TIAA Henderson Real Estate

Commonwealth House

Transport Assessment

Final | 31 July 2014

Job number 235586

Ove Arup & Partners International Ltd
13 Fitzroy Street
London
W1T 4BQ
United Kingdom
www.arup.com

ARUP

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1 Introduction

1.1 Background

Arup has been appointed by TIAA Henderson Real Estate to prepare a Transport Assessment (TA) to support a planning application for the proposed refurbishment of Commonwealth House, 1-19 New Oxford Street, London Borough of Camden (LBC). This TA considers the transport implications of the proposed development, and also provides a Delivery and Servicing Management Plan and a Framework Travel Plan, as requested by LBC.

The site is a prominent triangular site which is bounded by New Oxford Street to the north and High Holborn to the south. The immediate area around the site comprises a diverse mix of uses including office, commercial, retail, and food and drink. The existing building is B1 office space with retail units at ground floor. The location of the site is shown at **Figure 1**.

The development proposals will include the refurbishment of the existing building and extension at roof level to provide a nine storey building including a single basement level and will continue to provide mainly B1 office space with retail at ground level.

1.2 Consultation

During the pre-application process, regular correspondence and meetings were held with Transport for London (TfL) and LBC. The scope of this report was agreed with LBC at a meeting in July 2014.

1.3 Report Structure

Following this introductory section, the remainder of the report is structured as follows:

- **Section 2** outlines the current national, regional and local transport planning policy relevant to this proposal;
- **Section 3** provides a description of the existing development;
- A review of the existing local transport facilities is provided in **Section 4**;
- **Section 5** provides a description of the proposed development, including cycling provision;
- **Section 6** provides a description of the proposed delivery and waste arrangement;
- **Section 7** presents the trip generation and mode split of the proposed development;
- **Section 8** outlines the anticipated transport effects of the proposed development;
- **Section 9** provides a summary of the Travel Plan and its main objectives. A Framework Travel Plan is included in **Appendix D**; and

- The final section, **Section 10**, summarises the TA and draws together the conclusions of the effects of the proposed development on the local transport network.

2 Policy Context

This section outlines the relevant national, regional and local transport policy and planning guidance documents upon which the proposed development will be assessed.

2.1 National Policy

2.1.1 National Planning Policy Framework (Department for Communities and Local Government, 2012)

The *National Planning Policy Framework (NPPF)* was published by the Department for Communities and Local Government (DCLG) and replaces previous planning policy guidance and planning policy statement documents. One of the core principles of the *NPPF* states that development should *"actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable"*.

The *NPPF* also indicates that developments should be located and designed, where practical, to:

- *accommodate the efficient delivery of goods and supplies;*
- *give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;*
- *create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;*
- *incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
- *consider the needs of people with disabilities by all modes of transport.*

The *NPPF* states that *"a key tool to facilitate the above will be a Travel Plan i.e. all developments which generate significant amounts of movement should be required to provide a Travel Plan"* (Ref: Paragraph 35).

2.1.2 Inclusive Mobility (Department for Transport, 2002)

The overarching aim of the document is to provide guidance on designing and constructing infrastructure for the disabled. Such infrastructure includes pavements and surfaces, road crossings, car parking bays and bus stops. Following the guidance will support social inclusion. However, it also considers the requirements of many other people including:

- Those with small children;
- Those carrying luggage or heavy shopping; and
- People with temporary mobility problems.

The document focuses on barriers and obstructions which cause problems for pedestrians, including street-works, advertisement boards, over hanging

vegetation and cycles and cars parked on footways. Measures to counteract these issues are considered.

2.1.3 Planning Practice Guidance (DCLG, 2014)

On 6 March 2014, the DCLG launched a planning practice guidance web-based resource. This was accompanied by a written ministerial statement that included a list of the previous planning practice guidance documents cancelled when the site was launched.

Under Planning Practice Guidance is a section titled *'Travel plans, transport assessments and statements in decision-taking'*. The relevant points to note are:

- Travel Plans, Transport Assessments and Statements are all ways of assessing and mitigating the negative transport impacts of development in order to promote sustainable development. They are required for all developments which generate significant amounts of movements.
- The development of Travel Plans and Transport Assessments or Transport Statements should be an iterative process as each may influence the other.
- Transport Assessments and Statements can be used to establish whether the residual transport impacts of a proposed development are likely to be "severe", which may be a reason for refusal, in accordance with the *National Planning Policy Framework.*

2.2 Regional Policy

2.2.1 Revised Early Minor Alterations to the London Plan, 2013 (REMA)

Produced by the Greater London Authority (GLA), the Mayor of London's London Plan details an integrated economic, environmental, transport and social framework for the development of London to 2031. The London Plan outlines a number of policies on the integration of transport and development, including the consideration of development proposals in terms of existing transport capacity and supporting sustainable transport in London. In terms of transport, the London Plan sets out policies primarily intended to support delivery of the objective that London should be:

"*a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities with an efficient and effective transport system which actively encourages more walking and cycling*".

A number of policies within the London Plan are relevant to the proposed development. These are as follows:

Policy 6.1 – *strategic approach* advises that the Mayor will work with all relevant partners to encourage the closer integration of transport and development through a number of measures including:

- *encouraging patterns and nodes of development that reduce the need to travel, especially by car;*
- *seeking to improve the capacity and accessibility of public transport, walking and cycling;*

- *supporting development that generates high levels of trips at locations with high public transport accessibility;*
- *seeking to increase the use of the Blue Ribbon Network (London's strategic network of waterspaces), especially the Thames for passenger and freight use;*
- *supporting measures that encourage shifts to more sustainable modes and appropriate demand management; and*
- *promoting walking by ensuring an improved urban realm.*

The proposed development accords with this policy by providing an office development in a highly accessible location that reduces the need to travel by car.

Policy 6.3 – *assessing effects of development on transport* outlines that development proposals should ensure that impacts on transport capacity and the transport network, including the cumulative impacts of development, are fully assessed. Transport Assessments should be in accordance with Transport for London's (TfL's) Transport Assessment Best Practice Guidance document and Travel Plans and Servicing Plans for developments should be secured.

This TA ensures the proposed development accords with this requirement and Section 6 details the Delivery and Service Management Plan.

Policy 6.7 – *better streets and surface transport* notes that there should be direct and pleasant walking routes to public transport connections from the proposed development. Safe, convenient and direct pedestrian access is provided from the development to public transport facilities, with the nearest London Underground stations (Holborn and Tottenham Court Road) being approximately five minute walk from the site, and other important land uses in the area are easily accessible on foot. The pedestrian environment is well maintained and is accessible to all users.

Policy 6.9 – *cycling* presents measures to increase cycling mode share in London to 5% by 2026. Measures include Cycle Superhighways and Quietways, and the on-going expansion and improvements to the cycle hire scheme.

To support this, developments should provide:

a) *secure, integrated, convenient and accessible cycle parking facilities in line with minimum parking standards as shown in the Parking Addendum Table 6.3;*

b) *Provide on-site showers and changing facilities;*

c) *contribute positively to an integrated cycling network for London by providing infrastructure that is safe, comfortable, attractive, coherent, direct and adaptable;*

d) *provide links to existing and planned cycle infrastructure projects including Cycle Superhighways, Quietways, the Central London Grid and the 'mini-Hollands'; and*

e) *facilitate the central London Mayor's cycle hire scheme through provision of land and/or planning obligations where relevant, to ensure the provision of sufficient capacity.*

In accordance with **Policy 6.9** of the REMA of the London Plan, the proposed development will provide parking as set out in Table 6.3 of REMA. In summary, this would include one space per 150sqm for staff and visitors.

2.2.1.1 Draft Further Alterations to the London Plan, January 2014 (FALP)

On 15 January 2014 the Mayor published the Draft Further Alterations to the *London Plan* for public consultation until 10 April.

Further alterations to this policy also add:

- *if the cycle parking requirements cannot be met within the site, developers should liaise with neighbouring premises and the local authority to identify potential for, and fund appropriate off-site visitor cycle parking. In all circumstances, long stay cycle parking should be provided within the site;*
- *cycling issues should be addressed in detail in development proposals as part of an integrated approach to sustainable transport, health and local economy. Proposals should ensure that cycling is promoted and that the conditions for cycling are enhanced;*
- *developments will need to address the needs of both long stay (staff) and short stay (visitor) cyclists; and*
- *cycle parking should be designed and located in accordance with best practice set out in London Cycling Design Standards (or subsequent revisions*)

In accordance with *London Plan* **Policy 6.9**, secure cycle parking will be provided for employees within the basement.

With regards to walking, **Policy 6.10** recommends the use of shared space principles with simplified streetscape, de-cluttering and access for all. Developments should therefore ensure high quality pedestrian environments and emphasise the quality of pedestrian and street space. It points to the 'Legible London' pedestrian wayfinding system as a successful measure to support walking journeys.

The proposed development is situated in an area with high quality pedestrian connections to nearby facilities. The proposed development has been designed to contribute to the high quality public realm to promote a secure and pleasant walking environment. The improvements alongside Dunn's Passage will provide an enhanced space improving the local urban realm.

2.2.2 Mayor's Transport Strategy (GLA, 2010)

The Mayor's Transport Strategy (MTS) sets out his transport vision for London and details how Transport for London (TfL) and partners will deliver the plan over the next 20 years. It is a key part of a strategic policy framework to support and shape London's social and economic development. Of particular importance is the implication for '*making London an accessible city'*, by:

- *Improving the efficiency, effectiveness and reliability of London's transport system;*
- *Encouraging and enabling patterns of land use that support sustainable patterns of travel;*
- *Integrating transport, spatial development and economic development policies to ensure sustainable access for people and goods;*

- *Identifying and creating locations with good public transport access to encourage the appropriate scale, form and type of development in ways that reduce car travel; and*
- *Improving travel choice and quality.*

The *MTS* seeks to increase the capacity of London's public transport and improve the accessibility and efficiency of London's transport system. Major London-wide infrastructure proposals include Crossrail, Thameslink and enhancement of the Underground and National Rail network.

The *MTS* aims to improve conditions for pedestrians and cyclists for reasons of health and sustainability. Walking and cycling will be promoted through information campaigns, travel planning, training and improved infrastructure such as cycle hire schemes, Cycle Superhighways, cycle parking provision, key walking routes and consistent wayfinding (such as Legible London).

2.2.3 The Mayor's Vision for Cycling in London Transport Strategy (GLA, 2013)

The Mayor's vision is that cycling in London will become an integral part of the transport network. The document outlines the Mayor's ambitions and intentions for cycling in London. The key outcomes of the Mayor's Vision for Cycling are:

- *A Tube network for the bike - London will have a network of direct, highcapacity, joined-up cycle routes. Many will run in parallel with key Underground, rail and bus routes, radial and orbital, signed and branded accordingly: the 'Bakerloo Superhighway'; the 'Circle Quietway', and so on. A 'bike Crossrail' will run, substantially segregated, from west London to Barking. Local routes will link with them;*
- *Safer streets for the bike - London's streets and spaces will become places where cyclists feel they belong and are safe;*
- *More people travelling by bike - Cycling across London will double in the next 10 years. The Vision will 'normalise' cycling, making it something anyone feels comfortable doing; and*
- *Better places for everyone -The new bike routes are a step towards the Mayor's vision of a 'village in the city', creating green corridors, even linear parks, with more tree-planting, more space for pedestrians and less traffic. Cycling will promote community safety, bringing new life and vitality to underused streets.*

2.2.4 Transport Assessment Best Practice Guidance (Transport for London, 2010)

Best practice guidance was originally prepared by TfL in 2006 to assist those submitting planning applications for major developments in London where a TA is required. Since then there have been a number of changes including the introduction of new planning powers for the Mayor of London, the introduction of pre-application advice and the publication of national guidance on transport assessments issued by DfT.

The purpose of this document is to provide high-level guidance to improve the process for TfL and its Land Use Planning Team (LUP). The Guidance covers the

scoping process, a TA's structure, inputs, analytical inputs, mitigation and travel plans.

2.2.5 Guidance on Travel Planning (TfL, 2013)

In November 2013, TfL updated its guidance on the requirements for travel plans for new developments in London. This guidance includes an explanation of the process, when a travel plan is required, what it should contain, and how to monitor, secure and enforce travel plans. It supersedes the previous TfL guidance, *Travel Planning for New Development in London: Incorporating Deliveries and Servicing*.

2.3 Local Policy

2.3.1 Camden Local Development Framework – Core Strategy (London Borough of Camden, 2010)

LBC's Core Strategy sets out the key elements of the Council's planning vision and strategy for the borough. It is the central part of the Council's Local Development Framework (LDF), a group of documents setting out its planning strategy and policies.

The Core Strategy has four overarching themes/objectives. The themes/objectives of relevance are:

1 A sustainable Camden that adapts to a growing population

To reduce the environmental impact of transport in the borough and make Camden a better place to walk and cycle.

3 A connected Camden community where people lead active, healthy lives

To reduce congestion and pollution in the borough by encouraging more walking and cycling and less motor traffic and to support and promote new and improved transport links.

These objectives are supported by policies to promote efficient use of land and buildings (***CS1 Distribution of Growth***) and encourage walking, cycling and public transport usage (***CS17 Promoting sustainable and efficient travel***).

The Council also commits to working with its partners to ensure that walking links are improved around Tottenham Court Road station in order to accommodate the expected increase in pedestrian activity in the area.

2.3.2 Camden Local Development Framework – Development Policies (LBC, 2010)

LBC's *Development Policies* form part of the Council's LDF. The document contributes towards delivering the Core Strategy by setting out detailed planning policies that the Council will use when determining applications for planning permission in the borough. The following policies are of interest:

DP16 The transport implications of development

- *The Council will seek to ensure that development is properly integrated with the transport network and is supported by adequate walking, cycling and public transport links.*

DP17 – Walking, cycling and public transport

- *Development should make suitable provision for pedestrians, cyclists and public transport and where appropriate, will also be required to provide for interchanging between different modes of transport.*

DP18 – Parking standards and limiting the availability of car parking

- *Development should comply with the Council's parking standards. Where the Council accepts the need for car parking provision, development should not exceed the maximum standard for the area in which it is located (excluding spaces designated for disabled people). Developments in areas of on-street parking stress should be 'car capped'.*

DP20 – Movement of goods and materials

- *In order to minimise the movement of goods and materials by road the Council will expect development that would generate significant movement of goods or materials both during construction and in operation to minimise the movement of goods and materials by road, and consider the use of more sustainable alternatives such as rail and canal link.*

2.3.3 Camden Planning Guidance – CPG7 Transport (LBC, 2011)

Camden Planning Guidance provides advice and information on how LBC will apply its planning policies. The Guidance has been drafted to support the policies in their *LDF*.

CPG7 covers transport and the points relevant to the proposed development are:

Chapter 2 – Assessing transport capacity

- *A Transport Assessment is required for all schemes which will generate significant travel demand.*
- *Guidance applies to planning applications that involve a change in the way that a site is accessed from the highway, and planning applications that will alter how people or goods are moved, how many trips they make, and when the trips take place.*

Chapter 3 – Travel Plans

- *The requirements of a Travel Plan will be tailored to the specific characteristics of the site and the development.*
- *Guidance applies to all planning applications that involve a significant impact on travel or the transport system. It will also guide consideration of Travel Plans submitted where the impacts are less, but where the transport provision does not have capacity for increased demand, and where demand management measures are desirable to address sustainability concerns.*

Chapter 4 - Delivery and servicing management plans

- *Transport Assessments represent the best tool to consider how a development can most appropriately be serviced.*
- *Guidance applies to all development proposals which are likely to generate delivery and servicing movement and therefore may incur significant noise and disturbance impacts.*

Chapter 8 - Street and Public Spaces

- *New development should contribute to the creation of attractive, clean and well-maintained public places.*

Chapter 9 – Cycling Facilities

- *Guidance on the implementation of minimum cycle parking standards for new development, the design and layout of cycle parking and cycle hire and cycle stations;*
- *All cycle parking, including all parts of the parked cycles, should be clear of routes needed for pedestrian movement; and*
- *The route to cycle parking from street level should be step free. Cycle parking inside buildings should be at the entrance level of the building or accessible by a ramp or lift from street level that can accommodate a bike.*

2.3.4 St Giles to Holborn Place Plan (LBC, 2012)

This Place Plan has been prepared as part of LBC's place shaping approach to understanding and addressing the needs, priorities and opportunities in different parts of the borough. The St Giles to Holborn area of focus covers the immediate area around St Giles Circus, where Camden meets Westminster, the corridor of New Oxford Street and High Holborn to the area around Holborn Station.

The vision for the Place Plan includes four themes:

- Benefits from major developments;
- Public spaces and movement;
- Supporting community needs; and
- Supporting business.

As part of the second theme, **Objective 4** seeks to improve the quality of experience for pedestrians and cyclists with reduced traffic dominance and fewer one-way systems. The following actions are highlighted in the Action Plan to try and achieve this Objective:

- ***4.1** Continue to work together within Midtown to explore opportunities for public realm improvements identified in Farrell's study*;
- ***4.2** Continue to review the Holborn Gyratory system and consider options to address the issues of concern;*
- ***4.3** Undertake public consultation on proposed junction alterations and public realm improvements around Holborn;*
- ***4.4** Continue to work with partners to investigate opportunities to address congestion issues at Holborn Station; and*

- ***4.5*** *Work with partners to continue to promote, develop and maintain cycle routes across the borough as well as improve their legibility.*

2.3.5 Planning Framework for Tottenham Court Road station and St Giles High Street Area (LBC, 2004)

The purpose of this *Planning Framework* is to provide a guide for decision-making for the area and to ensure that developments achieve maximum and widely distributed benefits to Camden as a whole. The document details a series of 'boxes' which provide useful guidance. The boxes of interest include:

Box 8: Proposed Cycle Routes

- *Eastbound route (and possibly westbound), running east along Andrew Borde Street and St Giles High Streets and up Museum Street to join Bloomsbury Way.*
- *Westbound route along New Oxford Street and into Oxford Street using the bus lane.*
- *Northbound from Drury Lane, across High Holborn, along Museum Street, east along Bloomsbury Way and north in to Bury Place.*
- *South down Bury Place, crossing Bloomsbury Way into Bury Place, east along New Oxford Street and High Holborn and then south into Newton Street.*
- *South down Bloomsbury Street, crossing New Oxford Street, to Bloomsbury Way and Endell Street.*

Developments will be expected to make provision for these routes in their designs and to provide safe and secure bicycle storage facilities.

Chapter 5, entitled '*Transport and Circulation Objectives'* has one key objective: "*Development will assist in reducing the dominance of traffic and improving walking, cycling, public transport and the environment".* This advocates the preparation of Transport Assessments, measures to improve pedestrian accessibility and promotion of the cycle network.

2.3.6 Planning Brief for 21-31 New Oxford Street (LBC, 2004)

A *Planning Brief* has been prepared for the development of land adjacent to Commonwealth House at 21-31 New Oxford Street. Its purpose is to secure development which accords with the Council's planning objectives and maximises the benefits of development.

Part 8 of the brief considers access, vehicular movement and parking. The key points to note are:

- *A primary requirement for the development is that it should minimise vehicle usage generally, and the number of car parking spaces in particular;*
- *New development is expected to provide for off-street servicing for commercial premises wherever practicable and must not hinder the servicing of adjacent buildings;*
- *Secure cycle parking is required for all developments. Cycle parking should be provided at all commercial premises at 1 space per 250m2 of gross floor area with additional parking to cater for 10% of visitors;*

- *A comprehensive Transport Impact Statement should be submitted with any application for planning permission to develop this site. This should examine all the traffic impacts of development on all components of the transport network. Developers should demonstrate that their proposals would not lead to any unacceptable impacts on public transport, highway networks and the wider environment, taking into account the likely phasing of developments over time, plans for local capacity improvements and user patterns; and*
- *To mitigate transport impact, developers should also prepare a Green Travel Plan that occupiers will be required to sign up to before occupation.*

2.4 Policy Compliance

The proposed development is considered to meet the objectives of current national, regional and local policy for a number of reasons:

- The site has excellent accessibility to public transport, with many local bus and Underground services available within a short walking distance from the site. This fulfils policy objectives for the promotion of accessibility to jobs by public transport (see **Section 3**);
- Secure cycle parking and associated facilities for cyclists will be provided in accordance with the Revised Early Minor Alterations to the *London Plan*, 2013 (see **Section 5**);
- Service vehicles will be accommodated via two loading bays along the road adjacent to Dunn's Passage and one existing on-street loading bay on New Oxford Street, which would be satisfactory for the servicing of the whole building (see **Section 6**); and
- The provision of a Travel Plan Framework that manages and monitors the trips associated with the proposed development will ensure that building users make trips in the most sustainable way possible (see **Section 9**).

3 Existing Development

This section describes the existing development on the application site, including the existing land use, access, parking facilities, servicing and waste arrangements.

3.1 Site location and existing land use

The site is located in the London Borough of Camden and forms part of a triangular block of buildings. The site is bounded by New Oxford Street to the north and High Holborn to the south. A site location plan is shown at **Figure 1.**

Commonwealth House has approximately 12,300m² of gross external area of office with a mix of retail use on the ground and basement floors.

3.2 Existing access arrangements

The existing office development is accessible from three entrances - one at the 'nose' of the building and a further two entrances on New Oxford Street. The main reception area for the offices is located at the 'nose' of the building, with two secondary entrances off New Oxford Street. Retail units on New Oxford Street and High Holborn are accessed directly from street. Separate entrance points on High Holborn and New Oxford Street provide access to Dunn's Passage, which is a narrow pedestrian lane to the west of the site.

Vehicular access to the site is provided via the road adjacent to Dunn's Passage. This route has access from High Holborn and New Oxford Street. This road is predominately used for office deliveries. Office waste collection and deliveries to the retail units on New Oxford Street utilise an on-street loading bay adjacent to a diplomatic parking bay. Deliveries to retail units on High Holborn also take place on-street. There is no car parking provision on site.

4 Existing Transport Facilities

This section describes the existing transport facilities in the vicinity of the proposed development. This includes public transport, walking infrastructure, cycling infrastructure, the local highway network and parking arrangements.

4.1 Public Transport

The Public Transport Accessibility Level (PTAL) of the proposed development has been calculated using Transport for London's (TFL) approved methodology. This assumes a walk speed of 4.8 kilometres per hour and considers rail stations within a 12 minute walk (960m) of the site and bus stops within an eight minute walk (640m) as accessible. Using this methodology, the proposed site has a PTAL rating of 6b. This is the highest level of accessibility and rated as 'Excellent' (with 1a being the lowest accessibility and 6b being the highest accessibility). Public transport services are shown at **Figure 2.**

4.1.1 London Underground

There are two London Underground stations accessible within 960m walking distance of the proposed development. These are:

- Tottenham Court Road: within 400 metres of the site and serving Central and Northern lines; and
- Holborn: within 500 metres of the site and serving the Piccadilly and Central lines.

A summary of these services and their frequencies are provided in **Table 4.1**.

Table 4.1: London Underground Services

Line	Origin/ Destination	Frequency*
Central	Hainault/Epping to /from Ealing Broadway/West Ruislip	Every 2-3 minutes
Northern	Edgware/High Barnet to/from Kennington-Morden	Every 2-4 minutes
Piccadilly	Heathrow Airport/Uxbridge to/ from Cockfosters	Every 2 to 3 minutes

*Peak hour frequency per direction

The Central Line tunnel runs to the north of the site and the Crossrail safeguarding zone runs to the south of High Holborn.

4.1.2 National Rail Services

Charing Cross Station and Euston Station are the closest National Rail stations to the proposed development, approximately 1.3km to the south and 1.4km to the north, respectively.

4.1.3 Bus Services

There are a number of bus routes available within 640m walking distance of the proposed development. The routes, which serve a wide variety of locations, are summarised in **Table 4.2** and shown in **Figure 3**.

Table 4.2: Local Bus Services

Route No.	Origin/ Destination	Frequency*
1	Canada Water Bus Station – Tottenham Court Road	Every 6-10 minutes
7	Russell – East Acton	Every 5-10 minutes
8	Bow Church – Tottenham Court Road Station	Every 4-7 minutes
10	Hammersmith Bus Station – King's Cross Station /York Way	Every 6-10 minutes
14	Putney Heath – Warren Street Station	Every 3-7 minutes
19	Battersea Bridge/Hester Road – Finsbury Park Interchange	Every 6-10 minutes
25	Holles Street (Oxford Circus) – Hainault Street (Ilford)	Every 5-8 minutes
29	Trafalgar Square/Charing Cross Station – Wood Green Station	Every 3-6 minutes
38	Victoria Bus Station - Lea Bridge Roundabout (Hackney)	Every 2-6 minutes
55	Leyton Green – Oxford Circus	Every 5-9 minutes
59	King's Cross - Streatham Hill / Telford Avenue	Every 8-10 minutes
68	Euston Bus Station – West Norwood Station	Every 5-9 minutes
73	Victoria Bus Station – Stoke Newington Common	Every 2-4 minutes
91	Northumberland Avenue/Trafalgar Square - Rosebery Gardens (Crouch End)	Every 5-8 minutes
98	Pound Lane / Willesden Bus Garage - Holborn Station	Every 6-9 minutes
134	Tottenham Court Road Station – Tally Ho Corner (West Finchley)	Every 3-7 minutes
168	Dunton Road (Hampstead Heath) - South End Green (Southwark)	Every 5-8 minutes
171	Museum Street - Catford Garage (Bellingham)	Every 6-10 minutes
176	Tottenham Court Road Station - Penge/Pawleyne Arms	Every 6-10 minutes
188	Russell Square Station – North Greenwich Station	Every 6-10 minutes
242	Tottenham Court Road Station – Homerton Hospital	Every 7-11 minutes
243	Waterloo Station/Tenison Way - Wood Green Station	Every 7-10 minutes
390	Notting Hill Gate – Archway Station	Every 6-10 minutes
521	London Bridge Station - Waterloo Station /Mepham Street	Every 2-5

Route No.	Origin/ Destination	Frequency*
		minutes
RV1	Tower Gateway Station - Covent Garden/Catherine Street	Every 9-11 minutes
X68	Southampton Row (Holborn) - West Croydon Bus Station	Every 15 minutes

**Peak hour frequency per direction*

The bus routes outlined above are served by the following bus stops (approximate walking distances shown in brackets):

- Bloomsbury Way/New Oxford Street (65m)
- High Holborn Post Office (100m)
- Bloomsbury Way (105m)
- Bloomsbury Street/Shaftesbury Avenue (195m)
- High Holborn/Newton Street (220m)
- Bloomsbury Square (315m)
- Bloomsbury Street (345m)
- New Oxford Street Centre Point Building (360m)
- Shaftesbury Avenue (450m)
- Holborn Station/Kingsway (460m)
- Southampton Row/Theobalds Road (465m)
- High Holborn/Proctor Street (490m)
- Red Lion Square (490m)
- Tottenham Court Road/Dominion Theatre (505m)
- Oxford Street/Tottenham Court Road Station (505m)
- Cambridge Circus (570m)
- Conway Hall (590m)
- Covent Garden/Russell Street (610m)

The local bus stops and routes in the vicinity of the proposed development are shown on **Figure 2.**

4.2 Pedestrians

4.2.1 Pedestrian Facilities

The proposed development is highly accessible on foot. All roads in the immediate vicinity (New Oxford Street, High Holborn, Bury Place, Smarts Place and Museum Street) have good quality footway and provide routes to key local stations and destinations, such as Tottenham Court Road station and Holborn station. The local pedestrian network is heavily used in the morning and evening peak periods, primarily by commuters travelling between the nearby Underground stations and various commercial or retail premises.

Three signalised pedestrian crossings are located adjacent to the proposed development:

- **New Oxford Street/Bloomsbury Way**: north - east of the site. This provides a key connection for northbound and southbound pedestrian movements;
- **New Oxford Street/High Holborn:** east of the site. This provides a key connection to destinations east of the site; and
- **High Holborn/Museum Street/Drury Lane**: south-west of the site. This is a crossroads with crossings on all four arms. The crossings on the southern and eastern arms are signalised; the crossings on the western and northern arms operate as 'walk with traffic'.

4.3 Pedestrian Environmental Review System (PERS)

In order to review the pedestrian network surrounding the proposed development, a Pedestrian Environment Review System (PERS) audit was undertaken on 9 May 2014. This assessment evaluates the quality of the local pedestrian network, identifying the extent to which it meets pedestrian needs. The PERS audit considers how pleasant, coherent and convenient the pedestrian facilities are. The audit allows for the identification and prioritisation of problems for pedestrians in the area, so that resources can be targeted to improve the walking environment in the most efficient and effective manner.

The full audit is provided in **Appendix A**. The audit has highlighted some specific themes for improvement in the vicinity of the proposed development, as shown in **Appendix A.** The key findings are summarised as follows:

- The local pedestrian network is moderately used in the morning and evening peak periods.
- The PERS audit has shown that the pedestrian environment is generally in good condition, with direct routes to local tube and train stations.
- There is adequate width on all footways to cope with the existing volume of pedestrians on most of the footways surrounding the proposed development.
- The majority of dropped kerbs are located at the appropriate places and are generally aligned with the pedestrian desire line.
- There is good signage within certain locations of the study area. Wayfinding maps and signs are provided outside Underground stations, which help with navigation in the area. However, when travelling south of the proposed development along Drury Lane, the level of continuous signage to trip attractors decreases. This could be improved with intermediate signing in this area.
- The majority of pedestrian crossings are satisfactory for the level of users.
- Public transport waiting areas (i.e. bus stops) performed positively in the audit. Despite this, the lack of real time information at some bus stops could be addressed.

Following the PERS audit, the following headline recommendations can be made to improve the pedestrian environment in the vicinity of the proposed development:

- More attention/action should be given to improve the physical environment of High Holborn (at, and close to, its junction with Museum Street) and Museum Street. The PERS showed that the quality of environment for pedestrians was not pleasant. Maintenance of the route could be improved to develop the physical environment.
- The functioning of the crossing on New Oxford Street could be improved to enable pedestrians to directly cross Bloomsbury Way at the junction.
- The waiting areas for Bus Stop C on Bloomsbury Way and Bus Stop S on High Holborn could be improved.
- The amount of unnecessary obstructions on footways could be reduced to free up space for pedestrians. This is especially relevant of routes south of the site (e.g. Drury Lane).
- More wayfinding maps could be introduced en route to Covent Garden station in order to guide pedestrians to trip attractors.

4.4 Cyclists

4.4.1 Cycle Routes

There are a number of cycle routes available in the vicinity of the proposed development. According to TfL's Central London cycle map, Museum Street is a 'quieter road that has been recommended by other cyclists'. An off road cycle path is located on High Holborn leading to New Oxford Street, north-west of the site. All cycle routes are shown on **Figure 4**.

A number of new cycle routes are proposed, as part of the Central London Cycle Grid. A number of proposed routes will pass near the site. These include:

- Route EW7 from Tottenham Court Road to Clerkenwell;
- Route EW8 from Charing Cross to Holborn; and
- Route NS1 from Regent's Park to Great Queen Street.

4.4.2 Public Cycle Parking

Public cycle parking facilities are available at a number of locations in the immediate vicinity of the proposed development. These stands are located at:

- Museum Street (4 spaces)
- New Oxford Street (5 spaces)
- New Oxford Street (9 spaces)
- High Holborn (4 spaces)
- High Holborn (10 spaces)

4.4.3 Barclays Cycle Hire

The closest Barclays Cycle Hire docking stations to the site are as follows (approximate walking distances and number of bicycles shown in brackets):

- High Holborn, Covent Garden (this station is immediately adjacent to the site, 16 bikes)

- Bury Place, Holborn (140m, 21 bikes)
- Southampton Place, Holborn (320m, 19 bikes)
- Earnshaw Street, Covent Garden (320m, 18 bikes)
- Drury Lane, Covent Garden (320m, 27 bikes)
- Great Russell Street, Bloomsbury (320m, 26 bikes)
- Newton Street, Covent Garden (485m, 23 bikes)

Figure 5 shows the location of the cycle hire locations.

4.5 Highway Network

The proposed development is bounded by the following roads:

- **New Oxford Street** to the north of the site restricts traffic to westbound movements only to the west of the site. This section of New Oxford Street experiences lower levels of traffic compared with traffic further westbound along New Oxford Street. There is vehicular access to the existing site via New Oxford Street and the road adjacent to Dunn's Passage.
- **High Holborn** to the south of the site restricts traffic to westbound movements only, and generally experiences heavy traffic flows. There are waiting restrictions for lorries (over 5 tonnes) and coaches. There is vehicular access to the road adjacent to Dunn's Passage off High Holborn. High Holborn is part of the Strategic Road Network where LBC are the traffic and highway authority and TfL have to be consulted on any proposed changes.

Other roads in the vicinity of the site include:

- **Bury Place** connects New Oxford Street to Bloomsbury Way, at the eastern end of New Oxford Street and restricts traffic to southbound movements only. Bury Place is a minor road and is managed and maintained by LBC.
- **Museum Street** connects High Holborn, New Oxford Street and Bloomsbury Way, to the west and experiences lighter traffic flows compared with the adjacent roads. Traffic travels in a south to north direction. Museum Street is a minor road and is managed and maintained by LBC.

4.6 Parking

4.6.1.1 On Street Parking

There are some pay and display parking bays on High Holborn adjacent to Bloomsbury Court. The maximum stay is for two hours Monday-Saturday 8:30am-6:30pm. This also includes one space for permit holders. New Oxford Street, immediately north of the site, has a diplomatic vehicle parking bay. Barter Street has four pay and display parking bays operating the same controls as stated above.

4.6.1.2 Off Street Parking

There is one NCP car park in the vicinity of the site. Shaftesbury Car Park is accessible from Museum Street, immediately to the west of the site, and has capacity for 228 vehicles.

4.6.1.3 Car Club Spaces

Car clubs provide access to short term car hire, reducing the need for people to own a private car. There are two car club parking bays within walking distance of the site, each with capacity for one vehicle, with vehicles in the following locations:

- Bury Place, 160m (City Car Club)
- Parker Street, 320m (Zipcar)

4.7 Pedestrian, traffic and parking flow surveys

Surveys were undertaken in the vicinity of Commonwealth House at the end of March 2014. The surveys comprised pedestrian flow counts, automatic traffic counts, parking bay occupancy surveys and bus boarding and alighting counts. A summary of the survey information is provided below.

4.7.1 Pedestrian flow counts

A summary diagram of the pedestrian flows along New Oxford Street, High Holborn and the road adjacent to Dunn's Passage, including the building entrances, is provided at **Appendix B** and shown in **Table 4.3**.

Table 4.3: Pedestrian Flow Summary

Location	AM Peak (0800-0900)	PM Peak (1700-1800)	Daily (0700-2200)
	Two Way	Two Way	Two Way
New Oxford Street (southern footpath)*	624	958	8,900
High Holborn (northern footpath)	127	176	2,004
High Holborn (southern footpath)	913	1,522	14,377
The road adjacent to Dunn's Passage	7	23	58
Commonwealth House entrance (New Oxford Street/High Holborn main access)	149	146	1,437
Commonwealth House entrance (New Oxford Street west access)	131	28	557
Commonwealth House entrance (New Oxford Street aux entrance)	1	0	4

**the northern footpath on New Oxford Street was closed at the time of the survey and remains temporarily closed.*

4.7.2 Traffic Flow Counts

A summary flow diagram of the traffic flows along New Oxford Street, High Holborn and the road adjacent to Dunn's Passage is provided in **Appendix B** and summarised in **Table 4.4**.

Table 4.4: Pedestrian Flow Summary

Location	AM Peak (0800-0900)	PM Peak (1700-1800)	Daily Average (24-hours)
New Oxford Street	175	136	1847
High Holborn	574	577	9863
Road adjacent to Dunn's Passage	1	0	31

The road adjacent to Dunn's Passage is lightly trafficked throughout the day with 31 vehicles movements recorded. The majority of vehicles that use this road are delivery vehicles to existing buildings. One other goods vehicle (OGV) was recorded in the AM peak hour (0800-0900) and no vehicles were recorded in the PM peak hour (1700-1800). The road adjacent to Dunn's Passage is more heavily used by cyclists accessing Commonwealth House, with 309 cyclists recorded throughout the day.

4.7.3 Parking Bay Surveys

Parking bay surveys were undertaken between 07:00 - 10:00 and 16:00 - 19:00, as summarised below.

New Oxford Street - The solo motorcycle parking bay was highly utilised with five motorcycles using the bay in the AM peak period (07:00-10:00) and eight motorcycles in the PM peak period (16:00-19:00). The diplomatic car parking bay was unused in both survey periods. The loading bay which is used for Commonwealth House servicing was occupied by nine vehicles in the AM peak period and ten vehicles in the PM peak period, an average of one vehicle every 15 minutes.

4.7.4 Bus Boarding Surveys

Bus boarding surveys were conducted at the bus stop adjacent to Commonwealth House between 07:00 and 22:00. The peak hour for bus boarding and alighting was between 08:00 and 09:00, with a total of 112 passengers recorded. The PM peak occurred between 17:20 and 18:20, with 172 passengers recorded.

4.7.5 Bus Stand Survey

Bus stand surveys were undertaken between 07:00 and 22:00 on New Oxford Street. There were a total of 12 vehicles using the bus stand during the AM peak period and 14 vehicles using the bay during the PM peak period. Seven vehicles (LGVs and HGVs) were also recorded using the bus stand.

4.8 Future Transport Proposals

4.8.1 The West End Project

In conjunction with TfL and Westminster City Council, LBC is exploring changes to the main roads and junctions between Euston and St Giles. This work is known as the West End Project. The Project aims to create more civilised streets with less traffic, lower traffic speeds and better public spaces on the street. These changes

would involve a more attractive Tottenham Court Road with wider footways and remodelled junctions at:

- Euston Circus (above the Euston Underpass);
- St Giles Circus (the southern end of Tottenham Court Road);
- Cambridge Circus (Shaftesbury Avenue / Charing Cross Road); and
- Princes Circus (Shaftesbury Avenue / High Holborn).

Alterations to traffic flows on these roads and junctions could have a significant influence on traffic and pedestrian movements across Fitzrovia, Bloomsbury and beyond.

Further details are provided in the Fitzrovia Area Action Plan drawn up by LBC. Wider public consultation on the project is taking place in June and July 2014. The scheme is expected to be delivered by 2016.

4.8.2 Holborn Public Realm Project

LBC are currently investigating the reduction or removal of traffic on the Holborn gyratory in order to improve conditions for walking, cycling and bus travel. This area roughly extends west to east from Museum Street to Gray's Inn Road. The gyratory includes the following major roads:

- Bloomsbury Way / Vernon Place / Theobald's Road;
- New Oxford Street;
- High Holborn;
- Drake Street / Procter Street; and
- Kingsway / Southampton Row.

The Holborn scheme is considered to be an extension of the West End Project to remove the traffic gyratory from Tottenham Court Road and Gower Street, which LBC are currently consulting on. It is worth noting that the project proposals are still at an early stage.

4.8.3 Crossrail

Crossrail will deliver a high frequency, high capacity service to 40 stations, linking Reading and Heathrow in the west, to Shenfield and Abbey Wood in the east, via 21 km of new twin-bore tunnels under central London. New Crossrail stations are being built across London, one of which is Tottenham Court Road. Buildings have been demolished from the area bounded by Dean Street, Diadem Court, Great Chapel Street and Oxford Street, to make way for the modern ticket hall.

The new station is expected to open in late 2018 and will provide 24 trains per hour during peak times. Journey times to Canary Wharf will be accessible in 12 minutes, Stratford in 13 minutes and Heathrow in fewer than 30 minutes.

5 Development Proposals

This section outlines the proposed development and how access and parking will be managed.

5.1 Description of the proposed development

The proposals will include the refurbishment of the existing building to provide a nine storey building, including a single basement level comprising of mainly B1 office space with some retail at ground level. The total Gross External Area (GEA) of the proposed development is 13,243m² (including plant). This includes:

- 11,696m² B1 office floorspace
- 1,349m² A1-A5: retail/café/restaurant/bar floorspace
- 198m² of shared circulation space

The proposed ground floor layout is shown in **Orms Drawing 1975 GA 02 rev G,** while the basement layout is shown in **Orms Drawing 1975 GA 01 rev G.**

5.2 Proposed site access

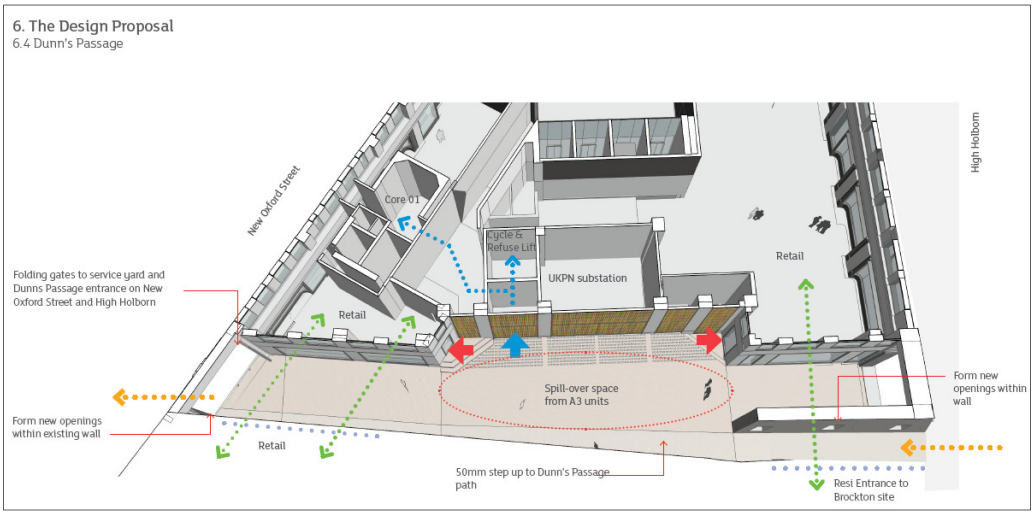
5.2.1 Pedestrian Access to the building

The existing office entrances are proposed to be relocated to provide a central double height entrance point from New Oxford Street. Access to the retail facilities will be available from New Oxford Street and High Holborn.

5.2.2 Pedestrian Access to Dunn's Passage

There is a desire by the applicant to open up and reactivate Dunn's Passage. Due to issues with ownership, the proposed works for Dunn's Passage will be developed and progressed following this application. Orms have been working closely with 21-31 New Oxford Street, the neighbouring site, to develop a holistic design approach for this area. **Plan 5.1** reflects the progress of the current design. However the design does not form part of this application, but is the preferred long term plan, subject to discussions with the owners.

Plan 5.1: Dunn's Passage Proposals (Orms Design and Access Statement, July 2014)



The road alongside Dunn's Passage and Dunn's Passage itself would be accessible by pedestrians from both High Holborn and New Oxford Street. The following restrictions are proposed:

- The hours of access for the general public would be restricted as the gates to the service yard will be closed overnight.
- When the service yard is open to the public the gates will remain open, however bollards will be up to deter any unscheduled delivery vehicle from accessing the service yard. The service yard will be managed by staff at this time.
- The long term plan is to remove the boundary wall and have a raised footpath along Dunn's Passage of about 50mm above the level of the service yard.

5.2.3 Car Parking

No car parking spaces will be provided as part of the proposed development.

5.2.4 Vehicle Access

The main vehicular access to the site for servicing is proposed to be via the road adjacent to Dunn's Passage, giving access to servicing bays. The access will be one-way with access via High Holborn and egress onto New Oxford Street. The junctions will take the form of simple crossovers. The servicing strategy is discussed in greater detail in **Section 6**.

5.2.5 Cycle Access

Access to the cycle parking spaces is proposed via three entrances, one along the road adjacent to Dunn's Passage and two on New Oxford Street. The main access to the basement is provided via a goods/cycle lift accessible from the road adjacent to Dunn's Passage, to the west of the building. Stairs with a gully are also provided down to the basement at two locations from New Oxford Street. This design is in accordance with LBC planning guidance. *Camden Planning Guidance 7, Transport*, states that:

'the route to cycle parking from street level should be step free. Cycle parking inside buildings should be at the entrance level of the building or accessible by a ramp or lift from street level that can accommodate a bike.'

5.3 Cycle Parking

Cycle parking for the whole building will be provided at basement level. A breakdown of the proposed provision is shown below:

- 73 spaces for B1 office staff and visitors
- 16 spaces for retail staff and visitors

A minimum of 10% of the cycle parking spaces will be provided using Sheffield stands. The majority of the cycle parking spaces are provided as Josta 2-tier racks. The 2-tier racks are designed to get the maximum number of bikes into a limited space, in a safe, easy to use way.

The minimum number of cycle parking spaces required to meet Camden's planning standards is 64 (47 for office and 17 for retail). The cycle parking provision proposed exceeds Camden's standards by 25 spaces and is designed in accordance with the *London Plan*, 2013 standards (1 space per 150m²). A full breakdown of the cycling standards and policy requirements is shown in **Table 5.1**.

Table 5.1: Cycle Standards, Revised Early Minor Alterations to the London Plan, 2013

Cycle Standards	Use Class	Standard	Minimum Cycles Required	REMA Cycle Standard Requirements	Proposed Number of Cycles
Revised Early Minor Alterations to the London Plan, 2013	Office	1 space per 150m²	78	86	89
	Retail	1 space per 100m²	8		

The proposals also include eight showers, one disabled shower and 98 lockers, providing more than one locker per cyclist. Shower and locker facilities are in accordance with *BREEAM* guidance.

The level of provision of the cycle parking facilities reflects the sustainable aspirations of the proposed development and the anticipated level of demand.

5.4 Improvements to the Public Realm

The applicant is exploring the option to contribute to wider public realm improvements on New Oxford Street. Discussions are on-going with LBC and neighbouring land owners.

6 Delivery and Service Strategy

6.1 Introduction

This section outlines the servicing and waste management strategies for the proposed development. The daily delivery and servicing vehicle trips for the development were calculated using an Arup in-house vehicle generation tool. The generation tool utilises data gathered from similar developments in the UK, including: Arup research; other survey information; and relevant design guidelines. This information is used to determine vehicle trip rates (vehicles per 100m² of Gross Internal Area per day) for deliveries and servicing, by type of building use. The vehicle trip rates are then applied to the relevant building areas to calculate the daily delivery and servicing vehicle trips for the development.

6.2 Service vehicle generation

The estimated number of vehicles generated as a result of the proposed development has been calculated based on survey information from similar developments in London. The vehicle trips rates used are based on the gross internal areas (GIA) of the development and are as follows:

- 0.2 vehicles per 100m² GIA per day for the office land use;
- 1 - 2 delivery vehicle per day for A1 retail land uses; and
- 3 - 4 delivery vehicles per day for A3 retail land uses.

The proposed development will comprise the following:

- 11,087m² GIA office space (including ground floor office reception and basement plant areas);
- 370m² GIA A1 retail space; and
- 751m² GIA A3 retail space.

Based on these areas, the total number of delivery vehicles estimated is shown in **Table 6.1**.

Table 6.1: Daily Delivery and Servicing Trips

Use Class	Gross Area (m²)	Daily Trips	Peak Hour (9am-10am)
A1 Retail	146	3	6
A3 Retail	591	12	
B1 Office	11,087	22	
Total	11,824	37	6

The proposed development is estimated to generate 37 delivery and servicing trips a day. The hours of servicing will be restricted to between 06:00 to 10:00 in the morning and 16:30 to 22:00 in the evening. Outside this time period, it is proposed that the gates will remain open but bollards will be installed to deter any unscheduled delivery vehicle from accessing the yard. This will be managed with a person on duty during service hours. The gates to the service yard will be closed overnight and, therefore, not accessible to the public or any vehicles, due to the proposed residential units in the adjacent development.

The proposed restricted hours of servicing are due to the location of some of the retail units along the road adjacent to Dunn's Passage and to generally help improve the local public realm.

There is a peak of activity of six service vehicles between 09:00 and 10:00. The number of future service vehicle movements is not considered to be significant and is not envisaged to generate any capacity issues on the external highway network. The vehicles types and typical turnaround times are shown in **Table 6.2**.

Table 6.2: Typical Turnaround Times for Delivery Vehicles

Vehicle Type	Vehicle	Characteristics	Turnaround Time (mins)
LGV - Light Goods Vehicle, 6m Rigid		3.5 Tonne, vehicle length 6m	15
MGV - Medium Goods Vehicle, 8m Rigid		7.5 Tonne, vehicle length 8m	20
HGV - Heavy Goods Vehicle, 10m Rigid		17 Tonne, vehicle length 10m	20

6.2.1 Service bay locations

It is proposed that servicing for office and retail land uses within the proposed development be from two loading bays located west of the proposed development along the road adjacent to Dunn's Passage, and utilising the existing loading bay on New Oxford Street. The loading bays will be accessed from New Oxford Street and High Holborn.

The layout and swept path analysis of the loading bay has been undertaken and is shown on **Drawing 235586-00-TR-005**. This shows that access to all loading bays can be achieved.

The proposed service strategy would require the movement of waste in 1,100 litre bins via the goods/cycle lift in the basement to the road adjacent to Dunn's Passage at ground level on collection days. **Drawing 235586-00-TR-005** shows the swept path of an 8m vehicle entering the site from High Holborn and pulling into the service area to collect bins from waste store. The drawing also shows that a 6m vehicle entering and parking up to the west of the service yard.

Additionally, the existing 10m bay to the north of the site located on the south side of New Oxford Street, which is used for the existing servicing of the building, could provide servicing for vehicles up to 10 metres in length and would be able to service the retail units along New Oxford Street. The existing diplomatic bay adjacent to the existing loading bay is underutilised, as shown in our survey results (see section 4.6.3). Subject to LBC approval and the submission of a Traffic Regulation Order, the existing 5m diplomatic bay could potentially be used for servicing/courier vehicles for the proposed development.

6.3 Waste Generation and Storage

All office and retail waste will be brought up from the basement for collection from the road adjacent to Dunn's Passage.

6.3.1 Office Waste

Office waste is based on the number of staff occupying the building. Based on a net internal area (8,896 m²), it is estimated that 882 staff will occupy the building. The office users will generate 44.1m³ of waste per week. Best practice is to provide two days' waste storage to provide resilience in the event of a disruption to the daily collection service. **Table 6.3** shows the two day waste generation and storage requirements for office tenants.

Table 6.3: B1 Office Two Day Waste Storage Requirements

	B1 Office Two Day Storage Requirements	
	Volume (litres)	No. 1,100 litre bins
Refuse (40%)	7,112	7
Recycling (60%)	10,668	10
Total	17,780	17

A waste room to hold 17 No. 1,100 litre bins will be sized at 62.9m² (14.8m x 4.25m). A minimum clear space of 150 mm between individual containers and between containers and surrounding walls will ensure satisfactory positioning. The waste room will be located in the basement.

6.3.2 A1 Retail Waste

A1 retail waste is calculated by multiplying the net sales area by a factor of ten litres per week. A1 retail will generate 2.35m³ per week. **Table 6.4** shows the two day waste generation and storage requirements for A1 retail tenants.

Table 6.4: A1 Retail Two Day Waste Storage Requirements

	A1 Retail Two Day Storage Requirements	
	Volume (litres)	No. 1,100 litre bins
Refuse (20%)	97	1
Recycling (80%)	389	1
Total	**486**	**2**

6.3.3 A3 Retail Waste

A3 Retail waste is calculated by multiplying the total number of covers within the development. A3 retail will generate 19.8m³ a week. **Table 6.5** shows the two day waste generation and storage requirements for A3 retail tenants.

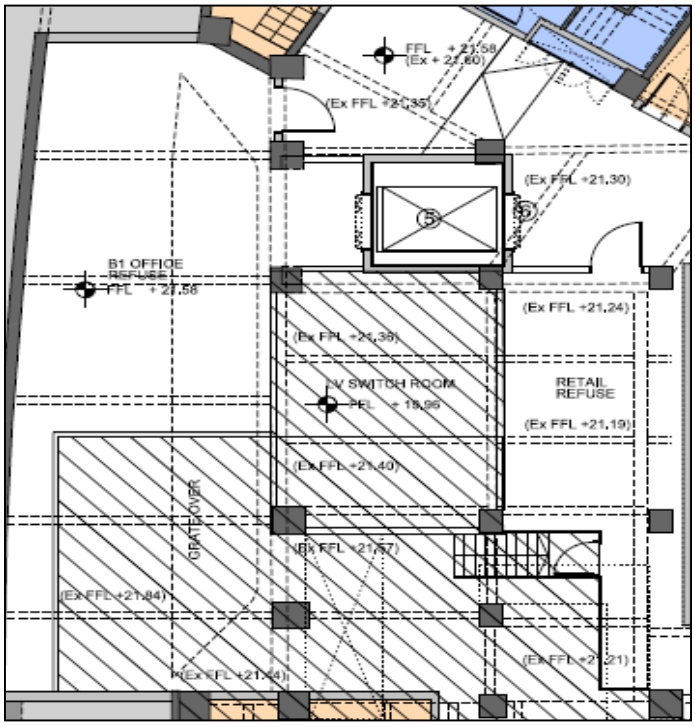
Table 6.5: A3 Retail Two Day Waste Storage Requirements

	A3 Retail Two Day Storage Requirements		
	Volume (litres)	No. 1,100 litre bins	No. 240 litre bins
Refuse (40%)	2,893	3	
Food (40%)	2,367		10
Recycling (20%)	1,315	2	
Total	**6,575**	**5**	**10**

A waste store for the combined A1 and A3 retail waste will hold five No. 1,100 litre bins and nine No. 240 litre bins and will be sized at 35.9m² (8.45m x 4.25m). A minimum clear space of 150 mm between individual containers and between containers and surrounding walls will ensure satisfactory positioning.

The current strategy for storing waste for the whole building is acceptable; however, in future it may be more efficient for the retail units to accommodate their own waste within their storage units in the basement.

Plan 6.1: Office and Retail Waste Stores



7 Trip Generation and Mode Share

7.1 Introduction

This section provides a detailed analysis of trip generation and modal split, carried out for both the existing buildings and the proposed development, to calculate the net change in trips as a result of the proposed development.

The methodology is based on TRICS (Trip Rate Information Computer System) database v7.1.1 which predicts trip rates and modal split of new developments based on survey information of comparable sites. TRICS is a recognised database widely used by transport professionals, TfL and London boroughs. For the purposes of this report we have extracted TRAVL data (Trip Rate Assessment Valid for London) which is similar to the data from TRICS but provides accesses to historical Greater London survey data from the TRAVL system.

The retail land uses are not considered to be major trip generators in their own right, given their scale. It is anticipated that trips to the retail units would primarily be pass-by trips (i.e. visited by people that are already in the local area) or trips made by local residents which would be on foot. The number of trips generated by the retail unit has not been considered as part of this assessment.

7.2 Site selection

The selection of comparable sites in TRAVL has considered key site characteristics including land use, PTAL rating of five or six, location, size of development and provision of parking facilities. The following seven central London sites have been identified as suitable for assessment:

- Baltic Exchange (EC3A 8BH, City of London, 2005)
- Buckingham Palace Road, TfL offices (SW1 9TN, City of Westminster, 2007)
- Eccleston Place, TfL offices (SW1 9NF, City of Westminster, 2007)
- Windsor House, TfL offices (SW1 0TL, City of Westminster, 2007)
- Faith Lawson, TfL offices (SW1 0NR, City of Westminster, 2007)
- MVA Transport Consultancy (W1T 3LA, City of Westminster, 2006)
- Reed Employment (SE1 9SE, London Borough of Tower Hamlets,2002)

All of the seven selected sites are of Class B1 office led use, a central London location, a PTAL of five or 6 and zero car parking spaces; hence the travel behaviour observed on these sites has been considered to be comparable with that of the application site. The full TRAVL site report can be seen at **Appendix C**. For the office space within the proposed development, the trips generated will be greatest during the normal commuter peak periods, which occur between 07:00 and 10:00, and between 16:00 and 19:00, on a typical weekday.

7.3 Office Development trip generation

For the purposes of this study, the trip generation from the proposed development has been estimated for the AM and PM commuter peak hours, which are between 08:00 and 09:00, and 17:00 and 18:00.

The average person trip rates of the six TRAVL sites outlined in **Section 7.2** above have been calculated and are shown in **Table 7.1**. The estimated number of trips during the peak hours is shown in **Table 7.2**. The number of trips generated by the proposed development is based on a GEA of 11,719m² and the existing GEA of 12,230m². Using GEA is considered a robust approach and a busiest case scenario.

Table 7.1: Person trip rates / 100m² GFA

	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Average Trip Rate	3.11	0.29	3.41	0.36	2.73	3.09

Table 7.2: Person trips

	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Existing Trips	330	31	361	38	289	327
Proposed Trips	364	34	398	42	319	361
Net Increase	**34**	**3**	**37**	**4**	**30**	**34**

It is expected that there will be approximately 398 (two-way) person trips generated by the proposed development during the AM peak hour, with an estimated 361 person trips generated by the proposed development during the PM peak hour. The TRAVL trip rate report is provided in **Appendix C**.

A survey at the existing site was undertaken in March and is summarised in **Section 4.6.2**. The results of the surveys have been compared with results from TRAVL as a like for like comparison. It was considered that we use the trip rates from TRAVL, as these rates provide more robust calculation for the proposed trips arriving and departing the development.

7.4 Mode split

The modal split for all trips generated by the proposed development has been based on TRAVL. The TRAVL modal split report is provided in **Appendix C**. **Table 7.3** summarises the TRAVL modal split data. The existing, estimated and net additional number of trips that would be generated by the proposed development during the AM and PM peak hours is shown in **Table 7.4**, **Table 7.5** and **Table 7.6**.

,

Table 7.3: Predicted B1 office mode split

Mode of Transport	Mode Split (TRAVL)
Public Transport	88%
Walk	7%
Pedal Cycle	4%
Car Drivers	1%
Motorcycle	0%
Taxi	0%
Unknown	1%
Total	100%

Table 7.4: Peak hour trips by mode – existing

	AM Peak Hour			PM Peak Hour		
Mode of Transport	In	Out	Total	In	Out	Total
All Car Drivers	1	0	1	0	1	1
Bus	26	2	28	3	23	26
Car Driver (alone)	1	0	1	0	1	1
Car Passenger	1	0	1	0	1	1
Motor Cycle	1	0	1	0	1	1
Pedal Cycle	12	1	13	1	10	12
Rail	147	14	160	17	128	145
Taxi	0	0	0	0	0	0
Underground	118	11	129	14	103	117
Unknown	2	0	2	0	2	2
Walk	22	2	24	3	19	22
Total	**330**	**31**	**361**	**38**	**289**	**327**

(Note that figures may not sum due to rounding)

Table 7.5: Peak hour trips by mode -proposed

	AM Peak Hour			PM Peak Hour		
Mode of Transport	In	Out	Total	In	Out	Total
All Car Drivers	1	0	1	0	1	1
Bus	29	3	32	3	25	28
Car Driver (alone)	1	0	1	0	1	1
Car Passenger	1	0	1	0	1	1
Motor Cycle	1	0	1	0	1	1
Pedal Cycle	13	1	14	2	11	13
Rail	162	15	177	19	142	161
Taxi	0	0	0	0	0	0
Underground	130	12	142	15	114	129
Unknown	2	1	3	0	2	2
Walk	24	2	26	3	21	24
Total	**364**	**34**	**398**	**42**	**319**	**361**

(Note that figures may not sum due to rounding)

Table 7.6: Peak hour trips by mode – net increase

	AM Peak Hour			PM Peak Hour		
Mode of Transport	In	Out	Total	In	Out	Total
All Car Drivers	0	0	0	0	0	0
Bus	3	0	3	0	3	3
Car Driver (alone)	0	0	0	0	0	0
Car Passenger	0	0	0	0	0	0
Motor Cycle	0	0	0	0	0	0
Pedal Cycle	1	0	1	0	1	1
Rail	15	1	16	2	13	15
Taxi	0	0	0	0	0	0
Underground	12	1	13	1	11	12
Unknown	0	0	0	0	0	0
Walk	2	0	2	0	2	2
Total	**34**	**3**	**37**	**4**	**30**	**34**

(Note that figures may not sum due to rounding)

8 Effects of the Proposed Development

This section assesses the net impact of the proposed development on individual modes of transport, based on the net changes in trip generation described in **Section 7**. The assessment considers the inbound AM peak hour between 08:00 and 09:00 when the transport impact will be the greatest. The effect of the proposed development has been reported by outlining the net increase in trips resulting from the proposed development.

8.1 Impact of public transport networks

8.1.1 Impact on the rail network

It is estimated that there would be a net increase of 17 inbound rail trips in the AM peak hour as a result of the proposed development, as shown in **Table 7.6**. Accordingly, there will be minimal impact on the local rail network as a result of the proposed development.

8.1.2 Impact on the Underground network

It is estimated that would be a net increase of 13 inbound Underground trips in the AM peak hour as a result of the proposed development, as shown in **Table 7.6.** Accordingly, there will be minimal impact on the Underground network as a result of the proposed development.

8.1.3 Impact on the bus network

It is estimated that there would be a net increase of three inbound bus trips in the AM peak hour as a result of the proposed development, as shown in **Table 7.6**. Accordingly, there will be minimal impact on the local bus network as a result of the proposed development.

8.2 Impact on the pedestrian network

It is estimated that there would be a net increase of two inbound pedestrian trips in the AM peak hour as a result of the proposed development, as shown in **Table 7.6**. Accordingly, there will be minimal impact on the local pedestrian network as a result of the proposed development.

8.3 Impact on the local cycle network

It is estimated that there would be a net increase of one pedal cycle in the AM peak hour as a result of the proposed development as shown in **Table 7.6.** Accordingly, there will be minimal impact on the local cycle network as a result of the proposed development.

8.4 Impact on the local highway network

The proposed development is not expected to generate any new car tips onto the local highway network, besides the six refuse/delivery vehicles arriving in the AM peak associated with servicing of the development.

9 Travel Plan

The Applicant is committed to promoting sustainable development and environmentally friendly modes of transport. The proposed development offers an opportunity to influence travel patterns for all site users.

The sustainable location within Camden will play an important role in reducing reliance on the private car. The PTAL rating of 6b will enable employees and visitors to use public transport to access their places of work and amenities. In addition to measures intrinsic to the design of the scheme, a Travel Plan will be implemented for the proposed development which will provide a systematic approach to influence long term travel choice, including trips during the working day.

A Travel Plan Framework (TPF) has been prepared which sets out the aims and objectives for the proposed development. A range of potential measures that could be considered by the occupiers of the development for inclusion in the final Travel Plan have been outlined. The TPF can be seen in **Appendix D**.

At this stage, the Travel Plan for the site only seeks agreement for the proposed framework which will be developed further with future occupiers. It is recommended that the Travel Plan will be secured, monitored and funded as part of the Section 106 agreement for the proposed development. The full Travel Plan should meet the Assessment Tool for Travel Plan Building, Testing and Evaluation (ATTrBuTE) requirements when produced.

The overarching aims of the Travel Plan seek to:

- Influence the travel behaviour of staff and visitors;
- Encourage travel by public transport, cycle and foot by improving their attractiveness; and
- Promote healthy lifestyles and sustainable, vibrant local communities.

The site specific objectives of the TPF respond to the aims through:

- Making alternative travel modes to the car very accessible and user friendly. The Travel Plans will be positively promoted whilst not aspiring to dictate the lifestyles of the users of the development;
- Providing no car parking for employees to protect the environment for all users of the development. There will be a high availability and usage of public transport; and
- Linking the development to the surrounding community by the strong promotion of walking, cycling and public transport, thus minimising the effect of the new development on the surrounding infrastructure.

The Travel Plan is about helping people to find ways to travel differently. It is not anti-car, nor is it about reducing choice. Instead, it is a cogent strategy for providing and promoting realistic, high quality alternatives to improve the travel environment for the community as a whole.

10 Summary and Conclusions

10.1 Summary

Arup has prepared this Transport Assessment in support of a planning application for the proposed refurbishment and extension of Commonwealth House at 1-19 New Oxford Street.

The development proposals will include the refurbishment of the existing building to provide a nine storey building, including a single basement level comprising of mainly B1 office space with some retail at ground level. The total GEA of the proposed development is 13,243m² (including plant). This includes

- 11,696m² B1 office floorspace
- 1,349m² A1-A5: retail/café/restaurant/bar floorspace
- 198m² shared circulation

A review of current national, London-wide and local transport policies reveals wide policy support for the promotion of public transport, walking and cycling as alternatives to the use of private vehicles.

The site benefits from a Public Transport Accessibility Level (PTAL) rating of 6b (excellent) and is within a convenient walking distance of Tottenham Court Road and Holborn Underground stations. There are 26 bus services available within the area, with routes operating to a wide variety of areas in central and greater London.

A total of 89 cycle parking spaces are to be provided at basement level within the building which is in excess of the REMA *London Plan* requirement. Access to the cycle parking spaces is proposed via three entrances, one along the road adjacent to Dunn's Passage and two on New Oxford Street. The main access to the basement is provided via a goods/cycle lift on the road adjacent to Dunn's Passage, to the west of the building. Stairs with a gully are provided down to the basement at two locations from New Oxford Street.

Deliveries to the office and retail units will be undertaken from two loading bays located west of the proposed development, along the road adjacent to Dunn's Passage, and use of an existing loading bay on New Oxford Street. The loading bays will be accessed from New Oxford Street and High Holborn.

A waste strategy has been developed for the proposed development to ensure that there will be adequate waste storage areas within the building and a suitable means of access for waste collection. It is estimated that the proposed development will generate approximately 37 service vehicle trips on a typical day. It is expected that the peak in terms of delivery / maintenance vehicle trips will occur between 09:00 and 10:00, with an estimated six vehicle trips during this time period.

The trip generation assessment estimates that the proposed development will generate 37 additional person trips during the AM peak hour when compared with the existing building. The distribution of these trips to the pedestrian, cycle and public transport networks indicates that the proposed development will have a minor or no adverse impact on the operation of the local transport network.

The proposed development is located in an area of high public transport accessibility and, therefore, it is anticipated that the majority of trips generated by the site will be made on foot, cycle and public transport. The site's close proximity to public transport services means that there is no need for dedicated commercial or retail car parking for the development.

A Framework Travel Plan has been prepared for the proposed development. This aims to promote the use of sustainable modes of transport through a range of soft measures, as well as highlighting the benefits of travelling by modes other than the private car. A full Travel Plan will be prepared following occupation of the proposed development.

10.2 Conclusion

This TA demonstrates that the proposed development can be accommodated within the existing transport infrastructure surrounding the development site. This site is well served by public transport and the expected trip demands can be accommodated on the local transport network. Design proposals will help to enhance the key pedestrian network surrounding the site.