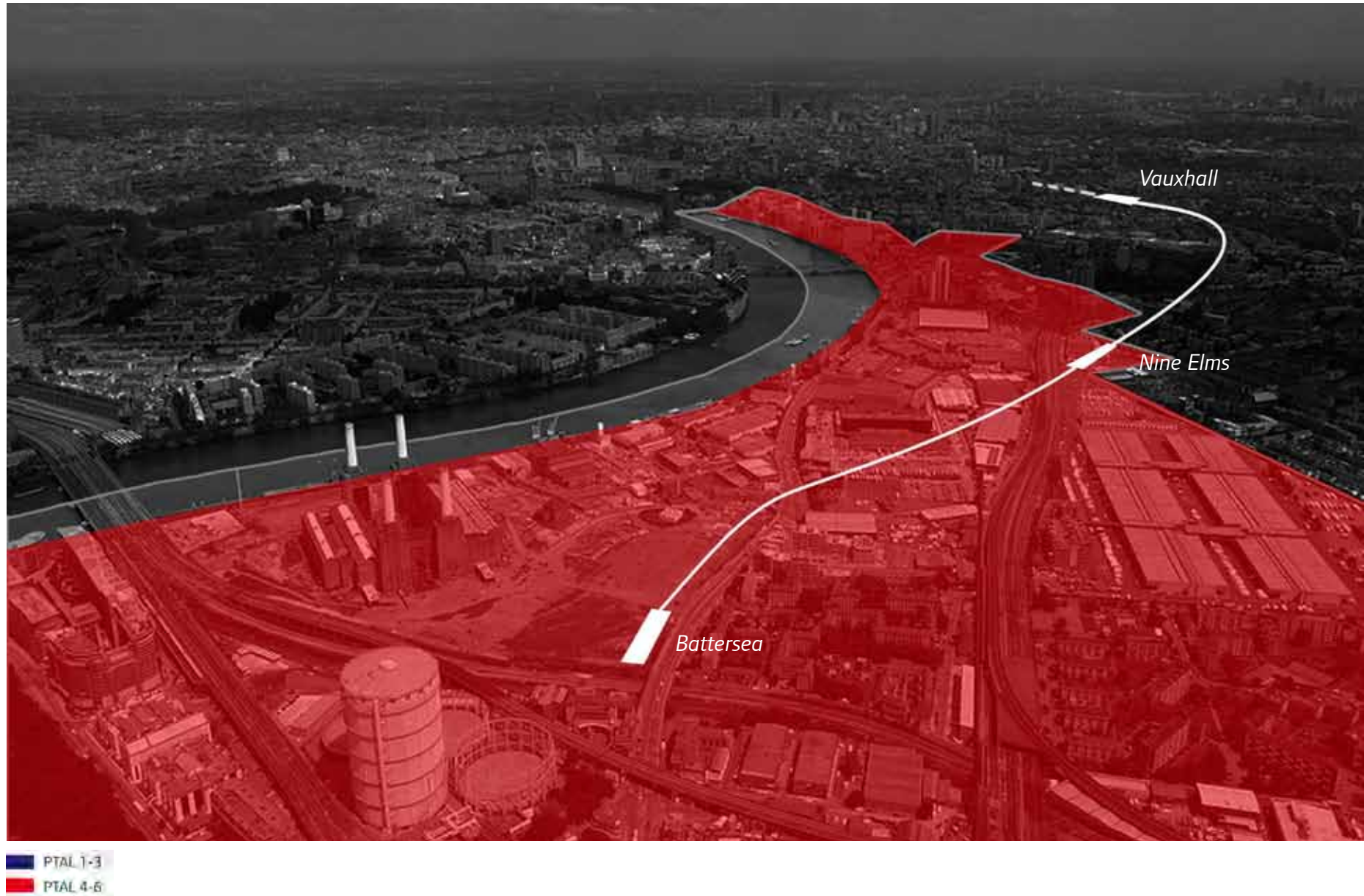


Figure 6.9 – PTAL after Northern Line extension

Pedestrian and Cycle Bridge

Cross River Partnership's (CRP) Vauxhall Battersea Development Framework (2003) considered the concept of a pedestrian bridge linking Battersea/Nine Elms to Pimlico. This now forms part of the wider public realm strategy promoted within the OAPF. It is proposed that the pedestrian and cycle bridge will link Nine Elms Lane with Grosvenor Road enhancing cross-river links between the Nine Elms and Pimlico areas, including Pimlico Underground Station.

Whilst it is difficult to assess the full impact of a pedestrian and cycle bridge in terms of number and distribution of trips, it could attract a significant number of pedestrian and cyclists. Demand would increase commensurate with population changes in the OA, and overall the bridge would bring significant wider benefits in terms of public realm improvements and through encouraging more walking and cycling in the area.



Figure 6.10 Proposed location of pedestrian and cycle bridge

Supporting Transport Interventions

In addition to the four strategic transport interventions identified above and which have been tested and modelled as part of the transport study, there are a number of other transport schemes which have been identified and which would bring significant transport benefits for the OA area in the short to medium term. These include:

- Improvements to Vauxhall Underground and Network Rail stations including congestion relief, capacity and step free access improvements.
- Capacity enhancements to Battersea Park National Rail Station
- Vauxhall gyratory pedestrian, cycle and public realm improvements
- Highways and public realm improvements throughout the OA – delivered by individual developments in accordance with the Public Realm Strategy
- Potential highway improvements outside the OA
- Improved access and infrastructure for cyclists
- Improved river services

Transport study: key conclusions

Table 6.3 identifies the key conclusions of the transport study in terms of the infrastructure requirements for each of the development scenarios tested. In addition the study concludes that:

- development levels equivalent to development capacity scenario 3 or higher would require more than the 'bus-only' public transport interventions;
- all development scenario/transport package combinations, except those including the NLE, would result in increased public transport passenger congestion at Vauxhall, in particular at Vauxhall Underground station;
- the NLE would provide significant relief to this congestion; and
- traffic increases arising from all levels of OA development would put increased pressure on the Vauxhall gyratory and other local and strategic roads within the OA.

There was an emphasis on bus initiatives, especially in the lower-density development scenarios and underground schemes in the higher-density scenarios. Bus improvements are included in each transport package.

The initial public transport and highways modelling results were also reviewed to assess the existing transport problems in the OA for 2008 and 2026. The identified transport network deficiencies include:

- capacity constraints on the Underground Victoria and Northern lines;
- performance of Vauxhall bus, National Rail and Underground stations;
- lack of capacity at National Rail stations in the OA;
- capacity of bus services in the OA; with the exception of Vauxhall a relatively low level coverage in the OA by bus services, compared to other parts of central London; and continued highway capacity issues (similar to 2008 levels).

A range of additional supporting transport measures will be required as part of an integrated approach to transport improvement in the OA.

6.5 The preferred development scenario: transport recommendations

The preferred development scenario

The transport study concluded that in order to support the preferred development scenario, a package of transport measures including new and enhanced bus services and an extension to the Northern Line from Kennington to Battersea via Nine Elms will be required. This is the only transport package considered capable of providing the necessary capacity on the network without overloading Vauxhall underground station and causing significant congestion on the road network.

In order to support the required improvements to transport capacity, accessibility and connectivity within the OA and to ensure development and transport is fully integrated, a series of recommendations is set out below.

OA Scenario	Land Use/Density	Required transport Infrastructure
1 - 2	Low – medium density housing	Improved interchange and passenger throughput No justification for new major infrastructure
3	High density housing	Enhancements to existing bus services, new bus routes Significant improvements to interchange and passenger throughput at Vauxhall Underground, NR and bus station
4 - 5	High density housing and major retail development	As described above An extension of the Northern Line from Kennington to Battersea Power Station with an intermediate station in the Nine Elms area.

Table 6.3 – Transport packages

Recommendations A - Strategic & High capacity Interventions

The key public transport improvements required to support the preferred development scenario are the Northern Line Extension and a phased improvement to bus services and connections throughout the wider OA.

Table 6.4: Underground & Rail

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Northern Line Extension from Kennington to Battersea, via an intermediate station in the Nine Elms area (estimated private sector delivery cost)	H	£563.8m *	£563.8m

* This is the estimated private sector delivery cost. The public sector delivery cost is estimated at around £900m, which includes 35% optimism bias and an allowance for inflation.



Figure 6.11 – Interchange

(Source: TfL)

Table 6.5 Bus services and supporting infrastructure

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
20 % capacity increases on bus routes serving the OA	H	£50m	£42.5m
New bus routes: NW-SE bus routes e.g. Extension of P5	H	Included in sum above	Included in sum above



Figure 6.12 – Buses

(Source: TfL)

Recommendations B - Supporting Transport Interventions and improvements

A range of additional supporting transport measures will be required over the plan period and should be phased and delivered in line with development to provide increased capacity and accessibility to accommodate growth and mitigate the incremental impacts of development.

Table 6.6: Bus services and supporting infrastructure

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
New/Improved bus stops/standing at Western end of OA	H	£75,000	£0
Where appropriate land to be made available/ safeguarded for bus standing/stopping provision	H	-	-
Continue to improve the quality of bus interchange at Vauxhall both between bus routes and between all transport modes	H	-	-
Maintain the existing capacity of Vauxhall Bus Station. Develop measures to improve transport interchange and connections with the wider Vauxhall and Opportunity Area.	M	-	-

Table 6.7: Underground & Rail

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Congestion Relief, ticket hall and gate line works and improvements to Vauxhall Underground Station	H	£18m	£5.4m
Step free access at Vauxhall Underground Station	H	-	
Improvements to Vauxhall Station NR Station in line with the NSIP and DfT's Access for All programmes	H	£2.7m	£1.3m
Increase train capacity and platform lengthening	M	£8m	£0m
Improvements to Battersea Park Station to facilitate increases in demand from new development e.g. second station access point/ ticket hall.	H	£14m	£14m
Queenstown Road - Improve the quality and accessibility of the station both internally and externally.	M	£500,000	£300,000
Improved Interchange and Integration at existing and new underground and rail stations with the existing transport network and wider public realm, including signage.	M	-	-

Walking

In order to meet the Mayor’s targets in relation to walking and to conform with London Plan policies, a step change in

the quality of the pedestrian environment throughout the OA is required. The following recommendations should be read in conjunction with the public realm strategy for the OA.

Table 6.8: Walking

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Pedestrian and Cycle bridge linking Nine Elms and Pimlico	H	£30m	£24m
Improvements to Vauxhall Gyratory and Albert Embankment	H	£19m	£11.6m
New and enhanced walking routes/ connecting the OA to the River	H	£17.4m	£5.2m
5.5 metre footways where achievable, to allow for movement, planting, street furniture and activity	H	-	-
Reduced street clutter and high quality materials	H	-	--
Integration of the OA with the Legible London way finding scheme	M	£750,000	£0
Upgrades to the Thames River Path, Strategic Walk Network to enabling links between central London and Battersea Park	H	£15.5m	£1.55m



Figure 6.13 - Legible London

(Source: TfL)

Cycling

In order to meet the Mayor's targets in relation to cycling and to conform with London Plan policies, there is a need to improve conditions and facilities for cycling throughout the OA.

Table 6.9: Cycling

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Improved cycle routes throughout the OA, including through the Linear Park and Riverside Walk and along Nine Elms Lane	H	-	-
Improvements to Vauxhall Gyrotory and Albert Embankment	H	£19m	£11.6m
4 metre wide bus lanes to accommodate cyclists - where achievable	H	-	-
Consolidation of cycle signage	M	-	-
New developments to fully integrate and where necessary facilitate enhanced cycling routes and infrastructure, including Cycle Superhighway proposals,	H	-	-
All developments to provide cycle parking in line with London Plan standards	H	-	-
Safe, secure and sheltered station cycle parking to be developed for Vauxhall and other stations in the OA	H	-	-
Extension of the Barclay's Cycle Hire scheme into the OA. Cycle hire facilities to be introduced at strategic locations and in line with new developments within the OA	H	£1.6m	£400,000



Figure 6.14 -High quality cycle lanes.

(Source: TfL)

River

Table 6.10: River transport

Recommendation	Priority (Low/ Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
New piers to be provided within the OA at appropriate locations i.e. at Battersea Power Station	M	£2m	£0
Extension of river services to serve the OA	M	-	-
Promotion and use of river to focus freight and construction purposes including new developments and major infrastructure projects such as the NLE and Thames Tideway Tunnel.	H	-	-



Figure 6.15 – River Services

(Source: TfL)

Travel Planning Demand Management

Table 6.11: Travel planning

Recommendation	Priority (Low/ Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Demand Management measures	M	£2m	£0
Demand Management Staffing OA wide	M	£2.5m	£2.5m

Highways

The level of development proposed under RS5 has the potential to generate a large number of vehicular trips and considerably increase traffic levels within the VNEB area. There is very limited scope to significantly increase traffic capacity on the highway network, and therefore measures such as restraint based car parking provision and

travel planning are key to ensuring vehicle journeys are reduced and peak periods are avoided as far as possible. This also highlights the importance of significantly enhancing the public transport network, both through short term measures such as bus service enhancements and longer term improvements such as the Northern Line Extension and station upgrades.

Table 6.12: Highways recommendations

Recommendation	Priority (Low/ Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Nine Elms Lane, Vauxhall Gyratory and Albert Embankment to continue to provide strategic vehicle access routes through the OA	H	-	-
Rationalise/reduce the number of new accesses/signalised junctions from the TLRN to key development sites is a key priority	H	-	-
Nine Elms Lane to be considered as a single entity i.e. Developers to work together with TfL to develop highways models required to support future planning applications	H	-	-
Albert Embankment Highways and public realm improvements	M	£7m	£5.6m
Nine Elms Lane Highways and public realm improvements	M	£12m	£6m
Vauxhall Gyratory Highways and public realm improvements	H	£12m	£9.6m
Highways improvements outside the OA (to mitigate OA impacts)	L	£5m	£0

Recommendation	Priority (Low/ Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Stewarts Road Improvements including Thesally Links	M	£3.6m	£0
Deliver a step change in the quality of the TLRN pedestrian environment and public realm by developing a coherent overall strategy for the OA, in line with the TfL Streetscape Guidance	H	-	-
Low levels of car parking should be provided to limit impacts on highway capacity, encourage modal shift and support sustainable travel patterns. Car free development will be sought in areas with high PTAL levels. TfL expects an average ratio of 0.25 across the OA.	H	-	-

Table 6.13: Taxis and Coaches

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
New developments, especially those with characteristics which are high taxi demand/generators such as offices, embassies and hotel and leisure uses should make adequate provision for taxis	H	-	-
Opportunities for strategic taxi hubs to be investigated i.e. at Vauxhall Station and any future interchange at Battersea Power Station.	M	-	-
Existing levels of coach parking and layover to be retained within the VNEB area. Where sites are redeveloped all efforts should be made to provide alternative temporary and permanent coach parking areas.	M	-	-
Possibilities for a Coach (long distance services) stop in the Vauxhall area to be investigated.	M	-	-



Figure 6.16 – Taxis

(Source: GLA)

Freight

The relocation of freight uses and potential for retention of freight activity within the OA is being considered by LDA and LB of Wandsworth in the public realm and access strategy for Stewarts Road industrial area

currently being undertaken. In addition the planning framework recommends a further business relocation strategy specifically looking at transport, logistics and distribution uses in the OA (see land use strategy in chapter 5).

Table 6.14: Freight

Recommendation	Priority (Low/Medium/High) Low (L) Medium (M) High (H)	VNEB DIFS Estimated Gross Cost after deducting mainstream funding (2010)	VNEB DIFS Amount sought via Tariff (2010)
Investigate measures to support 24 hour access to wharves	M	-	-
To maximise the use of the river and rail to deliver construction materials for new developments in the OA	M	-	-
Future delivery and servicing needs of existing and new uses, must be addressed to cover out-of-hours deliveries, home deliveries etc.	M	-	-
Landowners and stakeholders to work together to provide Construction Consolidation Centres where possible, in order to improve efficiency and minimise the impact of construction vehicle journeys	M	-	-



Figure 6.17 – Freight facility

(Source: TfL)

6.6 Progress to implementation

Since the draft OAPF was published a number of key milestones have been achieved:

1. Policy support for the NLE in both the Mayor's Transport Strategy and London Plan.
2. In principle support from central government for the NLE, subject to a commitment from a developer by April 2013 (Chancellors statement, 2011)
3. Following public consultation and further assessment Route 2 (see figure 6.5) has been agreed as the preferred route for the Northern line Extension
4. It is confirmed that TfL with the support of the local authorities and landowners will lead on the preparation and submission of a Transport Works Act Order. Depending on a funding strategy being identified submission is expected in 2013.
5. A report on the wider economic benefits of the NLE was completed in January 2012. This concluded that when considered alongside conventional transport benefits, the wider economic benefits raised the benefit cost ratio of the NLE 'very significantly.' Furthermore, the study identifies an additional £1.6 to £7.9 billion of growth to the UK economy which could be generated as a result of the NLE.
6. Station improvements to both Vauxhall Underground and Vauxhall National rail station are confirmed. LU congestion relief and step free access is due to commence in 2013 and complete in

2015. Network Rail station enhancement and step free access works are now being delivered and due to be complete by end 2012.

7. The new St Georges Wharf Pier opened in 2011 and is now operational allowing riverboat services to serve the OA.
8. The first phase of Barclays Cycle Hire scheme opened in 2010, Albert Embankment and Vauxhall are served with a number of docking stations. The cycle hire network will be expanded further into the OA in line with new development and the wider phase 3 expansion.
9. Cycle Super Highway Route 5 (Lewisham to Victoria) Is currently in development and is due to open in 2013.
10. Further work to take forward the recommendations of the Public Realm and Highways Modelling Study has been undertaken and work is continuing with the boroughs.

6.7 Conclusions

This chapter has summarised the findings of the VNEB transport study and has recommended that in-order to enable and support a revised scenario 5 development a package of strategic transport measures, supported by a series of more local transport improvements will be required to support growth and development of the OA.

These include:

- A optimum package of bus service enhancements including the introduction or extension of bus routes
- An extension to the Northern -Line, from Kennington to Battersea Power Station, with an intermediate stop in the Nine Elms area
- Improvements to the National Rail, Underground stations and interchange facilities at Vauxhall and Battersea Park stations
- A step change in the walking and cycle environment both within and to/from the OA and ensuring improved legibility and connections
- An approach to development which reduces the need to travel by car/reduces the number of private vehicle trips within the OA
- Improving conditions for taxis, coaches, freight and river services within and to/from the OA
- Private investment to enable these improvements to be secured and delivered in line with the future development of the area

Oxford Circus
Vauxhall
88
Camden Town

IF LOVE IS A GAME,
WHO'LL MAKE
THE FIRST PASS?

GEORGE CLOONEY REBECCALIVELY

LEATHERHEADS

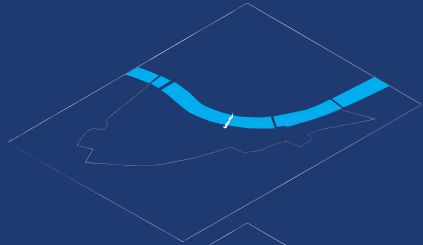
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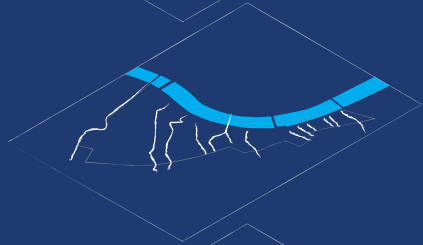
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Chapter 7

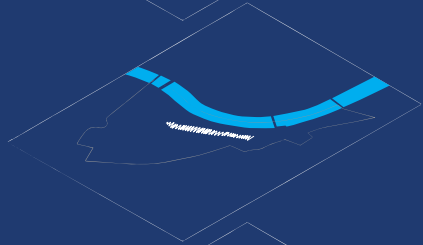
Public realm strategy



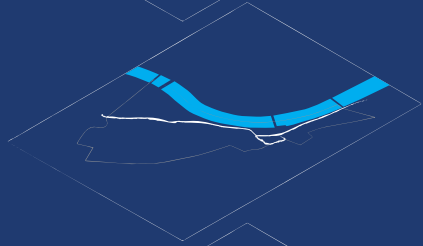
new pedestrian bridge across the river



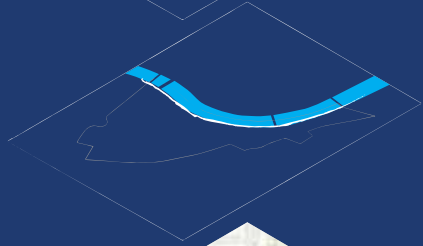
strategic green links to the river



new linear park



improved road environment



improved river walk



indicative masterplan

Key principles

- To improve the quality, character and continuity of the Thames Path, accepting that some areas will remain as safeguarded wharves
- To improve access for communities south of the OA to facilities and opportunities within the OA and to the river
- To create a new strategic green link from Lambeth Palace to Battersea Park including a linear park from Vauxhall through Nine Elms to Battersea Power Station
- To ensure that each development in the OA delivers a good quality public realm on its own site and also contributes to the overall public realm strategy for the wider area
- To improve connectivity from the OA to the north bank of the River Thames with a new pedestrian and cycle bridge
- To deliver public realm improvements at Vauxhall that support the emergence of a new urban heart, in terms of improved connectivity, increased footfall, CAZ uses and transport interchange movements.
- To ensure that the public realm strategy links important community facilities and places of interest including the riverfront, parks, schools, play areas, shops, post offices, public transport and other social infrastructure such as health centres and childcare facilities within and outside the OA
- To accommodate new utilities infrastructure including CCHP power and heating supply and SUDS which can be delivered incrementally
- To activate the railway arches throughout the OA including opening up key arches to enable new pedestrian connections in line with the overall public realm strategy
- To ensure that tall buildings are fully integrated with the public realm strategy and enable delivery of a high quality environment that is safe and convenient for pedestrians and cyclists, especially at Vauxhall.

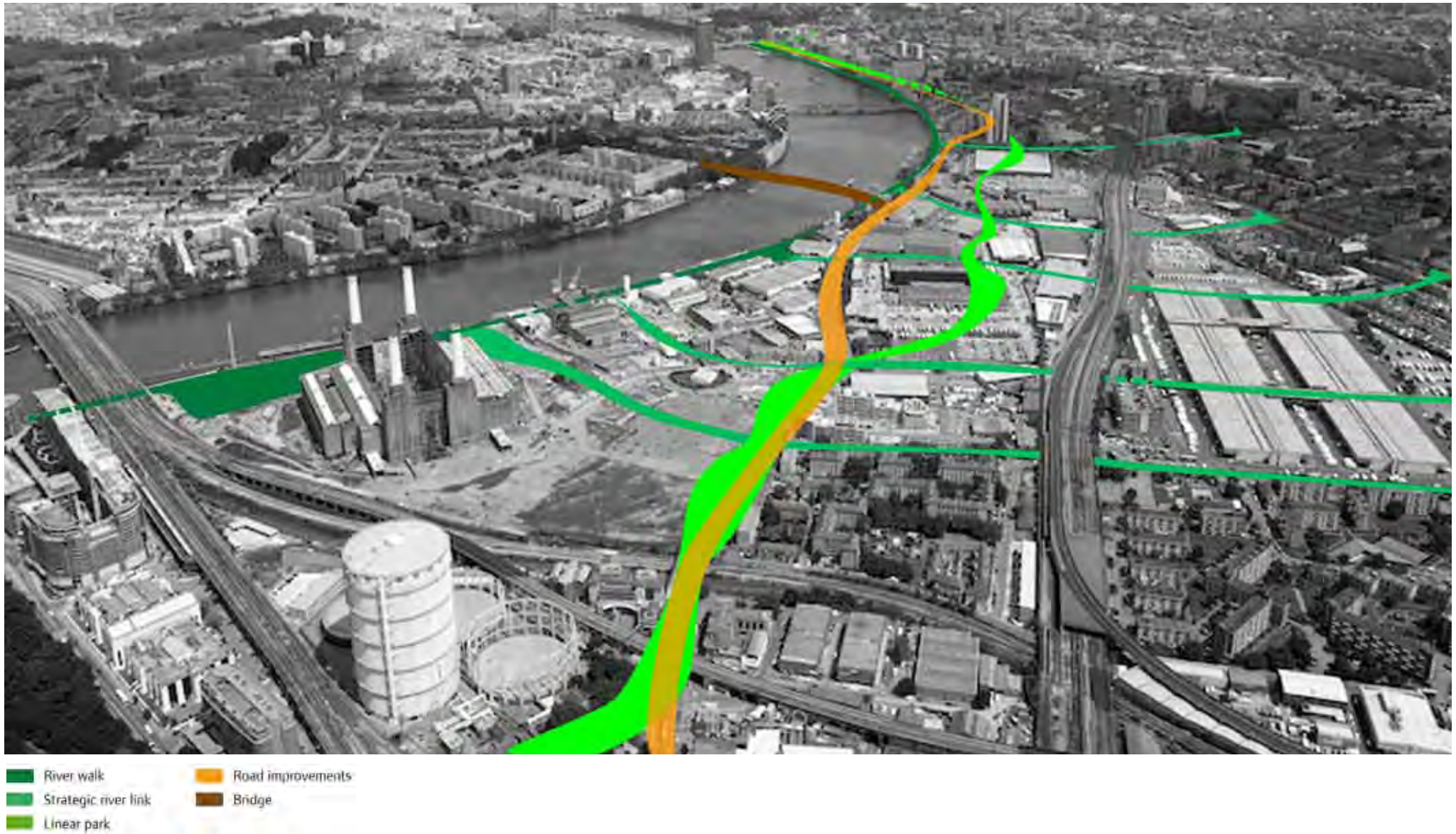


Figure 7.1 Strategic open space network for the OA – concept plan

7.1 Existing open space provision

On the whole, the OA is poorly served by open space, particularly in Nine Elms, Stewarts Road and around Battersea Power Station. There are, however, a number of existing parks and green spaces around the edges of the OA. Spring Gardens, Pedlars Park and Whitgift Park are all located to the north of Vauxhall around Albert Embankment and Spring Gardens, with Battersea Park, Heathbrook Park, Vauxhall Park and Larkhall Park are located along the southern and western boundaries of the OA.

Battersea Park is a well used and maintained grade II* listed park of significant scale which is designated Metropolitan Open Land and serves a large residential catchment area. Connections from the OA to Battersea Park are poor, with narrow pavements, heavily trafficked roads and unwelcoming railway arches defining the physical links from the OA to Battersea Park to the west.

The other smaller district and local level parks within the OA are on its periphery and are in variable conditions, all requiring some degree of improvement.



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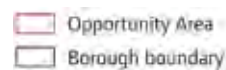
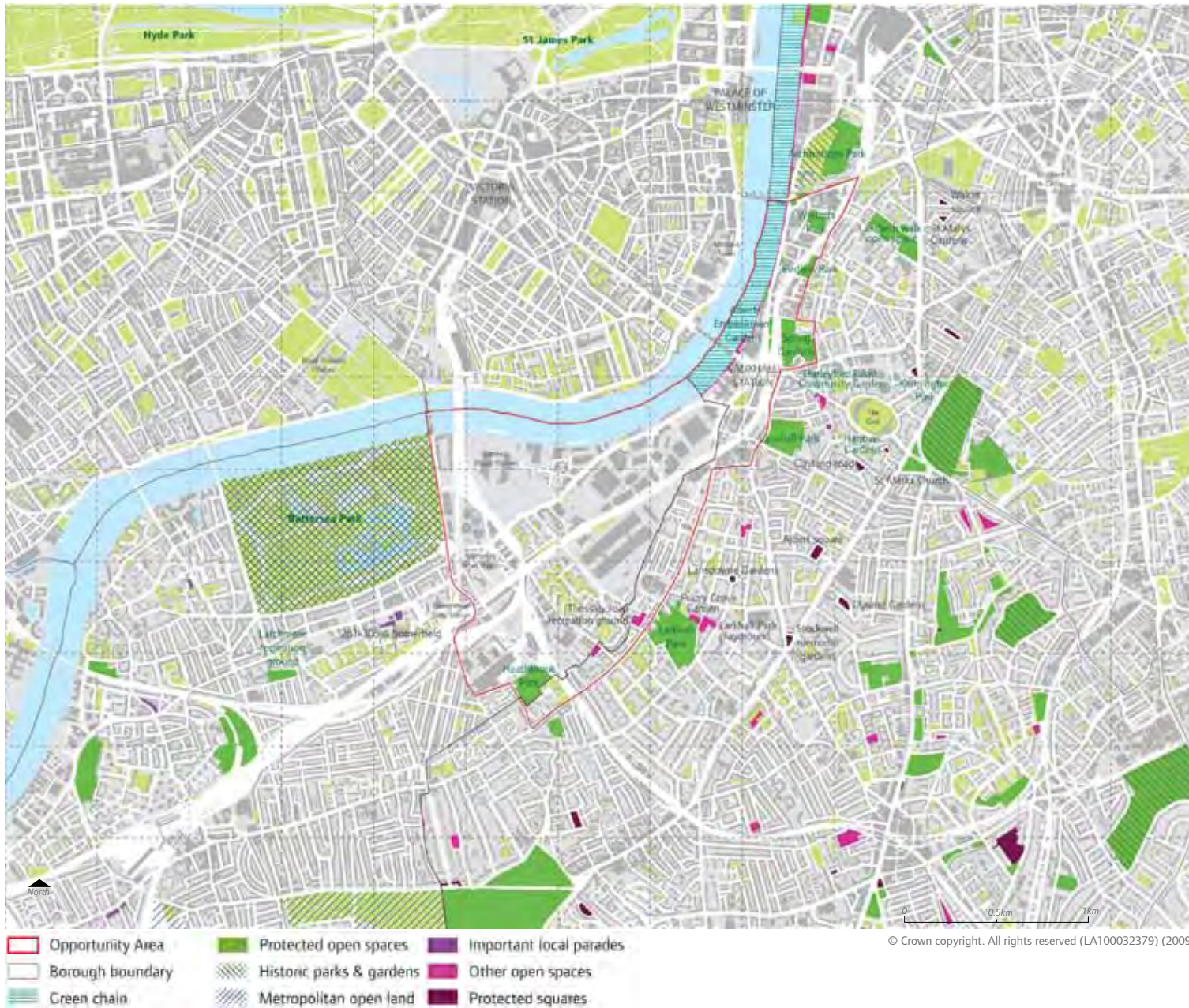


Figure 7.2 Open space in and around the OA



The key issue in the OA itself is the lack of green space, particularly in Nine Elms, Stewarts Road and around Battersea Power Station.

The northern edge of the OA is bounded by the River Thames, the largest strategic open space in London. For the most part, the OA does not capitalise on its generous river frontage, despite the riverside walk being fairly continuous from Lambeth Palace to Battersea Park. There are, however, short stretches of the riverside where connection cannot be made along the river frontage and no alternative routes are provided.

The quality of the riverside walk is a major issue; it is a sterile and soulless environment, which is not overlooked by active frontages and despite the excellent views to the north bank and central London is largely unused.

Public access to the river is currently constrained by a lack of good quality pedestrian/ cycle linkages across the OA from the residential hinterland to the south east.

Figure 7.3 Open space designations

7.2 Public realm strategy

The public realm strategy comprises five principle interventions, which are:

1. An improved river walk
2. Strategic links to the river
3. A new linear park
4. Road environment improvements
5. A new pedestrian/ cycle bridge



Figure 7.4 An improved river walk



Figure 7.5 Strategic links to the river



Figure 7.6 A new linear park



Figure 7.7 Road environment improvements



Figure 7.8 A new pedestrian/cycle bridge

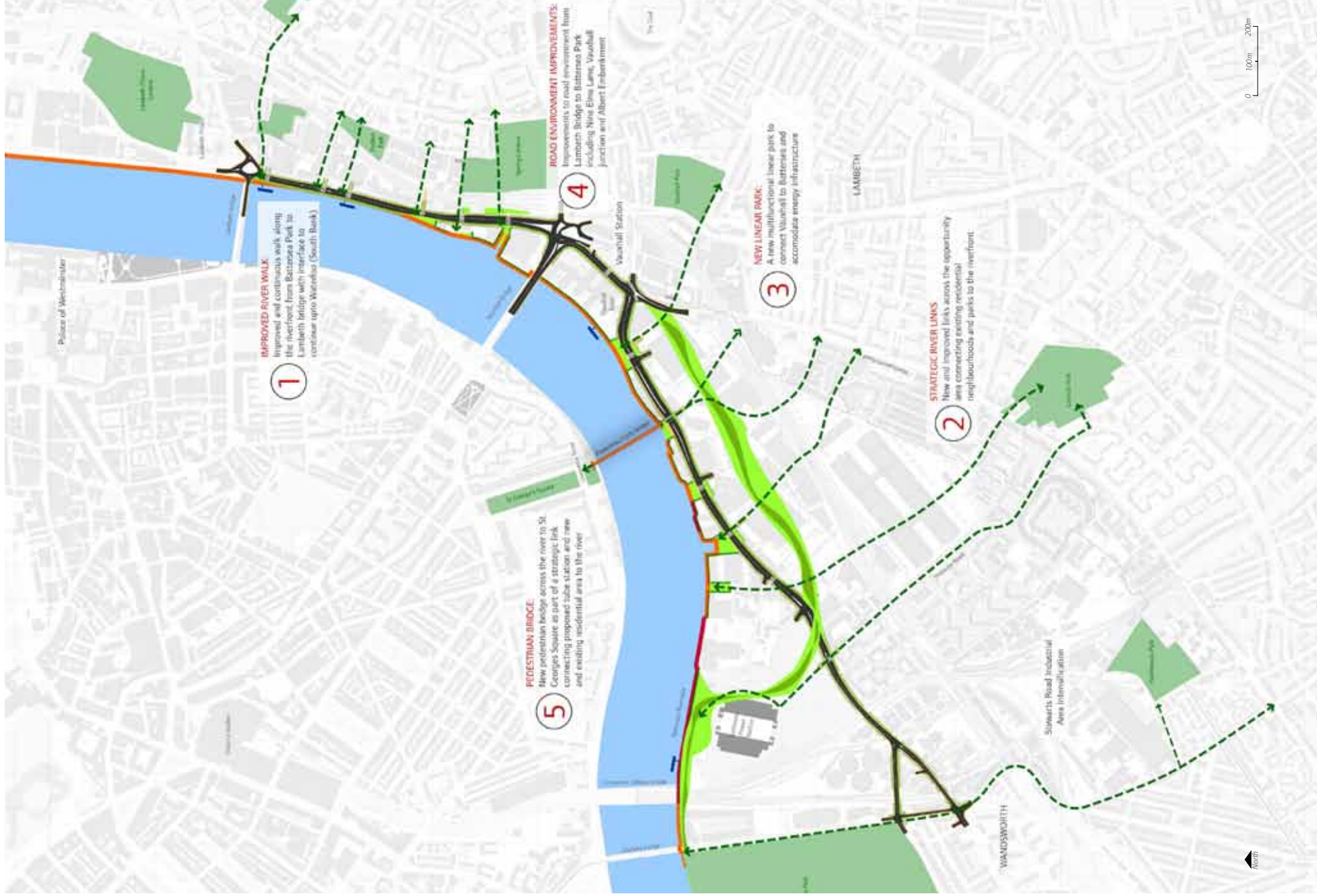


Figure 7.9 Key elements of the public realm strategy

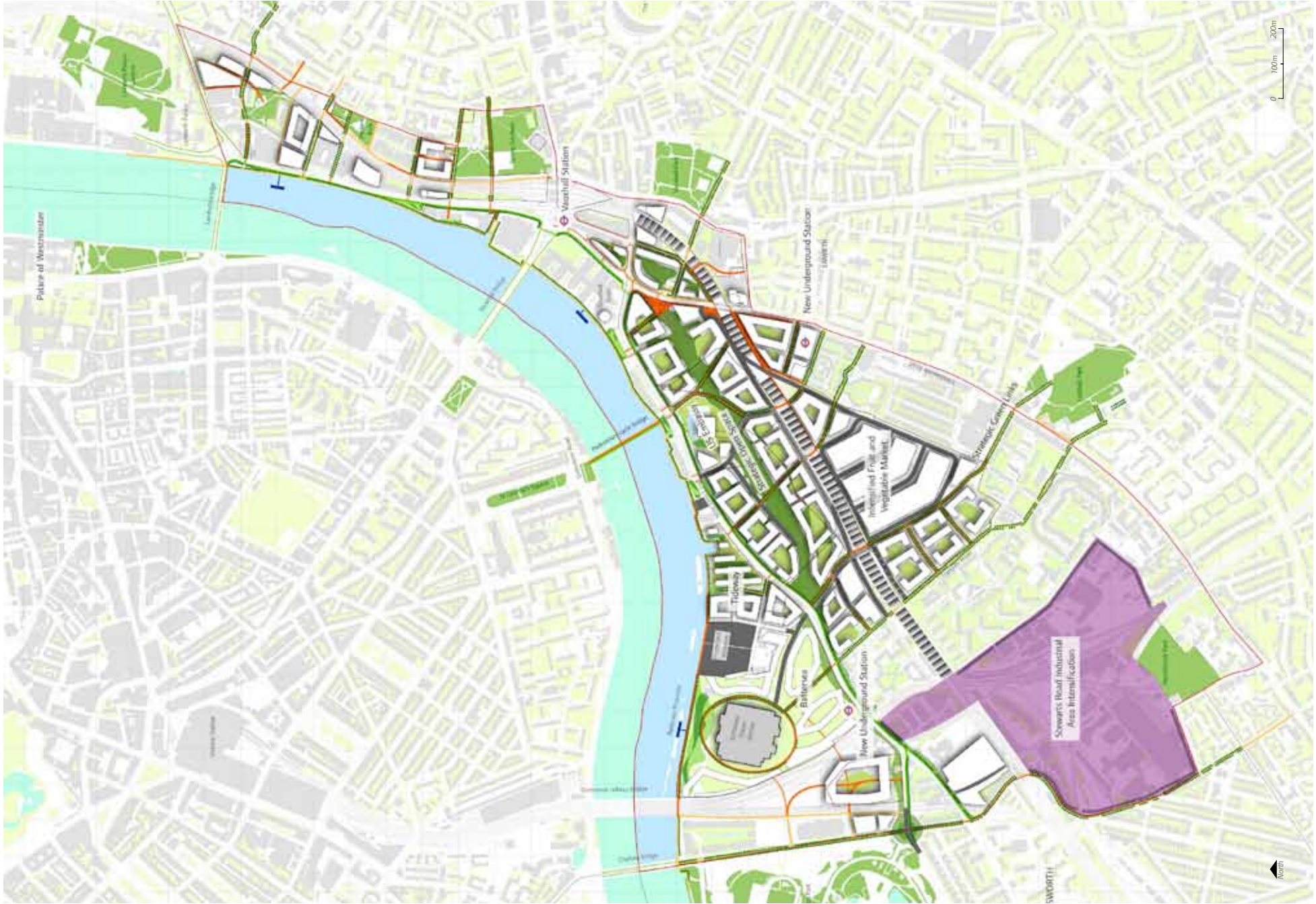


Figure 7.10 Illustrative master plan

1 An improved river walk

A key principle of the public realm strategy is to improve the quality, character and continuity of the Thames Path.

The riverside walkway is largely in place from Lambeth Bridge to Chelsea Bridge, although it is broken in front of the safeguarded wharves and Heathwall pumping station, and there is currently no public access through the Battersea Power Station site or under the Grosvenor Railway Bridge and an alternative route is not currently in place. However it is recognised that seeing active freight and other vessels on the Thames adds to the interest and activity of the riverside experience.

The OAPF seeks to deliver a high quality continuous riverside path from Lambeth Palace Gardens to Battersea Park. In order to maintain the ongoing operation of the safeguarded wharves and the pumping station, this would require a caged walkway above the river in front of Cringle Dock, RMC Battersea (Metro Greenham), and RMC Vauxhall (Middle Wharf) and Heathwall pumping station. Given that this is a long term aim, an alternative good quality inland diversion will be required in the short to medium term. Ultimately both riverside and inland options should be delivered. Clear signage will be an important element of the overall strategy.

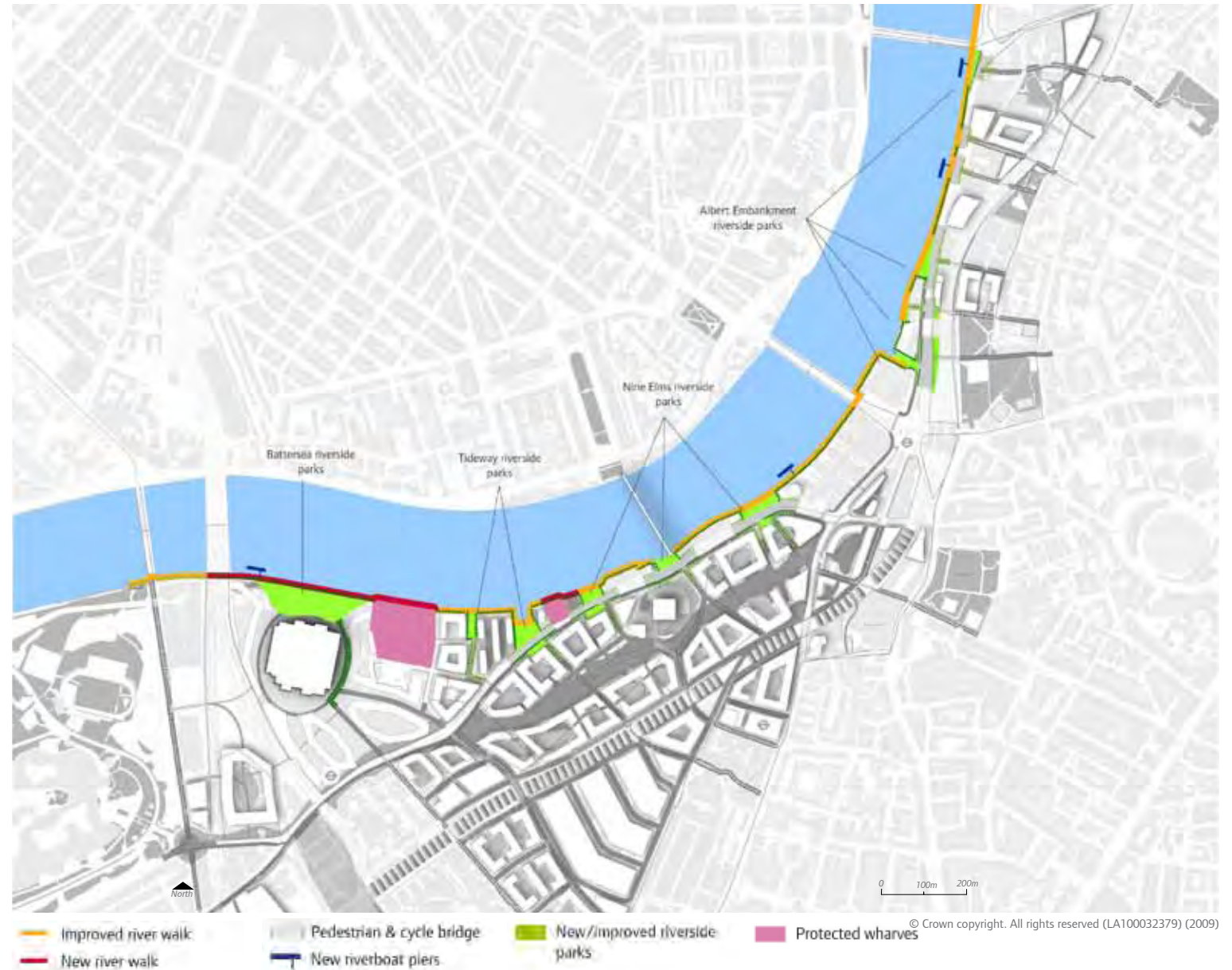


Figure 7.11 Illustration of riverside walk



South Bank London



Potters field London



Richmond riverfront



Gabriel's Wharf

The quality and character of the riverside walkway also requires improvement. Existing pockets of open space adjacent to the riverside would benefit from improved hard and soft landscaping, lighting and new street furniture. New development on the riverside should activate its edges and deliver substantial public realm improvements that complement existing riverside activities, protect the ongoing operation of the wharves

and enhance biodiversity. New passenger piers planned at St George Wharf and Battersea Power Station will increase activity associated with waterborne passenger and tourist traffic.

The riverside walk should link back to Nine Elms Lane and the wider network of routes through the area.



Figure 7.12 The riverside walk

2 Strategic links to the river

The public realm strategy for the OA seeks to address a longstanding deficiency in this part of Lambeth and Wandsworth, namely the segregation of the residential hinterland to the south from the riverside. The lack of physical linkages across the OA is a long standing issue which needs to be addressed to enable social integration and connectivity of existing housing to new jobs, social infrastructure and open space.

Figure 7.13 identifies opportunities to improve existing routes and deliver new routes through the delivery of a series of strategic river links that run north to south across the site. Achieving public access through the railway viaduct and New Covent Garden Market where none exists at present will be key to unlocking north-south permeability. Landowners whose sites border the viaduct will be expected to engage with Network Rail to secure these connections.

At the locations where existing and new connections to the riverside are made, significant public realm improvements will be required, as well as improvements along the length of the riverside.

In addition, new pedestrian / cycle crossings will be required on the existing road network to ensure safe, good quality linkages for pedestrians are delivered.

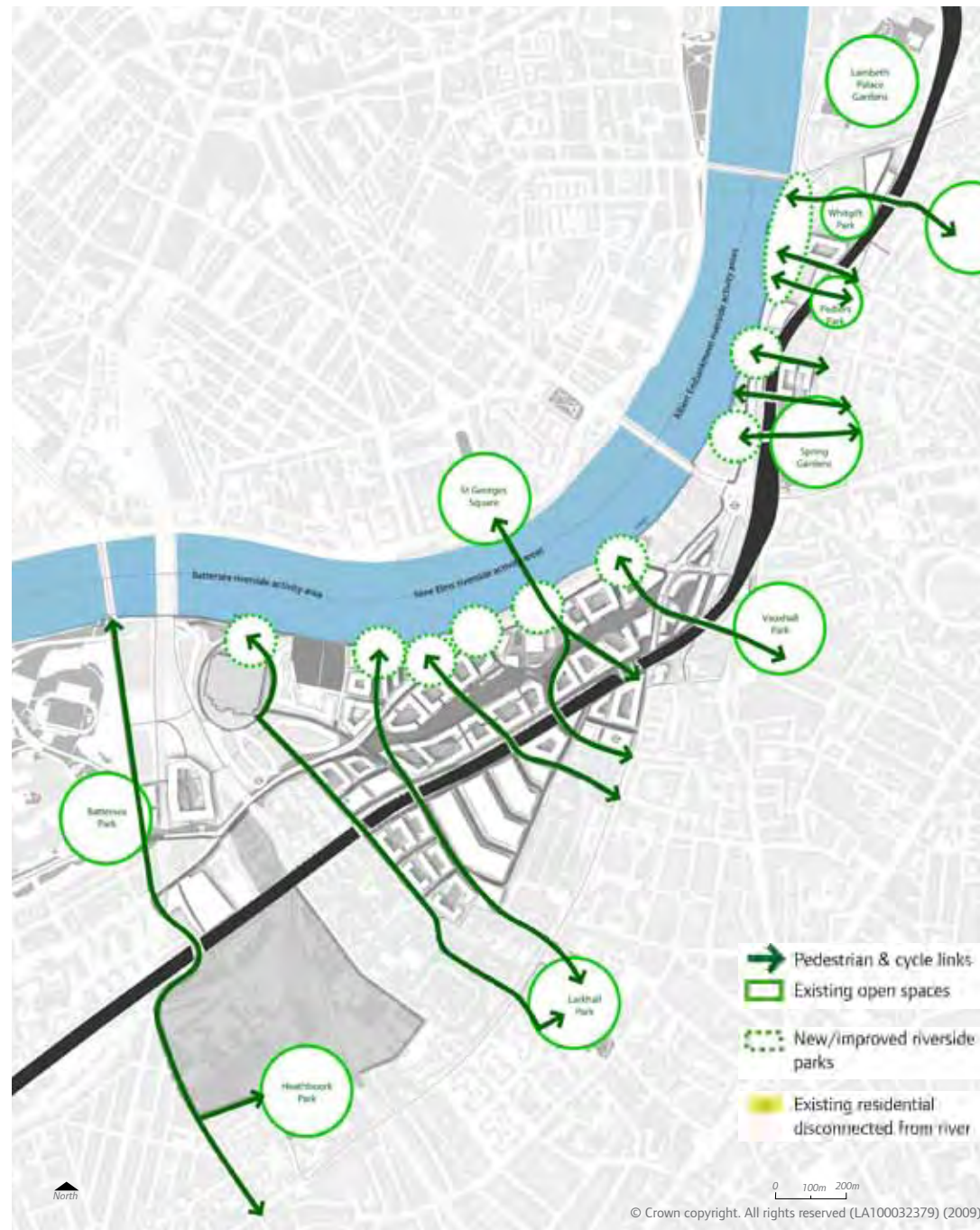


Figure 7.13 Illustration of the fingers



Light at the end of the tunnel, Southwark



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Spitalfields Market



Borough Market



Figure 7.14 The fingers

3 A new linear park



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Figure 7.15 Nine Elms

Given the quantum of development likely to come forward in the OA, a significant step change in the quantity and quality of public realm will be required. At a strategic level this will include a new green link from Lambeth Palace to Battersea Park, which will act as a unifying element in the OA. At some points along its length this will be a pedestrian and cycle route to enable better connections to and through the OA, and in Nine Elms where there is an existing deficiency in open space provision, a new linear park will be created.

The linear park will act as a focal point and recreational resource for the new community in Nine Elms and the existing communities nearby. It will provide a variety of recreational functions and should include sports pitches, formal and informal children's play areas, water features, community growing areas and seating areas. The park should be experienced as a contiguous space with common themes and landscape treatment unifying different character areas. Spaces and uses within it should be organised

to make optimum use of light and shade at different times of the day. The park's edges should be activated and its character defined and enhanced by complimentary uses such as cafes, community and leisure facilities and residential front doors and gardens. Landscaping materials should be high quality and low maintenance.

Vehicular movements across the park should be minimised in line with figure 7.15. Where they cannot be avoided, they should be designed so that pedestrians and the recreational function of the park take priority. Cycling should be allowed through the park to provide an alternative off-road route to Nine Elms Lane.

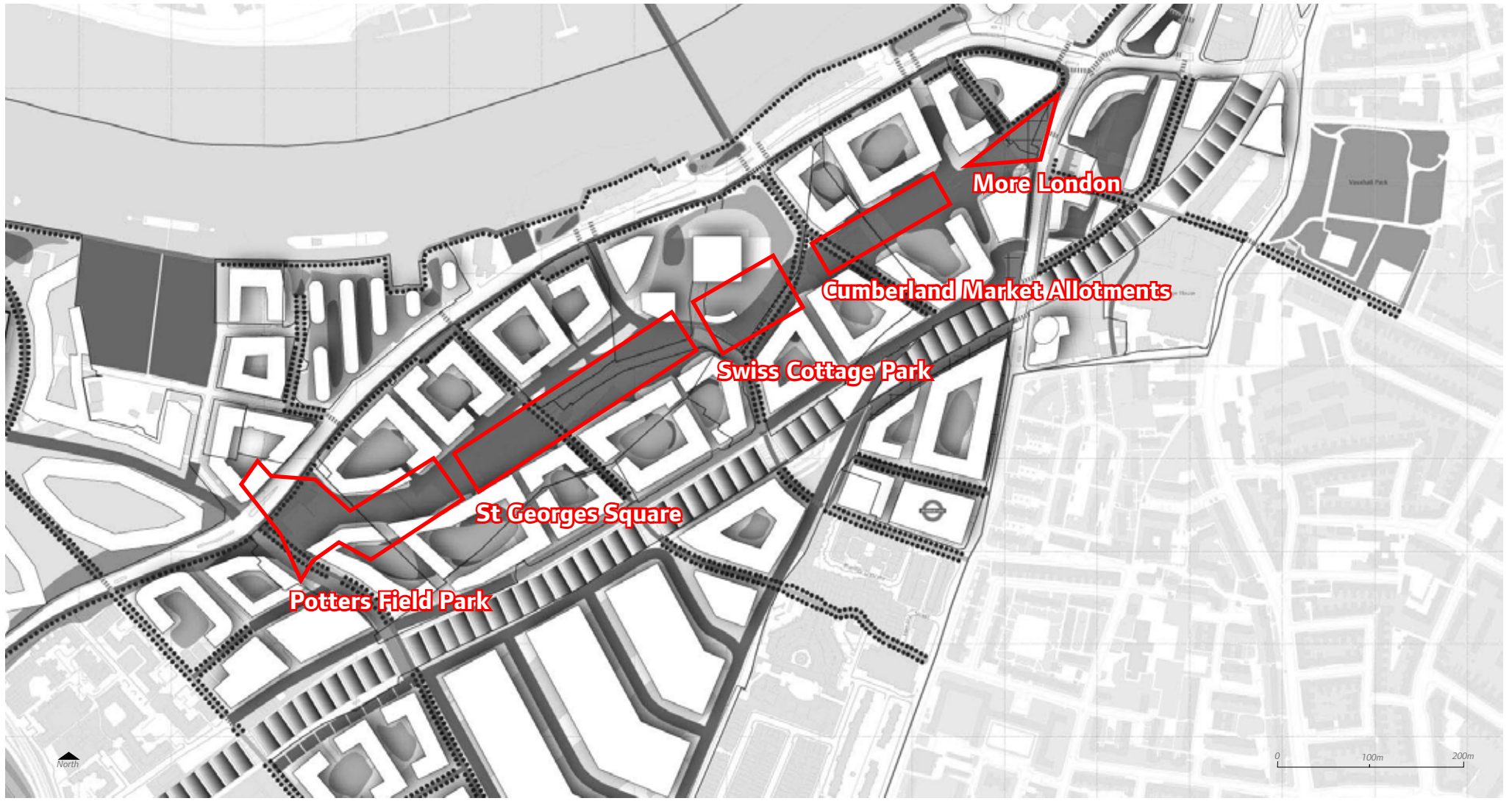
The park will also provide an opportunity to deliver other planning functions and utilities infrastructure in an integrated manner. Water features will perform a flood attenuation function and the main route through the park will enable connection of the planned district heat network from Battersea Power Station to New Covent Garden Market and other major developments.

St George's Square in Pimlico and Hammarby in Stockholm have been identified as precedent examples for the park space.



Figure 7.16 The park

Existing parks for comparison to proposed linear park



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Figure 7.17 Nine Elms



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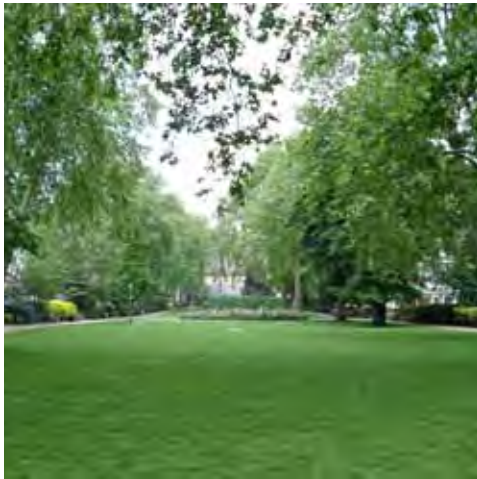
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St Georges Square



Cumberland Market Allotments



Swiss Cottage Park



More London

Note: For scale comparison , the aerials maps and the detail masterplan are of the same scale



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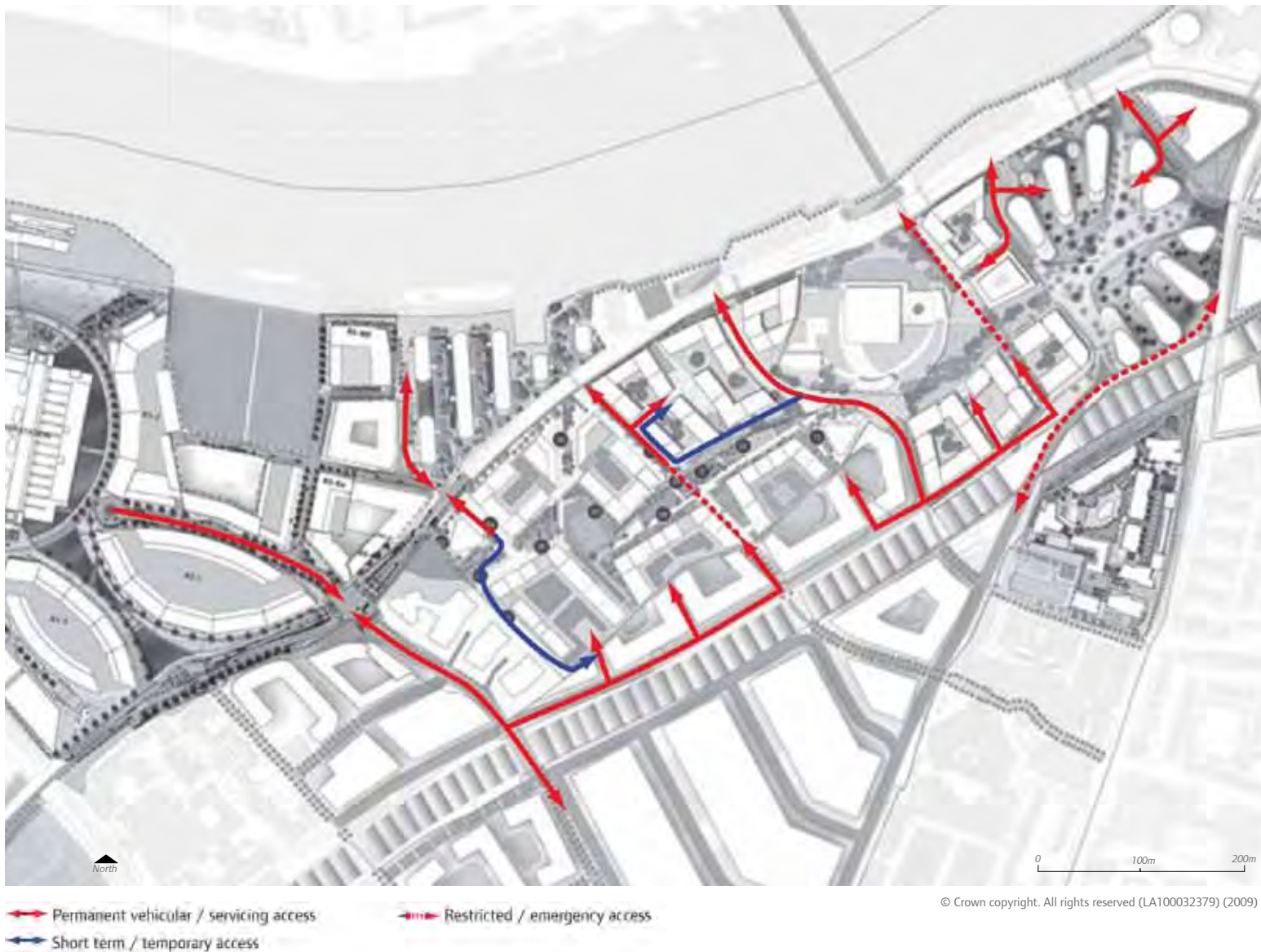


Potters Field Park



Illustrative view along the linear park

source: Ballymore & Camlins



Having created the linear park the aspiration is to minimise the number of vehicular routes that cut across the space. There are two routes that are intended to be short term in nature. To the west there is a current access shown across the Royal Mail site that would service the retained delivery office on the site. The long term aim is to ensure that redevelopment of the Covent Garden Main Market site provides access into the Royal Mail site from a shared servicing arrangement with New Covent Garden Market. This could potentially be delivered along the railway viaduct and would obviate the need for commercial traffic cutting across the western end of the park.

In the central section of the park the Ballymore Embassy Gardens development will have a temporary vehicle access along the northern perimeter of the park. This is intended to be replaced in due course by vehicular access from Nine Elms Lane. This should enable a situation in which there remains a single vehicle access over the park adjacent to the Embassy at the relocated Ponton Road. At the point the road crosses the park the intention is that the surface treatments clearly indicate that the road is part of the park landscape and that pedestrians have priority.

Figure 7.18 Vehicle circulation routes

Illustrative western park entrance

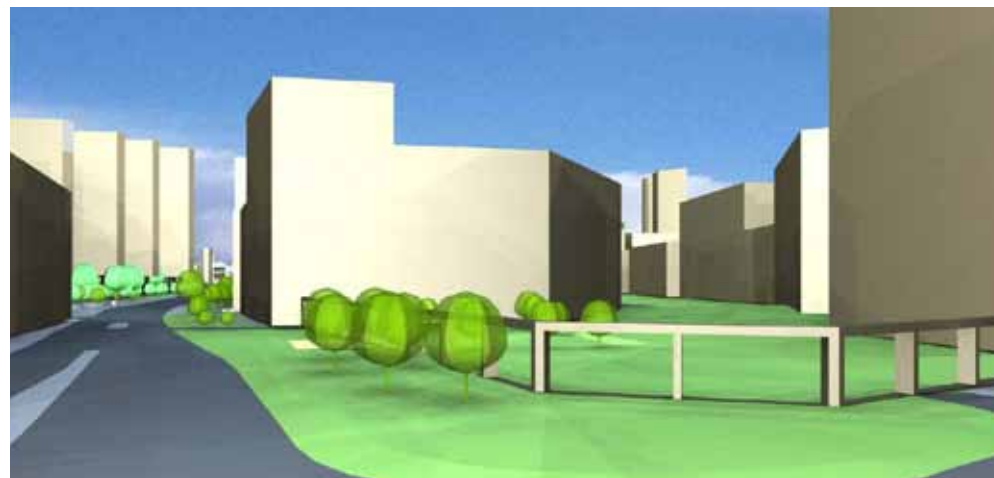


Figure 7.19 View of the linear park from Nine Elms Lane looking east

Western park entrance

The western entrance to the park should celebrate and maximise the park's character defining role. It should offer a generous frontage to Nine Elms Lane and read and be understood as a main park entrance. It should be framed by buildings that come forward on the Booker cash and carry site, at Nine Elms Lane/ Kirtling Street and on the Power Station site, which should work together to form an appropriate setting and enclosure for the space. Potters Field Park is a precedent example of a successful park entrance adjacent to a main road.

Appropriate measures must be put in place to facilitate the continuation of the strategic route from the west end of the linear park across Nine Elms Lane/Battersea Park Road and through to the new riverside park on the Power Station site. Improved crossings at the junction are part of the solution. The approved masterplan for the Power Station site has the benefit of providing clear routes and connections from the linear park, through to the Power Station itself and then onto the riverside park. The sweeping forms of the crescent shaped buildings work well with the entrance to the linear park, providing clear lines of site into and out of the park. This would encourage permeability and movement along the park space through the Power Station site and ultimately to Battersea Park, delivering one of the key aspirations of the OAPF. Should the masterplan be amended, whilst the detailed design of any new scheme may vary from the approved plan, these key principles of movement and connection should continue to be delivered between the western entrance of the park and the riverside.



Western park entrance



Western park entrance

Illustrative eastern park entrance



Figure 7.20 Nine Elms

Eastern park entrance

The eastern end of the park will be a gateway entrance for pedestrians arriving from Vauxhall. It will be similar in scale to the arrival space to More London from Tooley Street and will be transitional in character from the busy Vauxhall gyratory to the quieter, greener park space.

A key element of the journey between the eastern end of the park and Vauxhall is the delivery of a choice of alternative routes, one via the pedestrian crossings at the junction where Wandsworth Road meets Nine Elms Lane and Parry Street, and a second across Wandsworth Road and through a quieter, more landscaped space on the CLS site. Both routes are of equal importance in terms of offering a choice of routes and making the connection between the linear park and Vauxhall and continuing the idea of the linear park across the gyratory and north towards Archbishops Park. This is illustrated in figure 7.22. Whilst the entrance to the linear park would not be directly visible from Vauxhall station, there would be a clear route west that would be marked by the taller buildings of the Vauxhall cluster.

In views from the linear park towards the station, whilst the station entrance may not be directly visible, a clear succession of park and street spaces would lead back to the station as shown in fig 7.23. The CLS site would provide an alternative that contains ground floor retail and cafe uses and shelter from the gyratory environment. These two routes are seen as being complimentary rather than mutually exclusive and together would provide a strong pedestrian link across a very busy road network.



More London



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Figure 7.21 Eastern park entrance

The gyratory crossings



Figure 7.22 Nine Elms

Centre of the park

The main section of the new linear park will start in the west at the corner of Nine Elms Lane and the main Covent Garden Market access road, continuing through to the Market Towers site in the east. It will be a predominantly green space, comprising lawned areas, recreational spaces, trees, planting and water features. It should read and be understood as a park. Where it intersects with the new US Embassy, an Embassy Square will be created, which will perform a more civic function for visitors arriving at the Embassy. This should, however, be secondary to the primary recreational function of the park, and should maintain a predominantly green and informal character.

The VNEB public realm working group has considered options for the management and maintenance of the linear park. The preferred option is for ownership of the park to be retained by the developers, with public access in perpetuity, with a special purpose vehicle having responsibility for management and maintenance of the park in the long term.



Proposal for linear park

source: Ballymore & Camlins



Proposal for US Embassy

source: Ballymore & Camlins



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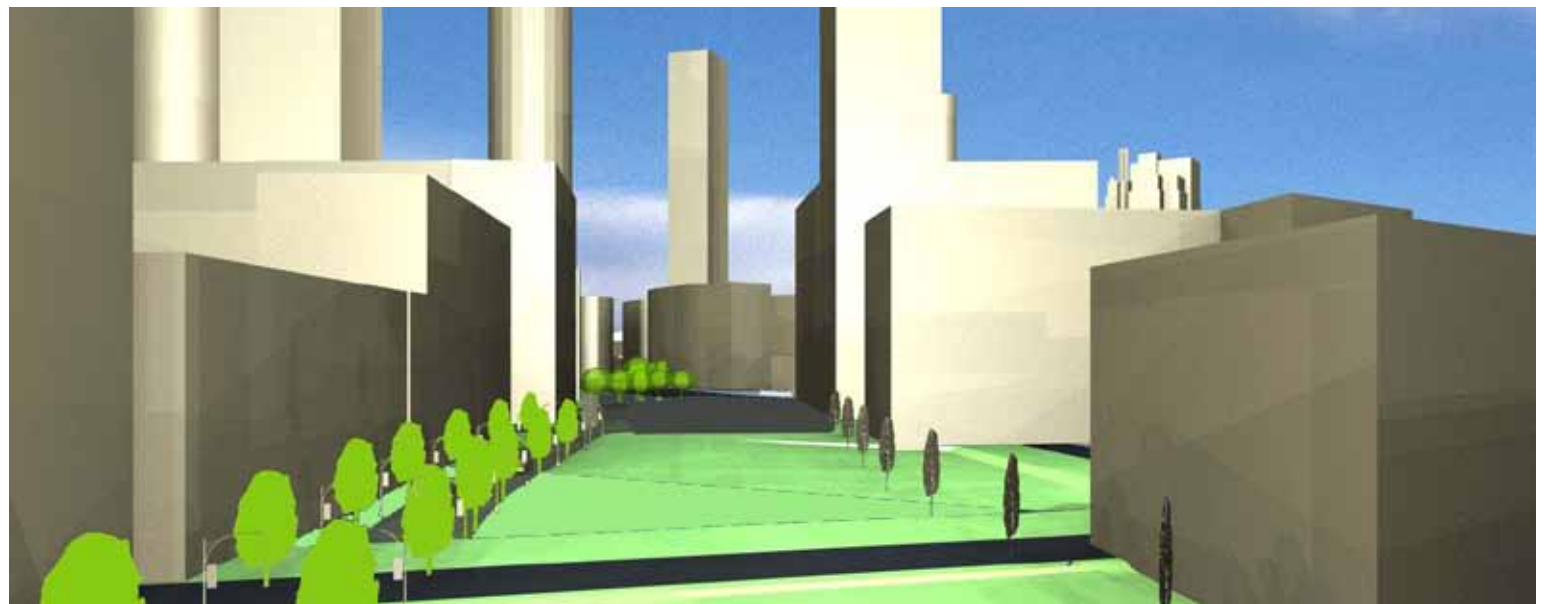


Figure 7.23 View eastwards from linear park towards Vauxhall station

Centre of Linear Park

4 Road environment improvements

The transformation of land-use in the OA will require a substantial change in the character and appearance of Nine Elms Lane, Vauxhall Gyratory and Albert Embankment, which form a strategic traffic function within the city and provide local service access to existing businesses in the area. Whilst the strategic function of this route will be maintained, its character will change.

TfL commissioned a Public Realm and Highways Modelling Study (PRHMS) to identify integrated public realm and highways options to improve conditions for pedestrians and cyclists whilst also smoothing traffic flow within the three main study areas of Nine Elms, Vauxhall and Albert Embankment.



Figure 7.24 Illustration of the road

Nine Elms Lane

Nine Elms Lane will continue to be the main route through the western part of the opportunity area between Battersea and Vauxhall. It will need to provide local access to a new residential neighbourhood to the southeast, facilitate pedestrian links between the linear park and the river, and accommodate, with better connections required to the river and for increased bus, pedestrian and cycle trips throughout the area.

It is proposed that landowners with sites adjoining Nine Elms Lane will develop their sites with active frontages and contribute to public realm improvements that deliver the following objectives:

- Create an urban boulevard that accommodates pedestrians, cyclists and vehicles in a balanced way
- Provide wide and well designed pavements that include tree planting
- Improve the river walk and connections to it
- Provide active ground uses that open out to the street and activate its edges
- Street trees should be larger growing sustainable trees such as London Planes
- Improve bus and cycle routes
- Provide pedestrian and cycle crossings at regular intervals along desire lines to the riverside
- Rationalise and minimise accesses to new developments
- Maintain traffic capacity



Figure 7.25 Nine Elms Lane

Vauxhall Gyratory

The Vauxhall Gyratory is characterised by wide carriageways, long distances between crossings and a high volume and speed of traffic. This provides a hostile, unattractive environment for pedestrians and cyclists, with narrow pavements in places, complex junctions and multiple staggered crossings. Development of the OA will result in increased pedestrian footfall, particularly between Vauxhall transport interchange and the new development at Nine Elms, supporting the functioning of this location as one of the two VNEB growth poles. The gyratory should be improved in line with the following objectives:

- Improve accessibility to/from surrounding areas especially the Nine Elms area with clear, convenient and attractive routes fully integrated into the public realm
- Reduce the impact of road space while maintaining efficient traffic flows (including additional development traffic) and bus operation in 2012
- Improve conditions for cyclists
- Improve modal interchange with a consideration of 2026 additional population
- Create an attractive, accessible and safe pedestrian environment with a new public square as a focal point to encourage modal shift towards more sustainable forms of transport such as walking and cycling
- Explore two-way working of the road network in the longer term

Since the draft OAPF was published, a significant amount of further investigation and option development has focused on the Vauxhall Cross area. The Public Realm and Highways Modelling Study (2010) recommended an incremental approach to improving the area for pedestrians, cyclists, public transport users and vehicles. Figure 7.26 illustrates indicatively what could be

achieved in the longer term through potential narrowing of the carriageway, tightening of key junctions, widening footways, improving pedestrian crossing points, maximising public realm and improving the quality of the environment. All of the identified interventions are subject to further feasibility, design development and approvals to ensure that benefits and impacts associated with

change are balanced and enable the smooth flow of pedestrians, cyclists, public transport users and traffic into and through the Vauxhall area.

Work will continue with the local authorities and local community to identify and deliver improvements to the area in line with development progress throughout the OA.

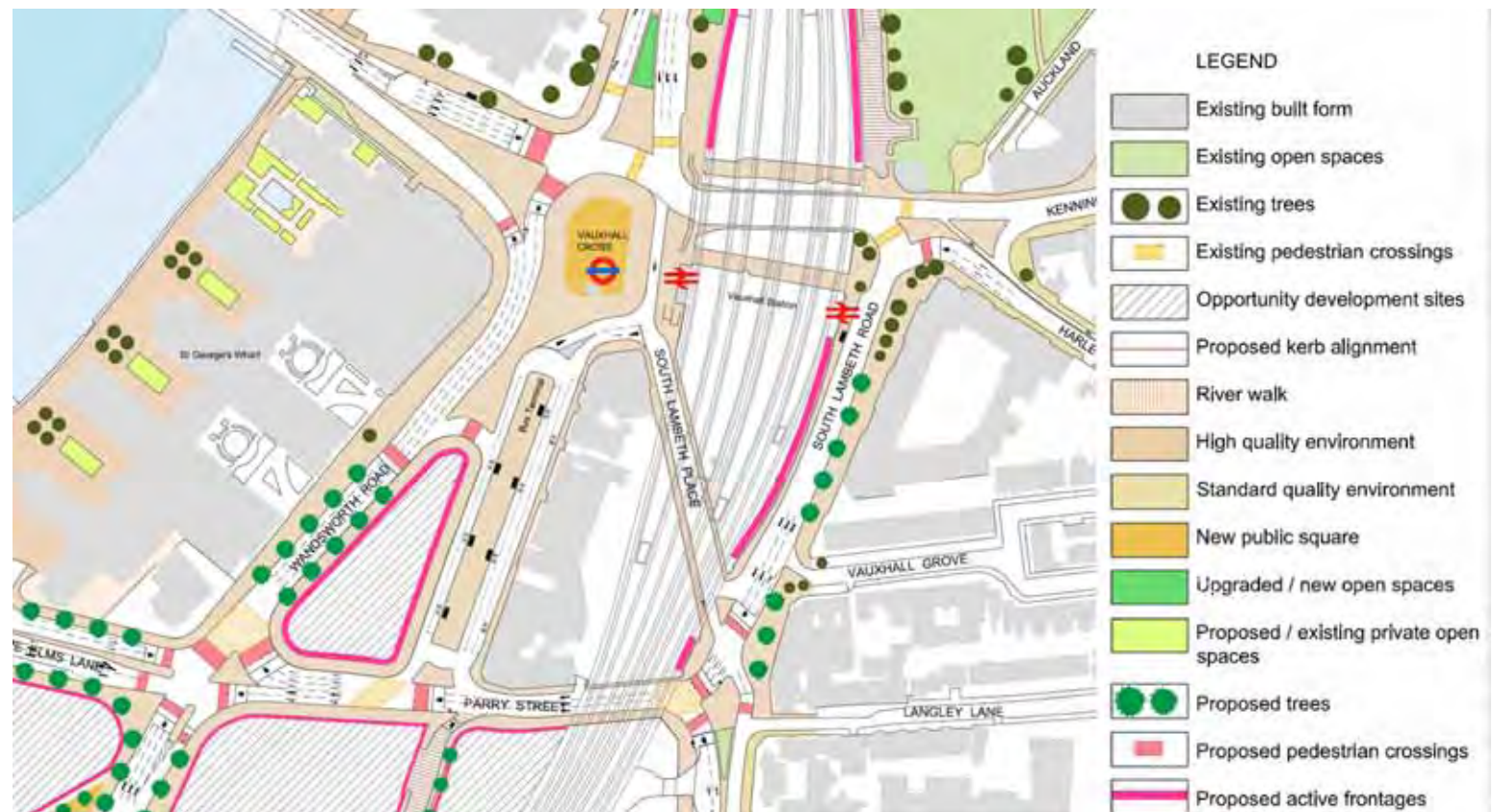


Figure 7.26 Vauxhall Gyratory option

Albert Embankment

Albert Embankment between Vauxhall Bridge and Lambeth Bridge is characterised by large scale commercial buildings and flatted development. The public realm is of a generally good quality, with Yorkstone pavements with granite kerbs. It operates efficiently for buses and cars but cyclists must use bus lanes and there are large gaps between pedestrian crossings. It could benefit from improvements in line with the following objectives:

- Reduce the impact of the Albert Embankment traffic corridor on the perceived and physical accessibility of the river edge
- Improve access to the riverside especially along desire lines from the residential hinterland
- Improve bus and cycle routes
- Improve the river walk

It is envisaged that land abutting these routes, including the existing pavements and carriageways of these routes themselves will be realigned to deliver:

- A wide two-way segregated cycle route from Queenstown Road to Lambeth Road including Vauxhall Cross
- Wide, well surfaced pavements for pedestrian use
- Active frontages with residential and commercial entrances facing the street
- Extensive mature tree planting
- Unified street lighting
- Regular and wide pedestrian/cycle crossings to the riverside well placed to connect to public realm improvements along the riverside
- Rationalised and minimised service entrances to new development sites
- Creation of periodic small places or points of interest along its length to humanise the road.

	VNEB opportunity area		Proposed shared surface
	Existing built form		Proposed Albert Embankment surfacing
	Existing open spaces		New public square
	Existing trees		Upgraded new open space
	Existing pedestrian crossings		Proposed private open spaces
	Opportunity development sites		Proposed trees
	Proposed built form of new developments		Proposed trees in private developments
	River walk		Proposed pedestrian crossings
	River walk to be extended		Viaduct tunnels to be upgraded
	High quality environment		Proposed new viaduct tunnels
	Standard quality environment		Proposed active frontages
			Zone of integration with developments



Figure 7.27 Albert Embankment part A



Figure 7.28 Albert Embankment part B

5 A new pedestrian/cycle bridge

In addition to improving connectivity from the residential hinterland to the river, a further strand of the public realm strategy is improving the connectivity of the OA to the central activities zone north of the river. In order to achieve this, a new pedestrian/ cycle bridge link is proposed connecting Nine Elms to Pimlico.

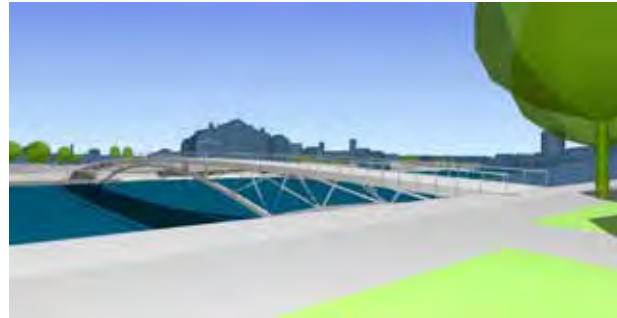


Figure 7.29 bridge type 1 from Pimlico Gardens



Figure 7.30 bridge type 1 from St. George Wharf



- Pedestrian & cycle bridge
- New/improved riverside parks
- Existing open space
- Strategic green link

Figure 7.31 Illustration of the bridge



Figure 7.32 bridge type 1 from above Nine Elms Pier

Source 3D model: Z mapping

Figure 7.31 illustrates the proposed location of the bridge, which will provide an alternative direct pedestrian and cycle route across the river, potentially relieving pressure on bus and tube routes and on Chelsea and Vauxhall bridges. The bridge could have other benefits including being symbolic of the regeneration of the OA and raising the area's profile.

An initial feasibility study for the bridge has been undertaken by Marks Barfield and Buro Happold for TfL. This considered alternative locations, identified opportunities and constraints to construction, considered bridge forms and concepts and provided initial cost estimates.

Figures 7.29 to 7.38 illustrate three potential bridge types that could be appropriate.

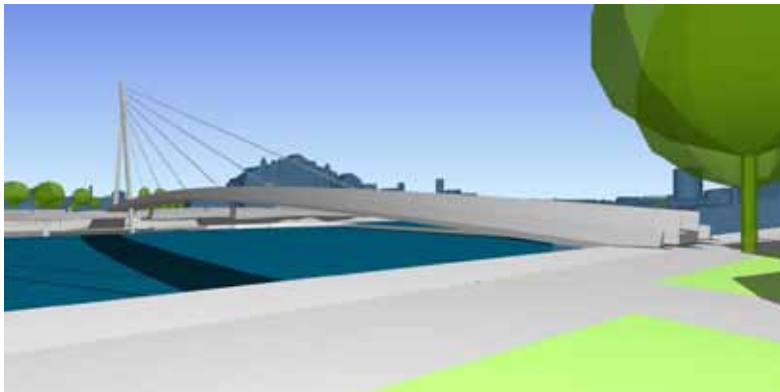


Figure 7.33 bridge type 2 from Pimlico Gardens

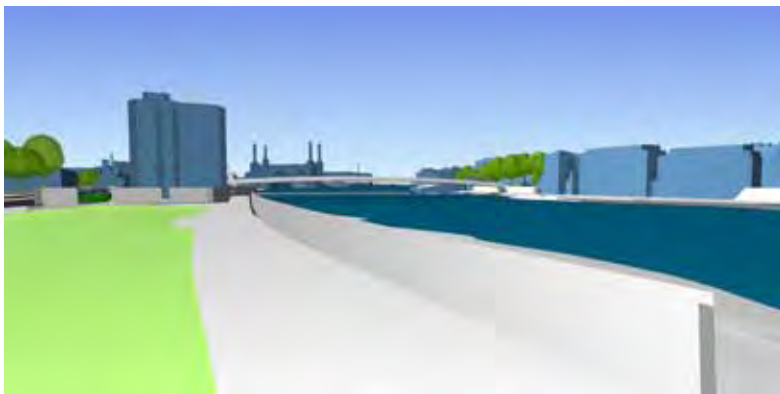


Figure 7.34 bridge type 2 from St. George Wharf



Figure 7.35 bridge type 2 from above Nine Elms Pier

Source 3D model: Z mapping

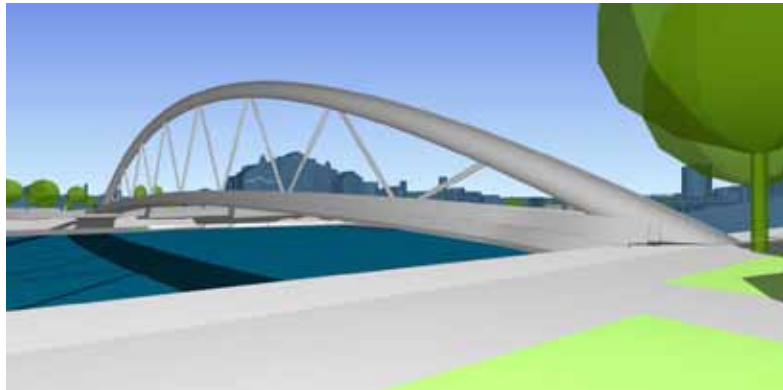


Figure 7.36 bridge type 3 from Pimlico Gardens



Figure 7.37 bridge type 3 from St. George Wharf

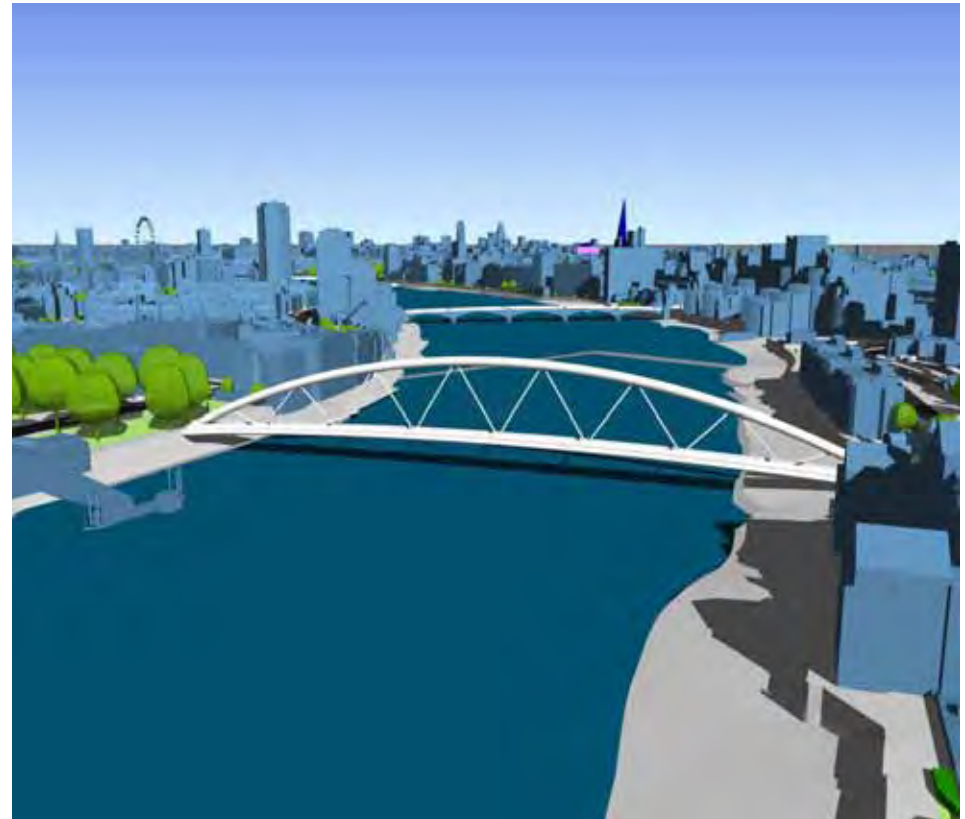
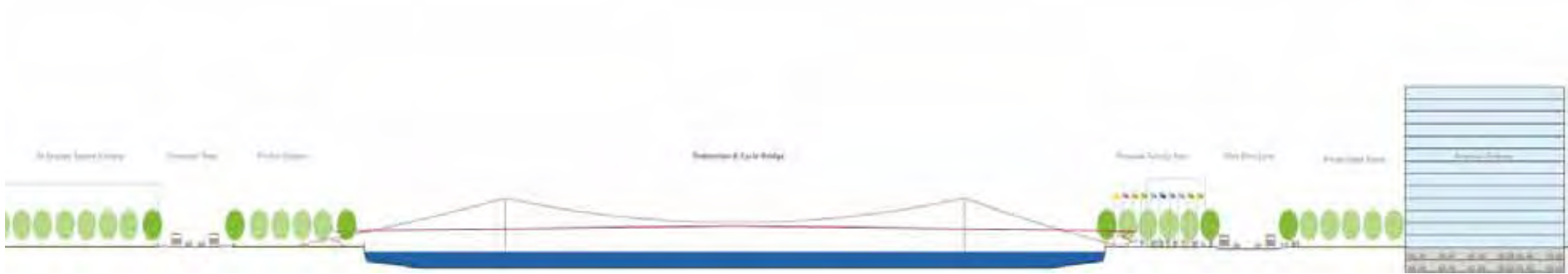


Figure 7.38 bridge type 3 from above Nine Elms Pier

Source 3D model: Z mapping



Section A



Figure 7.39 The bridge

Source 3D model: Z mapping

Tall buildings and views

Tall buildings should be fully integrated with and facilitate delivery of the public realm strategy. They will play a key part in defining the public realm, they can help with orientation, way finding and help landmark particular uses. The tall buildings strategy in the following chapter sets out some principles for the location of tall buildings within the public realm of the OA.

Some of the key principles promoted in terms of views within the OA are as follows:

- That taller buildings should be located to signpost routes through the OA for instance along the length of the park and at key locations along the fingers that link the residential hinterland to the river
- That views into the OA from the north bank of the River Thames should be maintained and a solid wall of development avoided. Similarly views from the residential hinterland into the OA from the south should be developed to ensure visual permeability.

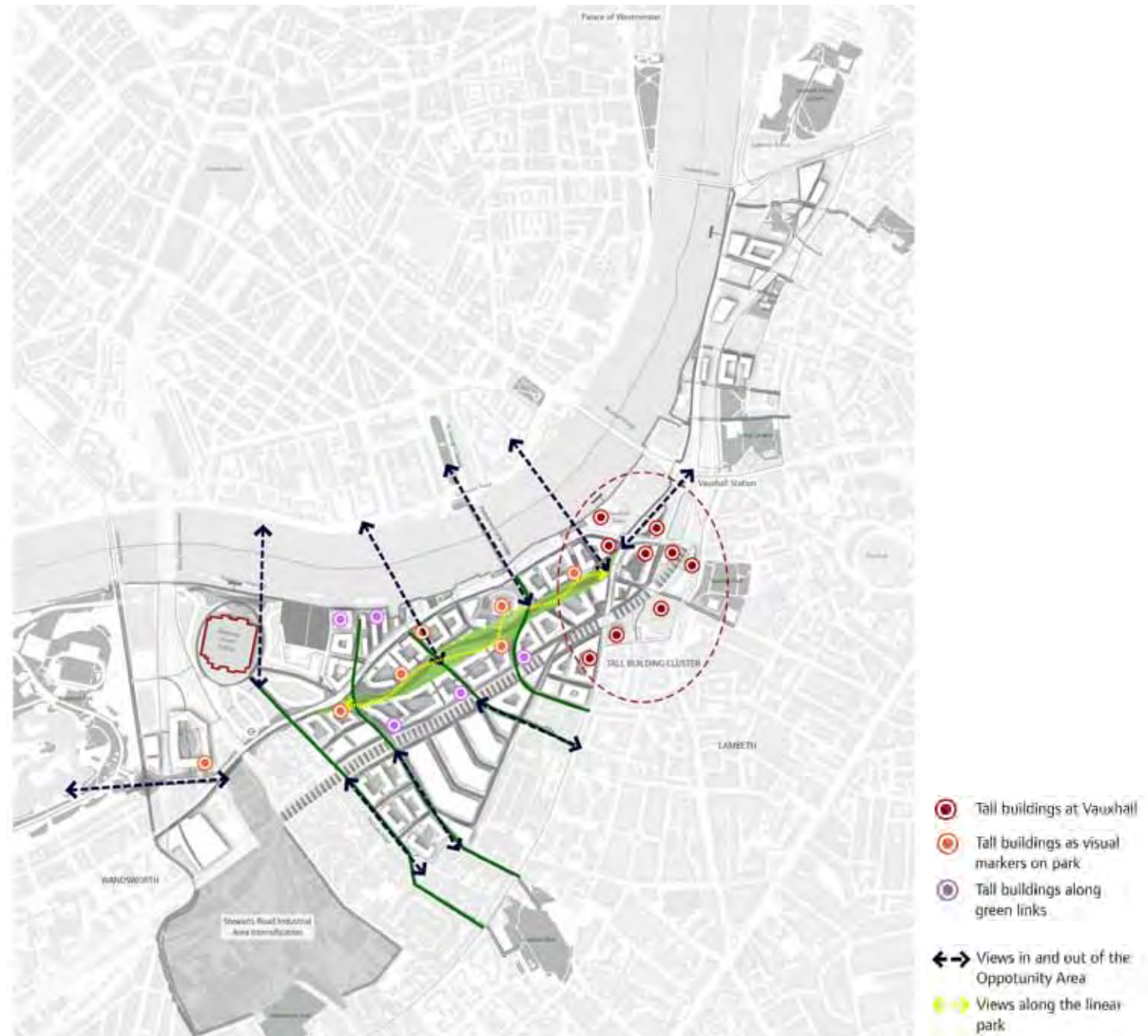


Figure 7.40 Indicative location of tall buildings in relation to public realm

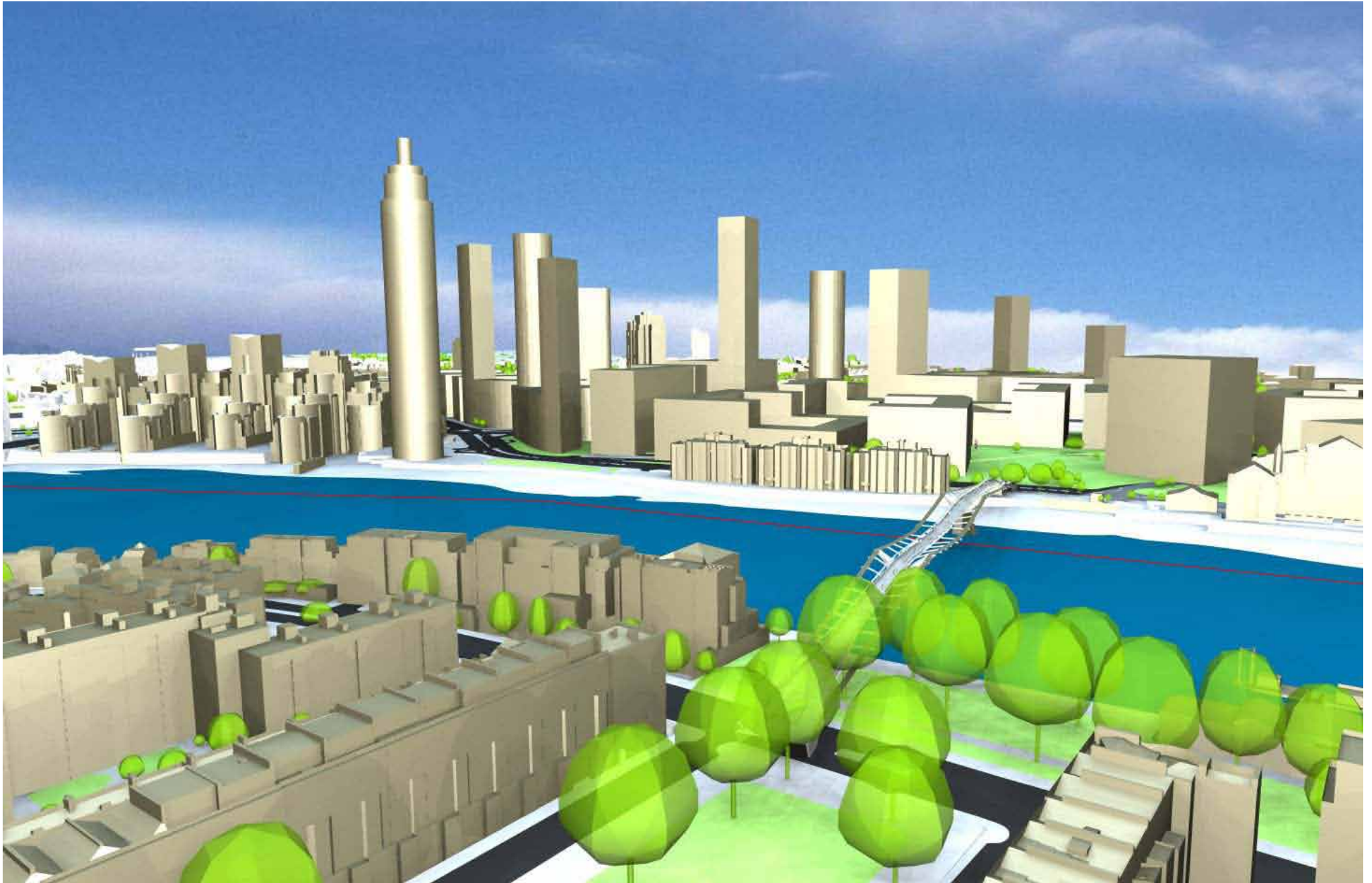


Figure 7.41 View of emerging tall building cluster from above Dolphin Square

Implementing the public realm strategy

Progress from 2009 draft to 2012 publication

In the run up to publishing the consultation draft OAPF in 2009 a series of meetings were held with landowners and their masterplan teams promoting the key themes of the OAPF. Since publishing the 2009 draft an ongoing series of conversations and negotiations have been held with the landowners and their masterplan teams and with other public bodies including CABE and English Heritage in order to deliver the aspirations of the OAPF public realm strategy.

Initially, the early iterations of the masterplan teams did not reflect the content of the draft OAPF. However, over the last two years the benefit of co-operation between landowners has become apparent and through a series of iterations the delivery of the broad principles of the original draft OAPF have also become apparent.

The masterplan teams have brought their own ideas to the process to the benefit of the delivery of the framework. The framework masterplan was always intended



Figure 7.42 Indicative masterplan 2009 OAPF

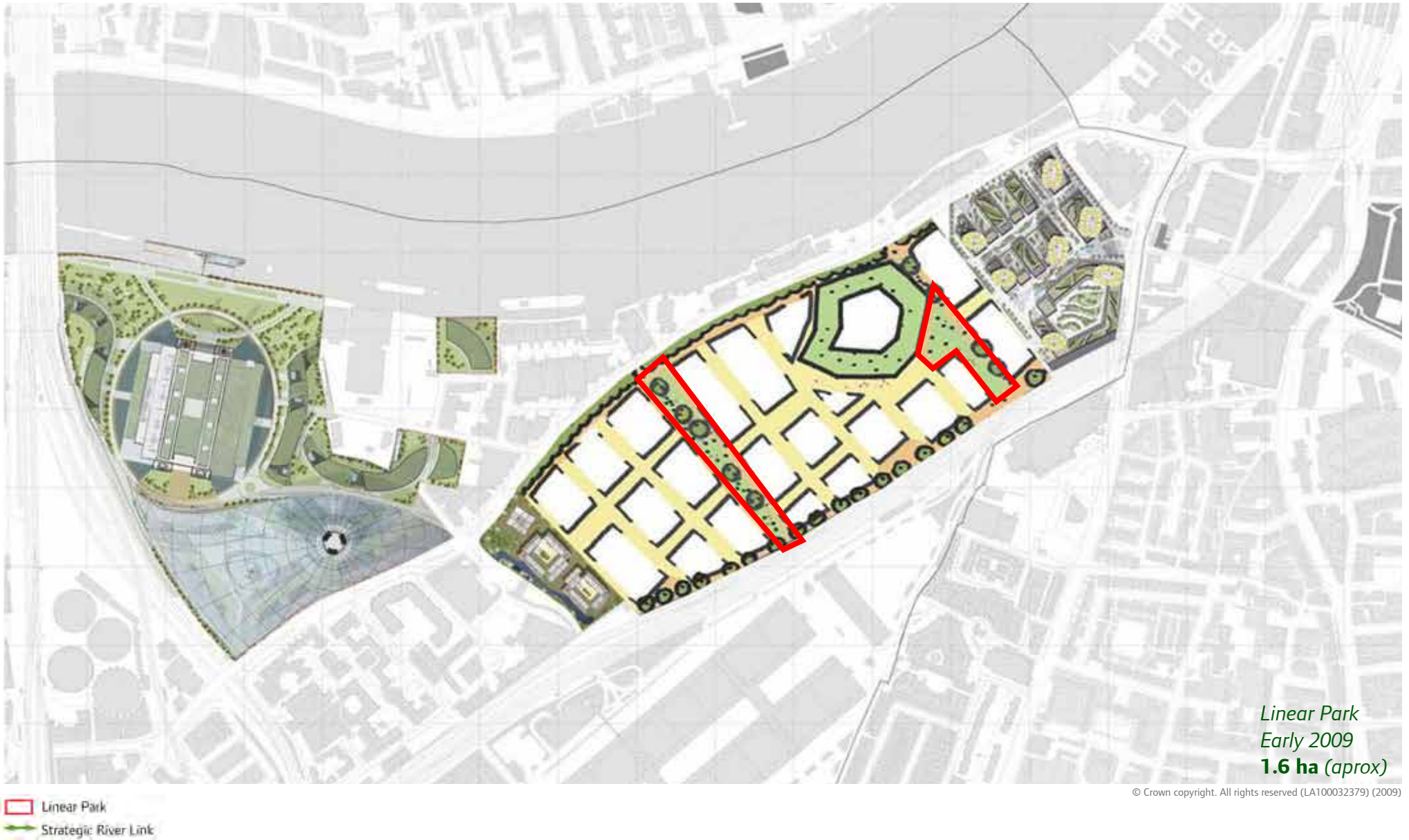
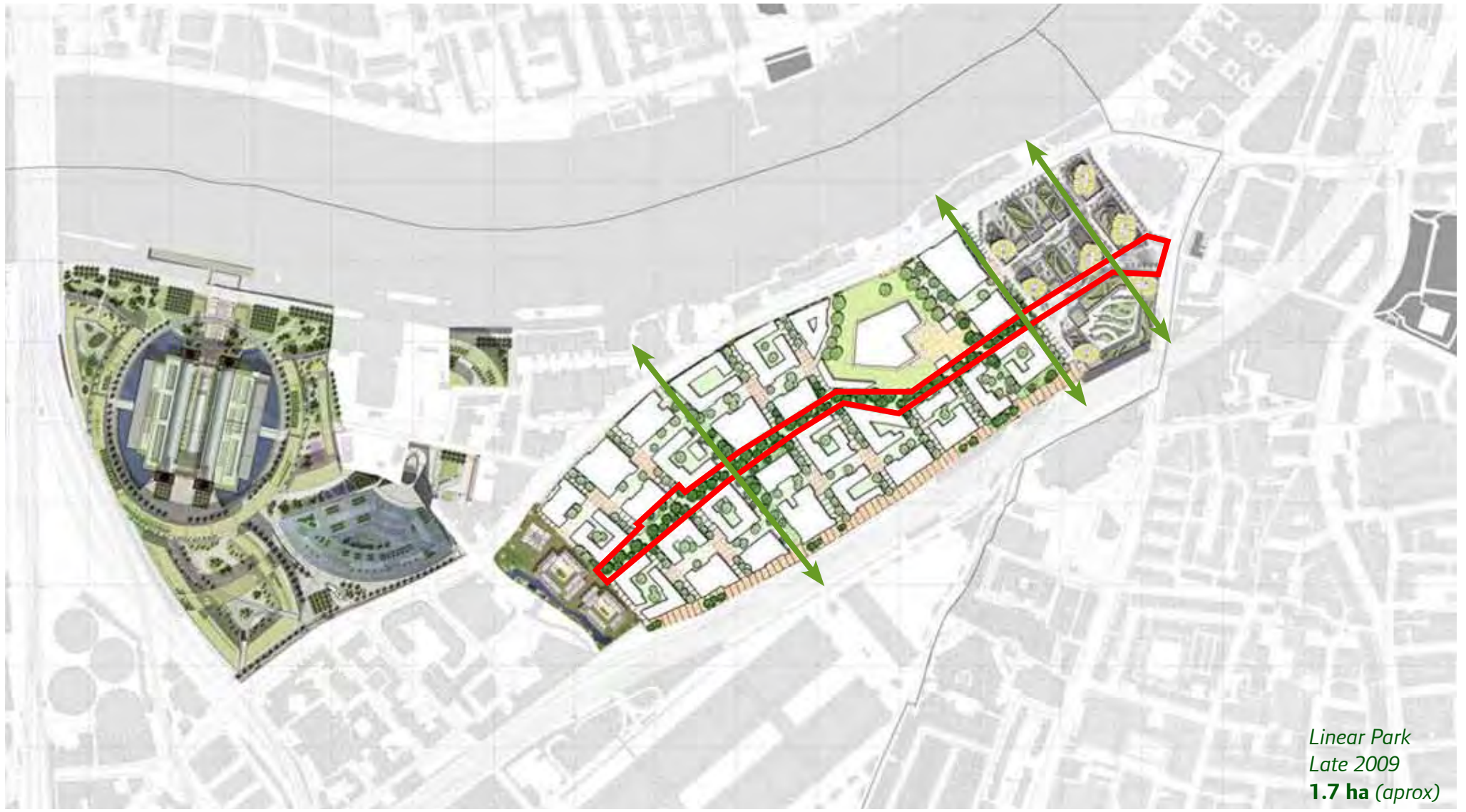


Figure 7.43 Response to VNEB OAPF Draft 2009



Linear Park
Late 2009
1.7 ha (aprox)

- Linear Park
- Strategic River Link

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Figure 7.44 Response to VNEB OAPF Draft late 2009

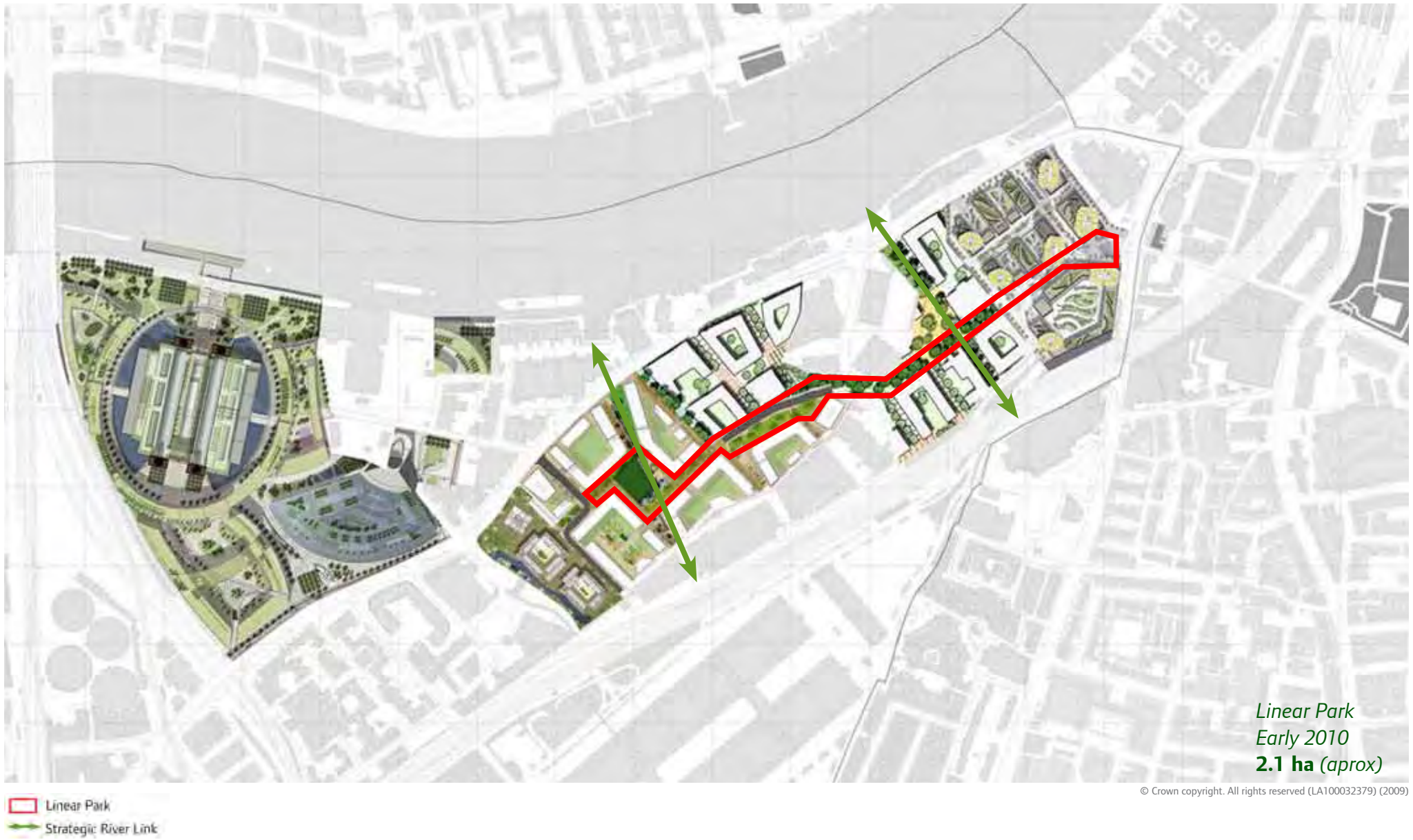


Figure 7.45 Response to VNEB OAPF Draft early 2010



Figure 7.46 Response to VNEB OAPF Draft mid 2010



Figure 7.47 Response to VNEB OAPF Draft- late 2011



- Linear Park
- Strategic River Link

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Figure 7.48 Response to VNEB OAPF Draft- late 2011

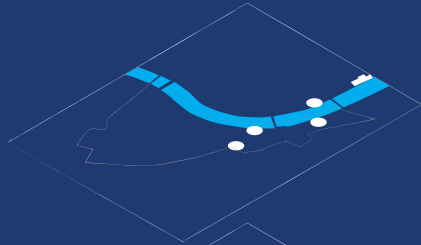


Figure 7.49 2012 masterplans overlaid on 2009 Draft VNEB indicative masterplan

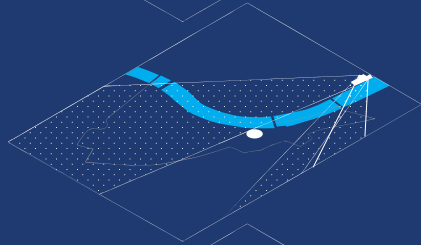


Chapter 8

Tall Buildings Strategy



existing & consented tall buildings



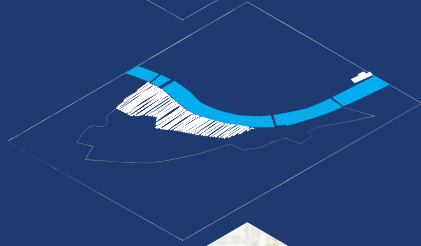
effect on views of palace of westminster



tall building cluster upto 150m with
Vauxhall Tower as pinnacle



upto 80-90m high



upto 60-70m high



indicative masterplan

Key principles

- The planning framework supports an emerging cluster of tall buildings at Vauxhall within the Central Activities Zone (CAZ)
- The form and height of the emerging cluster at Vauxhall as defined in the tall buildings strategy will not be detrimental to the setting of the Westminster World Heritage Site (WWHS) from the river prospect views as defined in the London View Management Framework (LVMF)
- The form of the emerging cluster is defined as a series of tall buildings coming forward as separate individual elements on the skyline to a maximum of 150 metres with the pinnacle being formed by the Vauxhall Tower (under construction) at 180 metres.
- It is anticipated that other tall buildings will come forward on Albert Embankment (maximum threshold c.80 metres) and in Nine Elms (maximum threshold 60 – 70 metres) where they will not impact on the protected silhouette of the Palace of Westminster
- The tall buildings strategy and public realm strategy is fully integrated
- The form of development that will be supported in the OA will be 8 – 10 storey high density development with tall buildings on key sites such as along the riverside and in prominent locations along strategic routes as set out in the public realm strategy

8.1 Policy overview

London Plan 2011

The London Plan defines tall buildings as those that are substantially taller than their surroundings, cause a significant change to the skyline or are larger than the threshold sizes set for the referral of planning applications to the Mayor.

London Plan policy 7.7 states that tall and large buildings should be part of a planned approach to changing or developing an area by the identification of appropriate, sensitive and inappropriate locations. It goes on to state that tall and large buildings should generally be limited to sites in the Central Activities Zone, opportunity areas, areas of intensification or town centres that have good access to public transport and should not impact on local or strategic views adversely.

London Plan policy 7.10 states that development should not cause adverse impacts on World Heritage Sites or their settings (including any buffer zone). In particular, it should not compromise a viewer's ability to appreciate its Outstanding Universal Value, integrity, authenticity or significance. In considering planning applications, appropriate weight should be given to implementing the provisions of the World Heritage Site Management Plans.

The Mayor has also produced draft supplementary planning guidance on the settings of London's World Heritage Sites (October 2011). This provides guidance

on defining the setting of World Heritage Sites and assessing development proposals for impact on a World Heritage Site's Outstanding Universal Value.

London Plan policies 7.11 and 7.12 provide the strategic policy framework for designating strategic views and implementing the London View Management Framework (LVMF). Policy 7.11 provides that within designated strategic views, the Mayor will identify strategically important landmarks that make a very significant contribution to the image of London at the strategic level or provide a significant cultural orientation point. He will also identify and protect aspects of views that contribute to a viewer's ability to recognise and to appreciate a World Heritage Site's authenticity, integrity, significance and Outstanding Universal Value.

Policy 7.12 states that new development should not harm, and where possible should make a positive contribution to, the characteristics and composition of strategic views and their landmark elements. It should also preserve and enhance viewers' ability to recognise and to appreciate strategically important landmarks in these views and, where appropriate, protect the silhouette of landmark elements of World Heritage Sites as seen from designated viewing places.

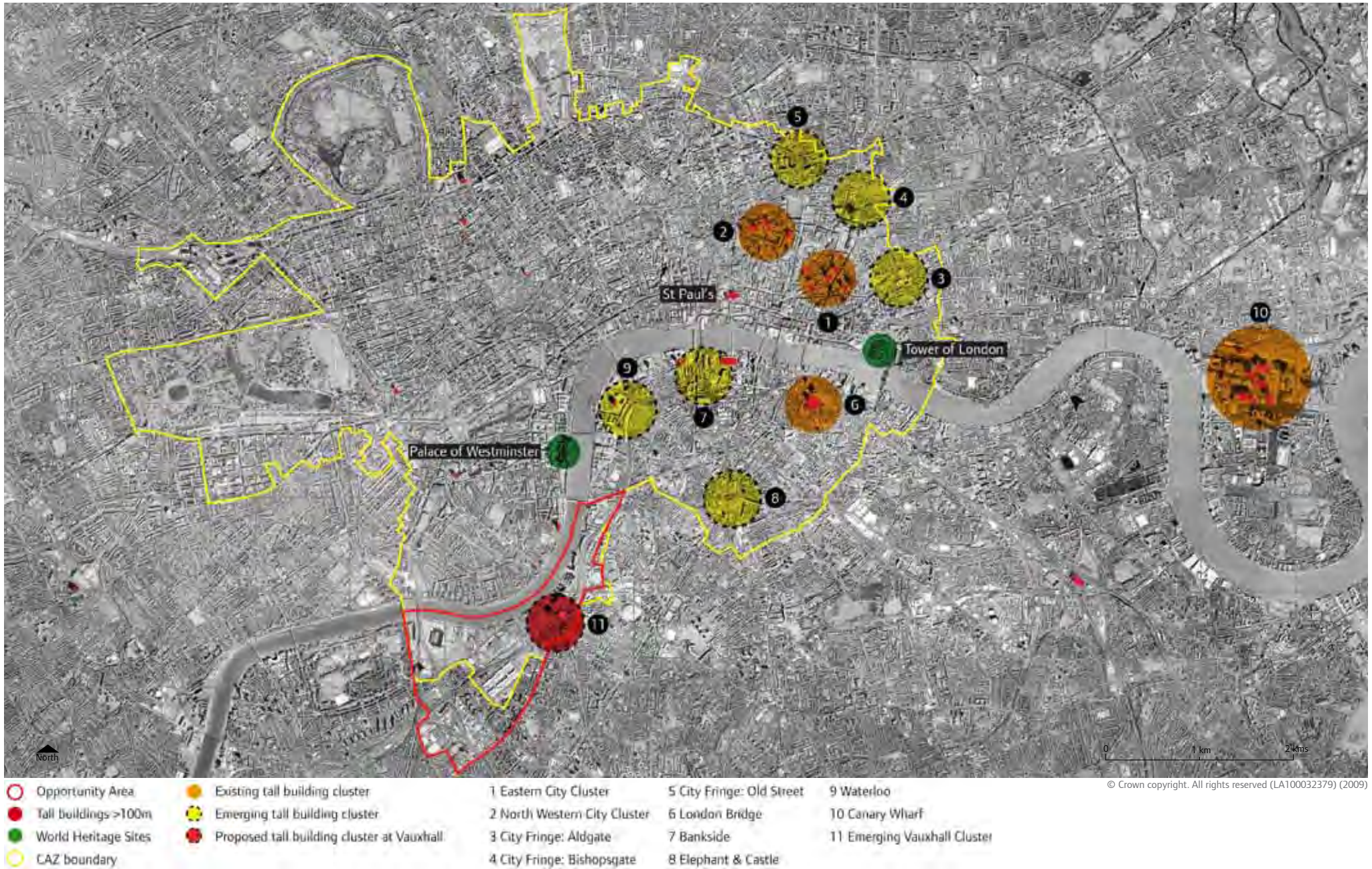
A summary of the LVMF (July 2010) and revised draft LVMF (July 2011) and how it relates to the OA is set out in TA3.

Wandsworth Core Strategy 2010

Core Strategy policy IS3 defines tall buildings as those which are substantially taller than the prevailing height of neighbouring buildings and/or which significantly change the skyline. It acknowledges that tall buildings may be appropriate in Nine Elms near Vauxhall and at Battersea Power Station, but that some locations within these areas will be sensitive to, or inappropriate for, tall buildings. Specific sites considered for tall buildings will be identified in the Site Specific Allocations Document.

Wandsworth Site Specific Allocations Document (Submission version, May 2011)

The Area Spatial Strategy for Nine Elms North identifies eight discrete districts within the Wandsworth part of the opportunity area. Two of these districts – Vauxhall/Embassy and Battersea Power Station – are identified as areas where tall buildings may be appropriate. In other areas, it is expected that developments of 8-10 storeys will be the norm and any proposals for 11 storeys or above will be regarded as tall buildings and will need to be assessed against the criteria set out in Development Management Policies Document policy DMS4.



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Figure 8.1 – Existing and planned tall building locations

Wandsworth Development Management Policies Document (Submission version, May 2011)

Policy DMS4 sets out detailed criteria against which applications for tall buildings will be required to address in order to demonstrate compliance with Core strategy policy IS3. Specific considerations include impact on the historic environment, visual impact including cumulative impact on the skyline, integration into surrounding development and climatic effects such as overshadowing and wind effects.

Lambeth Core Strategy 2011

Core Strategy policy S9 identifies parts of the Vauxhall opportunity area as being appropriate for tall buildings, subject to appropriate accompanying urban design assessments. It also identifies the need to protect strategic views, including those that affect the outstanding universal value and setting of the Westminster World Heritage site.

Policy PN2 supports opportunities for the development of a cluster of high quality tall buildings at Vauxhall, for a mix of uses including residential, retail, business, other commercial and community uses focused on the transport interchange at Vauxhall Cross.

Non-statutory guidance

Other sources of guidance on the planning and design of tall buildings include CABI and English Heritage's joint Guidance on Tall Buildings (July 2007).

CABI and English Heritage advise planning authorities to consider the scope for tall buildings, where they are a possibility, as part of strategic planning.

8.2 Westminster World Heritage Site

The Westminster World Heritage Site (WWHS) comprises the Palace of Westminster, Westminster Abbey and St Margaret's Church.

The location of the proposed cluster of tall buildings at Vauxhall relative to the WWHS gives rise to a potential impact on the setting of the WHS. The draft Statement of Outstanding Universal Value for WWHS identifies that the visual integrity of the WHS is vulnerable to proposals for tall buildings. Tall buildings at Vauxhall will not necessarily cause harm to the setting of the WHS, but great care will need to be taken to ensure that the form and composition of the cluster, and the design of individual tall buildings, does not adversely affect the Outstanding Universal Value of the WHS or its setting. The height parameters and guidance on the composition of the cluster set out in the following sections have been developed having regard to the relationship with the WWHS and the policy imperative that development should not cause adverse impacts on the WHS or its setting.

All proposals for tall buildings in the OA should be accompanied by an assessment of impact, including cumulative impact with other proposed and consented schemes, on the Outstanding Universal Value, integrity, authenticity and significance of the WHS and its setting. A framework for assessment is contained in the draft 'London World Heritage Sites – Guidance on Settings' SPG.

8.3 Strategic views

There are a number of key issues to be considered in terms of the emerging tall buildings strategy for the OA:

- The visual impact of the emerging cluster of tall buildings in strategically important views, primarily the river prospects from Westminster, Waterloo and Hungerford bridges identified in the London View Management Framework (July 2010) and its draft replacement (July 2011), including the new townscape view from Parliament Square.
- The scale, appearance and form of the emerging cluster at Vauxhall and how this will change over time as key development sites come forward in this location
- The relationship between the emerging cluster at Vauxhall and the Palace of Westminster World Heritage Site
- The scale and appearance of tall buildings on Albert Embankment and how this will change over time as key development sites come forward in this location
- The relationship between development on Albert Embankment and the Westminster WHS
- The potential for tall buildings in Nine Elms and Battersea to interrupt the protected silhouette of the Palace of Westminster
- The potential for tall buildings within the OA to be visible from within the Westminster World Heritage Site (WWHS)
- The visual impact of tall buildings on key local views from conservation areas both within and beyond the OA

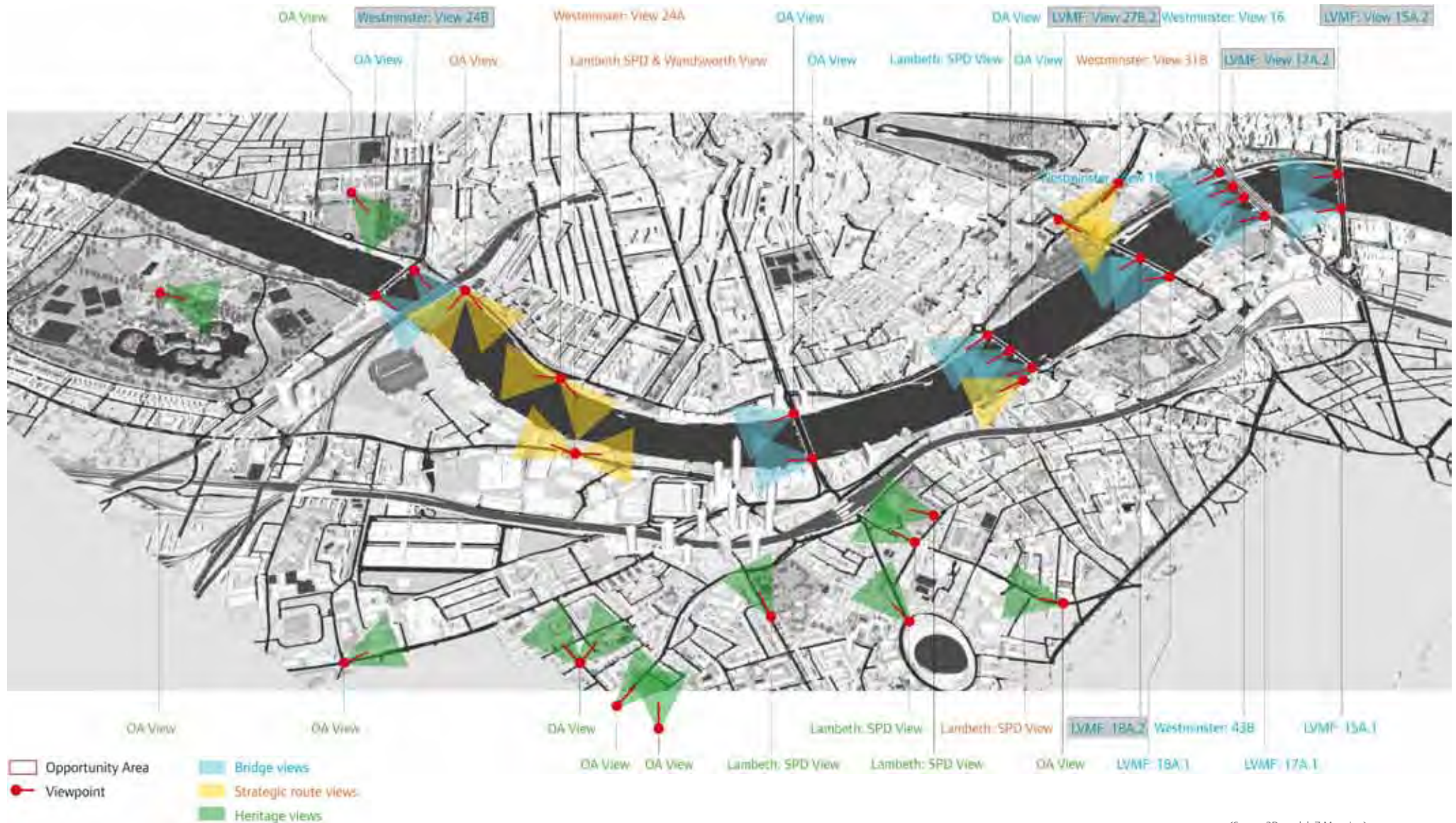
The tall buildings strategy has been informed by, and is consistent with, World Heritage Site and strategic views policies.

8.4 Tall buildings height parameters

There are a number of existing tall buildings located on Albert Embankment and at Vauxhall. Recent consents for the Vauxhall Tower at St George Wharf, Vauxhall Sky Gardens on Wandsworth Road, the US Embassy and Hampton House on Albert Embankment demonstrate that tall buildings can be appropriate in planning and development terms at specific locations within the OA. The public realm strategy for the OA proposes to locate tall buildings at key locations along the strategic routes through the area.

It is important that tall buildings have a positive relationship with the surrounding townscape; both in terms of their immediate setting at ground level and their relationship to open space and other buildings nearby. This is important in terms of the role well designed tall buildings can play in place shaping and contributing to legibility both at a local and a city wide scale.

The tall buildings strategy illustrated in figures 8.3 and 8.4 seeks to balance the development of an emerging cluster of tall buildings at Vauxhall, supporting regeneration in Lambeth and Wandsworth, with the broader strategic objectives of protecting the setting of the Westminster World Heritage Site (WWHS) and surrounding conservation areas and listed buildings whilst integrating tall buildings with the public realm.



(Source 3D model: Z Mapping)

Figure 8.2 Detailed views analysis

The form of development within the OA will predominantly be 8 – 10 storeys in height with tall buildings in appropriate locations, within the emerging cluster at Vauxhall, along the riverside and on key sites along strategic routes and open spaces .

Albert Embankment

On Albert Embankment tall buildings should generally be no more than 80 – 90 metres in height, should contribute to a varied skyline and should avoid appearing cumulatively as a uniform wall of development in strategic views from Waterloo, Hungerford and Westminster bridges. The Palace of Westminster should be maintained as the main focus within the townscape composition from the river prospects.

Nine Elms and Battersea

Within Nine Elms and Battersea tall buildings of up to 60 metres – 70 metres may be appropriate, but they must not interfere with the protected silhouette of the Palace of Westminster as set out in the LVMF. This is not to say that all development should be 60 metres – 70 metres in height or come forward in the form of tall buildings. The OAPF promotes high density development in the region of 8 – 10 storeys in height in perimeter block form, with tall buildings of varying height in key locations, such as overlooking strategic open space, at important road junctions, at the termination of or along the length of important vistas within the OA, at transport interchanges or on the riverside. New development at Battersea Power Station should not harm the setting of the Grade II* listed building.

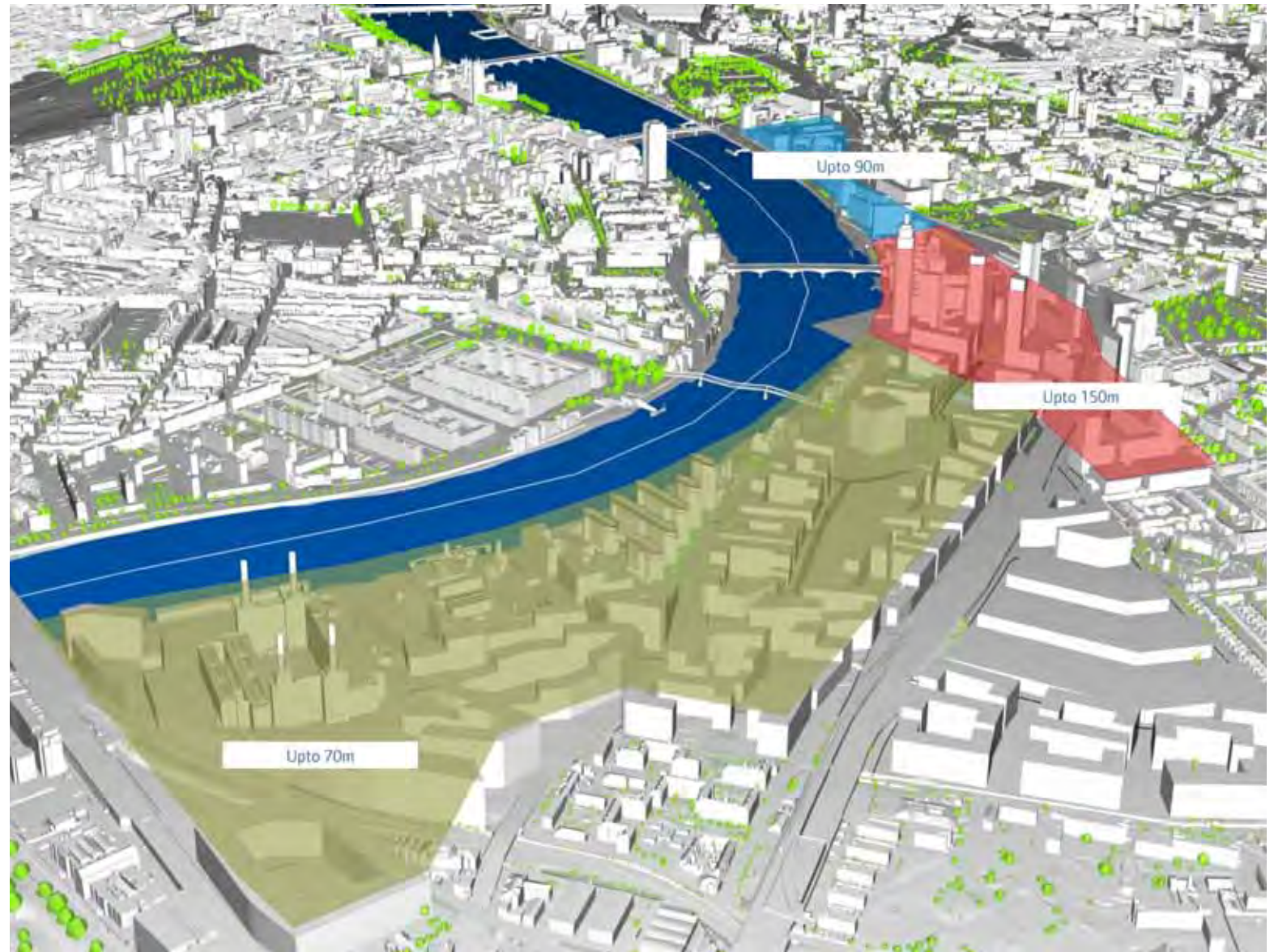
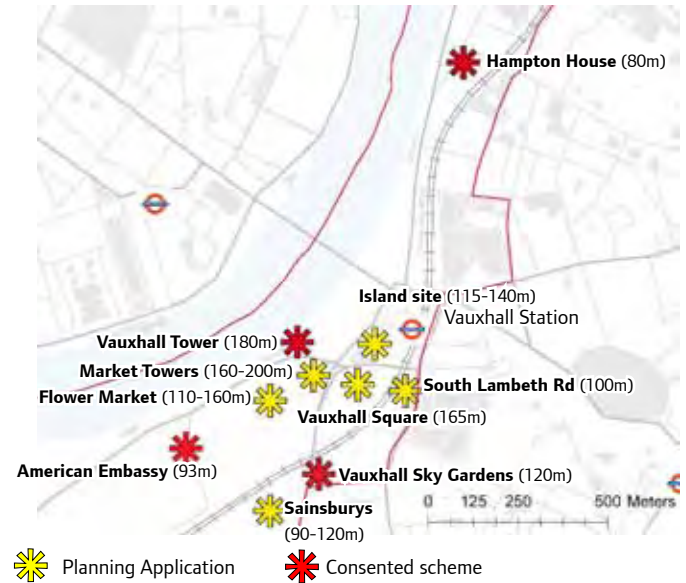
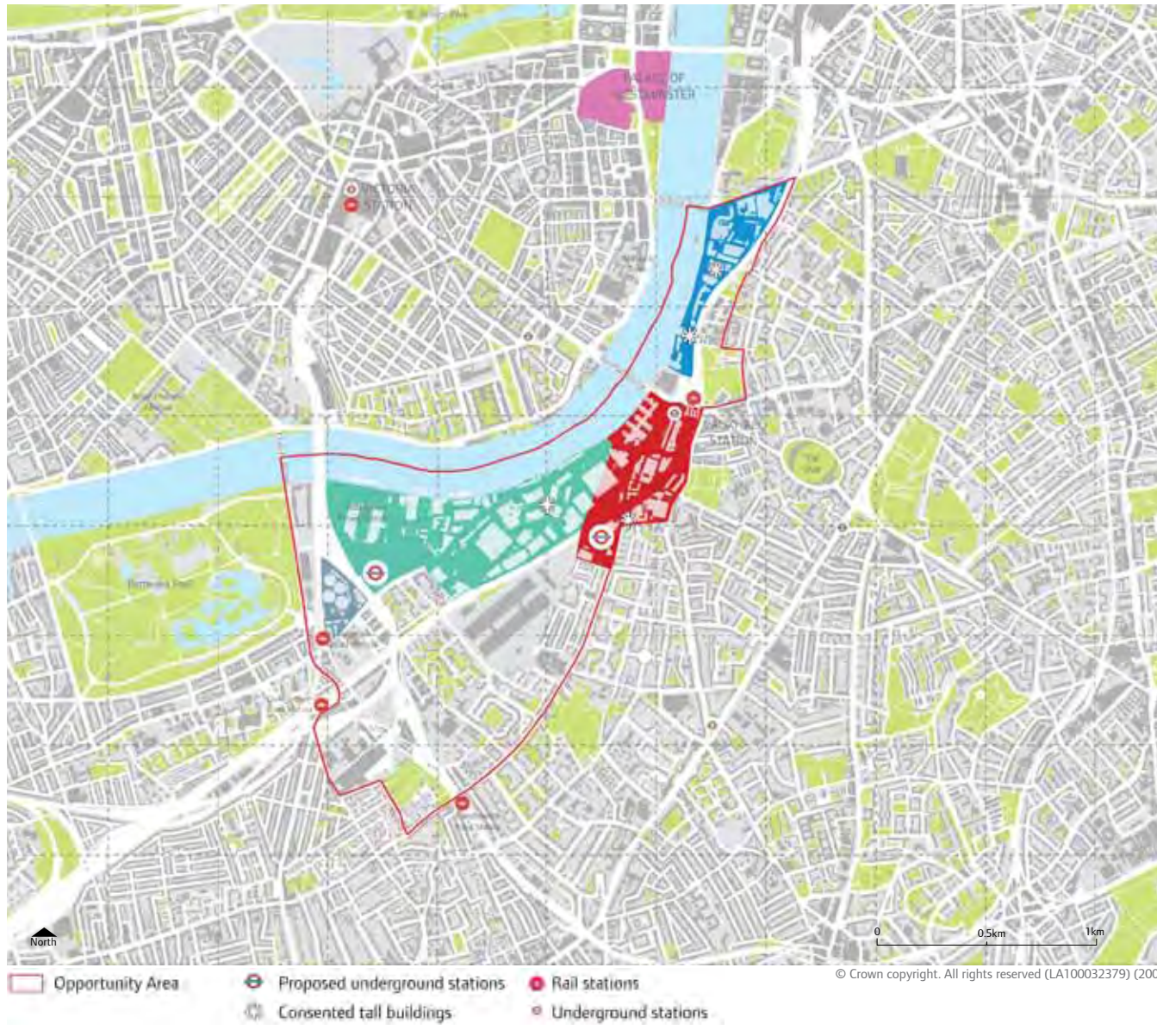


Figure 8.3 Tall buildings strategy



- ✳ Planning Application ✳ Consented scheme
- PRINCIPAL LOCATION FOR TALL BUILDINGS**
- **NINE ELMS & BATTERSEA:** Form of development will be 8-10 storeys in height with tall buildings in appropriate locations. Tall buildings of upto 60-70m may be supported but should not appear in the backdrop of Palace of Westminster
 - **VAUXHALL :** The Vauxhall Tower c. 180 metres is considered the pinnacle of a future cluster of tall buildings and other buildings in the cluster should have a secondary relationship to it. Buildings in the region of 150 metres are likely to have such a relationship and anything taller would need to be justified in relation to other developments coming forward and their cumulative impact on affected views. Tall buildings within the emerging cluster at Vauxhall should appear as individual elements on the skyline and avoid appearing as a solid wall of development within the setting of the Palace of Westminster.
 - **ALBERT EMBANKMENT :** Tall buildings should generally be no more than 80-90m in height and avoid appearing as a solid wall of development within the setting of the Palace of Westminster from Waterloo, Hungerford and Westminster bridges. The World Heritage Site should be maintained as the main focus within the townscape composition from the river prospects.

Figure 8.4 Tall buildings strategy

8.5 Composition of tall building cluster

At Vauxhall, buildings in the region of 150 metres could be supported as part of an emerging cluster of tall buildings. The Vauxhall Tower (under construction) should form the pinnacle of the cluster and all other buildings should have a secondary relationship to it. Buildings in the region of 150 metres are likely to have such a relationship.

Tall buildings within the emerging cluster should appear as individual elements on the skyline and avoid appearing collectively as a solid wall of development within the setting of the Palace of Westminster from the river prospects or from views within or close to Westminster World Heritage Site. The Palace of Westminster should be maintained as the main focus within the townscape composition when viewed from Waterloo, Hungerford and Westminster bridges.

It is important to deliver variety on the skyline not just to build to the maximum height parameters. This is particularly important given the extensive views into the OA and its riverside from the City of Westminster and the Royal Borough of Kensington and Chelsea to the north, and from conservation areas in Lambeth and Wandsworth to the south. The articulation of built form along the river will be particularly important, as tall buildings close to the river will be particularly prominent in many views and are more likely to be seen in silhouette

against the skyline. It is proposed that a series of visual breaks are maintained along the river edge allowing views into and out of the OA and that taller buildings could be located adjacent to these park spaces marking the river edge at key locations. Figure 8.7 illustrates the key parameters of the tall buildings strategy and how they should be applied.

Applications for tall buildings will be required to demonstrate how they relate to other proposals for tall buildings both in terms of their cumulative appearance on the skyline, with particular reference to their impact on strategic views and on the setting of the Westminster World Heritage Site, and the relationship at ground level, with particular reference to the creation of a high quality public realm and delivery of the objectives of the public realm strategy set out in chapter 7. Consideration should also be given to other planning benefits associated with tall buildings particularly in relation to other strategic objectives for the OA.

The exact form of the cluster should be subject to continuous dialogue between the local planning authorities and key landowners. As schemes come forward they should be scrutinised on an individual and collective basis against the parameters set out in the OAPF.



Figure 8.5 View 18A.2 Westminster Bridge upstream – form of emerging cluster



Figure 8.6 View 17A.2 Hungerford Bridge upstream – form of emerging cluster

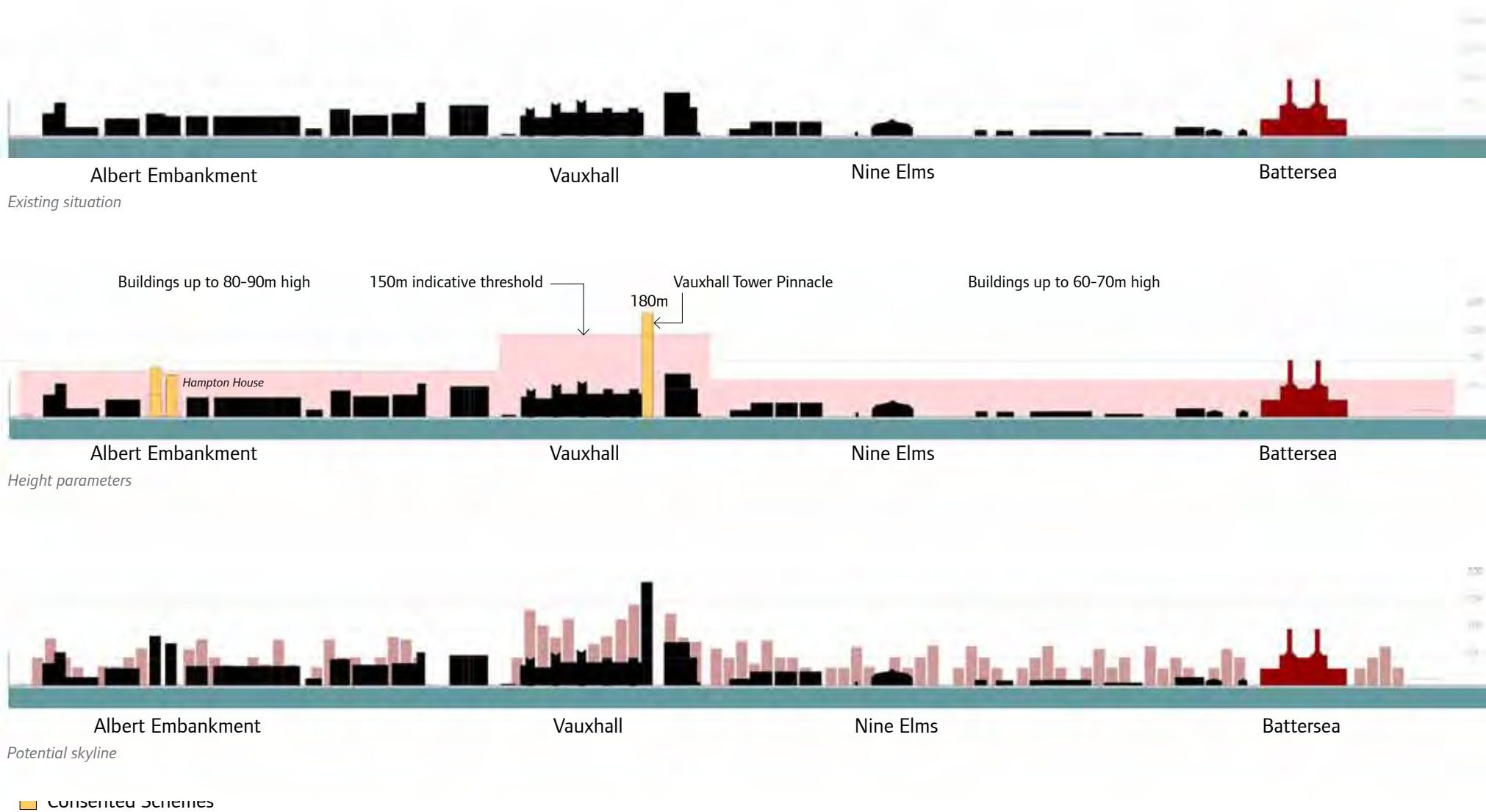


Figure 8.7 Key parameters for tall buildings

Visual impact of the emerging cluster

The tall buildings strategy is based on a thorough and detailed analysis of the built heritage context including a desktop views assessment. The tall buildings strategy establishes the parameters for an emerging cluster at Vauxhall. The visual impact of the emerging cluster on key LVMF river prospects is identified in the following pages.

The visual impact of the emerging cluster of tall buildings at Vauxhall has been tested in the form of a detailed views analysis, set out in TA3. A selection of the most strategically important views are set out below.

- Protected silhouette of the Palace of Westminster
- - - Tall buildings cluster

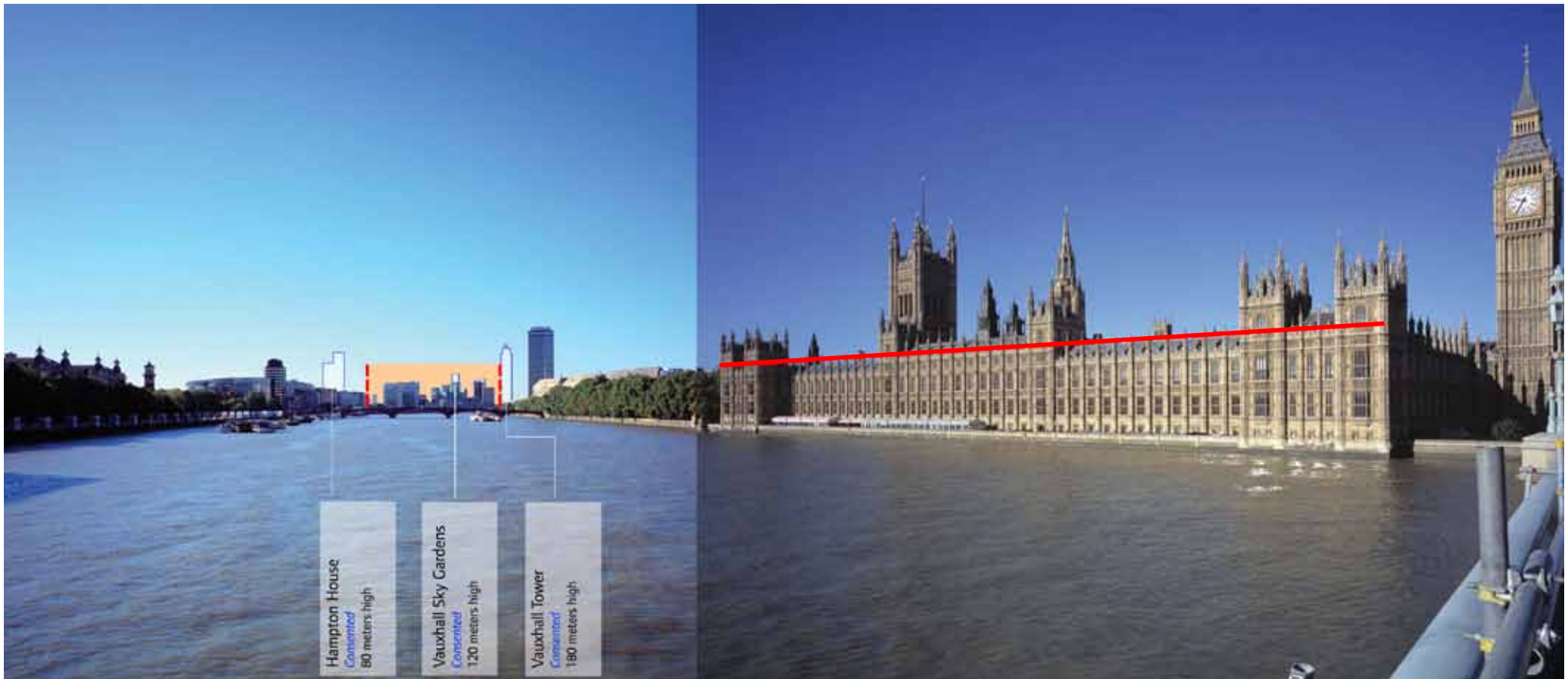


Figure 8.8 View 18A.2 Westminster Bridge upstream – location of emerging cluster

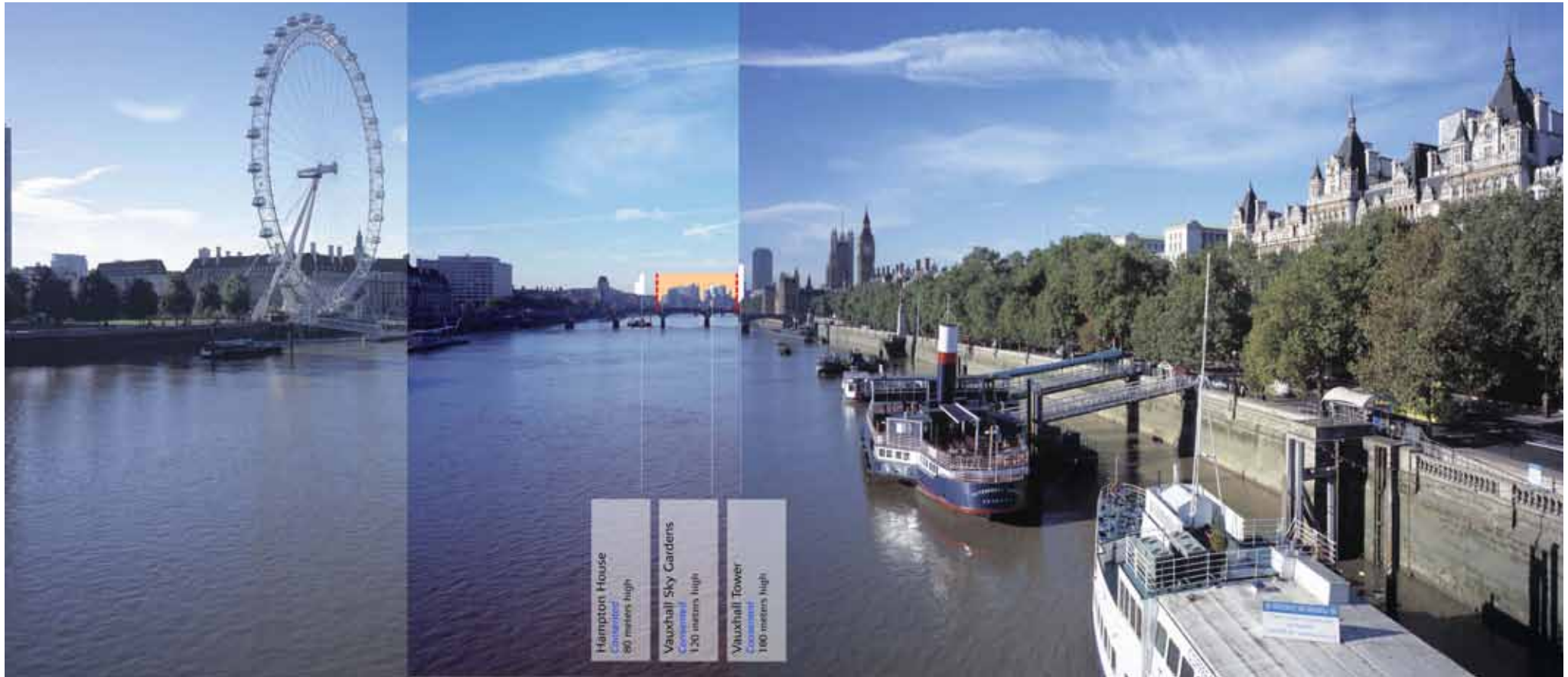


Figure 8.9 View 17A.2 Hungerford Bridge upstream – location of emerging cluster

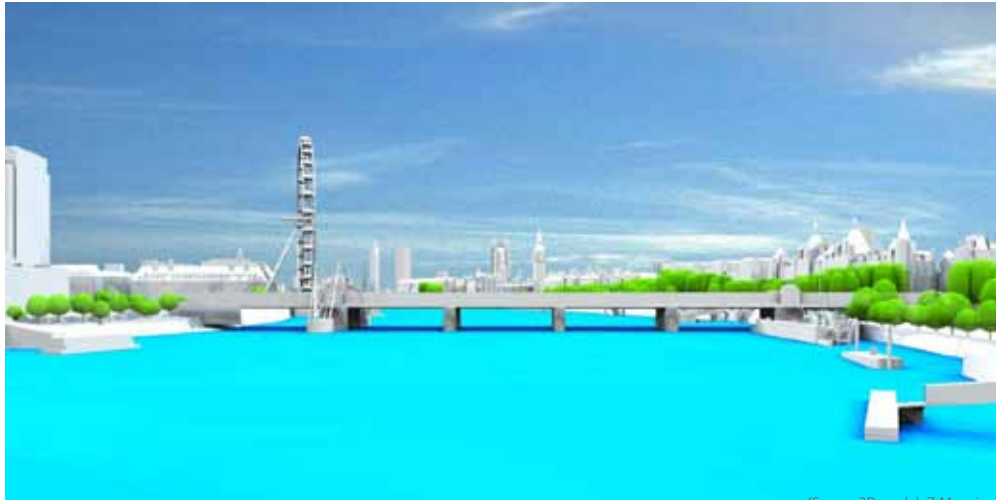


Figure 8.10 View 15A.2 Waterloo Bridge upstream – existing and consented

(Source 3D model: Z Mapping)



Figure 8.12 View 17A.2 Hungerford Bridge upstream – existing and consented

(Source 3D model: Z Mapping)

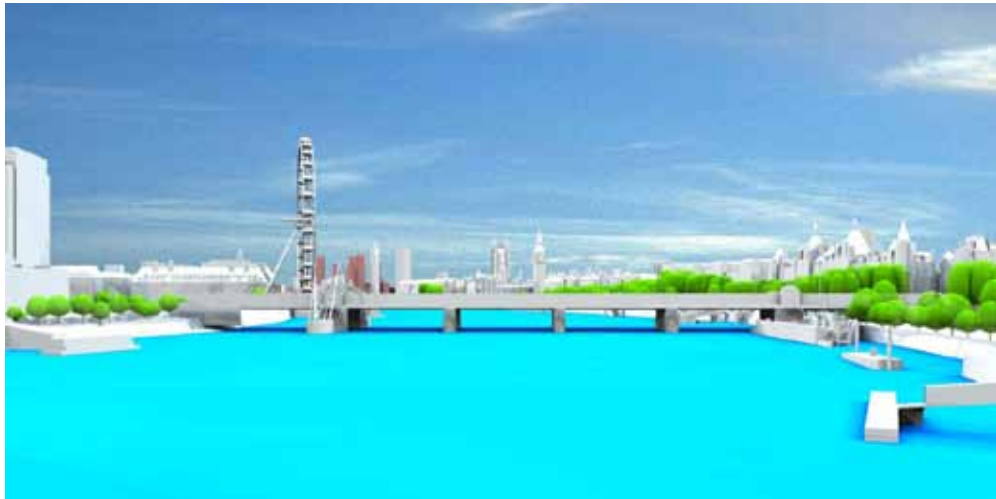


Figure 8.11 View 15A.2 Waterloo Bridge upstream – form of emerging cluster

(Source 3D model: Z Mapping)



Figure 8.13 View 17A.2 Hungerford Bridge upstream – form of emerging cluster

(Source 3D model: Z Mapping)



Figure 8.14 View 18A.2 Westminster Bridge upstream – existing and consented

(Source 3D model: Z Mapping)



Figure 8.16 View 24B Chelsea Bridge upstream – existing and consented

(Source 3D model: Z Mapping)



Figure 8.15 View 18A.2 Westminster Bridge upstream – form of emerging cluster

(Source 3D model: Z Mapping)



Figure 8.17 View 24B Chelsea Bridge upstream – form of emerging cluster

(Source 3D model: Z Mapping)

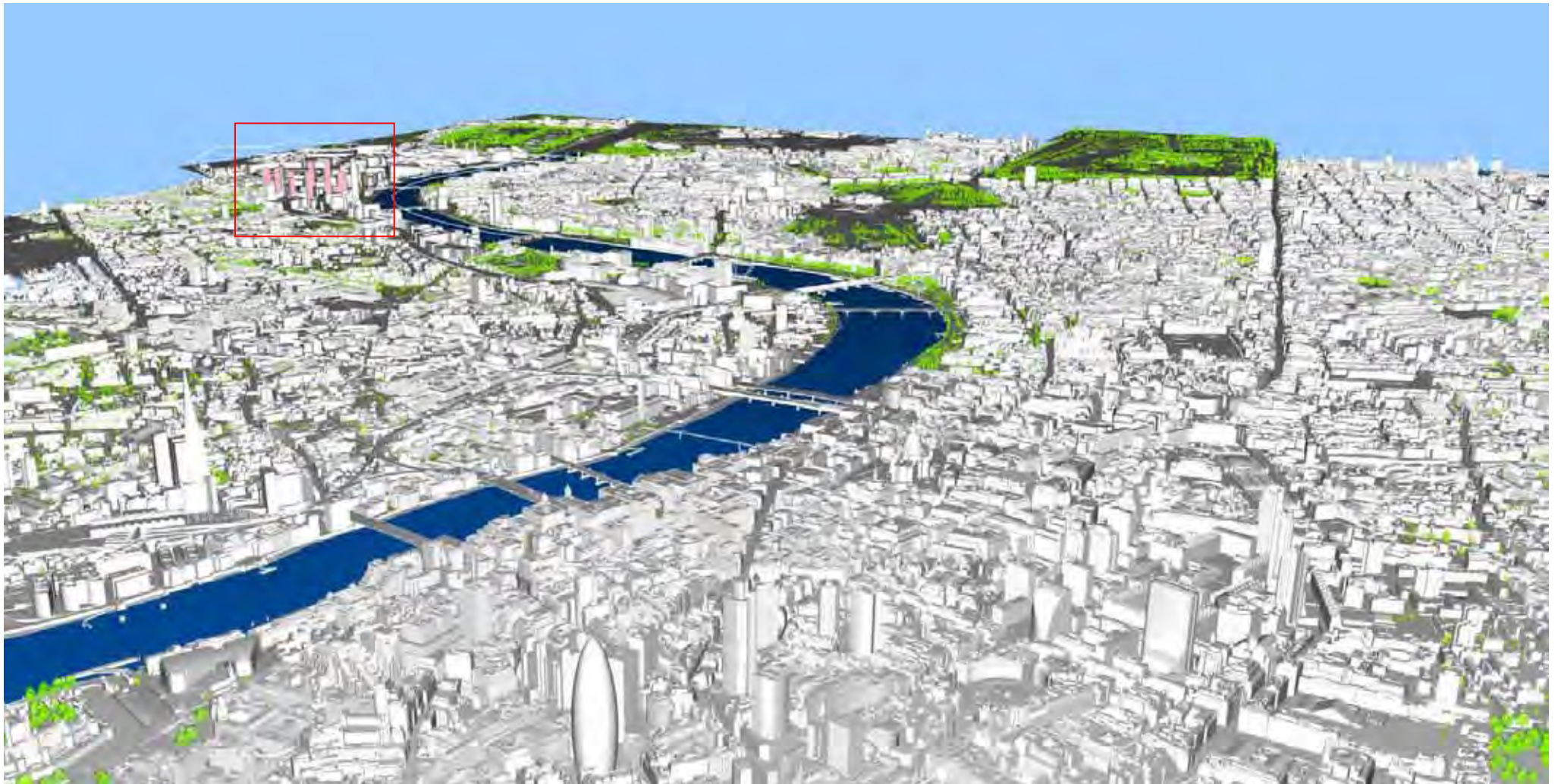


Figure 8.18 View from City to emerging Vauxhall cluster

(Source 3D model: Z Mapping)

The detailed visual analysis of the Vauxhall cluster shows the potential for a series of tall buildings, which appear as individual elements on the skyline with a variety of building heights. The tallest element of the cluster is the Vauxhall Tower (under construction) at 180 metres, with all other buildings being in the region of 150 metres.,

In terms of the strategically important river prospects, the emerging cluster would sit to the left of Millbank Tower in the view and form part of the wider townscape context to the Westminster World Heritage Site. The Palace of Westminster is maintained as the focus of the river prospects as set out in the LVMF. In addition to the strategic views a series of key local views have also been tested to the south, west and north of the OA. These indicate that the proposed tall buildings at Vauxhall sit within the existing townscape context of this part of the CAZ.

An indicative view of the emerging cluster within its wider city context is shown in figures 8.18 and 8.19.

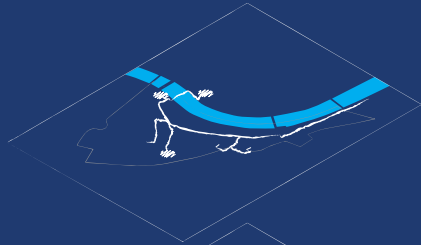


Figure 8.19 View from Stockwell to emerging Vauxhall cluster

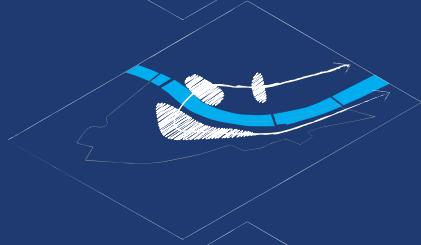


Chapter 9

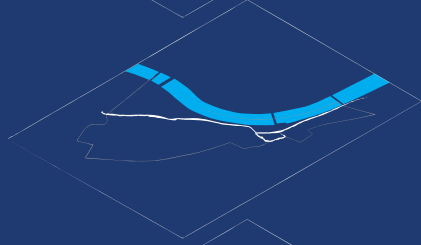
Environmental strategies



new energy network for the OA



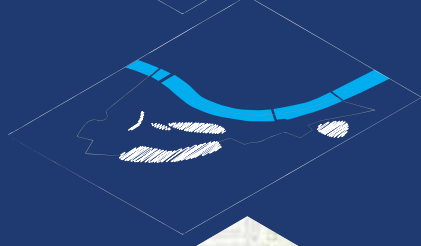
strategic links to nearby energy networks



noise and poor air quality



retention and protection of safeguarded wharves



flood prone areas



indicative masterplan

Key principles

- Delivery of VNEB CCHP/ CHP district heating network (DHN)
- Potential wider links to Pimlico, Whitehall and Waterloo energy networks
- Co-ordinated approach to electricity supply in OA – location/ timing/ size of new substation(s) required for new development
- Retention and protection of safeguarded wharves for waterborne freight handling purposes and designing adjacent development to minimise the potential for conflicts of use and disturbance.
- Maximise opportunities to use the wharves for transportation by river of construction materials and demolition waste associated with new development in the OA and the Thames Tideway Tunnel
- Enable construction of the Thames Tideway tunnel including a main tunnel drive site and combined sewer overflow site without adversely affecting new development
- Best practice to be followed for waste minimisation, reuse and recycling during demolition, excavation and construction
- Consideration of pneumatic waste collection system for new developments
- Mitigate the risk of flooding by integrating SUDS into the design of new developments and maximising opportunities to incorporate rainwater attenuation measures into the public realm and the linear park

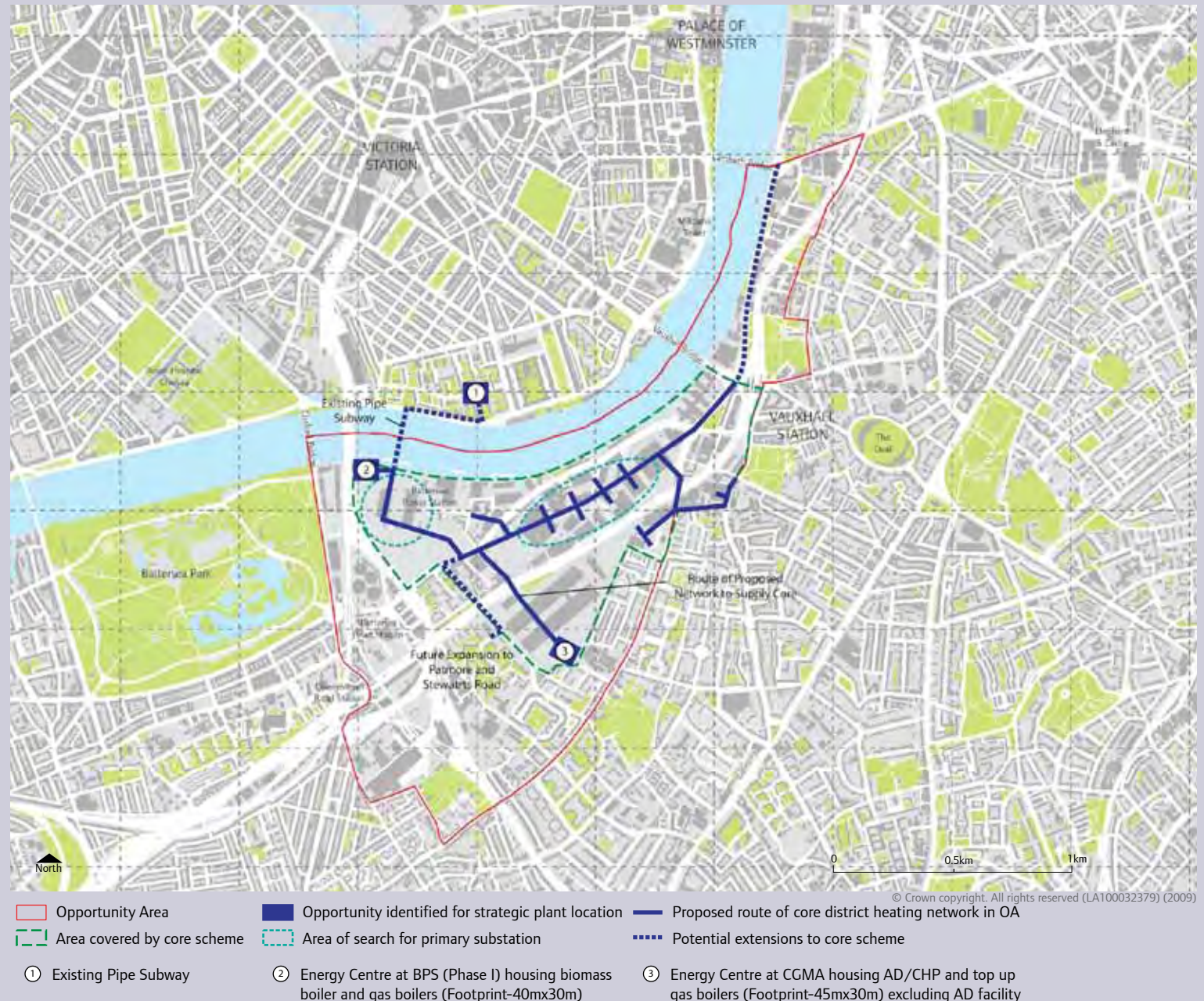


Figure 9.1 Conceptual map showing proposed District Heating Network and Energy Centre locations for core scheme

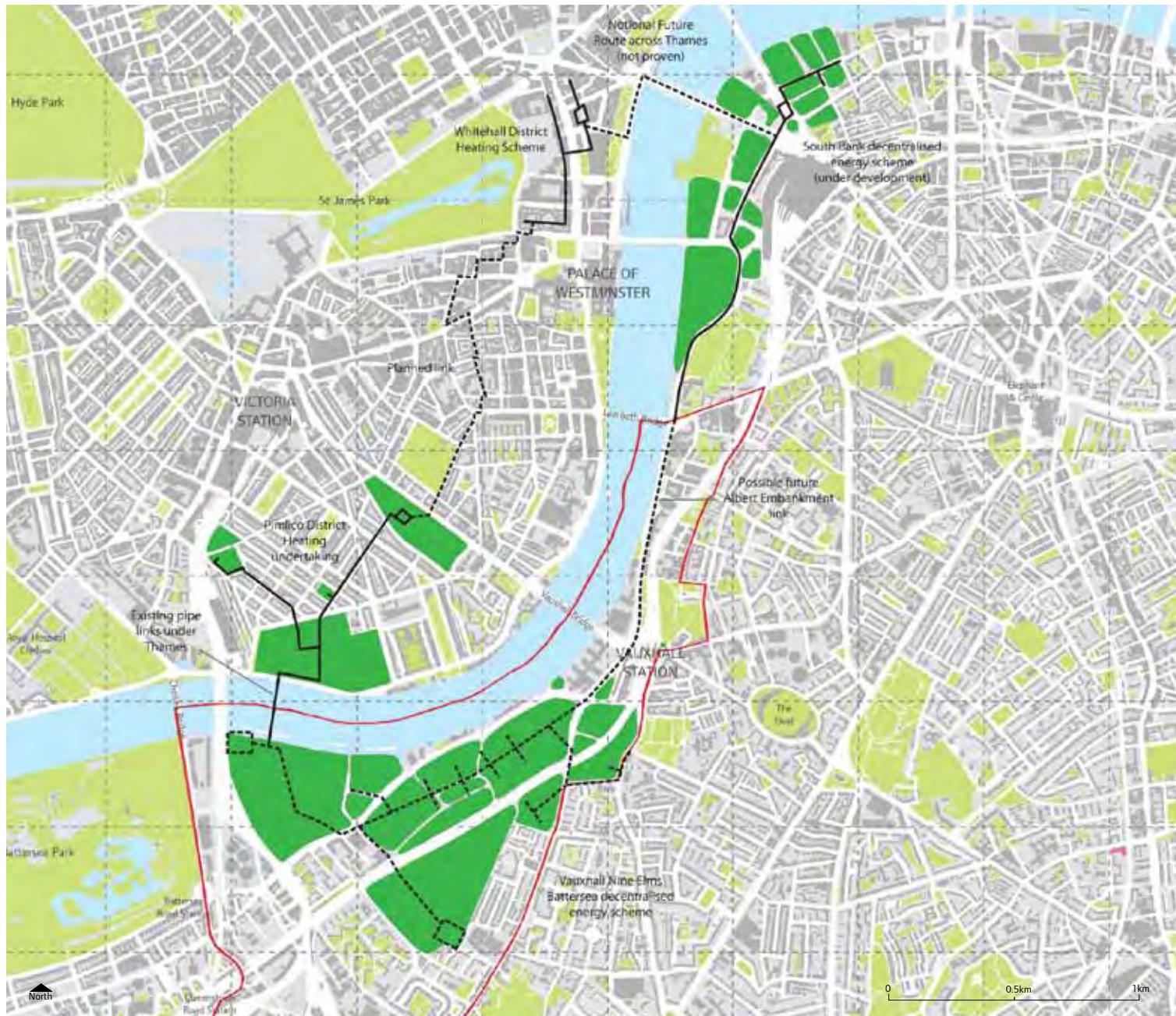


Figure 9.2 Map showing strategic context in relation to adjacent DE networks (existing and planned)

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9.1 Energy Strategy

The London Plan and the Mayor's Climate Change Mitigation and Energy Strategy emphasise the important role of decentralised energy systems in reducing carbon emissions and tackling climate change. London Plan policy 5.5 promotes the development of decentralised heating and cooling networks at the development and area wide levels including by identifying opportunities for new networks and expanding existing networks, developing energy master plans for specific decentralised energy opportunities and requiring developers to prioritise connection to existing or planned decentralised energy networks where feasible.

The energy strategy for VNEB is set out in TA5 of this document. In spatial planning terms it sets out an illustrative energy master plan, which connects key sites in the OA to a district heating network (DHN). Figure 9.1 illustrates the proposed route of the core network and indicative locations for two main energy centres, as well as a potential extension of the core network along Albert Embankment.

The energy strategy also identifies the potential for the VNEB DHN to connect to other energy networks beyond the OA boundary. These are illustrated on figure 9.2 and comprise:

- The Pimlico District Heating Undertaking (PDHU) in Westminster
- Whitehall District Heating Scheme in Westminster
- South Bank Decentralised Energy Network (under development) in Southwark

The key recommendations of the energy strategy are as follows:

- Key stakeholders to work with GLA, LDA and Boroughs as part of a VNEB District Heating Steering Group, to establish a district heating network in the core areas of Nine Elms, Battersea, Vauxhall, to supply low carbon heat to all new developments in this area.
- Ensure developments connect to the VNEB district heating network. Where a development is completed before the VNEB network is completed, the development should be designed using technical standards established by the VNEB District Heating Steering Group to ensure it can connect to the VNEB network with the minimum delay and modifications. Planning obligations will be used to ensure connection occurs.
- Ensure that council owned buildings in the OA connect and benefit from the low carbon DHN where appropriate.
- Ensure that the strategic connection between the PDHU and VNEB via

the existing pipework beneath the Thames is secured, including any access requirements and space for heat exchangers & pumps on the Battersea Power Station site.

- Ensure that the opportunity for the PDHU to be linked with a future VNEB heat network is fully investigated.
- Ensure that a route for the buried district heating mains is safeguarded in the strategic open space.
- Encourage the collection and processing of organic waste across the OA, using anaerobic digestion (AD) plant located at New Covent Garden Market.
- Determine the optimum location, scale and combination of energy generation technologies to provide a reliable and low carbon supply of heat for the district heating network, with the flexibility to adapt to future changes in relevant guidance and regulation.
- Ensure that opportunities to locate strategic energy generation technologies at Battersea Power Station and New Covent Garden Market are fully explored.
- Take a collective approach, through the establishment of a VNEB District Heating Steering Group (see Appendix 6 in TA5 for draft Terms of Reference), to determine the optimum ownership and contracting structure of the scheme and agree the preferred delivery approach.
- Develop technical standards and guidelines to ensure compatibility between developments and the VNEB district heating network to ensure a common approach to issues such as metering.

- Take a collective approach to the planning and provision of electrical capacity in the OA and establish areas of search for predicted EDF sub station capacity uplift (see sections 4.1 and 5.1 of TA5).

Progress towards implementation

Since the OAPF energy strategy was originally produced, the VNEB Energy sub-group has been created. The group meets quarterly and has representation from the two boroughs, the GLA, and major landowners. It reports to the Utilities and Wharves working group and is responsible for developing a detailed energy master plan for the OA, making recommendations in respect of energy network ownership and governance options and will ultimately oversee implementation of the network. Lambeth and Wandsworth Councils with the support of the GLA are commissioning an energy master plan for the OA based on a district energy network. The study will include energy demand forecasting and identification of plant size, locations for energy centres, routes for pipework, outline investment costs and opportunities to connect to existing energy loads and systems within or adjacent to the OA. The study will inform the next stage of work which will address procurement and commercial issues including a business model and pricing structure.

Planning applications already approved have been designed to enable straightforward future connection to the district heat network as and when it becomes operational.

9.2 Safeguarded wharves

The wharves and waste strategy is set out in TA6 of this document and sets the policy framework, baseline information and technical background for the spatial interventions proposed.

The OA contains three safeguarded wharves:

- Cringle Dock – an operational waste site (Western Riverside Waste Authority). Specialist infrastructure enables waste transfer activities to take place in a covered dock.
- Kirtling Wharf* – an operational aggregates wharf (Cemex) which has planning permission to increase throughput of the wharf.
- Middle Wharf – currently non-operational but considered to be capable of being made viable for waterborne freight handling purposes and may be required for construction of the Thames Tunnel. Following completion of the tunnel it should be brought back into operational wharf use and be able to contribute to the shortfall in wharf capacity in West London.

In line with the London Plan, the safeguarded wharves will continue to be safeguarded for waterborne freight handling uses in the long term, subject to a five-yearly review.

* "Kirtling Wharf has previously been known as RMC Battersea, Metro Greenham and Cringle Wharf"

Use of the wharves for transportation of construction and demolition materials will play a key role in reducing the number of road freight vehicle movements in the area during the construction period and such opportunities should be maximised.

The OAPF sets out a strategy for mitigating noise and visual intrusion around the wharves. This includes wrapping the wharf uses in commercial or other non-residential uses to prevent environmental issues emerging in the medium term when new residential development is occupied.

The OAPF also recommends the enclosure i.e. covering or containing within a building of the existing operational Thames Water site to the south of Cringle Dock in order to allow for continuation of use whilst also improving the quality of the built environment for those located around the facility.



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- Protected Wharves
- Cap site with development or open space
- Thames Tideway Tunnel
- Commercial development i.e. non-residential uses
- 1 Cringle Dock
- 2 Kirtling Wharf
- 3 Middle Wharf

Figure 9.3a Protected wharves - existing situation

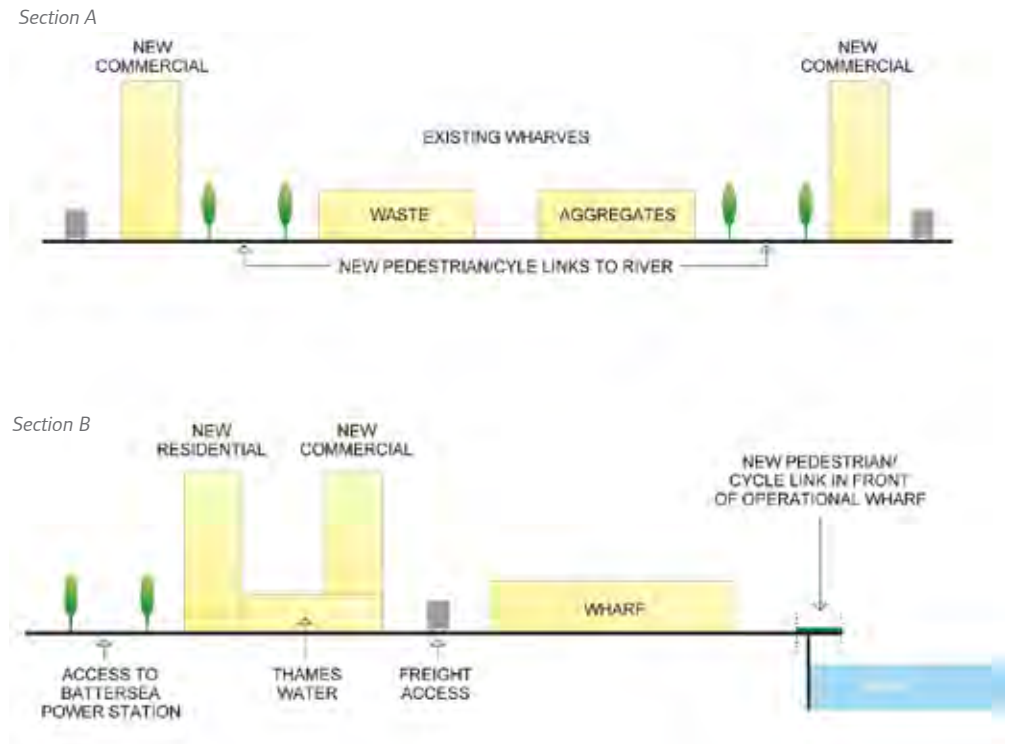


Figure 9.3d Section of proposed commercial development wrapping wharves and operational water site

Thames Tideway Tunnel

Thames Water has identified the need for a main construction site for the Thames Tideway Tunnel. Its Phase Two consultation material (November 2011) identifies a main tunnel driver site extending into the river foreshore and encompassing land at Kirtling Street and Cringle Street, including Kirtling Wharf, with a combined sewer overflow (CSO) connection site at Heathwall Pumping Station and Middle Wharf.

The preferred outcome would be to limit the extent of the jetty structure to minimise the impact on the adjacent Riverlight development by not encroaching into its river frontage. The main construction site would be required for approximately six years, and the CSO site for approximately three years, with a permanent requirement for maintenance access.



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- Draft limit of land to be acquired or used
- Local authority boundary
- proposed tunnel route - centreline
- Heathwall Pumping Station site

Figure 9.4 Thames Water Kirtling Street

9.3 Waste

The OA will see substantial new residential and mixed-use development, and this will give rise to significant quantities of waste, during construction and occupation. Waste reduction and recycling needs to be fully considered and implemented in the design phase, the construction phase as well as the operational phase.

Design Phase

This is often the most critical phase where waste can be designed out of the construction materials manufacturing process as well as the process on site. An appropriate design, specification and procurement strategy needs to be developed at this stage with appropriate targets set. Targets should be set in terms of percentages of reused and recycled materials used within the construction process.

Demolition and Construction Phase

Audits should be carried out prior to demolition to identify materials and products suitable for reuse and recycling. These items should be removed appropriately before demolition, as should any hazardous materials. Any remaining materials should be recycled following demolition.

Site waste management plans should be prepared for all construction sites with maximum emphasis placed on proper separation and sale/disposal of recyclable materials.

There is likely to be a degree of overlap between the construction periods of the various developments in the OA over a

prolonged period of time. It is therefore recommended that one or more temporary waste and materials consolidation centres should be established in the OA. Such centres offer controlled and secure facilities which provide reliability of materials delivery, fewer vehicle movements and lower CO2 emissions, and reduces over ordering, spoilage and loss of materials. Any consolidation centre should seek to maximise the potential of rail and river access transport for the delivery / removal of materials. They also enable better segregation and recycling of individual waste streams and to exceed standard and best practice industry performance. The Thames Tunnel main construction site could offer an opportunity to provide this.

Soils and excavated material should be reused or recycled rather than being sent to landfill. Ideally, contaminated materials should be treated and recycled rather than being landfilled. New approaches which support reusing these materials on and offsite are now available through the Development Industry Code of Practice* published by CL:AIRE. Their use should be considered on all new developments.

Operational Phase

It is critical that adequate space is designed for and provided within the homes and business premises to allow for efficient segregation of dry recyclable, organic and other waste. Space issues are one of the most significant barriers to recycling in businesses and in homes especially in flatted developments.

* "The Definition of Waste: Development Industry Code of Practice; Contaminated Land: Applications in Real Environments 2011 [Online] http://www.claire.co.uk/index.php?option=com_content&view=article&id=210&Itemid=116"

The OA will see high density development. The potential for innovative solutions to waste disposal and collection such as pneumatic waste collection systems*, which minimise the need for outdoor bins should be considered early in the design phase of new developments and should be developed in consultation with the borough waste teams. Such systems maximise the potential for recycling by residents and businesses whilst also increasing the attractiveness of the street environment. This could be particularly beneficial to the quality of the public realm and the linear park.

Other options may be suitable for particular waste streams, such as sink waste disposal units for organic waste.

More guidance on the opportunities related to new development will be available in the forthcoming SPG on Sustainable Design and Construction as part of the London Plan.

* "a pipe system particularly suitable for high density neighbourhoods using vacuum technology to take waste and recyclable materials to a few centralised points, saving space on outdoor bins"



Figure 9.5: pneumatic waste collection system at Wembley

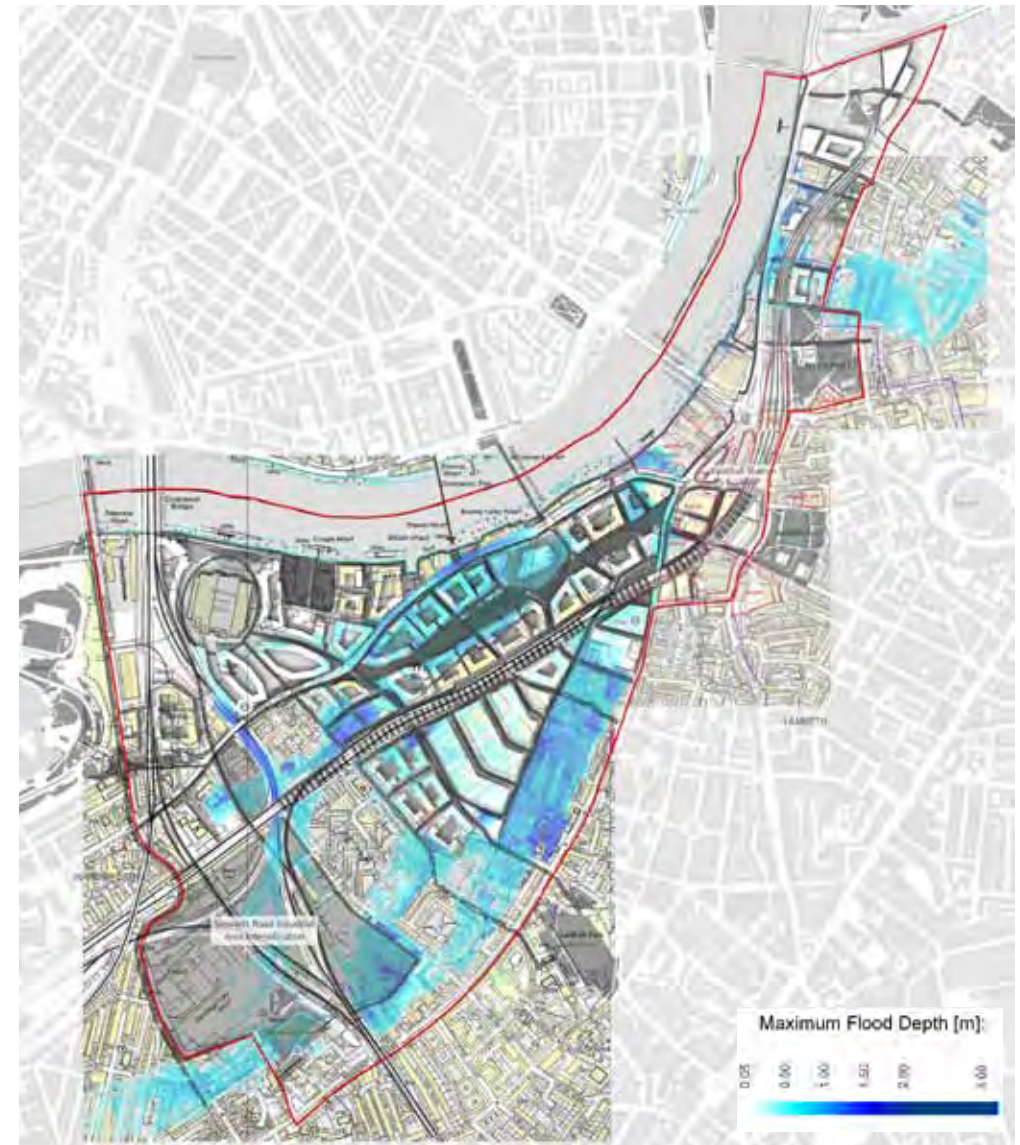
9.4 Flood risk

The water strategy for the OA is set out in TA7 of this document and provides the policy framework and baseline information in relation to flood risk and water conservation and management at strategic, site-wide and building level.

The whole of the OA is located within a high fluvial flood risk zone (PPS25 Zone 3a). It does benefit from a high level of flood protection (0.1% chance per year) by a combination of river walls and the Thames Barrier. Despite this there is a residual risk of flooding from either an overtopping of, or breach in, the flood defences. Breach modelling has been undertaken as part of the Strategic Flood Risk Assessments (SFRAs) for both Lambeth and Wandsworth. The 1:1000 year flood risk modelling demonstrates that the following areas could be affected:

- North of Spring Gardens
- Heart of Nine Elms
- New Covent Garden Market – Main Market
- Existing housing along the southern OA boundary around Crimsworth Road
- Lambeth College
- Parts of the Patmore Estates
- Areas within Stewarts Road SIL

Nine Elms has also been identified as a Critical Drainage Area as part of the Preliminary Flood Risk Assessment, looking at surface water flooding. This work has been undertaken as part of the requirements of the Flood Water Management Act 2010 (FWMA) and Flood Regulations 2009.



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Figure 9.6 - potential for the public realm to provide long term flood relief

The public realm strategy for the OA includes a linear park and strategic green links across the OA, which provide an excellent opportunity for flood risk mitigation in the areas set out above. Diagram 9.6 indicates that whilst the whole OA is not affected, there is a risk that many existing and proposed residential properties would be flooded and key transport routes including rail would be affected.

Through careful design of the public realm to include ponds, wetlands, swales, basins and drainage channels, the new green infrastructure in the OA will serve to reduce flood risk throughout the area. It will still be important for individual developments to consider the risks and ensure that they are designed to manage those risks, particularly where the development involves strategic infrastructure such as the NLE, electricity sub stations or emergency services facilities.

As part of their duties as Lead Local Flood Authorities (LLFA), Lambeth and Wandsworth Councils are proposing to undertake a joint study to identify potential schemes to reduce the risk of surface water flooding. On completion this study will form a supporting document to the OAPF.

Individual schemes will be expected through design to minimise surface water run off through the application of the London Plan Sustainable Drainage hierarchy, including the use of sustainable urban drainage systems (SUDS). Given the proximity of the River Thames, most rainwater should be discharged to the river rather than the combined sewer network. Measures to conserve water through good strategic water management in line with the Mayor's Water Strategy and to incorporate rainwater harvesting and green roofs on both residential and commercial

buildings will also be expected.

As part of the requirements of the FWMA 2010, Lambeth and Wandsworth Councils as LLFAs will need to set up a SUDS approval body. It is expected that these requirements will come into force in late 2012. This will mean that all developments will have to incorporate a SUDS that will need approval, and subsequent maintenance will be the responsibility of the LLFA.

9.5 Noise

Land use changes in the OA will raise a number of issues with regard to residential quality and noise.

Existing noise sources include:

- Strategic highways network in particular the Vauxhall gyratory and Nine Elms Lane
- Mainline railway lines to Waterloo and Victoria
- Safeguarded wharves – 24 hour operating licences
- All night activity at the New Covent Garden Main Market site
- Late night leisure activity around Vauxhall and Albert Embankment
- Rail and bus depots at Stewarts Road industrial area

In accordance with London Plan policy 7.15, individual schemes will be required to separate new noise sensitive development from major noise sources wherever practicable through the use of distance, screening or internal layout in preference to sole reliance on sound insulation.

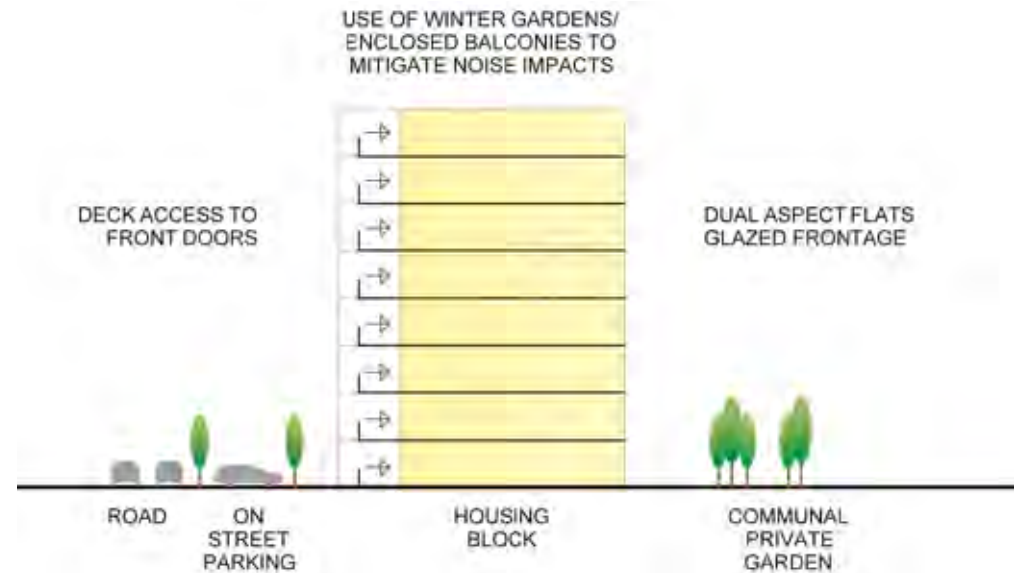


Figure 9.7 Residential layout – noise mitigation through design

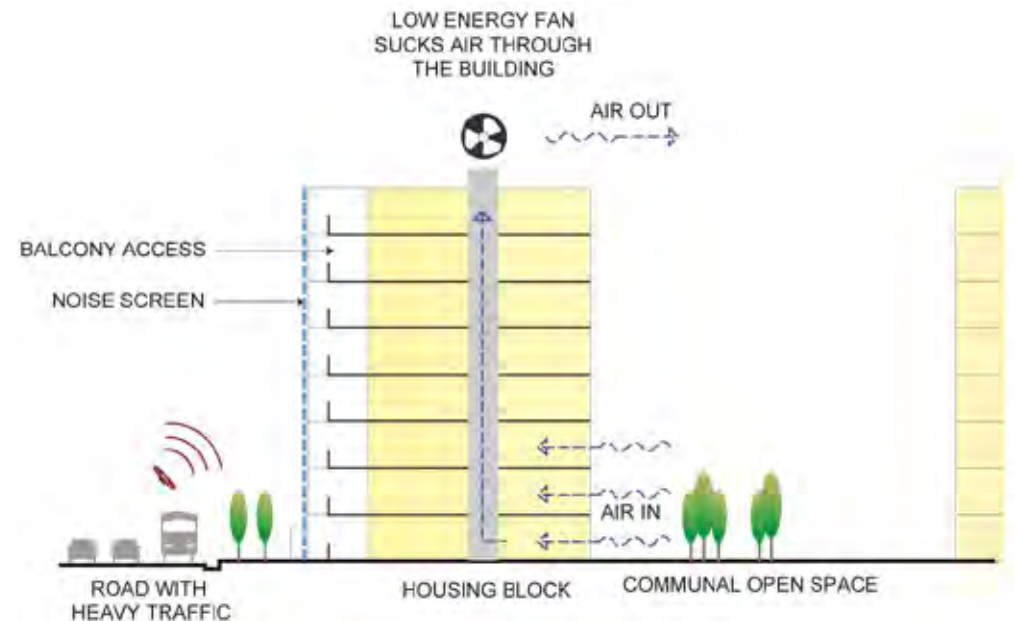


Figure 9.8 Residential layout – air quality mitigation through design

9.6 Air quality

Figure 9.9 shows the relative distribution of nitrogen dioxide (NO₂) concentrations in inner and outer London, with much higher concentrations within the central area.

Figure 9.10 shows NO₂ concentrations in the OA and figure 9.11 shows the number of exceedences above the daily mean particulate matter (PM₁₀) concentration. Both are highest around Vauxhall gyratory and along Nine Elms Lane and Albert Embankment.

In accordance with London Plan policy 7.14, development proposals should be designed to minimise exposure to existing poor air quality and provide on-site mitigation measures to ameliorate any additional negative air quality impacts arising from the development. Appropriate design solutions could include passive house technologies where the units are sealed and venting is taken from the less polluted side of the development and vented out at higher levels.

Modelled 2004 Annual Mean NO₂ Concentration (microgrammes per cubic metre), based on 2004 Meteorology and the LAEI 2004

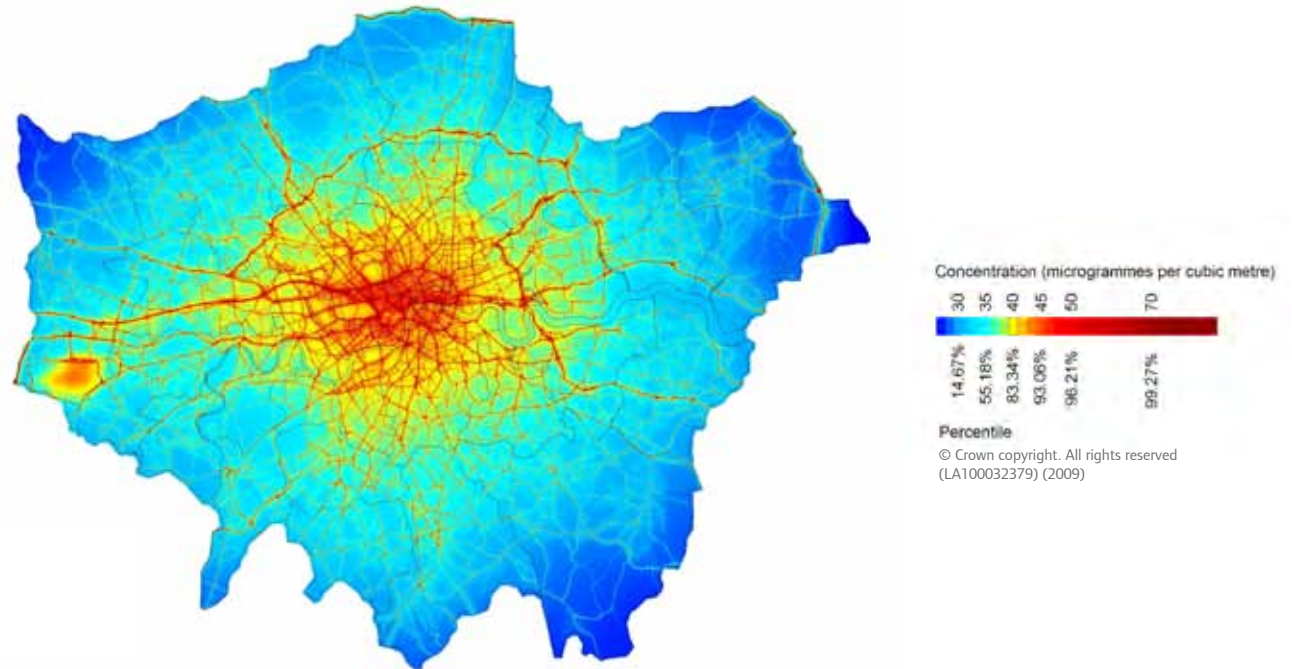


Figure 9.9 London-wide NO₂ concentrations

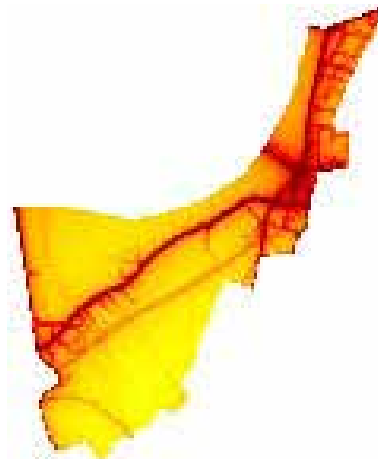


Figure 9.10 VNEB NO₂ concentrations



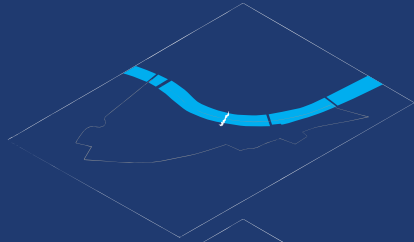
Figure 9.11 Modelled number of exceedences (days) above the daily mean PM₁₀ concentration using the LAEI 2004 emissions datasets and 2004 meteorology.



STOP

Chapter 10

Section 106 & CIL



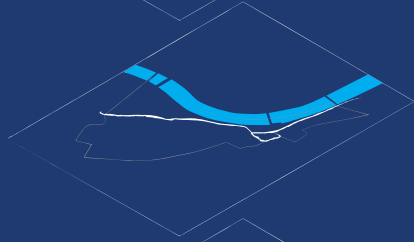
new pedestrian bridge across the river



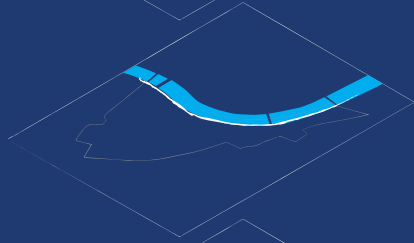
new social infrastructure



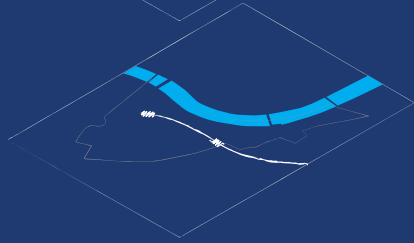
new linear park



improved road environment



improved river walk



northern line extension

10.1 Development infrastructure funding study

In Summer 2010, Roger Tym & Partners, Peter Brett Associates, and GVA Grimley undertook a Development Infrastructure Funding Study (DIFS) on behalf of the GLA in partnership with TfL, Wandsworth and Lambeth Councils and landowners. The aims of the study were to understand what infrastructure is required to support the proposed level of new development within the OA based on preferred development capacity revised scenario five (high density housing with retail and office); to identify the level of contribution that can be collected from developers without jeopardising viability; to identify how this is split between the proposed Northern Line Extension (NLE) and other infrastructure projects; to identify the size of the potential funding gap; and how that funding gap might be addressed.

The infrastructure requirements identified in the DIFS report were based on an assessment of the need for transport, health, education, open space and other infrastructure arising from future growth in housing and jobs in the opportunity area. These requirements were identified in consultation with key stakeholders and service providers. The costs associated with delivery of the new infrastructure were based on service providers' own estimates or with reference to case studies and data from cost guides. The proportion of infrastructure costs that were directly attributable to development in the OA, and which may be reasonably sought from developers via a tariff on development, was determined. Residual land value appraisals were then undertaken in order to determine what level of contribution per residential unit and per square metre of non-residential floorspace could be supported without unduly impacting development viability.

The full DIFS report is provided as Technical Appendix 9 to the framework.

10.2 Legislative context

Part 11 of the Planning Act 2008 provides for the imposition of a Community Infrastructure Levy (“CIL”). The Community Infrastructure Levy Regulations 2010 (as amended) implement the detail of the CIL.

The CIL allows local authorities and the Mayor to choose to charge a levy on new development in their area in order to raise funds to meet the associated demands placed on the area and to enable growth. It will largely replace agreements made under Section 106 of the Town and Country Planning Act 1990, the use of which, following implementation of CIL, will be scaled back to site-specific planning obligations and affordable housing, although the legislation may be further amended to bring affordable housing under CIL.

Under Regulation 122 of the CIL Regulations, the policy tests for planning obligations have been reduced from five to three and have been given statutory force, as follows:

“A planning obligation may only constitute a reason for granting planning permission for the development if the obligation is:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.”

Circular 05/2005 ‘Planning obligations’ provides for planning obligations to be pooled where the combined impact of a number of developments creates the need for infrastructure. It states that local authorities should set out in advance the need for this joint supporting infrastructure and the likelihood of a contribution being required, demonstrating both the direct relationship between the development and the infrastructure and the fair and reasonable scale of the contribution being sought. It is considered that the OAPF together with the DIFS report provide the evidence base for the proposed tariff-based approach.

Transitional arrangements for phasing out section 106 and implementing CIL, permit Section 106 agreements to continue to be used to pool planning obligations until April 2014 or until the CIL is introduced, whichever is the earlier. Thereafter, the CIL Regulations state that a local planning authority cannot use a planning obligation as a reason for granting permission to the extent that five or more separate planning obligations have been entered into within the area of the charging authority for the same infrastructure (other than Crossrail). Any mechanism that attempts to fund significant strategic infrastructure across five or more sites in either borough will therefore have to be implemented as a CIL. Once a local authority has adopted a CIL charge, it will be unlawful to charge a planning obligation for any item that could be covered by a CIL charge. Section 106 agreements will remain but contributions sought by this mechanism will be site-specific.

10.3 Policy context

London Plan

London Plan Policy 8.2 ‘Planning obligations’ indicates the Mayor’s preference for pooling planning obligations:

“In particular the Mayor wishes to develop with boroughs a voluntary system of pooling for the provision of facilities related to proposed developments...”

... Affordable housing; supporting the funding for Crossrail where this is appropriate and other public transport improvements should generally be given the highest importance.

Importance should also be given to tackling climate change, learning and skills, health facilities and services, childcare provision and the provision of small shops”

To ensure the process is transparent and equitable to developers, a consistent approach for determining planning obligations will be encouraged across the OA.

London Plan Policy 8.3 ‘Community Infrastructure Levy’ sets out the Mayor’s commitment to the effective development and implementation of the CIL. It states that the Mayor will provide a clear framework for application of the CIL to ensure the costs incurred in providing the infrastructure which supports the policies in the Plan (particularly public transport – including Crossrail) can be funded wholly or partly by those with an interest in land benefiting from the granting of planning permission.

Wandsworth Core Strategy

Policy IS7 – Planning Obligations of the Core Strategy states that “Planning obligations will be sought on a site-by-site basis to secure the provision of affordable housing in development schemes (see Policy IS5) and to ensure that development proposals provide or fund local improvements to mitigate the impact of development and/or additional facilities made necessary by the proposal, subject to the five tests set out in Circular 05/2005.” It goes on to state that in the areas of major change, including Nine Elms, contributions towards the cost of specific off-site improvements will be sought, in particular for transport and other infrastructure provision where necessary.

Wandsworth Site Specific Allocations Document

In the Area Spatial Strategy for Nine Elms, which forms part of its Site Specific Allocations Document (adopted February 2012), Wandsworth indicated that “Until the CIL is adopted, it is proposed that the tariff levels recommended in the DIFS report should be used as a guide to negotiations with developers”.

Lambeth Core Strategy

Policy S10 – Planning Obligations of the Core Strategy states that “Planning obligations will be sought to secure the provision of affordable housing” and will also be sought to mitigate the direct impact of development, secure its implementation, control phasing where necessary, and to secure and contribute to the delivery of infrastructure made necessary by the development.

10.4 Crossrail funding

Use of planning obligations in the funding of Crossrail SPG

The Crossrail SPG, adopted in July 2010, states that when considering a planning obligation, Crossrail should 'generally' be given highest priority, but that the VNEB OA presents a special case and has been omitted from the Central London charging area.

This is on the basis that development in this area will be required to make a similar level of contributions towards other strategically important transport infrastructure, such as the NLE.

Mayoral Community Infrastructure Levy

The Mayoral Community Infrastructure Levy to support the funding of Crossrail will come in to force on 1 April 2012. The levy is intended to raise £300m towards the delivery of Crossrail, which is essential to London's growing economy and to ensuring it remains a competitive global business centre.

The Mayor considers that all new development in London (except development for health or education facilities) should contribute towards the funding of Crossrail. Because of differences between the CIL and section 106 systems, and the importance of avoiding potential State Aid challenges, areas which were previously excluded from Section 106 requirements under the Crossrail SPG are included in the Mayoral CIL charging schedule. This sets out a rate of £50 per sq.m. (gross internal area) in Wandsworth and £35 per sq.m. (gross internal area) in Lambeth.

10.5 Wandsworth and Lambeth CILs

The DIFS report includes recommendations for converting the tariff to a CIL charge, taking account of the differences in the way Section 106 and CIL operate, including the fact that CIL is not chargeable on affordable housing. Under the CIL Regulations, the boroughs are required to produce separate CILs for their areas. It will be important for the two borough charging schedules that apply to the OA to be consistent with one another.

Wandsworth CIL

Wandsworth Council is at an advanced stage of developing a local Community Infrastructure Levy which it expects to adopt in late 2012. Within the area designated as the Nine Elms charging area, which covers the Wandsworth part of the OA, the Council proposes to adopt an approach that identifies the Mayoral CIL as a deduction from the overall level of charge that was deemed affordable in the DIFS. The Mayoral CIL has therefore been made inclusive in the overall charge deemed affordable for the area, and is not proposed to be applied as an additional charge.

The Wandsworth CIL charging schedule is consistent in its outcome with the OAPF tariff (set out later in this chapter) and when adopted it will replace the tariff in the Wandsworth part of the OA.

Development in the Wandsworth part of the OA is expected to contribute in the region of £15-20m towards the Mayoral CIL.

Lambeth CIL

Lambeth Council has not yet commenced work on its boroughwide Community Infrastructure Levy but intends to have a charging schedule in place by April 2014 in line with legislative requirements.

Lambeth in its Cabinet report of 16 January 2012 has decided to implement the OAPF tariff (40% affordable housing scenario) in the interim period prior to adoption of a boroughwide CIL.

10.6 Charging mechanism

It is important that the most appropriate form of charging mechanism is put in place to ensure that the necessary contributions are charged fairly and collected properly.

The DIFS assessed various options for collecting contributions and recommended that, given the uncertainty in relation to the introduction of CIL which existed at the time, a S106 tariff-based approach be taken. The main advantage of a S106 tariff approach is the certainty it provides to developers regarding what they will be expected to pay, and to the authorities regarding the income that can be expected from contributions. Prior to the introduction of CIL, it is the most transparent and fairest way of collecting contributions and should largely avoid time consuming site-by-site negotiations.

The charging mechanism has been developed to ensure that contributions are charged fairly and collected properly, and to be sufficiently flexible so that it can be relatively easily adapted to a CIL in due course.

Individual S106 agreements will still be required for small revenue items such as maintenance, site specific infrastructure such as play areas and to secure affordable housing. The majority of the site-specific infrastructure items are transport-related and include contributions towards the delivery of the Mayor's cycle hire docking stations, which will be negotiated on a site-by-site basis and secured via S106/S278 agreements. A full list of infrastructure items to be funded is included in the table in chapter 17 of the DIFS report.

10.7 Affordable housing

The DIFS assessed the level of viable tariff contributions based on alternative 15% and 40% affordable housing scenarios. The cost of providing affordable housing is not included in the tariff itself, but is accounted for separately. The DIFS recognised that the level of affordable housing sought will affect the level of tariff contributions developers can afford. Because of ongoing uncertainty regarding affordable housing subsidy, the affordable housing scenarios both assume no grant is available. If grant becomes available in the future, it could be used to finance additional affordable housing.

Affordable housing units are subject to the residential tariff in the same way as private housing. This differs from the approach set out in the CIL legislation, although CIL may be amended in due course.

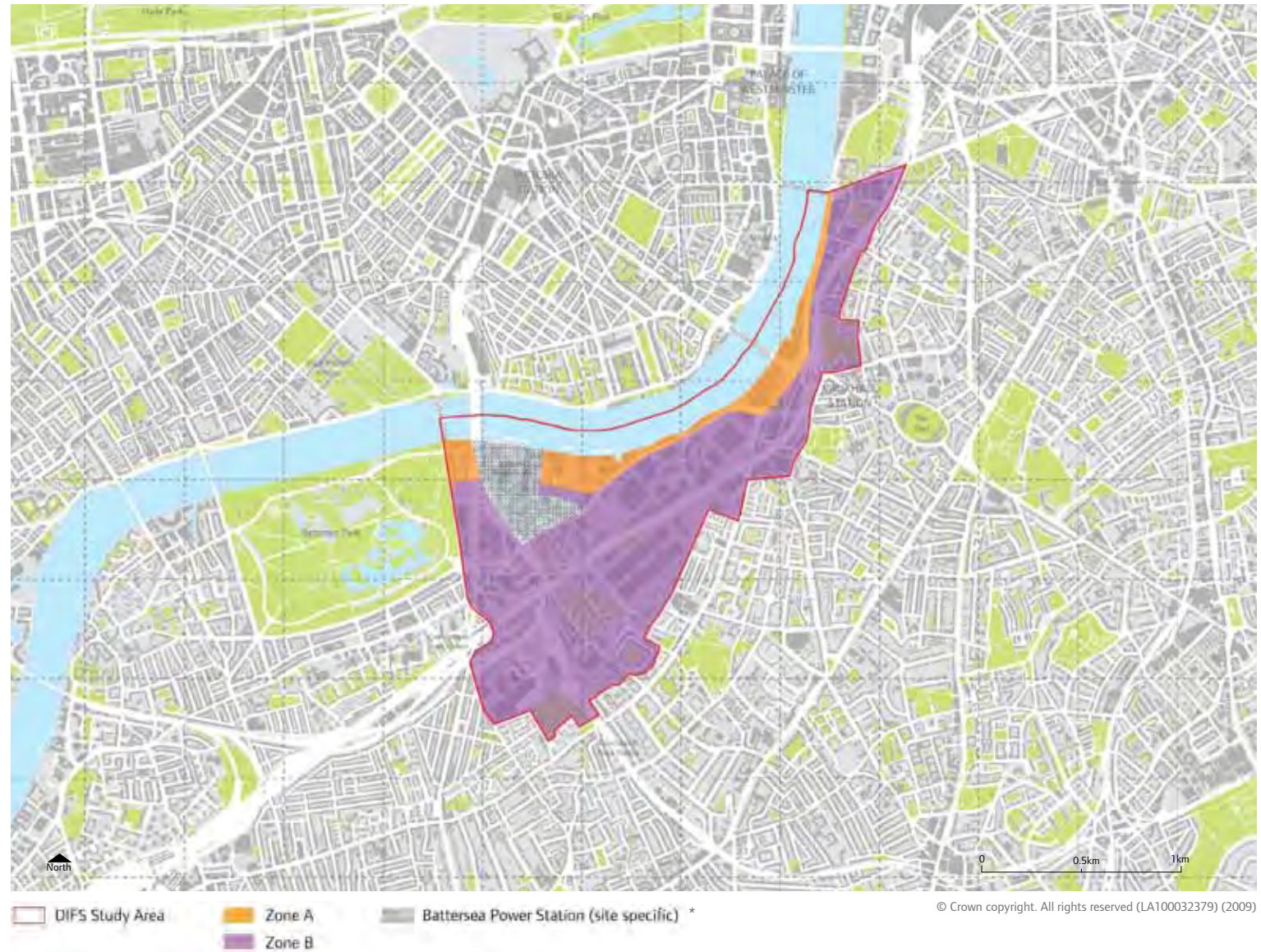
The strategic priorities set out in the London Plan are affordable housing and transport. Given the importance of the NLE and other transport projects to the success and viability of the whole opportunity area, in this instance, transport is prioritised above affordable housing. Therefore, the 15% affordable housing option is considered the most appropriate for the majority of the opportunity area. However, the affordable housing level required by Lambeth will normally be 40%, although for sites within close proximity to the proposed station at Nine Elms and those which may not be suitable for family housing, 15% affordable housing may be considered.

10.8 Tariff zones

The DIFS identified four different value areas within the OA and concluded that Value Area 1 could, in theory, afford a materially higher tariff than Value Areas 2, 3 and 4.

Two residential tariffs are therefore proposed, one for the higher value development in Zone A and a separate lower tariff for all other areas of the OA (Zone B). The tariff zone areas are shown in figure 12.1.

In terms of commercial development, a single tariff for the whole OA is proposed, regardless of the value area within which it is located.



* "Section 106 contributions secured in connection with any new scheme for the Power Station site will be expected to be at least proportionate to those already agreed, and having regard to borough CIL"

Figure 10.1: Proposed tariff zones

10.9 Charging tariff

The tariff will be levied on the levels of net additional residential and commercial floorspace calculated by gross internal area on a like-for-like land use basis. In practice, most of the development in the OA will involve demolition of activities such as warehousing and its replacement with residential, retail and office uses. There is likely to be very little replacement of space of the same use at a higher density. For the purpose of calculating the tariff, only the loss of the same type of space as that being proposed will be accounted for. The amount of tariff sought should relate to the level of affordable housing provided.

In order to front-load infrastructure funding and ensure its delivery in a timely manner, the tariff should, where possible, be paid on commencement of development. It is, however, recognised that there will be instances in which this could compromise scheme viability. The phasing of tariff payments should therefore be negotiated on a case-by-case basis having regard to scheme viability. The timing and size of payments will depend on the size of the overall contribution and the timescale for the construction of the development. Once CIL is in place the timing of payments will be determined by the CIL Regulations, and the relevant authority's instalment policy.

Land Use	15% affordable housing				40% affordable housing			
	2010 -2015 Tariff charge (per unit)	2010 -2015 Tariff charge (per sq.m.)	2016 -2031 Tariff charge (per unit)	2016 -2031 Tariff charge (per sq.m.)	2010 -2015 Tariff charge (per unit)	2010 -2015 Tariff charge (per sq.m.)	2016 -2031 Tariff charge (per unit)	2016 -2031 Tariff charge (per sq.m.)
Residential zone A	£40,000	£425	£50,000	£530	£25,000	£265	£35,000	£370
Residential zone B	£20,000	£210	£30,000	£315	£15,000	£160	£25,000	£265
Office (B1)	-	£160	-	£160	-	£160	-	£160
Retail (A1-A5)	-	£150	-	£150	-	£150	-	£150
Hotel (C1) and student housing	-	£40	-	£40	-	£40	-	£40

Table 10.1: Proposed S106 tariff charges for the OA, based on 15% and 40% affordable housing and property market recovery by 2015

The tariff will be paid to the local planning authority as the charging authority, who are also responsible for the allocation of funds to projects. However, the Strategy Board will be responsible for advising the Charging Authorities on prioritising and allocating funds to the infrastructure projects necessary to support the development of the OA.

10.10 Contribution split

The DIFS provides an in depth analysis of what infrastructure will be required in the OA to support the level of development proposed. Figure 10.2 shows the estimated infrastructure cost by category. A comprehensive list is provided in Chapter 17 of the study, including estimated costs and a breakdown of potential funding sources. The study does not seek to prioritise specific infrastructure projects but indicates that some are vital to the delivery of the OA whilst others are not essential but highly desirable.

Costs and potential sources of funding identified by the DIFS are set out in table 10.2. Work undertaken since the DIFS was completed has indicated that some of the figures need revising to take account of the latest information. As the implementation of the OAPF is taken forward, the detailed costs and sources of funding set out in the DIFS will need to be monitored and regularly updated. This work will be overseen and directed by the Strategy Board.

The DIFS highlights that there is likely to be a funding gap (of around £88 million, assuming market recovery) and that funding will come forward at different phases of the development period. Due to this uncertainty, it is important to clearly structure how funding will be allocated to projects as they come forward; which projects will be bought forward first and; which infrastructure projects have priority if the funding gap cannot be closed at a later date.

The development of the opportunity area is expected to take up to 25 years. The infrastructure requirements identified in the DIFS were based on the information available at a point in time, before any significant development in the area had commenced. As the development of the area takes place, the infrastructure requirements needed to support the area will need to be regularly reviewed, to take account of the latest information available.

The Strategy Board will be responsible for overseeing implementation of the OAPF and ensuring the success of the OA, including recommending the prioritisation and allocation of Section 106 contributions collected through the tariff and through the borough CILs as they come forward and replace the tariff. It is proposed that developer tariff/CIL contributions should effectively be pooled and that the Strategy Board should influence the prioritisation of projects and the allocation of funds as the development and specific infrastructure requirements are taken forward. Priorities for funding are likely to change over time and for the purposes of the OAPF it is not considered appropriate to be prescriptive about the allocation of monies towards specific infrastructure projects. The NLE is, however, recognised as being fundamental to the success of the OA and the ability to support the quantum of development planned under the preferred development scenario and should therefore be given the highest priority.

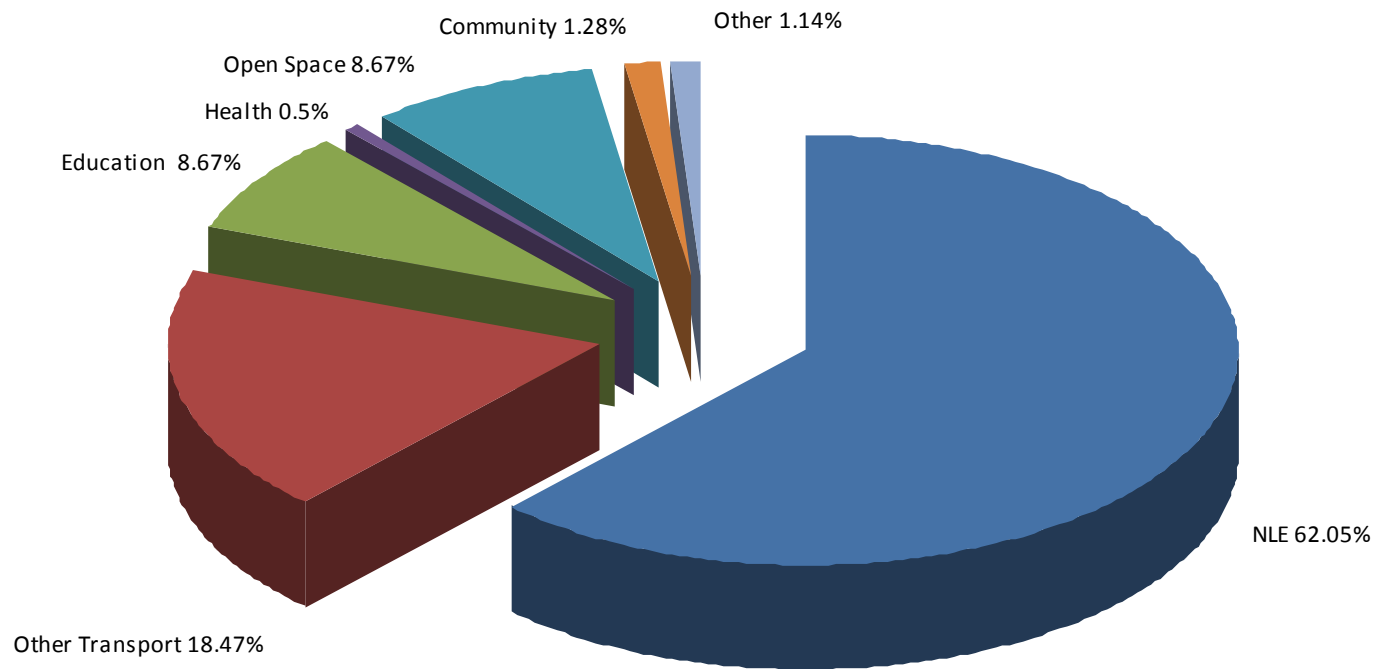


Figure 10.2: S106 / contribution split of total infrastructure costs identified in the DIFS

(Source: RTP)

10.11 Costs and funding summary

	Category	Definition	15% affordable housing	40% affordable housing
A	Gross infrastructure costs identified in the DIFS	The total costs of all infrastructure sought at the OA. It is the gross cost because it creates benefits beyond the OA.	- £1,059m*	- £1,059m*
B	Mainstream funding	Including grant funding from public agencies and authorities, and other recognised forms of public-private financing such as rent-back deals.	+ £23m	+ £23m
C	Funding anticipated through utilities cos, ESCOs, MUSCOs,	Explained in section 16 of the DIF study	+ £65m	+ £65m
D	Gross infrastructure costs after funding	= A - B - C	- £970m	- £970m
E	Infrastructure costs attributable to VNEB development	The portion of the gross costs which are mitigating the impact of development in the OA (i.e. costs that can be sought through S106, S278 or tariff)	-£908m	-£908m
F	Developer contributions	Anticipated funding which is available through the tariff, as well as contributions from extant permissions and Battersea Power Station.	+ £659m	+ £581m
G	Infrastructure assumed to be provided through development masterplan	Value of infrastructure provision which is expected through development masterplans. It will be agreed on a site-by-site basis through S106/ S278.	+ £94m	+ £94m
H	Infrastructure provided by site-by-site S106/S278	Value of infrastructure provision that is expected.	+ £34m	+ £34m
I	Innovative funding: additional bank borrowing for affordable housing which releases funding for infrastructure	See chapter 7 of DIF study	+ £33m	+ £90m
J	Funding Gap		- £88m	- £109m

Table 10.2: Estimated headline cost and funding

* This includes the estimated private sector delivery cost of the NLE at £563.8m. The public sector delivery cost is estimated at around £900m, which includes 35% optimism bias and an allowance for inflation.

(Source: RTP, PBA and GVA Grimley)

A number of other transport and non-transport infrastructure items are also necessary to make the development successful and should be prioritised accordingly. In order to maintain flexibility over the allocation of monies towards

infrastructure provision, it is proposed that Section 106 contributions should be linked to “the provision of infrastructure to support the development of the OA” and not to specific projects or areas except where this is justified by specific circumstances.

10.12 Developer contributions already agreed

Of the 16,000 units planned in the OA under revised scenario 5, 5,288 residential units have already been permitted, along with a significant amount of business and retail space at Battersea Power Station and the US Embassy.

Table 10.3 sets out the section 106 contributions that have already been agreed. Payment of these contributions is reliant on developments coming forward and is linked to the phasing of those developments.

Scheme	Contribution
US Embassy	£6,335,000
Lambeth (Various sites)	£5,300,000
Battersea Power Station	£213,249,711
Tideway	£35,013,050
Marco Polo House	£12,081,250
Embassy Gardens	up to £55,756,002
Nine Elms Parkside	up to £50,900,000
Total	up to £378,635,013

Table 10.3: S106 contributions already agreed

10.13 Other sources of funding

A number of other potential sources of funding for new infrastructure were identified in the DIFS and have emerged since its publication. Tax increment financing (TIF) could provide an opportunity to raise finance against predicted additional future taxation revenue streams e.g. business rates resulting from development in the OA. This mechanism could be implemented through creation of a new Enterprise Zone in the OA, which is currently being considered by the Government. Borrowing against future CIL and section 106 income could also provide upfront infrastructure financing.

These opportunities are the subject of ongoing discussion between all parties, which will continue to seek practical viable solutions to reduce the funding gap and ensure infrastructure is delivered in a timely manner.

Further work undertaken in relation to affordable housing has however indicated that the assumptions made in the DIFS in relation to the innovative funding of affordable housing are unlikely to be realised.

NLE funding and financing update

Since completion of the DIFS, a considerable amount of further work has been undertaken which has focused on the funding gap specifically as it relates to the NLE. It is important to note that the funding gap identified in the DIFS report is based on the estimated private sector cost of delivering the NLE (£563.8m). The ongoing funding and financing discussions are based on a NLE public sector delivery cost of £900m, which includes 35% optimism bias and an allowance for inflation.

This approach increases the overall funding gap for infrastructure; however, the Mayor remains committed to the NLE as key to unlocking and enabling growth and economic benefits for London.

The Government's support for the NLE was confirmed in the Chancellor's Autumn Statement (2011). Subject to a commitment by April 2013 from a developer to develop the Battersea Power Station site in accordance with the Mayor's vision and make agreed contributions, the Government has

indicated that it will consider allowing the Mayor of London and TfL to borrow against the Community Infrastructure Levy (CIL) to support this scheme; and also consider creating an Enterprise Zone, meaning that funding could be raised by borrowing against growth in local business rates. TfL and the GLA will continue to work closely with Government and the boroughs of Lambeth and Wandsworth to explore these mechanisms.

TfL is now progressing the preparation of a Transport Works Act Order application for the NLE on the understanding that the associated costs will be recovered from future section 106 and CIL payments. Subject to a funding and financing solution being agreed and final Mayoral sign-off, it is anticipated that this will be submitted this in early 2013.



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Figure 10.3 Developer contributions already agreed



STEWARTS
ROAD
PLAYGROUND