

Transport and Works Act 1992

Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006

London Underground (Northern Line Extension) Order

SUPPORTING STATEMENT

1. INTRODUCTION

1.1 Transport for London (TfL) is applying for an Order under the Transport and Works Act 1992 (the TWAO) to authorise an extension of the Northern line from Kennington to Battersea, via an intermediate station at Nine Elms. This document contains a summary of the case that supports TfL's application and has been produced to accompany the application and aid understanding of the project.

1.2 The primary aim of the Northern Line Extension (NLE) is to encourage economic growth in London and the wider UK economy by facilitating the sustainable regeneration and development of the Vauxhall Nine Elms Battersea (VNEB) Opportunity Area. This includes the creation of a major new sustainable residential, business and leisure district in London's Central Activities Zone. In addition, TfL has identified five secondary aims for the project, which are drawn from the *Mayor of London's Transport Strategy*, as follows:

- **Support economic development and population growth**

By enabling the sustainable regeneration and development of the VNEB Opportunity Area, the NLE will catalyse the creation of 16,000 new homes and 25,000 new jobs. In addition, it will enhance access to employment for local people in the surrounding area and integrate the VNEB Opportunity Area with the remainder of central London.

- **Enhance the quality of life for all Londoners**

As part of a wider package of transport and urban realm improvements, the NLE will bring economic and accessibility benefits to a wide area, including the existing and new communities around Nine Elms station.

- **Improve the safety and security of all Londoners**

The Underground is a safe and secure transport mode whilst stations provide safe and attractive meeting-points: the new stations at Battersea and Nine Elms will be modern, well-designed landmarks which will be integrated with high quality urban realm, benefiting new and existing communities in the area.

- **Improve transport opportunities for all Londoners**

The NLE will transform accessibility across the VNEB Opportunity Area and deliver standards available elsewhere in central London, assisting and complementing London's transport network. Both new stations will be step-free from street to train and will significantly enhance transport accessibility to all by creating new high quality access points to the Underground network.

- **Reduce transport's contribution to climate change and improve its resilience**

The Underground is a sustainable transport mode and the NLE will be constructed to the most up-to-date design and environmental standards. The NLE will contribute to making the area more typical of central London in terms of providing alternatives to car travel.

1.3 This Supporting Statement explains briefly how the project will achieve those aims. Accordingly, this Statement is structured as follows:

- a) The case for sustainable regeneration.
- b) The policy context.
- c) Project development and the proposed scheme.
- d) Project effects, with particular regard to:
 - Environmental effects;
 - Transport effects; and
 - Regeneration effects.

2. THE CASE FOR SUSTAINABLE REGENERATION

- 2.1 The need to accommodate growth in London's population and economy should be uncontroversial.
- 2.2 London is the economic powerhouse of the country. Its prosperity and its ability to continue to grow are central to the national economy. London is a world centre for business, tourism, media and culture and home of the UK Government. Inner London alone contributes around 14% of the UK's GDP.
- 2.3 London was the fastest growing region across England and Wales in the period 2001 to 2011 and population growth is forecast to continue. The London Plan predicted an increase of 790,000 households in the capital by 2031 and a growth of 776,000 jobs over the same period. Those estimates have more recently been updated by the GLA in its draft *Planning Statement for London* published in February 2013. Between 2012 and 2031 London's population is expected to grow by over a million and job growth is forecast at over 900,000. The national interest requires that potential to be satisfied.
- 2.4 London's outward expansion is constrained by the Metropolitan Green Belt, whilst planning policy necessarily protects its internal green spaces. It follows that London must take the opportunity to achieve growth and increased densities in brownfield areas with potential for new development.
- 2.5 A focused strategy of growth, based on regeneration has been at the heart of strategic planning for London since at least the publication of the Government's *Strategic Guidance for London* (RPG3 in 1996) and it lies at the heart of the London Plan spatial strategies of 2004, 2008 and 2011. Central to the strategy are a series of defined Opportunity Areas. Opportunity Areas are areas that are "*capable of accommodating substantial new jobs or homes and their potential should be maximised*". The Opportunity Areas have the capacity to meet almost two-thirds of the net employment requirement of the London Plan and 62% of London's planned housing development. Their successful development is central to the planned development of London.
- 2.6 Successive London Plan Panel Reports have supported the principle of the Opportunity Areas and emphasised their importance. The Panel for the 2004 London Plan identified considerable scope for and the benefit of the Opportunity Areas exceeding their indicative housing targets, whilst the Panel Report for the 2008 London Plan identified the importance of the Central London Opportunity Areas, including VNEB in the following terms:

"These are all localities either in the process, or offering the prospect, of enlarging and reinforcing London's position as a world city and its essential contribution to the UK economy."

2.7 The opportunities, however, are relatively scarce, particularly those which offer the potential to achieve regeneration on a large scale. They are also difficult to achieve and slow to fulfil. VNEB is a prime example of an Opportunity Area full of potential yet slow and difficult to bring forward.

2.8 As long ago as 1996, RPG3 recognised that regeneration areas were most likely to arise from vacant land generated by the departure of traditional industries and that focal points for regeneration were likely to be particularly important where they lay on the margin of the Central Area, providing key strategic opportunities in the capital to provide more competitive locations for business and to attract high quality new investment:

“The sites of railway yards, depots, power stations, canal basins and markets present opportunities but there are often practical difficulties in securing new uses on them. They represent a major regeneration resource which can complement or enhance nearby Central Area functions and act as a magnet for inward investment while at the same time contributing to meeting local needs.” (para. 2.33)

2.9 The south bank of the River Thames was identified as a particular example, including specifically “*the Vauxhall/Nine Elms area*”.

2.10 Unsurprisingly, Vauxhall Nine Elms was identified as a ‘*major regeneration resource*’ in the Wandsworth Unitary Development Plan of 2003 (the UDP), where regeneration could achieve multiple benefits including:

- meeting local needs;
- contributing to regeneration and the enhancement of the environment;
- reducing the need to travel; and
- meeting London-wide needs for population and employment growth.

2.11 The UDP identified that “*Nine Elms Battersea*” was a Government Priority Area for regeneration.

2.12 The London Plan 2004 identified VNEB as an Opportunity Area. VNEB was identified as the largest Opportunity Area in central London. At the same time, the London Plan extended the boundary of the capital’s CAZ (Central Activity Zone) to embrace VNEB, recognising its strategic proximity to the heart of London. It also removed a large part of the Strategic Industrial Location allocation of the area, which had affected and constrained its planning and development.

2.13 The current London Plan identifies the VNEB Opportunity Area as an area of 195 hectares with an indicative (additional) employment capacity of 15,000 jobs and a minimum of 10,000 homes. The Plan explains:

“As an integral part of the CAZ, this area has scope for significant intensification and increase in housing and commercial activity.”

2.14 The Nine Elms Vauxhall Board and Nine Elms Partnership were first established in October 2012 by the Mayor of London, TfL, the boroughs of Lambeth and Wandsworth and major landowners in the area. The partnership, jointly chaired by the leaders of Wandsworth and Lambeth councils has a Business Plan for the Area and also an agreed Vision, as follows:

“The Nine Elms Vauxhall area will be London’s biggest regeneration opportunity by far with the potential to create a new London quarter, deliver huge growth for the area and make a major contribution to London’s economy. By 2035 the 195 hectares which make up the VNEB Opportunity Area will become an internationally significant, special and distinctive part of central London. This requires no less than a transformational change..... Huge investment is needed – not just in the new developments but in the infrastructure necessary to support the density of the planned new uses....”

2.15 Despite its location and strategic potential, however, the VNEB Opportunity Area currently fails to fulfil that potential. In particular, the area has a number of characteristics which confirm the need for change, as well as a number of barriers to investment:

- the Area has a low population density relative to neighbouring communities;
- the Area has a low employment density, particularly in comparison to areas immediately to the east and north;
- the Area has relatively poor public transport accessibility - whilst the eastern part of the Area around Vauxhall station has good accessibility, the western parts of the Area achieve PTAL scores of only 1-2, which is insufficient to support higher levels of density if these are to be developed in accord with London Plan policies;
- large parts of the Area have a poor environment, there is a substantial legacy of vacancy and dereliction, a poor relationship with the River Thames and an uncoordinated, traffic dominated environment; and
- the Area and its immediate surrounds have relatively high indices of deprivation.

2.16 Battersea Power Station exemplifies both the potential and the problem. The site extends to 14.6 hectares and has been largely vacant since the closure of the Power Station in 1983. The land is vacant, derelict, publicly inaccessible and unattractive. The Grade II* Listed Power Station is in an extremely poor state of repair and officially identified by English Heritage as a Building at Risk. The history of attempts to achieve regeneration is extensive and there has been widespread planning activity and multiple planning applications

since 1997. The 1980s and 1990s saw failed attempts to promote theme park and retail/leisure/housing developments, including a new railway station. The most recent initiative was a comprehensive planning application promoted by developers REO (through its company Treasury Holdings UK Ltd) for a development totalling 940,000m² of mixed-use residential, leisure, retail, community and employment floorspace with the estimated potential to generate 3,400 homes and 13,000 jobs. Planning consent was granted in August 2011 but the development stalled, the developer went into administration and now a new developer has been found to take the site forward, 30 years after it first became vacant and available for development.

- 2.17 The consented development, however, is dependent upon a major new transport initiative to transform its accessibility and its commercial attractiveness. Consultants for Treasury Holdings undertook studies which concluded that an extension of the Northern line was the best practical means of providing the step change in public transport accessibility required to support the level of development proposed. In a study for Treasury Holdings in 2008, consultants Steer Davies Gleave (SDG) concluded:

“Treasury Holdings’ proposals for the redevelopment of Battersea Power Station and LB Wandsworth’s and the GLA’s vision for Nine Elms and North East Battersea can be achieved only if there is a step change in public transport accessibility.

The preferred option is the extension of the Northern line from Kennington to Battersea Power Station.”

- 2.18 The planning permission included a new underground station and a series of conditions and obligations in relation to the NLE. In particular, the planning permission committed to the following:

- no development beyond Phase 1 can proceed until either the NLE is in place or an order has been made by the Secretary of State approving the NLE, a contract let for the construction of the NLE and Wandsworth Council is satisfied that the NLE is capable of being completed and made available for use by the public prior to the first occupation of any other part of the development;
- an initial contribution of circa £14 million shall be paid towards feasibility studies, project management costs, technical studies, land acquisition etc with the express intention of seeking to bring forward the NLE;
- to use reasonable endeavours to promote the NLE by preparing and submitting a TWAO application as soon as reasonably practicable;
- to enter into a funding and delivery agreement with TfL to make arrangements for financing and funding the NLE; and

- to pay infrastructure contributions amounting to £211.6 million primarily towards the construction of the NLE.
- 2.19 There are a series of other detailed provisions within the BPS planning permission but the principle is clear - the development cannot proceed beyond Phase 1 without the NLE and the applicant committed to substantial actions to seek to bring it forward, including an infrastructure contribution of £211.6 million. This chapter of the planning history established that major regeneration at BPS cannot proceed without the NLE or an equivalent major transport intervention.
- 2.20 The London Borough of Wandsworth committee report on the BPS application confirmed the position as follows:
- “Whilst the NLE is supported in principle by the GLA, TfL and Wandsworth and Lambeth Councils, if it does not materialise, the level of development proposed for both this site and the Opportunity Area would need to be very substantially reduced.” (page 292).***
- 2.21 The first phase of development accounts for less than 7% of the total estimated trips that would be generated by the total development – giving some indication of the extent to which development is constrained without the NLE.
- 2.22 Battersea Power Station is perhaps the most high profile development site in the VNEB Opportunity Area but it is not the largest site and the overall scale of potential development is substantially greater. In total about 30 significantly scaled sites are identified for redevelopment, guided by planning policy principles set out in the *VNEB Opportunity Area Planning Framework* (the OAPF). A large number of these sites have now achieved planning permission, almost all at densities which can only comply with the Density Guidelines of the London Plan if the NLE is constructed. The committee reports for the applications make clear that the applications are predicated on the construction of the NLE and other complementary transport improvements.
- 2.23 The cumulative capacity of consented and anticipated development in the Opportunity Area would create 18,400 new homes, supporting a population of 34,300. In addition, the consented and anticipated employment floorspace would be sufficient to support 29,200 jobs, which would be a net gain of 23,800 jobs.
- 2.24 The Borough Councils and the Mayor of London have consented developments in advance of the NLE in recognition of the growth and regeneration status of the Opportunity Area. Some of those developments may come forward in advance of the NLE, whilst others may await its completion. The NLE would ensure the sustainable development of these development sites through the provision of high quality transport accessibility,

capacity and connectivity. It would also facilitate their development by enhancing the value and saleability of residential and commercial floorspace.

- 2.25 The transport studies undertaken for Treasury Holdings by SDG identified the need for the NLE and similar conclusions have been reached in the assessments undertaken for other large scale developments in the Opportunity Area. TfL's own transport studies have confirmed these findings.
- 2.26 In late 2011, Treasury Holdings UK Ltd entered into administration and the Mayor of London asked TfL to take responsibility for bringing the NLE project forward. TfL had worked closely with Treasury Holdings and supported its initiatives to bring forward the development of BPS. More generally, however, TfL had also been working closely with the Borough Councils and other stakeholders in order to establish planning policy for the Opportunity Area as a whole and, particularly, to identify the infrastructure investment that was necessary to enable the regeneration of the area.
- 2.27 In parallel with the work undertaken for Treasury Holdings, TfL undertook appraisals of the transport options for development scenarios in the Opportunity Area. In particular, the *VNEB Opportunity Area Transport Study* (SKM December 2009) and its *Addendum* of April 2010 undertook detailed transport modelling for the Opportunity Area. Six alternative Development Scenarios were examined, as follows:

OA Development Scenarios

OA Scenario	Description	Employment	Dwellings	Population
1	Low density residential	8,000	4,200	10,200
2	Medium density residential	8,000	8,500	20,700
3	High density residential	8,000	16,000	38,900
4	High density residential plus retail	12,000	16,750	40,700
5	High density residential plus retail plus office	27,000	16,750	40,700
5R	Similar to 5 but with a different employment mix and a slight reduction in density.	25,600	16,000	37,500

Source : SKM Table 8

- 2.28 Whilst enhancements to bus services and new bus routes would be sufficient to support Scenarios 1 and 2, Scenario 3 would require additional capacity and significant improvements to facilities at Vauxhall Underground station, Vauxhall Network Rail station and bus stations. Scenarios 4 and 5 (and 5R), however, would require *“the addition of a high capacity transport intervention”*. Options were assessed in detail and the best performing transport intervention for scenarios 4, 5 and 5R was the NLE.
- 2.29 The homes and jobs assumptions in Scenario 5R are very close to the reality of the now proven site capacity and planning potential of the Opportunity Area.
- 2.30 It is clear, therefore, that the VNEB Opportunity Area is in urgent need of regeneration, that such regeneration is important in the London wide and national interest and that the regeneration cannot sustainably take place at the scale proposed by the OA Planning Framework without the NLE.

3. PLANNING AND OTHER RELEVANT POLICY

3.1 The NLE project is consistent with and supported by all levels of planning policy – from national policy to specific local policy. It is also supported by wider economic and transport strategies and directly supported by the Government.

a) National Policy

3.2 The National Planning Policy Framework (NPPF) is based upon a presumption in favour of sustainable development, requiring development proposals that accord with the development plan to be approved without delay.

3.3 The thrust of the NPPF is perhaps captured in paragraph 19, as follows:

“The Government is committed to ensuring that the planning system does everything it can to support sustainable economic growth. Planning should operate to encourage and not act as an impediment to sustainable growth. Therefore significant weight should be placed on the need to support economic growth through the planning system.”

3.4 Paragraph 17 requires plan making and decision taking to proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Planning authorities are encouraged to work closely with the business community to understand their needs and to identify and address barriers to investment, including a lack of infrastructure capacity (paragraph 160). The NPPF provides a strong positive framework for decision making. Major planned infrastructure investments which facilitate growth in allocated regeneration areas qualify for the strongest national policy support.

3.5 In this case, of course, Government support extends beyond the provision of a positive planning policy framework. In his Autumn Statement of 2012, the Chancellor announced:

“I today confirm a billion pound loan and a guarantee to extend the Northern line to Battersea Power Station and support a new development on a similar scale to the Olympic Park.”

3.6 As part of that initiative, an Enterprise Zone is to be established for the VNEB Opportunity Area, allowing the GLA to retain the incremental business rates from development in the area in order to complement funding from Section 106 obligations and Community Infrastructure Levy payments to assist in the repayment of the loan.

b) **The London Plan 2011**

- 3.7 The NLE is directly supported by Policy 6.2 of the London Plan 2011, which provides that the Mayor will work with strategic partners to increase the capacity of public transport in London over the plan period by securing funding for and implementing a number of specifically identified schemes including:—

“Northern line – Kennington to Battersea to support the regeneration of the Vauxhall/Nine Elms/Battersea area.”

- 3.8 There is, therefore, direct up-to-date support in the statutory development plan for the project. The presumption in favour of sustainable development set out in the NPPF, therefore, is directly engaged.
- 3.9 The London Plan’s vision for London is that it should “*excel among global cities – expanding opportunities for all its people and enterprises*”. The London Plan recognises the challenges posed by forecasts of population and economic growth but confirms (at paragraph 1.47) that the only prudent course is to plan for continued growth and to manage that growth to ensure that it takes place in the most sustainable way possible – within the existing boundaries of Greater London and without encroaching on the Green Belt or London’s other open spaces (paragraph 1.51). A clear spatial strategy is set out, therefore, which includes the need to enhance and promote the unique characteristics of the Central Activities Zone (CAZ), which should form the globally iconic core of one of the world’s most attractive and competitive business locations (Policy 2.10). In order to achieve this, development opportunities are identified within the CAZ where development could be brought forward on a significant scale. VNEB is specifically identified for that purpose (Map 2.3 the CAZ diagram).
- 3.10 VNEB is identified as an Opportunity Area. Opportunity Areas are the capital’s “*major reservoir of brownfield land with significant capacity to accommodate new housing, commercial and other developments linked to existing or potential improvements to public transport accessibility*” (paragraph 2.58). Policy 2.13 of the London Plan explains that the Mayor will provide proactive encouragement, support and leadership for partnerships preparing and implementing opportunity area planning frameworks to realise the areas’ growth potential and ensure that his agencies (including TfL) work collaboratively to identify those Opportunity and Intensification Areas that require public investment and intervention to achieve their growth potential.
- 3.11 The VNEB Opportunity Area is defined more precisely in Annex 1 of the London Plan with an indicative additional employment capacity for 15,000 jobs and a minimum of 10,000 new homes. The supporting text explains:

“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.”

- 3.12 The TWA proposals, therefore, not only conform with the London Plan, they are required in order to fulfil its strategic objectives.

c) Mayoral Strategies

- 3.13 The *Mayor's Transport Strategy* was published in May 2010 and highlights the importance of increasing transport accessibility, along with the need to address congestion on the central London networks. VNEB is identified as an area where improving accessibility is “*of particular concern*”. The NLE is identified as a project to be privately funded to support developer led growth in the VNEB. Alignment between transport and regeneration priorities is identified as being of fundamental importance to achieving sustainable growth within central London.

- 3.14 The *Mayor's Economic Development Strategy* was also published in May 2010 and confirms that investment in growth and regeneration is essential to achieve the objectives of the Strategy. The successful development of the Opportunity Areas is relied on to fulfil the Strategy.

- 3.15 The *Economic Development Strategy* and the *Transport Strategy* were prepared in parallel with the London Plan – the three documents together provide a coordinated strategy for the future of London.

d) VNEB Opportunity Area Planning Framework (the OAPF)

- 3.16 The OAPF was published in March 2012 following extensive public consultation. Its preparation was informed by a range of detailed studies, including the *VNEB Opportunity Area Transport Study*. It assumes the construction of the NLE from Kennington to Battersea via Nine Elms and, consequently, plans for a capacity of 16,000 new homes and 20,000-25,000 jobs. The Mayor's foreword confirms that the area has “*huge potential to make a significant contribution to London's economy*”.

- 3.17 The OAPF sets out a land use, employment, retail and transport strategy which would be entirely unachievable without the NLE. High density employment and housing development is proposed in the west of the OA, for instance, including a new retail centre at BPS – none of which can be sustainably achieved without the NLE.

- 3.18 The OAPF contains proposals for a charging tariff based on the results of a detailed infrastructure study aimed at ensuring that developments in the Opportunity Area contribute proportionately, so that sufficient funds are generated towards the estimated costs of infrastructure considered necessary for the sustainable development of the VNEB, the principal component of which is the NLE.

3.19 This tariff charging structure has been adopted by the constituent borough councils and applied without exception to development in the Opportunity Area.

e) **Wandsworth and Lambeth Local Development Frameworks**

3.20 The Wandsworth Core Strategy was adopted in October 2010 and identifies that Nine Elms and North East Battersea has long suffered from a lack of functional identity. Policy PL11 promotes the area for high density mixed use development and commits the Council to working with the GLA and Lambeth on developing the OAPF to guide the comprehensive redevelopment of the whole area and to ensure that adequate infrastructure is available, including significant new public transport provision, which is identified as “*the key to unlocking the development potential of the area*”. The policy also confirms that funding will be sought from planning obligations linked to developments on sites within the Opportunity Area, in order to pay for essential infrastructure enhancements.

3.21 A more detailed spatial vision for the area is set out in the Wandsworth Site Specific Allocations document, adopted in February 2012 which identifies the VNEB area as a priority area for growth, whilst recognising that the proposed level and mix of development is dependent on major improvements to public transport. The NLE is identified as one of the key transport improvements necessary to unlock the area’s growth potential.

3.22 Wandsworth Borough Council resolved on 4 March 2013 to support the NLE application. The relevant report to Committee included the following:

***“For transformation on the scale envisaged at Nine Elms Vauxhall, addressing the relatively poor level of public transport accessibility particularly in the Battersea Power Station area is essential to both creating and responding to its growth potential.*”**

Appropriate public transport capacity will be fundamental to the attractiveness of the area as a commercial location and the achievement of the projected 25,000 new jobs as well as creating a vibrant new central quarter.”

3.23 The Lambeth Core Strategy was adopted in January 2011. Policies cover the Vauxhall part of the VNEB OA. The Core Strategy recognises the major opportunities for regeneration and development within the OA and supports the scale of growth identified in the then emerging OAPF, so long as this can be achieved to the benefit of and linked to the wider adjoining areas and their communities and supported by necessary social and transport infrastructure.

3.24 The draft Lambeth Local Plan of March 2013 confirms that the VNEB OA has the most significant potential for jobs growth in the borough, alongside potential for new housing but that this will only be achieved if there is a substantial growth in the capacity of public transport in the area.

- 3.25 At a more detailed level, a similar case is made in the Vauxhall SPD of February 2013, which supports the NLE including its new station at Nine Elms, confirming that new infrastructure is necessary to help create a truly memorable place and to enable the growth of the area.
- 3.26 Lambeth Borough Council resolved on 20 March 2013 to support the NLE application. The relevant committee report included the following:

“These opportunities and the significant benefits that they will bring can only be realised by radical improvements to the strategic transport network. This will involve....the extension of the Northern Line Underground from Kennington to Battersea Power Station, with a new Nine Elms Station in Lambeth, bringing the Northern Line to the Vauxhall area....

Unlocking the potential of the area by improving public transport connections opens up a range of opportunities for the borough’s residents and businesses that would not otherwise come forward.”

f) **Funding policies**

- 3.27 In addition to planning policies which comprehensively support the regeneration of the VNEB OA and the provision of the NLE, the relevant policies have put in place a series of mechanisms to secure funding towards the infrastructure necessary for the regeneration of the Opportunity Area and, particularly, the NLE. In particular:
- a. the Government has confirmed its support for the NLE by agreeing to designate a limited Enterprise Zone (EZ) covering sites in both Wandsworth and Lambeth. The incremental business rates generated within the EZ will be used by the GLA to help repay a loan of up to £1 billion from the Public Works Loan Board. A supporting guarantee for the loan has also been provided under the UK Guarantee Scheme;
 - b. the London Plan 2011 contains policies to enable Section 106 obligations to be sought to provide funding towards strategic transport improvements. In addition, the Plan confirms that the Mayor will raise a Community Infrastructure Levy (CIL) across London towards the funding of Crossrail. Policies for s.106 and CIL, however, recognise the VNEB as a “special case” because it has its own infrastructure funding priorities, so that the area is excluded from the Central London Charging Area;
 - c. the *VNEB Development Infrastructure Funding Study* (DIFS) was commissioned jointly by the GLA, TfL and the boroughs of Wandsworth and Lambeth to inform the OAPF. Published in October 2010, it costed the infrastructure necessary for the regeneration of the area, including the NLE. Having regard to

the amount of development planned in the Opportunity Area, the DIFS generated a tariff for development to pay, and tested its affordability for developers, based on an assumed reduction in the rate of affordable housing that would otherwise need to be provided in part of the area (15% rather than the normal policy requirement of 40%) – the tariff levels and this approach to affordable housing are adopted in the OAPF;

- d. Policy IS7 of the *Wandsworth Core Strategy* authorises the use of s.106 obligations to fund off-site infrastructure improvements in areas of major change, such as Nine Elms. Wandsworth's *Site Specific Allocations DPD* adopts the tariff levels from the DIFS;
- e. more recently, the borough of Wandsworth adopted its CIL Charging Schedule with CIL rates in the Nine Elms area set at the highest rate in the country – the rates were endorsed by the Examiner having regard to the exceptional level of infrastructure investment necessary in the area, including that the NLE was “*considered by the two Councils, the Mayor and the Government to be the key piece of new infrastructure to facilitate delivery of the full vision for the OA*”; and
- f. the *Lambeth Core Strategy* Policy S10 enables the collection of s.106 funds towards priorities, including infrastructure. Lambeth is preparing a CIL Charging Schedule for publication in 2013. In the interim, the Borough Council seeks s.106 obligations based on the DIFS tariff levels.

3.28 Against this background, the key principles relating to NLE funding have been agreed between the GLA, TfL and the London boroughs.

g) Policy conclusions

3.29 The NLE, therefore, is directly consistent with comprehensive, up-to-date planning policy and its delivery is key to the achievement of national, London wide and local planning objectives. Planning strategies assume, support and require its construction and a framework has been put in place to ensure that, whilst the NLE is to be publically financed, it will be privately funded.

3.30 Collectively, this amounts to an exceptional level of policy support.

4. PROJECT DEVELOPMENT AND THE PROPOSED SCHEME

- 4.1 The TWAO application proposes an extension to the Charing Cross branch of the Northern line, running from a section of track known as the Kennington Loop approximately 3,200 metres to Battersea Power Station with an intermediate station at Nine Elms. The twin bored tunnels would be served by permanent shafts with head houses at Kennington Green and Kennington Park to provide emergency access, tunnel ventilation and smoke control.
- 4.2 The new terminus at Battersea would be integrated within the Battersea Power Station development and the consented masterplan has already allowed for and assumed its development.
- 4.3 At Nine Elms, the station design allows for over site development (OSD) and the TWAO application documents illustrate the principle of that OSD development, which would be the subject of a subsequent planning application. The application documents illustrate and assess its potential effect. Development proposals have recently been put forward in that vicinity but it is apparent from close working with the affected parties that the amalgamation of land ownerships made necessary to construct the station creates an opportunity for a high quality, enhanced outcome. The approach chosen by TfL to comprehensive development is supported by the local planning authorities.
- 4.4 The project has evolved through detailed technical feasibility studies and has been informed and refined as a result of extensive public consultation and engagement with a wide range of public, private and community stakeholders. At each stage of the project development TfL has considered a range of possible alternatives and assessed these to ensure that the best performing options were taken forward. In some cases, options are limited by engineering or technical constraints but where feasible options are available these have been considered and assessed, including an assessment of potential impacts and consideration of the potential for mitigation.

a) Technical Studies

- 4.5 The original detailed technical appraisals of the need for a major transport intervention and the feasibility of the NLE were undertaken on behalf of Treasury Holdings, working in close consultation with TfL. Rather than resisting the need for major new transport investment, the owners of Battersea Power Station recognised at an early stage both the need for and the value of the NLE in order to facilitate and enable their development. By the time Treasury Holdings went into administration in December 2011, TfL had also conducted its own detailed studies which confirmed the need for and benefits of the NLE, not just for the development of BPS but for the successful regeneration of the VNEB Opportunity Area as a whole.
- 4.6 Some appreciation of the extent of the detailed technical studies which have led to the scheme now proposed in the TWAO can be gained from an

understanding that the NLE has been the subject or a key component of a range of studies, including:

- *Outline Feasibility Study and Business Case for the Tram and Tube Options*, SDG 2008;
- *Preliminary Business Case Summary*, SDG 2008;
- *Review of Outline Scheme*, Mott McDonald 2008;
- *Feasibility report addendum* : Parsons Brinckerhoff 2009;
- *VNEB Opportunity Area Transport Study*, SKM for TfL 2009;
- *Addendum to the Transport Study*, SKM for TfL 2010;
- *Public Realm and Highway Modelling Study*, PRHM 2010;
- *Multi-criteria Assessment of Route Options*, SDG 2010; and
- *Updated Route Option Assessment*, TfL 2011.

4.7 Collectively, the studies have generated a comprehensive understanding of the issues, options and optimum solutions for the principle of the NLE, the route selection and the detailed design of the project.

b) Public Consultation

4.8 Extensive consultation was undertaken in relation to the BPS planning application, including its proposals for a NLE and a new underground station at BPS. In addition, the planning application for the redevelopment of the Sainsbury's site at Nine Elms included provision for a new station and was the subject of extensive consultation. Policies within the London Plan and the borough policy documents have also been the subject of consultation and scrutiny. In addition, the following formal public consultation has been held in relation to the NLE itself:—

- *VNEB Opportunity Area framework and transport study* consultation, 2009;
- *VNEB Opportunity Area Framework* consultation, 2009;
- *NLE route options*, Summer 2010;
- *NLE route options and preferred alignment (including stations and permanent shafts)*, Summer 2011;
- *NLE temporary shafts options*, Autumn 2011;
- *NLE Update communication*, June 2012; and
- *Plans to extend the Northern Line to Nine Elms and Battersea*, Autumn 2012.

4.9 In addition, there has been ongoing engagement with local resident and community groups throughout 2011 and 2012 about specific elements of the project – for example, in relation to the originally proposed permanent shaft at Claylands Green, the design of the head house at Kennington Park, the reinstatement of Kennington Green and the temporary shafts at Radcot Street and Harmsworth Street.

4.10 There has been a process of continuous engagement with affected stakeholders and statutory bodies in order to inform, consult and respond to issues raised and to work towards an optimum scheme design. This has included consideration of potential alternatives where feasible.

c) NLE in principle

4.11 The need for a significant transport intervention was identified from the outset of the technical studies in 2008, which confirmed that incremental improvements to existing services would not provide the necessary transport capacity or accessibility to support the regeneration of VNEB. The studies identify that only a tram or tube option would be sufficient and the further studies undertaken on behalf of BPS confirmed that an NLE would achieve greater patronage and a better business case. The BPS application incorporated an NLE station and relied upon an NLE from Kennington.

4.12 As part of the consultation on the BPS proposals in 2008, 87% of respondents supported the NLE.

4.13 The appropriateness of the NLE was comprehensively re-appraised on behalf of TfL in the *VNEB Opportunity Area Transport Study* (SKM December 2009). The NLE was assessed against an alternative Light Rapid Transit (LRT) package and emerged strongly as the preferred solution. Identified advantages included:

- patronage and journey time savings would be greater on the NLE;
- the NLE would enable high density regeneration;
- relief would be achieved to overcrowding at Vauxhall, Battersea Park and on the Victoria line and the Northern line south of Kennington;
- the NLE would achieve a greater modal shift away from the use of the car and would also not reduce highway capacity or adversely impact on traffic flows; and
- an NLE would reduce traffic noise, air quality, townscape and other physical impacts compared to a surface solution.

4.14 The NLE package was found to provide much greater overall transport user benefits than the LRT package. An LRT would be cheaper than an NLE but the greater potential for private funding for the NLE would enhance its affordability and value for money from a public sector perspective. The NLE was also found to be the only scheme tested that could provide the required

additional transport capacity in the OA without overloading Vauxhall Underground station or causing impacts on the road network.

d) Route Selection

4.15 Four alternative route options emerged from the studies in 2008 and 2009:

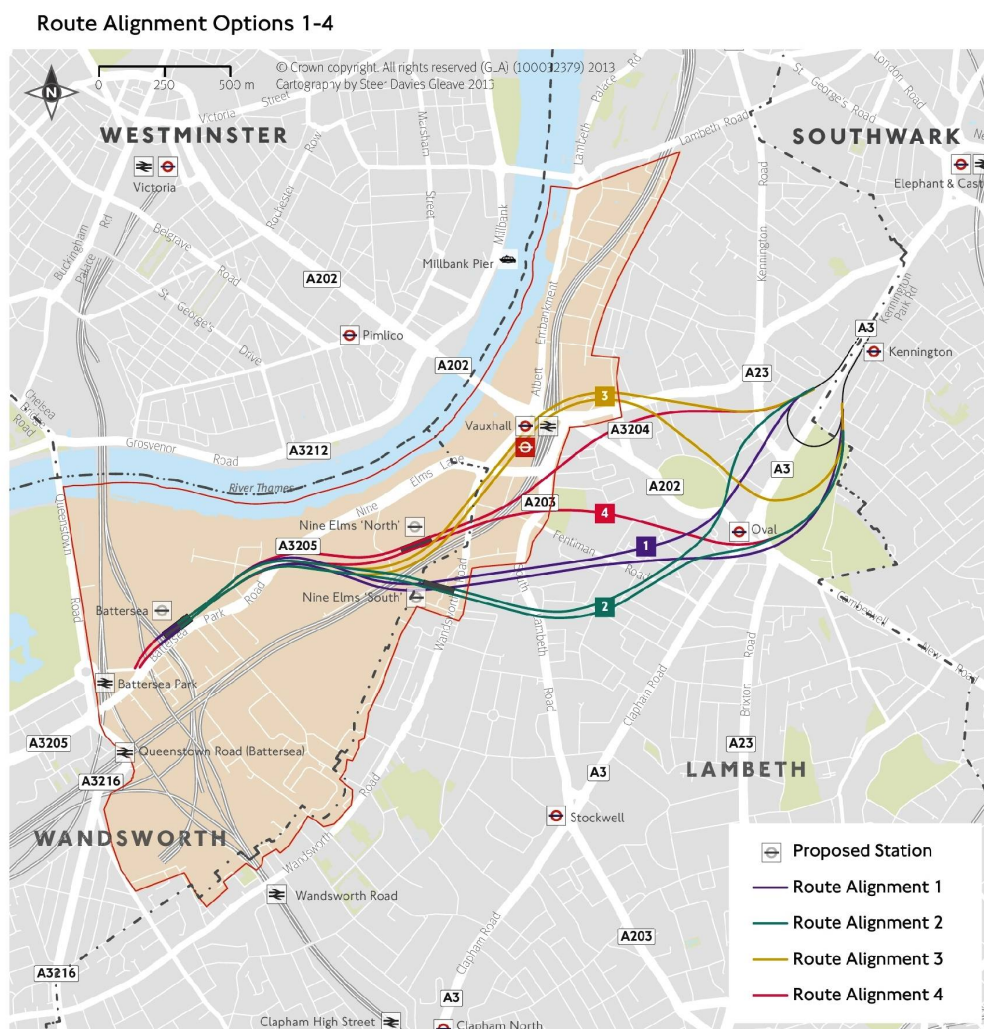
Route 1 - Kennington to BPS direct;

Route 2 - Kennington to BPS via Nine Elms;

Route 3 - Kennington to BPS via Vauxhall; and

Route 4 - Kennington to BPS with a station in the north of the OA.

The route options are shown in outline below:



4.16 The SKM Study of 2009 recognised different route and station options. An intermediate station at Nine Elms was identified as improving public transport accessibility for existing and new populations in the south of the Opportunity

Area and providing the potential to relieve pressure on the Victoria line and at Vauxhall station.

- 4.17 SDG undertook route option appraisals in 2009 and 2010 looking at the relative performance of options against strategic objectives and their business case. This work demonstrated that Route 2 performed best overall in terms of its fit with strategic policy objectives combined with value for money. Route 3 had the weakest case because of its poorer value for money (higher costs and lower user benefits) compared to Route 2, whereas the absence of an intermediate station at Nine Elms meant that Route 1 failed to deliver the necessary accessibility benefits to support the growth of the VNEB area.
- 4.18 TfL undertook an Updated Route Option Assessment in 2011 as a “sense check” on the earlier studies. The alternative routes were subject to review against TfL’s Strategic Assessment Framework and using the assessment framework in line with the DfT’s *WebTag* transport appraisal guidance. The criteria used are consistent with and drawn from the *Mayor’s Transport Strategy*. Route 2, with its interim station at Nine Elms, out performed all other routes when assessed against a range of criteria. For example, when assessed against the goals of the Mayor’s Transport Strategy, Route 2 was preferred in relation to all of the following:
- supporting sustainable population in growth;
 - improving connectivity and access to jobs;
 - improving journey experience and reducing crowding;
 - improved accessibility; and
 - supporting regeneration and tackling deprivation.
- 4.19 Route 2 was also found to be better than other options in relation to car transfer, CO₂ reduction and providing benefits to the greatest number of people.
- 4.20 The station at Nine Elms was identified as providing particular benefits in terms of providing greater additional public transport accessibility to those parts of the Opportunity Area proposed for development, as well as being located so as to serve existing communities. Route 2 was assessed to achieve the greatest patronage and the greatest relief to crowding for existing users of the Underground. Route 2 performed the strongest in terms of assessed transport benefits. Route 2 was also the most popular route with the public. During public consultation on route options in 2010, 61% preferred Route 2 and precisely the same proportion supported Route 2 in the summer 2011 public consultation exercise. Route 2 is directly supported in the OAPF and in the Vauxhall SPD, partly in recognition of the low levels of public transport accessibility in the Nine Elms area.

4.21 Route 2 provides for a Nine Elms station, broadly at the corner of Wandsworth Road and Pascal Street. Route 2 was endorsed by Wandsworth Council in June 2011, by Lambeth Council in January 2012 and by the VNEB Strategy Board also in January 2012.

e) **Detailed Scheme Development**

4.22 The route design in 2010 included a station at Nine Elms and three permanent shafts with head houses at Kennington Green, Kennington Park and Claylands Green. Permanent shafts are required to provide tunnel ventilation, smoke control and emergency access. The public consultation exercise of 2011 included these proposals. On taking over responsibility for the project in early 2012, TfL undertook a review of the entire design.

4.23 Particular concerns had been raised about the proposed shaft at Claylands Green, which caused TfL to undertake further feasibility studies and to engage with local residents and Borough representatives during 2012. As a result, design changes were developed (including the introduction of tunnel walkways, additional crossover passages, enhanced ventilation capacity at other shafts and relocation of a substation to Kennington Park) – all of which enabled the Claylands Green shaft to be removed from the project.

4.24 The permanent shaft proposed at Kennington Park has been the subject of close engagement with the local communities. There is little locational flexibility possible for the shafts themselves but the potential latitude available for the head houses has been explored to optimise their siting. In Kennington Park, the head house is proposed in the Park but it can be located so as to utilise the land on which the existing lodge stands, thereby limiting its impact. The proposals also include the replacement and enhancement of the existing community facilities, as sought by the Friends of the Park and by the local authority.

4.25 At Kennington Green, the head house is proposed within the forecourt of the nearby gin distillery on the site of a former building, so as to avoid the need for a permanent structure in the Green itself. This approach has also been agreed with the local authority and English Heritage. Specific local engagement has taken place with local businesses and residents regarding the principle and design of the head house and the reinstatement of the Green after the works have been completed.

4.26 Specific design work was also used to inform a consultation exercise on the location of two temporary work shafts. These are required for grouting and ground stabilisation works relating to the construction of step-plate junctions to connect the NLE to the Kennington loop. As a result of a local consultation exercise in Autumn 2011, temporary shaft sites at Radcot Street and Harmsworth Street were selected. An alternative construction approach which would use underground “gallery tunnels” instead of these temporary shafts continues to be discussed by TfL with interested contractors; this alternative is also described in the application.

- 4.27 At Kennington station, new cross-passages between the two southbound and the two northbound platforms are proposed and these are expected to relieve some of the congestion on the existing cross-platform interchange routes and to increase station capacity to accommodate the extra passengers generated by the NLE.
- 4.28 Design refinement continued and TfL undertook a comprehensive consultation exercise between October and December 2012 on each aspect of the project.

g) Scheme development conclusions

- 4.29 The scheme which now forms the subject of the TWAO application, therefore, has evolved through an exemplary process of feasibility testing, consideration of alternatives, design development, public consultation, stakeholder engagement and project review, in order to optimise its performance and minimise its environmental effects.

5. PROJECT EFFECTS

- 5.1 The TWAO application is supported by detailed assessments of all principal effects of the project. These effects need to be considered in detail and it would not be appropriate to attempt to summarise them for the purposes of this Supporting Statement.
- 5.2 There are, however, some important components of TfL's approach to limiting impacts which are particularly significant and which are recorded briefly below.
- 5.3 As explained in the previous section, the project design has evolved through a process of detailed technical appraisal and close engagement with the planning authorities, the public and potentially landowners and other interests. It is this careful approach which makes the most significant contribution to maximising the practical benefits of the project, whilst limiting its adverse effects. In addition, however, strategies have been developed to further limit potential adverse effects through commitments which would form a part of any TWAO and related planning permission. These include the following:
- a) a strategy to ensure that, where practicable, surplus demolition materials and tunnel arisings are transported from the area by river transport via the jetty at Battersea Power Station, thereby saving thousands of HGV movements;
 - b) commitment to a Code of Construction Practice to codify and apply best practice for large scale construction projects – this sets out a number of key principles which are then required to be reflected in detailed plans, including site-specific Codes of Construction Practice, which are to be submitted to and approved by the local planning authorities. These principles cover all principal construction activities that might be expected to have impacts on receptors, including matters such as working hours, lighting, security, site layout, site restoration, etc;
 - c) TfL has set a target level for operational ground borne noise and vibration that is at least as equivalent to other contemporary large scale UK rail projects;
 - d) commitment to a Construction Noise and Vibration Mitigation Scheme, a Ground Settlement Strategy and a Compensation and Hardship Policy for circumstances in which other mitigation measures are not sufficient to ensure a satisfactory environment for affected parties; and
 - e) a comprehensive set of proposed planning conditions.

- 5.4 Collectively, these amount to a substantial framework of mitigation and control to ensure that the project is delivered in accordance with the assessment in the *Environmental Statement*.
- 5.5 The project is also assessed to bring multiple positive benefits to the local area and to London as a whole. These are set out in, for instance, the transport and socio-economic chapters of the Environmental Statement. The assessments demonstrate that the project would be successful in meeting both its primary and secondary aims and, in particular, that its provision of high quality public transport accessibility to the Opportunity Area would both stimulate and support the sustainable regeneration of the area, enabling it to function as a dense, economically active district of central London.

30 April 2013