Paddington Green Police Station

2 – 4 Harrow Road, London, W2 1XJ

Transport Assessment

Arup

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Berkeley

Designed for life

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1 Introduction

1.1 Background

Ove Arup & Partners ('Arup') has been commissioned by Berkeley Homes (Central London) Limited to provide transport advice to support the redevelopment of Paddington Green Police Station (PGPS).

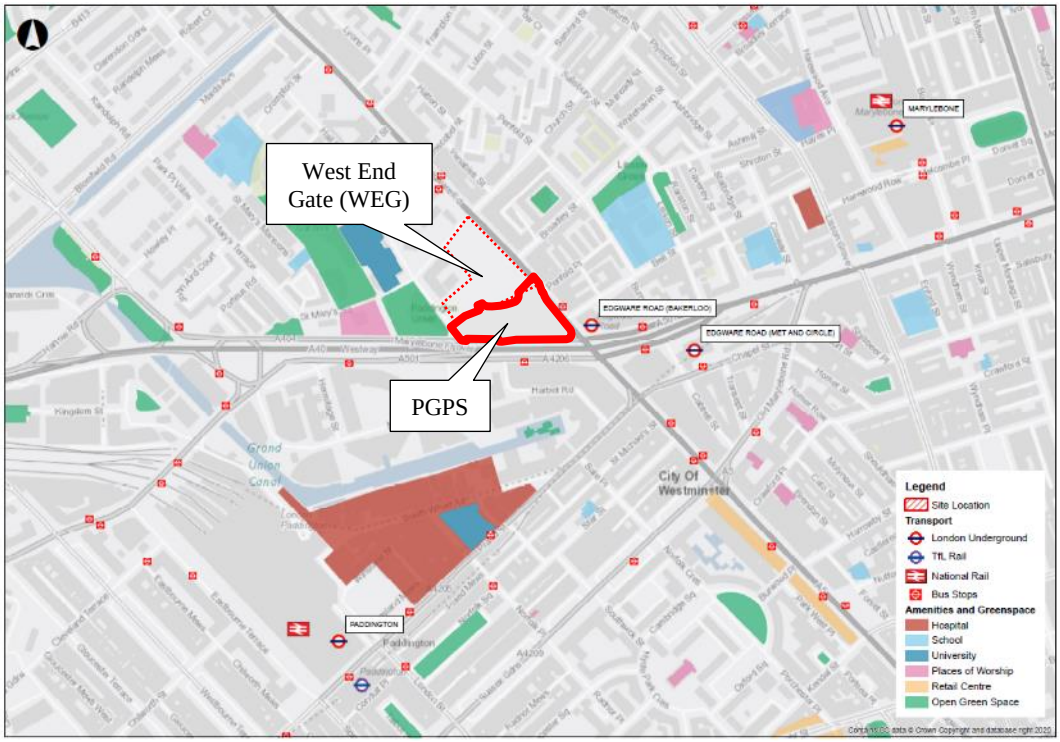
The local planning and highways authority is Westminster City Council (WCC). The highways authority for A5 Edgware Road and the very eastern section of A404 Harrow Road leading up to the junction with the A5 is Transport for London (TfL).

1.2 Site Location

The site is bounded by Edgware Road to the east, A404 Harrow Road to the south, Paddington Green to the west and Newcastle Place to the north. The site location is shown in Figure 1.

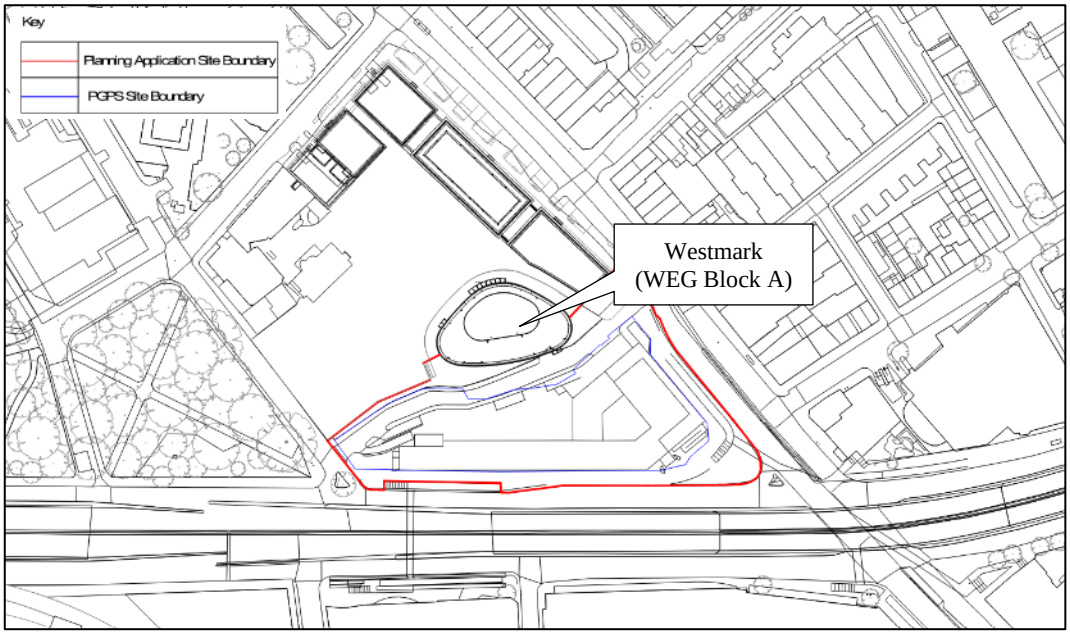
To the north of Newcastle Place is a development known as West End Gate (WEG) which is currently under construction by Berkeley Homes. WEG will provide a total of 844 new homes, as well as retail and restaurant land uses. WEG includes the associated 14-17 Paddington Green development. Block A of WEG, known as Westmark, the 30-storey tower, is located to the north of Newcastle Place, directly opposite the site. A double basement (levels B1 and B2) is provided at WEG which is accessed from Church Street.

Figure 1: Site Location Plan



The site ownership and red line boundary is presented in Figure 2.

Figure 2: Site ownership and red line boundary plan

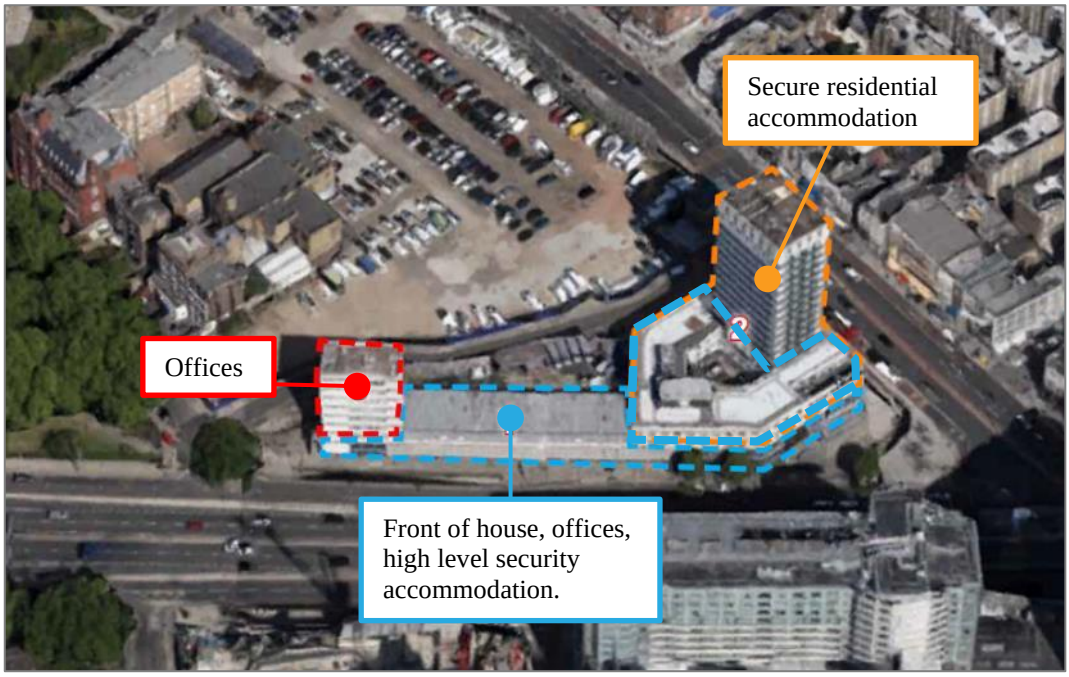


The proposed development will complement the adjacent WEG development and create a destination within Westminster. PGPS is identified as a key development site in the WCC Draft City Plan (2020) and it was recognised that development on this site should relate to the WEG scheme.

1.3 Former and Consented Use of the Site

The police station building has sui generis land use class can be considered in three parts as shown in Figure 3. The buildings formerly accommodated offices, secure residential accommodation for the police station and front of house including secure cells. There is car parking provided at basement and podium levels, with access provided from Newcastle Place (see Section 3.4.1). A small loading area is also accessed from Newcastle Place. The police station ceased operation in 2018.

Figure 3: Aerial view of Paddington Green Police Station



A change of land use class application was consented (December 2020) (Ref: 20/06727/FULL) for the western tower of the police station, from sui generis to land use class E. It is in occupation as offices, as per its former use as offices for the police station.

1.4 Development Proposal Summary

Demolition and redevelopment of the site to provide three buildings, providing private and affordable residential units (Class C3), commercial uses (Class E), flexible community/affordable workspace (Class E/F.1), provision of private and public amenity space, landscaping, tree and other planting, public realm improvements throughout the site including new pedestrian and cycle links, provision of public art and play space, basement level excavation to provide associated plant, servicing and disabled car and cycle parking, connecting through to the basement of the neighbouring West End Gate development.

The proposed scheme comprises of three blocks (Block I, J and K, as a continuation of the naming of the blocks being delivered at WEG), as shown in Figure 4, and will provide the following:

- 556 new homes
- Flexible commercial / retail (1,088 sqm GIA)
- Office space (4,755 sqm GIA)
- Affordable workspace (328 sqm GIA)

Figure 4: Proposed Site Plan

Long stay cycle parking and disabled car parking are proposed in the basement. Cycle parking accesses to the basement are located on Harrow Road and Newcastle Place, and car parking is accessed via the WEG basement from Church Street.

Short stay cycle parking will be in the public realm. Delivery and servicing are proposed to take place in the WEG basement and on the realigned Newcastle Place.

1.5 Compliance with Healthy Streets, Vision Zero, and Mayor's Transport Strategy Principles

In accordance with TfL's Healthy Streets Transport Assessment guidance, this section outlines how the proposed scheme will support Healthy Streets, Vision Zero, and the *Mayor's Transport Strategy* (2018), as well as how strategic transport policies will be delivered and how transport planning has contributed to the design.

The design and layout of the site follows TfL's Healthy Streets approach, which prioritises active and sustainable travel. New pedestrian and cyclist access points will be created into the site, which will increase the permeability of the site and improve its connections with the local area. These access points and associated routes will be direct, attractive and of high quality, which will help to create a place where people feel relaxed and safe, and will encourage the use by members of the public.

The proposed car-free (with exception of disabled parking) development is in accordance with the *New London Plan* (2021) and WCC's *Draft City Plan* (2020) policies. This will mean that residents and other users of the site would most

likely travel sustainably using the wide range of existing public transport services available near the site, as well as walking or cycling. This is in accordance with the key aim of the *Mayor's Transport Strategy* (2018) to achieve 80% of all trips in London to be made on foot, by cycle or using public transport by 2041. In addition, long-stay and short-stay cycle parking will be provided in accordance with the *London Plan* standards, accommodating and encouraging cycling as a sustainable and active mode choice.

Internal routes within the site will incorporate the principles of 'safe streets', within the *Vision Zero Action Plan* (2018). The routes will provide a pleasant walking environment that prioritises pedestrians, with reduced clutter and high quality hard and soft landscaping compared with the existing provision. The TfL Safer Junction scheme (discussed in later chapters) has upgraded the Edgware Road / Harrow Road junction, reducing the likelihood of collisions with vehicles at crossings, as well as creating a better and safer environment for pedestrian and cyclists.

1.6 Wider Policy Context

The following policy guidance informed the preparation of the Transport Assessment (TA), they include:

- National Planning Policy Framework (NPPF) (MHCLG, 2019)
- The New London Plan (GLA, 2021)
- The Mayor's Transport Strategy (GLA, 2018)
- TfL's Healthy Street Transport Assessment guidance (TfL, 2019)
- London Cycle Design Standards (TfL, 2014)
- Westminster City Council's City Plan: Adopted (WCC, 2016)
- Westminster City Council's Draft City Plan (WCC, 2020)
- Westminster City Council Replacement Unitary Development Plan (Saved Policies) (WCC, 2007)
- Westminster City Council Code of Construction Practice (WCC, 2016)
- Westminster City Council Recycling and Waste Storage Requirements (WCC, 2021)

1.7 Consultation

A Transport Assessment Scoping Report was prepared and issued to WCC and TfL in October 2020. The following pre-application meetings took place to discuss the proposals:

- 30 September 2020 – Pre-application meeting with the WCC transport officer.

- 26 November 2020 – Pre-application meeting with TfL and WCC. The TfL pre-application letter is contained in Appendix A.
- 26 February 2021 – Meeting with TfL and WCC to discuss the proposed construction strategy.
- 5 March 2021 – Meeting with WCC to discuss the proposed stopping up of Newcastle Place.

Comments received from WCC and TfL informed the design development of the scheme and the contents of this TA. Trip generation and principles of access were agreed.

1.8 Report Structure

In accordance with the TfL Healthy Streets Transport Assessment guidance, this TA is structured as follows:

- **Chapter 2**: **Transport Planning for People** – sets out who the development is for, how they will travel there and why;
- **Chapter 3: Site and Surroundings** – sets out how people of all abilities will move around the site and its immediate surroundings. It covers access by all relevant modes of transport, public realm space, and servicing and parking, for both the existing and proposed situation;
- **Chapter 4**: **Active Travel Zone (ATZ)** – contains the assessment of how people will make key journeys by active modes within the ATZ to support a car-free lifestyle;
- **Chapter 5**: **London-wide Network** – sets out the trip generation and impact assessment for the proposals;
- **Chapter 6**: **Construction** – sets out a high-level review of construction-related trips and safety measures for the construction phase(s); and
- **Chapter 7**: **Conclusion** – provides a summary table in accordance with TfL guidance.

As requested by TfL, the following supplementary reports are contained in the appendices:

- Appendix B - Outline Construction Logistics Plan (CLP)
- Appendix C - Delivery and Servicing Plan (DSP)
- Appendix D – Designer’s Response to Stage 1 Road Safety Audit

2 Transport Planning for People

In line with the Healthy Streets TA guidance, this chapter sets out details of who this development will be for, how they will travel to and from it, and their purpose for travel.

2.1 Approach

A user-centric approach has been taken to the redevelopment proposals which respond to the needs of future residents, employees and visitors to the site.

The redevelopment proposals will improve access and the layout of the site, which will benefit all site users. New access points will improve the permeability and connectivity of the site to the local area and surrounding transport networks. The scheme will create active frontages along Harrow Road and Edgware Road which are currently car dominated with barriers restricting permeability.

The creation of a central high quality public realm space will enhance the liveability of the area. This will make it an attractive place for people to stop and rest, feel relaxed, and feel safe, which are some of the Healthy Streets indicators.

The car-free nature of the development will create a pleasant environment for people, as well as promote the use of public transport as an alternative to travel by private car. Car-free nature also reduces highway impact on the surrounding streets.

Cycle parking is proposed in accordance with the *New London Plan* (2021) standards and *London Cycle Design Standards* guidance. The needs of cycle users will be met through the provision of Sheffield stands for all short-stay cycle parking. A proportion of long-stay cycle parking will also be Sheffield stands to allow the use of larger or adapted cycles.

2.2 Proposed Development Users and Requirements

Table 1 provides the user type assumptions and requirements by land use for the PGPS development.

Table 1: PGPS Users and Requirements

Land Use	User Type Assumptions	Requirements of User Types
Residential	The primary land use will be residential homes, which will be provided as a mixture of affordable and private units as well as wheelchair accessible units. These will be provided in units ranging in size from studio to four beds. A range of future residents are therefore likely to live in the proposed development, including families, couples and single occupants. Future residents are therefore likely to include people of all ages from children to the elderly, people of all physical abilities from active individuals to those with mobility impairments and people of various economic statuses. It is likely that the majority of residents will depart in the weekday AM peak for commuting, education and education-escort trips. The majority are likely to arrive back at the site over a protracted weekday PM peak period, which accounts for differences in work and education schedules, as well as additional leisure activities that may take place after work. During the weekends, residents are considered likely to depart from and arrive at the site throughout the day for leisure and shopping activities. Given the car-free nature of the development and the excellent public transport connections, almost all trips expected to be undertaken by walking, cycling or public transport.	Given the range of residential units that will be provided, there will be a wide range of residents including those with mobility impairments and children. Routes to and from the residential buildings should therefore cater for this range of requirements, including being easy to cross, accessible to all, quiet, and feeling safe and relaxed. Primary links to public transport interchanges should be provided with pleasant and attractive routes, in order to promote walking, cycling and public transport use. This includes providing places to stop and attractive features to look at. Routes should seamlessly integrate residential buildings with other facilities and land-uses on-site, as well as providing connectivity to the wider local area and surrounding transport networks.
Flexible Commercial	The flexible commercial units are intended to meet the needs of residents, employees and visitors associated with PGPS, WEG and the local area. These retail related units will have a local catchment and are not envisaged to be retail destinations in their own right. As such visitor trips will form part of pass-by / linked trips (e.g. trips by residents and employees on site and in the local area), likely to be undertaken by sustainable modes of transport including walking, cycling and public transport. Trips associated with employees are most likely to be made outside the AM and PM peak hours / prior to opening and post-closing times.	Given that visitor trips are likely to be linked or pass-by trips, the flexible commercial units should be located in a prominent, attractive, and easy to access location. Walking and cycling are likely to be the most popular and convenient methods of travel to the units by visitors, employees and residents of the site and surrounding area. High quality walking and cycling infrastructure should therefore support ease of navigation and access to the facilities. The units should

Land Use	User Type Assumptions	Requirements of User Types
		also be easily accessible from public transport services.
Offices / Workspace	Office provision on site is intended to meet employment demand. Employee trips are expected to be focused around the AM and PM peak hours and be tidal in nature. The majority of employees are expected to travel by sustainable and active modes. Some visitor trips will also be associated with this provision.	Convenient direct routes should be provided for office employees particularly between public transport nodes. Routes should prioritise walking and cycling over other modes and provide adequate accessibility for a full range of user mobility requirements. Routes should connect to areas of appropriate cycle parking storage as well as surrounding local facilities and amenities.

3 Site and Surroundings

This chapter sets out details of how people of all abilities, currently and in the future, will move around the new PGPS development and its immediate surroundings.

3.1 Walking

3.1.1 Existing Pedestrian Access

The main pedestrian access to the former police station is from the corner of Harrow Road / Edgware Road (stepped and ramp access). Additional access points are available from Newcastle Place and Paddington Green. This is shown in Figure 5.

Figure 5: Existing pedestrian access points

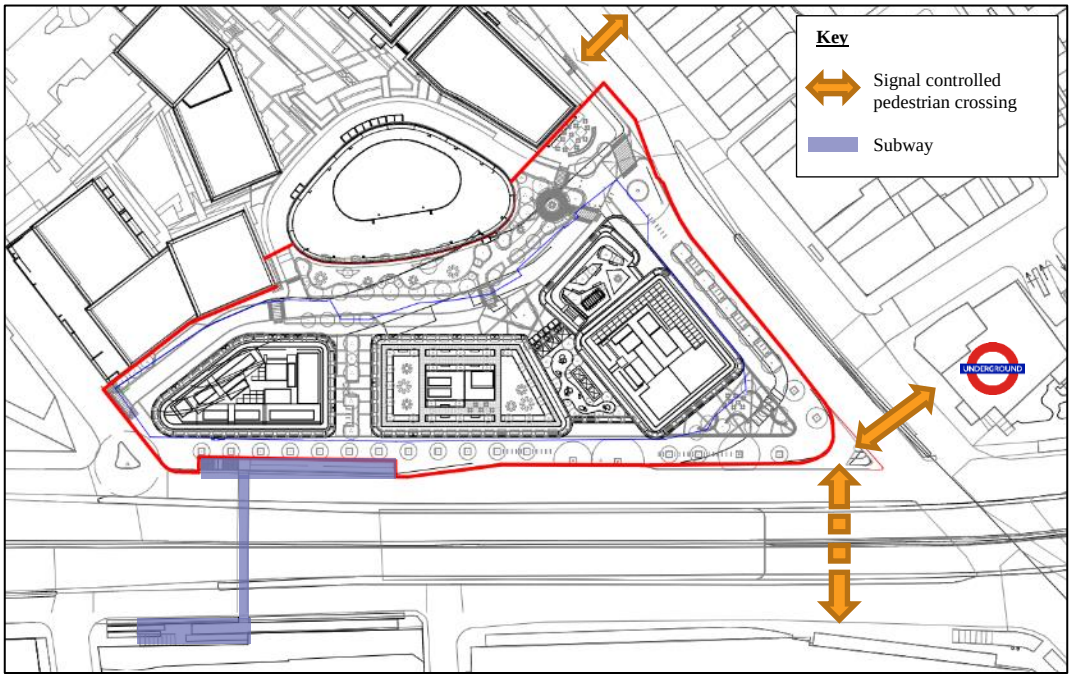
Footways are provided along all the local roads, and bollards are present along the footway of Newcastle Place. Newcastle Place currently has footways on the southern side, which are approximately 1.8m wide. The northern footway is not available whilst construction is taking place for WEG. Newcastle Place has been temporary closed since September 2020 (for one year and subject to monthly review) to facilitate construction works for WEG.

Dropped kerbs are provided at pedestrian crossing points. There are signal-controlled pedestrian crossings at the Edgware Road / Harrow Road junction. Further signal-controlled crossings are available along Edgware Road.

The steps and ramp to the subway on the corner of Edgware Road / Harrow Road are closed as part of the TfL Safer Junction scheme to create a better pedestrian environment (see Section 3.4.2.1). The existence of this infrastructure presents a barrier to permeability for pedestrians. A further subway with steps and ramp

access is provided on Harrow Road to the south of the site. The location of signal-controlled crossing points and Harrow Road subway is shown in Figure 6.

Figure 6: Existing pedestrian crossing facilities



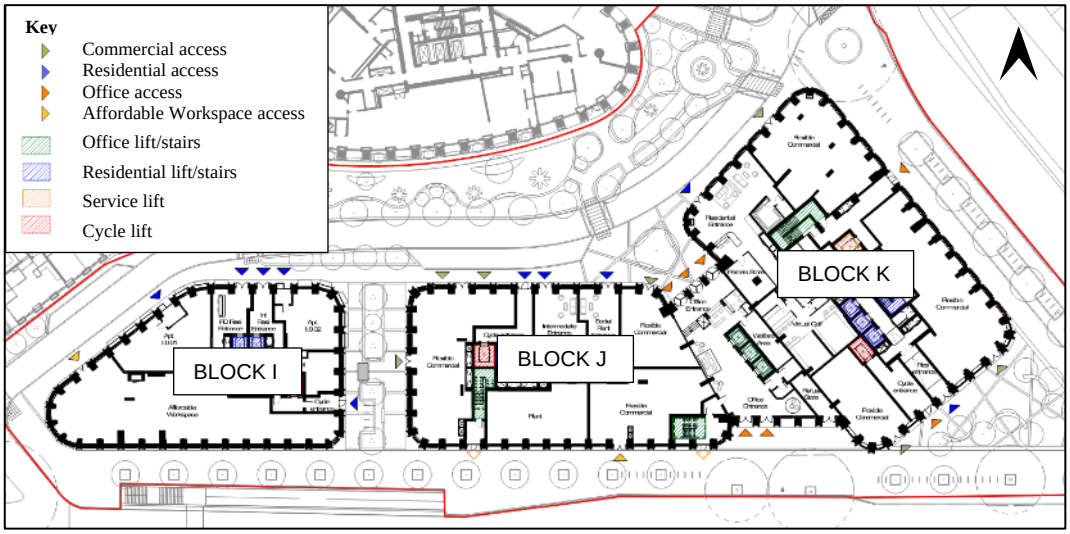
3.1.2 Proposed Pedestrian Access

The residential buildings entrances are proposed to be from Newcastle Place. Following pre-application discussions with TfL, additional residential access points are provided on Harrow Road for Block K, as shown in Figure 7.

Building entrances to the flexible commercial and office space will be from Newcastle Place, Harrow Road and Edgware Road. The proposal will activate the frontages along Harrow Road and Edgware Road and provide an improved pedestrian environment. Access to the affordable workspace will be from Newcastle Place. The building entrances are shown in Figure 7.

Newcastle Place is proposed to be 'stopped-up' to deliver a high quality, privately maintained pedestrian priority public realm space (see Section 3.4.3.1). Vehicular access will be controlled and the traffic flows will be low. Raised table pedestrian crossings will be provided along Newcastle Place to emphasise pedestrian priority and to create a pedestrian enhanced street.

Figure 7: Pedestrian access



An assessment on Pedestrian Comfort Level (PCL) as requested by TfL is contained in Section 5.7.

3.2 Cycling

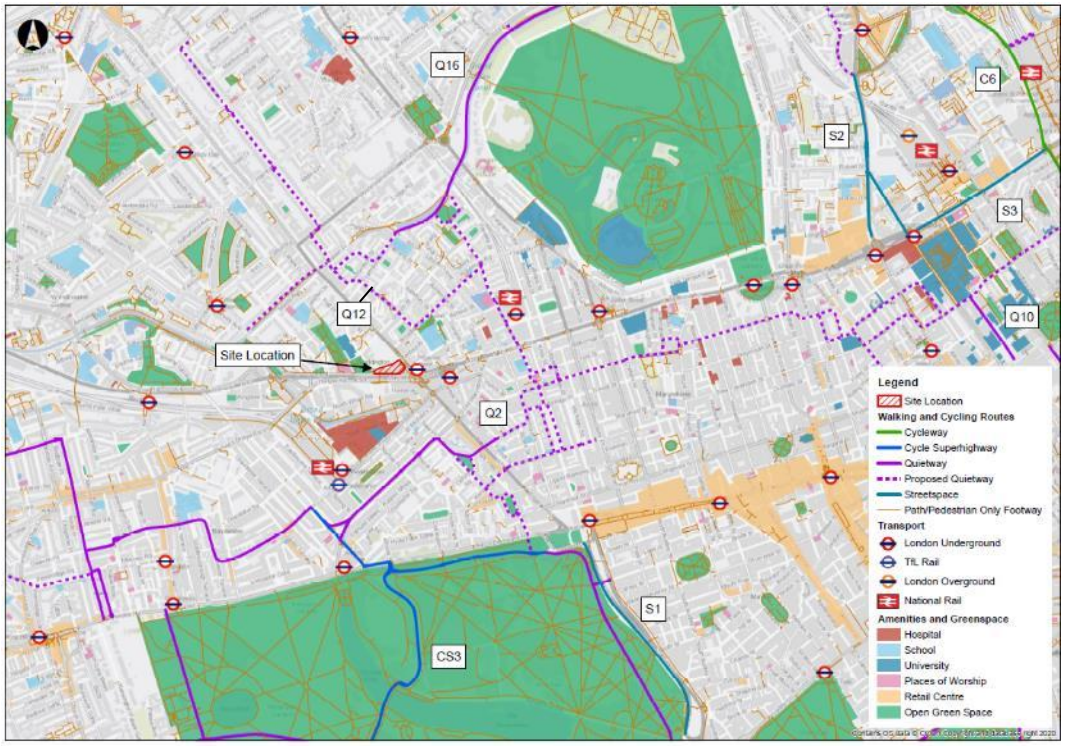
3.2.1 Existing Cycling Access and Facilities

3.2.1.1 Cycle Routes

The following cycle routes are located in the vicinity of the site:

- Quietway 2 (~650m from site) – Harrowby Street to Bayswater
- Quietway 16 (~1.2km from site) – Lisson Grove to Regent's Park
- Cycleway 3 (~1.4km from site) – an east-west cycleway between Barking and Lancaster Gate

Figure 8: Cycle routes in relation to the site



3.2.1.2 Cycle Parking

There are a number of existing cycle parking facilities in the vicinity of the site, which include:

- By Paddington Green Police Station – 6 spaces
- Harrow Road – 14 spaces
- Edgware Road station – 8 spaces
- Under the Marylebone flyover – 42 spaces to the west of the junction and 34 spaces to the east of the junction with Edgware Road.
- Broadley Street – 8 spaces
- Edgware Road (adjacent to Edgware Road post office) – 2 spaces

3.2.1.3 Cycle Hire

The nearest cycle hire docking stations are as follows and shown in Figure 9:

- Paddington Green - 20 docks
- Edgware Road Station (under the Marylebone Flyover east of Edgware Road) - 62 docks.
- Penfold Street - 15 docks.

It appears the cycle hire docking stations under the Marylebone Flyover to the west of Edgware Road was removed in 2019.

Figure 9: Locations of cycle hire docking stations

Source: https://tfl.gov.uk/modes/cycling/santander-cycles/find-a-docking-station

TfL provided the capacity and utilisation of some of the cycle hire stations in the vicinity of the site. However, in terms of the nearest docking stations, the data was limited to only Paddington Green (20 docks). The data showed 14% empty minutes and 0.2% full minutes. The data suggests that the Paddington Green docking station is not empty for a significant amount of time and it is rarely full.

The data does not include utilisation of the larger provision at Edgware Road Station and any increase in local demand arising from the proposed development is expected to be distributed across both Paddington Green and Edgware Road docking stations given the similar distances to the site. Cycle parking demand arising from the proposed development will also be met by the provision of short stay cycle parking in convenient and visible locations, and long stay cycle parking for residents and staff. Furthermore, the proposed development will have a mixture of uses, attracting cycle trips to and from the site which would help balance the use of the docking stations. Therefore, it is not considered that there will be a significant impact on the existing operation of the nearby docking stations near the site.

3.2.2 Proposed Cycling Access and Facilities

3.2.2.1 Cycle Parking

Cycle parking provision has been considered against the standards contained in the New London Plan. The standards which will be relevant to this scheme are presented in Table 2.

Table 2: New London Plan (2021) minimum cycle parking requirements

Land Use	Long-Stay Provision	Short-Stay Provision
Residential (C3)	1 space per studio or 1 person 1 bedroom dwelling 1.5 spaces per 2 person 1 bedroom dwelling 2 spaces per all other dwelling	5 to 40 dwellings: 2 spaces 1 space per 40 dwellings
Retail (A1)	Food Retail: From a threshold of 100sqm: 1 space per 175sqm GEA	Food Retail: From a threshold of 100sqm: areas with higher cycle parking standards: first 750sqm: 1 space per 20sqm; thereafter: 1 space per 150sqm
	Non-Food Retail: From a threshold of 100sqm: first 1000sqm: 1 space per 250sqm; thereafter: 1 space per 1000sqm (GEA)	Non-Food Retail: From a threshold of 100sqm: areas with higher cycle parking standards: first 1000sqm: 1 space per 60sqm; thereafter: 1 space per 500sqm (GEA)
Retail (A2-A5)	From a threshold of 100sqm: 1 space per 175sqm (GEA)	From a threshold of 100sqm: areas with higher cycle parking standards: 1 space per 20sqm (GEA)
Office (B1)	1 space per 75sqm (GEA)	First 5,000sqm: 1 space per 500sqm (GEA)

TfL's position on Class E uses is that they will seek to apply the most stringent parking standards, i.e. those which result in the most cycle parking and the least car parking. On this basis, all flexible commercial land-uses are considered to be A2-5 retail for a robust case.

The proposed long stay and short stay cycle parking provision is presented in Table 3.

Table 3: Proposed cycle parking spaces at PGPS

Land Use	Long Stay	Short Stay
Residential	878	15
Flexible Commercial*	7	60
Office and Affordable Workspace*	75	11
Total	**960**	**86**

** The cycle parking calculations include an assumption of GIA to GEA ratio of 1.1*

The proposed cycle parking strategy is as follows and the access to the cycle parking is covered in Section 3.2.2.2:

- **Short stay cycle parking** – 86 new cycle parking spaces in the form of Sheffield stands will be provided in the public realm. They will be conveniently located and visible to cyclists. The proposal incorporates the new cycle stands, together with relocated existing stands, as part of the proposed landscaping proposals along Edgware Road and Harrow Road. This is shown in Figure 10.
- **Flexible commercial long stay cycle parking spaces** – These will be part of the fit out of each ground floor unit.
- **Office and affordable workspace long stay cycle parking spaces** – These will be located in the B1 basement. A total 75 spaces will be provided and the location of the cycle parking is shown in Figure 11.
- **Residential long stay cycle parking spaces** – These will be provided in the B1 basement. It is proposed that 878 spaces will be provided in the PGPS basement, and an additional 104 spaces will be provided in the WEG basement to provide a total of 982 spaces to meet New London Plan (2021) standards. The indicative area in the WEG basement will replace around 12 car parking spaces and this area will be subject to a separate planning application. The long stay cycle parking areas is illustrated in Figure 11. Further information on the planning approach for the WEG basement cycle parking spaces is contained in the Planning Statement accompanying the planning application.
- The long stay cycle parking will be in the form of two-tier racks, with 5% provided as Sheffield stands. All the residential Sheffield stands will be located in the PGPS B1 basement.

Figure 10: Locations of short stay cycle parking

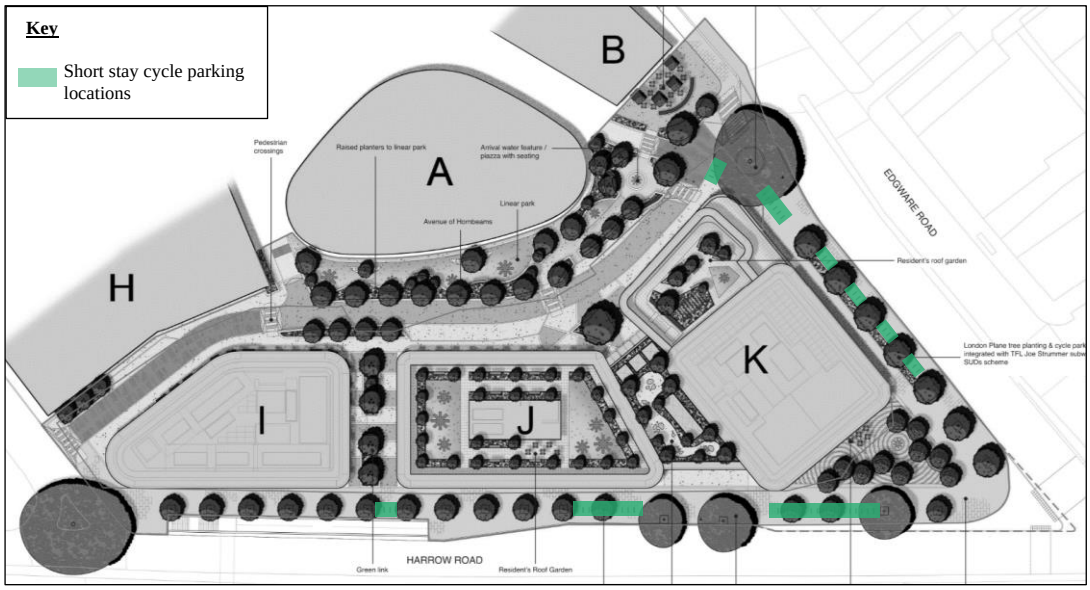
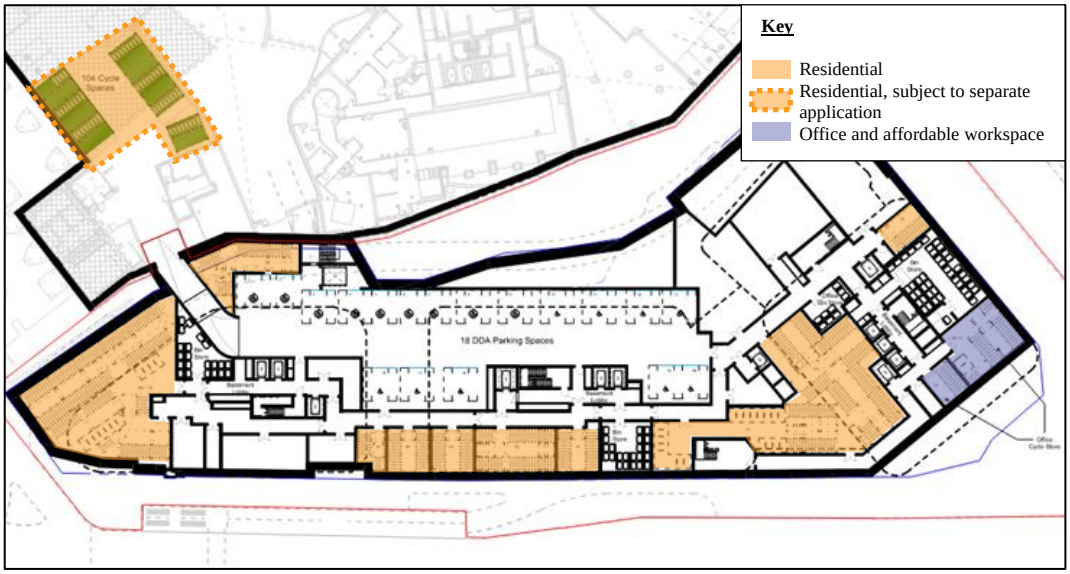


Figure 11: B1 long stay cycle parking layout

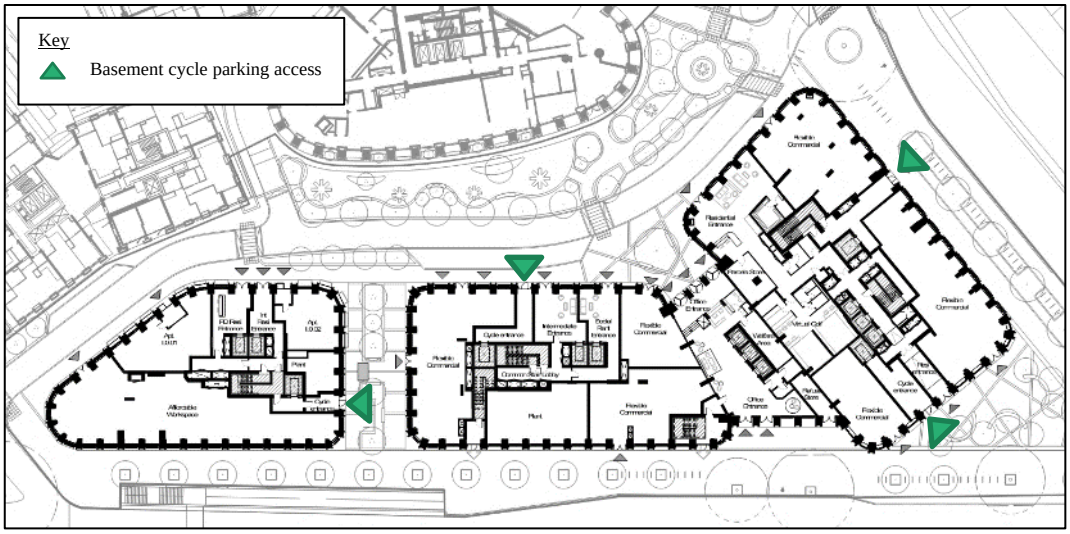


3.2.2.2 Cycle Routes and Access

There will be public realm improvements to Newcastle Place which will improve cyclist connections to the wider cycle network. Newcastle Place will provide access to long stay and short stay cycle parking.

Step-free access to the B1 basement will be from Newcastle Place, Harrow Road and Edgware Road to provide access to the residential, office and affordable workspace long stay cycle parking. The access points are shown in Figure 12.

Figure 12: Cyclist access



3.3 Public Transport

3.3.1 Public Transport Accessibility

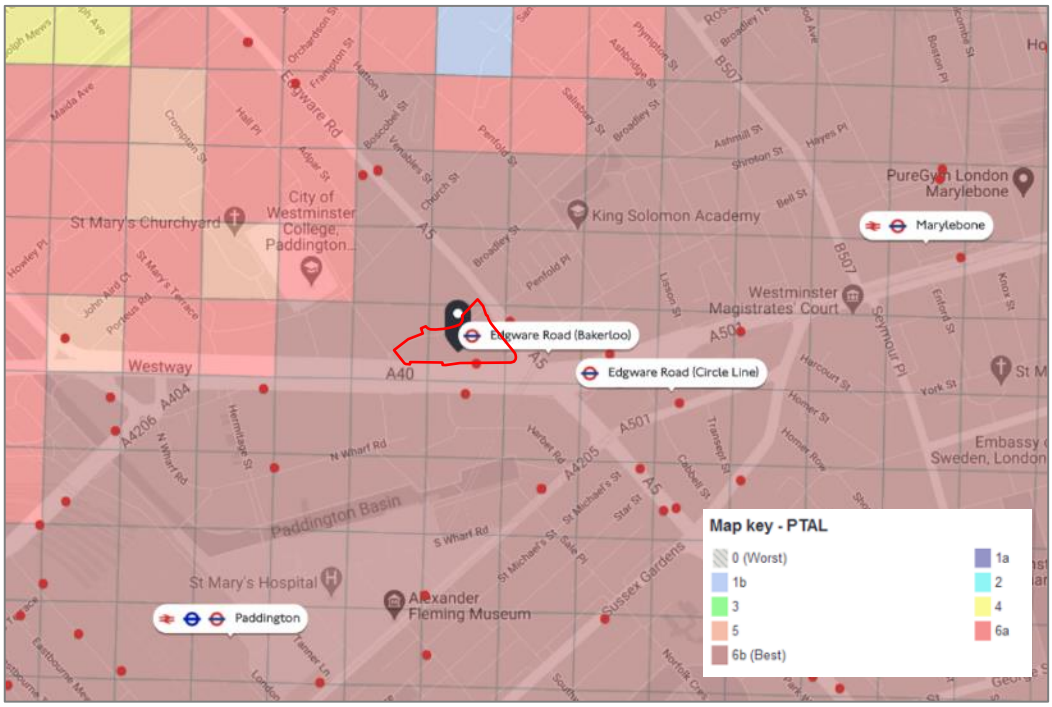
The Public Transport Accessibility Level (PTAL) methodology considers the time taken to access the public transport network including:

- The walk time to various public transport services;
- The average waiting time for each service; and
- The reliability of each service.

The assessment is based on a walk speed of 4.8kph and considers rail stations within a 12-minute walk (960m) of a site and bus stops within an eight-minute walk (640m) of a site. The PTAL assessment is undertaken using the operating patterns of existing public transport services during the morning peak hour.

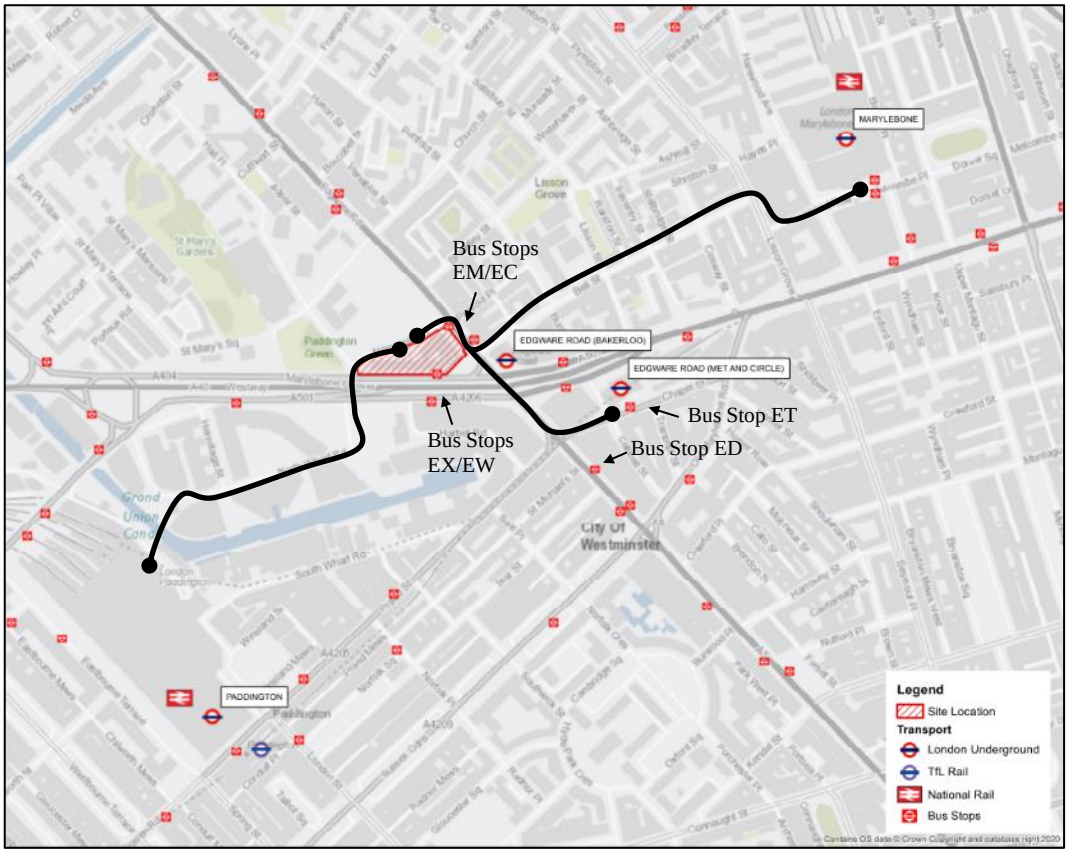
Based on TfL's WebCAT online database, the development site has a PTAL rating of 6b, which indicates an 'excellent' connectivity to the surrounding network, and is the highest possible score on the PTAL scale. The existing PTAL is shown in Figure 13.

Figure 13: Public transport accessibility calculated by WebCAT



The plan shown in Figure 14 shows the nearest bus stops and walking route to stations.

Figure 14: Public transport plan and key walking routes to stations



3.3.2 London Buses

The nearest bus stops to the site are Stops EM / EC on Edgware Road and Stop EX on A404 Harrow Road. Additional bus stops are within walking distance (400m) of the site and Table 4 shows the bus routes and frequencies.

Table 4: Bus services and peak hour frequencies

Bus Stop	Location	Route	Distance (metres)	Peak hour frequency (bph)
EM/EC	Edgware Road	16	80	9
		332	80	6
		98	80	9
		414	80	8
		6	80	10
EX/EW	Harrow Road	18	130	7
ED	Edgware Road / Praed Street	7	340	8
		23	340	8
		36	340	10
ET	Chapel Street	27	380	8
		205	380	8

3.3.3 London Underground

The Edgware Road Underground stations are located 60m (Bakerloo Line), and 300m (Hammersmith & City, Circle and District Lines) to the east and southeast of the site. This is summarised in Table 5.

Table 5: London Underground services at Edgware Road stations

LUL	Direction	AM peak frequency	PM peak frequency	Sat peak frequency
Bakerloo Line	Towards Queens Park	21	21	20
	Towards Elephant and Castle	23	21	20
Hammersmith & City and Circle Line	Towards Barking	13	13	12
	Towards Hammersmith	12	12	12
District and Circle Line	Via Victoria	6	6	6
	Towards Wimbledon	6	6	6

3.3.4 Elizabeth Line

Crossrail Ltd plans to bring the Elizabeth Line into passenger service in the first half of 2022. The Elizabeth Line will serve Paddington Station. The nearest station entrance from the site is via Paddington Basin, located approximately 650m away. The station is step-free between the platforms and street level; and provides an interchange between the London Underground services.

The Elizabeth Line provides connection from Paddington to Heathrow and Reading to the west and Abbey Wood to the east. Services operate at approximately 34 trains per peak hour.

3.3.5 National Rail

London Paddington railway station, with the nearest entrance point 650m from the site, provides services operated by Great Western Railway, Heathrow Express and

TfL Rail, to destinations including Reading, Cheltenham Spa, Swansea, Bristol, and Heathrow Airport.

London Marylebone railway station is located approximately 800m to the east of the site. The station provides services operated by Chiltern Railways to destinations including Aylesbury, Oxford, Birmingham, and Stratford Upon Avon.

3.4 Highway Network

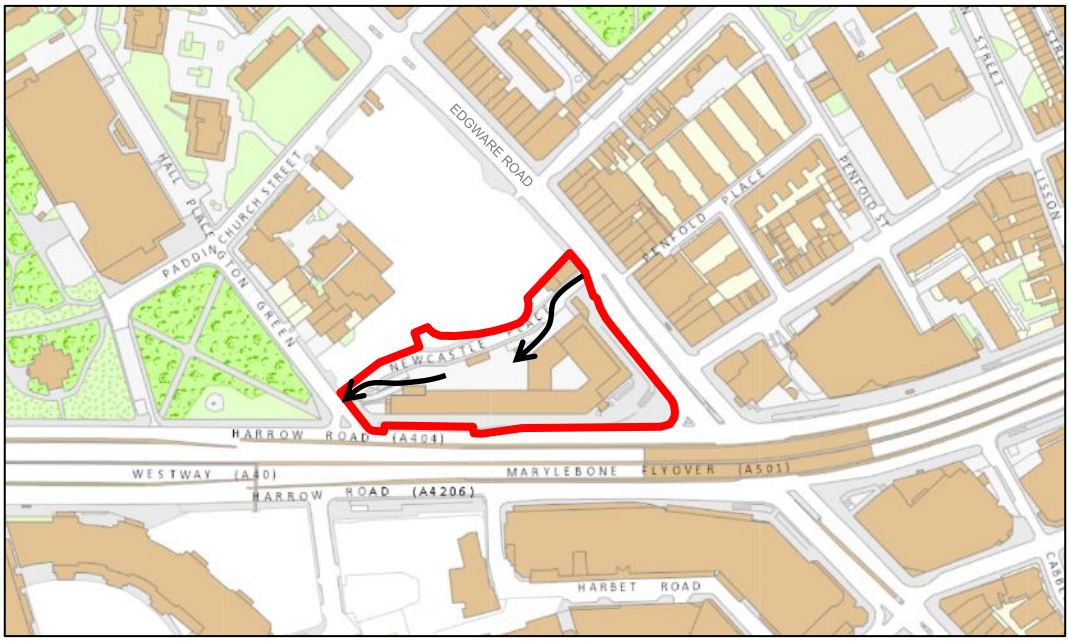
Newcastle Place is one-way westbound between Edgware Road and Paddington Green. Paddington Green is two-way, connecting with Harrow Road to the south at a priority junction. Edgware Road meets Harrow Road at a signal-controlled junction to the southeast of the site.

Both the Edgware Road (A5) and the eastern section of Harrow Road (A404) are part of the Transport for London Road Network (TLRN). Edgware Road forms a strategic northwest-southeast route and Harrow Road provides access to the A40 Westway and A501 Marylebone Road, a strategic east-west route.

3.4.1 Existing Vehicular Access

The former police station has car parking at basement and podium levels and a ramped vehicular access is provided from Newcastle Place (as shown in Figure 15).

Figure 15: Highway network and PGPS access points



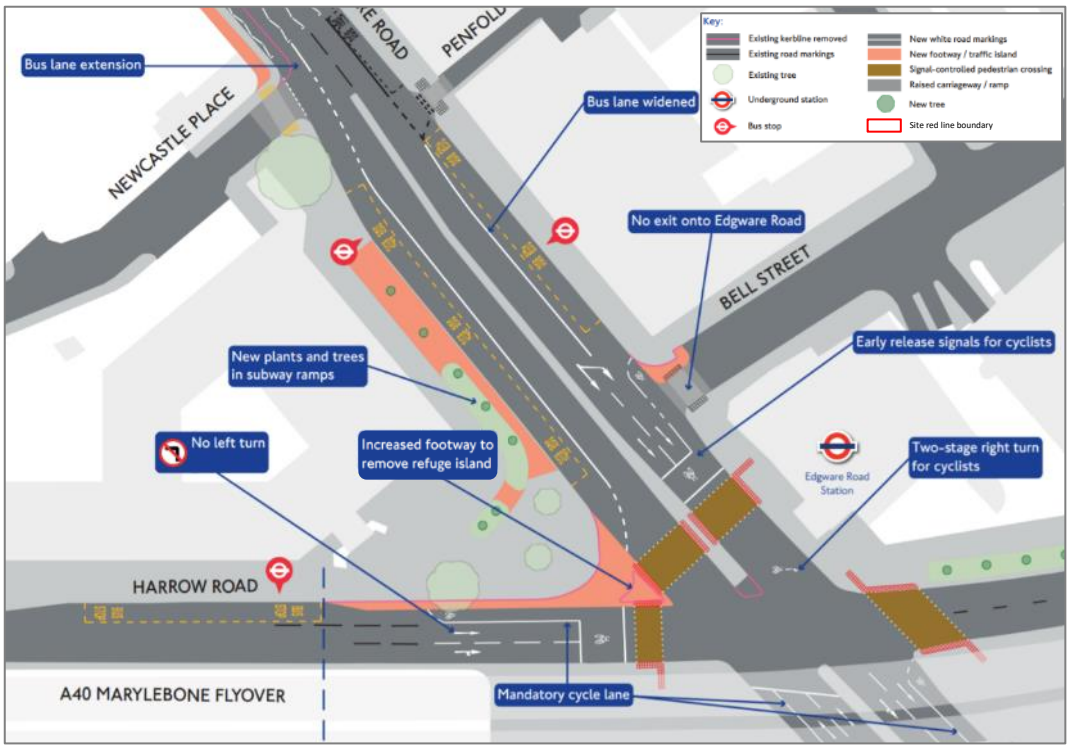
3.4.2 Committed Highway Works

3.4.2.1 TfL Safer Junctions Scheme

TfL commenced construction works of the TfL Safer Junctions scheme at the Edgware Road and Harrow Road junction in January 2020 and the works are now completed.

The scheme aims to reduce road danger and eliminate collisions at the junction, and create safer streets for users to walk, cycle and use public transport. The proposal consists of widening of all pedestrian crossings at the junction, introducing a 20mph speed limit across the junction. An extract of the scheme showing Edgware Road and Harrow Road is shown in Figure 16.

Figure 16: Extract from the Safer Junction scheme design proposals (now complete)



The scheme involved the following:

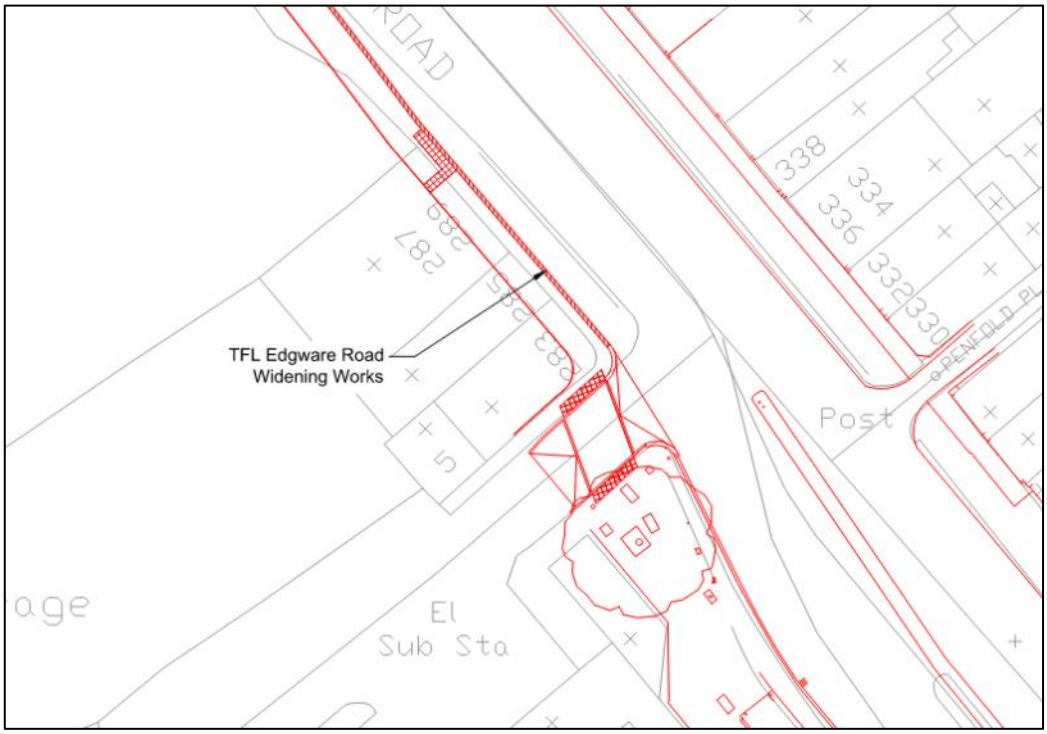
- Fill in the ramp and stairs of the subway entrances to create sustainable drainage features. This creates a better pedestrian environment and improves the public realm space around the site.
- Installing cyclists early start signal on southbound Edgware Road.
- Building out northwest corner to remove junction splitter island to provide a better pedestrian environment.
- Converting staggered crossing to straight-across crossing to create direct and safer routes to/from Edgware Road Bakerloo line station.
- Changing the current three-lane road layout to two traffic lane and a cycle land through the junction.

- Widening southbound bus lane to 4.5m as it passes the bus stop.
- Extending bus lane north of Newcastle Place.
- Banning left turn from Harrow Road into Edgeware Road northbound.
- Making Bell Street no exit onto Edgware Road.

3.4.2.2 Edgware Road Widening Works

The WEG consented scheme safeguarded land to enable future improvement works on Edgware Road, as shown in Figure 17. The TfL improvement works involve widening Edgware Road from one to two lanes and providing a raised table pedestrian crossing at Newcastle Place. These changes are incorporated into the proposed layouts.

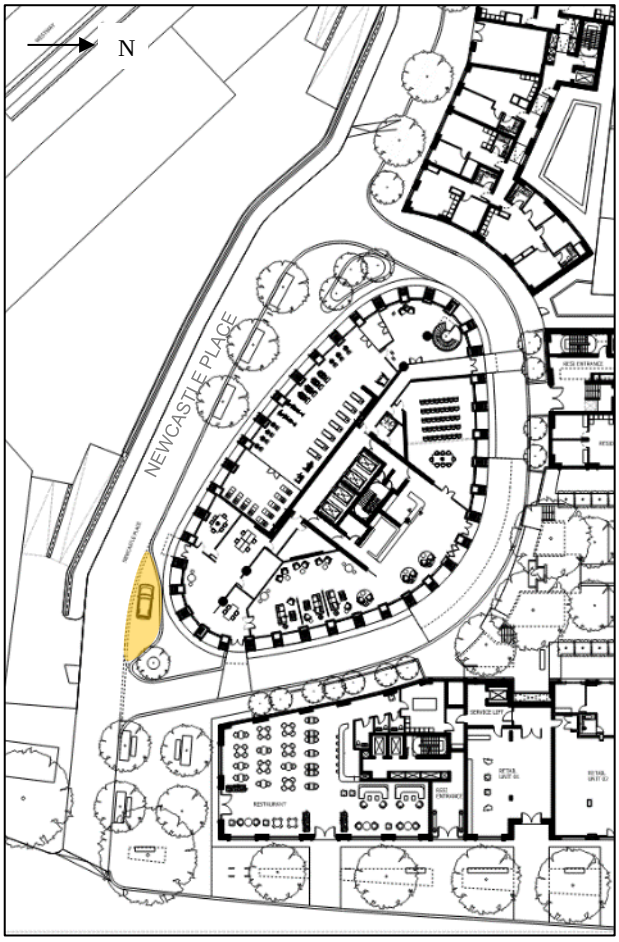
Figure 17: TfL Edgware Road widening works



3.4.2.3 Consented Loading Bay on Newcastle Place

An on-street loading bay was consented on Newcastle Place, as part of the planning application (ref: 16/12162/FULL), to relocate the drop off area and main entrance to Block A of WEG, known as Westmark. The consented bay is shown in Figure 18. This loading bay has been incorporated into the proposed PGPS layout.

Figure 18: Consented loading bay by Westmark

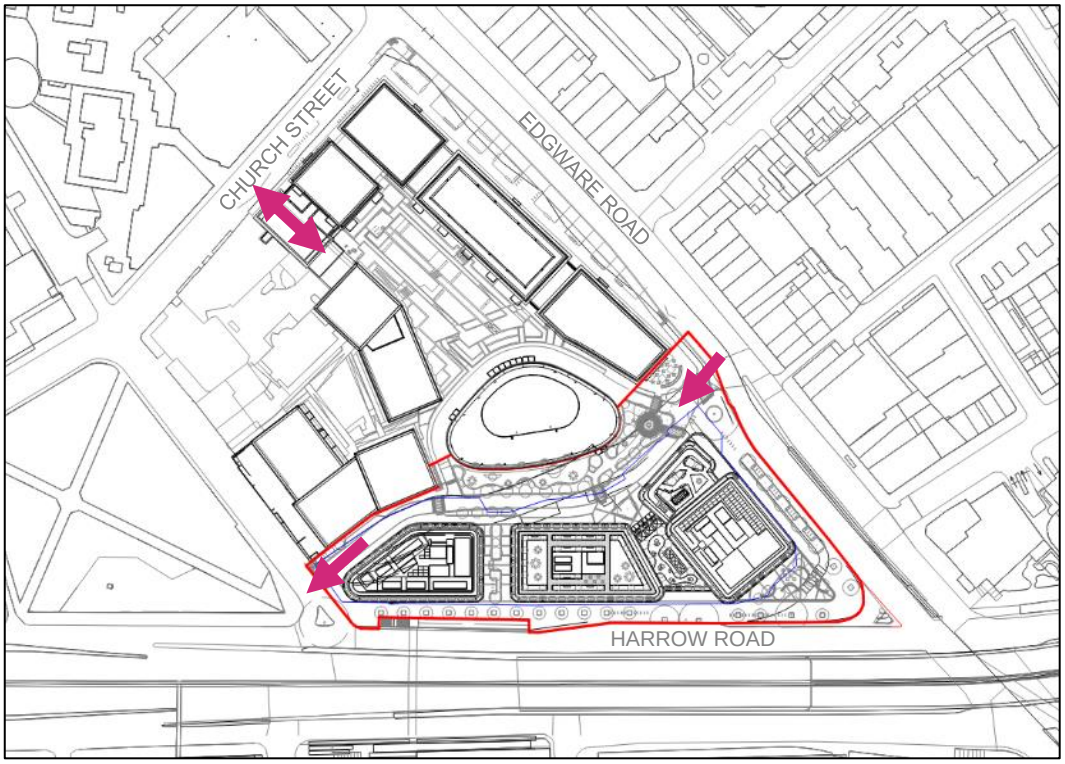


3.4.3 Proposed Vehicular Access

There are two proposed vehicular accesses to the proposed site, as shown in Figure 19. They are:

- Church Street provides access to the basement car park which was consented as part of the WEG development. This will be used for PGPS residential parking and deliveries.
- Newcastle Place will be ‘stopped up’ (see Section 3.4.3.1) and have controlled access for taxi or car drop-offs/pick-ups and residential deliveries. No parking is permitted on Newcastle Place.

Figure 19: Proposed vehicular accesses to the site



3.4.3.1 Stopping Up

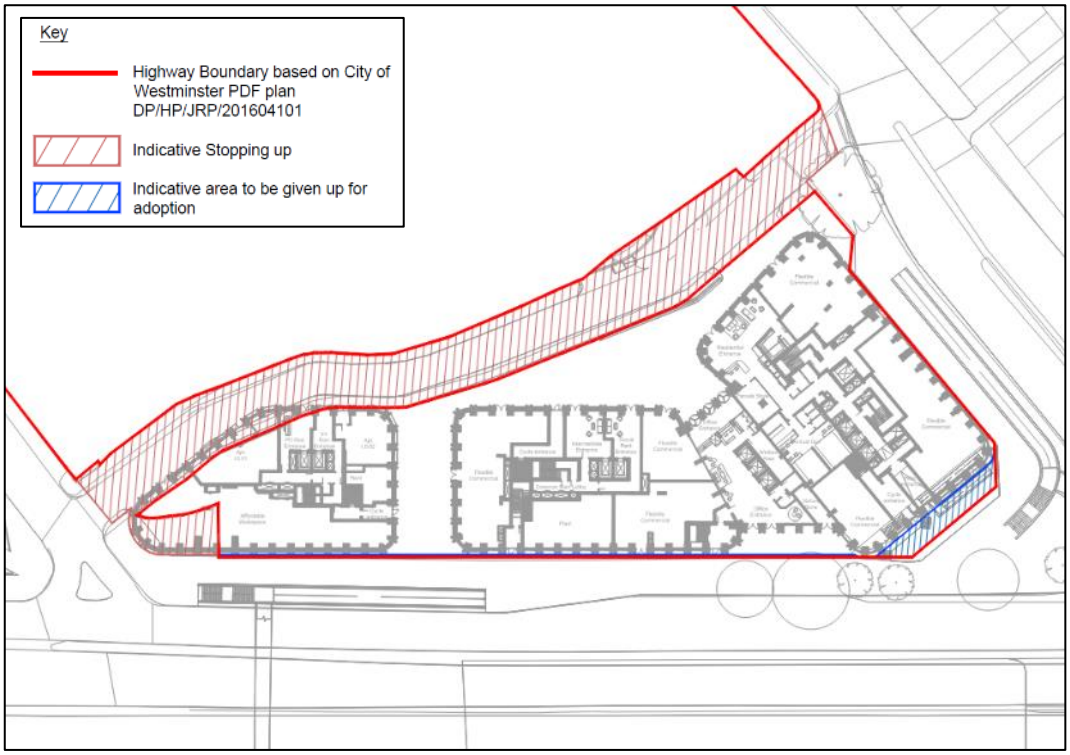
The proposed development includes the proposal to 'stop-up' Newcastle Place and a section of deterrent footway on Paddington Green, which are currently part of WCC adopted public highway. The stopping up would be under S247 of the Town and Country Planning Act,

The purposes of stopping up Newcastle Place are:

- To allow Berkeley Homes to create a safer and greener space at the heart of the scheme, which will help deliver an environment with better air quality, a much improved public realm with high quality finishes including water features and help towards maintaining a safer environment through our estate management.
- To deliver a public realm which prioritises pedestrian and cyclist movements and is in keeping with the Healthy Streets principles.
- To accommodate the proposed development and rectify current adopted highway alignment errors.

The proposed area to be stopped up is shown in Figure 20 and a scaled drawing is included in Appendix E.

Figure 20: Indicative stopping up plan



In terms of the function of Newcastle Place:

- **Existing function** – Newcastle Place provides an one-way westbound connection between Edgware Road and Paddington Green and largely facilitated access to the former police station (i.e. the site). The police station closed in 2018. It serves as an alternative vehicle route to Church Street to properties on Paddington Green from the south and southeast. It has a local function and no wider vehicular route purpose. Historically it was created formally as part of the police station development. As such, it was intended primarily to serve the site and needs of the police, and not an integral part of the wider highways network.

  Newcastle Place has been temporary closed since September 2020 (for one year and subject to monthly review) to facilitate construction works for WEG.

- **Consented function** – Newcastle Place has a consented vehicle access to the WEG development around Westmark. An on-street loading bay has been consented on Newcastle Place, located near a parcel store in Westmark and is proposed for residential deliveries.

- **Proposed function** – It is proposed the Newcastle Place will provide walking and cycling access for the public (subject to a walkways agreement within S106), WEG and the proposed development. There will be controlled one-way vehicle access to discourage through traffic to give priority to pedestrian and cyclists in the public realm. It will also be a route for emergency vehicles.

  Residential deliveries will take place on Newcastle Place for PGPS and WEG. Alternative options have been explored and this option is expected to prevent deliveries overspilling elsewhere on public highway. Commercial deliveries,

all refuse collection, and any pre-booked residential deliveries / move in / out will take place in the basement.

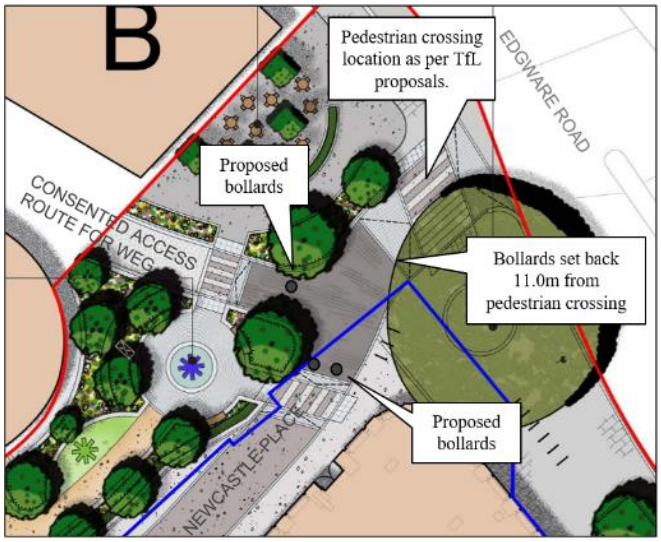
Newcastle Place will also be used for taxi / car drop off to each block to help those with mobility impairments and the numbers are expected to be low.

In terms of Newcastle Place traffic flows:

- In 2015, when the police station was in operation, Newcastle Place was surveyed to have 9 vehicles in the AM peak and 20 vehicles in the PM peak. These are very low traffic flows. Newcastle Place has been subject to temporary closure since September 2020 and therefore no traffic flows.
- With the consented WEG scheme, there would be around 7 vehicles in the AM peak and 5 vehicles in the PM peak. In the peak delivery hour, around 10 vehicles could be expected (one vehicle every 6 minutes).
- With WEG and the proposed development, there would be around 11 vehicles in AM peak and 9 vehicles in the PM peak. In the peak delivery hour, around 21 to 24 vehicles (one vehicle every 2 to 3 minutes) could be expected. This is a robust case and assumes no consolidation in deliveries between WEG and PGPS.

Bollard control is proposed along Newcastle Place within the site, as indicated in Figure 21. These will be set back by 11.0m from the pedestrian crossing on Newcastle Place (proposed as part of TfL Edgware Road widening works), to allow a large vehicle to wait. This represents a total distance of around 20m from Edgware Road. Given the expected low number of vehicle trips, no more than one vehicle is expected to arrive at the same time and large vehicles are expected to be very occasional. Therefore the proposed bollard arrangement will not have an impact on the operation of Edgware Road.

Figure 21: Proposed bollard control on Newcastle Place



Arriving vehicles will be directed to the correct block / loading area. Vehicles not undertaking deliveries or entered by mistake will be escorted through onto Paddington Green. The bollard control will reduce vehicle speeds into the area

and any through traffic and will emphasise pedestrian priority. The bollards are expected to be manned, with intercom connection to reception.

A Stage 1 Road Safety Audit has been undertaken and a Designers Response has been prepared. This is contained in Appendix D.

3.5 Public Realm

3.5.1 Existing Conditions

The site is currently occupied by the former police station building and the surrounding public realm reflects the former use of the building, with bollards, guard rails and inactive frontages onto the public realm.

The site is currently occupied by a single block facing Harrow Road, Edgware Road and Newcastle Place with no permeability across the links. This part of Edgware Road is less vibrant than the section closer to Church Street. Other site constraints relating to the proximity to the A40 Westway and Edgware Road and barriers to transport hub (Edgware Road Underground station interchange) and green spaces such as Paddington Green. Figure 22 to Figure 24 show the current condition of the site.

Figure 22: Frontage of former police station building

Figure 23: Paddington Green facing Newcastle Place and former police station building

Source: Google Streetview

Figure 24: View of Newcastle Place

Source: Google Streetview

3.5.2 Proposed Public Realm

The proposed landscape plan is shown in Figure 25 and further information on the landscaping proposals is submitted separately with this planning application.

The proposal seeks to maximise the soft landscaping and prioritise pedestrian and cycle movements (see Figure 25) and controlling vehicle access (see Section 3.4.3.1). Traffic flows will be low and raised table pedestrian crossings are incorporated along Newcastle Place to prioritise pedestrian movements.

A new plaza is proposed at the corner of Edgware Road / Harrow Road directly opposite the underground station (see Figure 27). The public realm design along Edgware Road is developed in line with the changes of the TfL road widening scheme. The proposed improvements contribute to creating attractive spaces surrounding the site and within the development, that encourage pedestrian and cyclist movements.

There are also improvements proposed on Harrow Road, with upgraded footways, landscaping and active frontages. This is illustrated in Figure 28 and Figure 28.

Figure 25: Proposed landscape plan

Figure 26: Artist impression of landscape garden on Newcastle Place

(Source: Artist impression by Squire+Partners)

Figure 27: Artist impression of the landscape plaza on the corner of Harrow Road / Edgware Road

(Source: Artist impression by Squire+Partners)

Figure 28: Artist impression of Harrow Road

(Source: Artist impression by Squire+Partners)

3.6 Healthy Streets Check for Designers

The Healthy Streets Approach is a long-term plan for improving Londoners' and visitors' experiences of our streets, helping everyone to be more active and enjoy the health benefits of using our streets on a daily basis.

The 'Healthy Streets Indicators' are ten evidence-based indicators which define the important elements that makes streets appealing, healthy and inclusive places. Working towards these indicators on our street networks will contribute towards creating a healthier city. The ten healthy streets indicator are shown in Figure 29.

Figure 29: The Healthy Streets indicators

A number of useful tools have been developed as part of TfL's *Healthy Streets toolkit*[1], one of which is the "Healthy Streets Check for Designers" (HSCD). Whilst targeted more towards appraising proposed changes or options to existing streets and particularly presenting a comparison between the existing and proposed cases, it can also be used as a useful guide for the design of new streets.

HSCD is based on the scoring of a number of metrics that each, individually or combined, contribute to the ten Healthy Streets indicators. There are a total of 31 different metrics which relate to various elements such as vehicle traffic characteristics (e.g. volume, speed, noise etc), design for pedestrians (e.g. crossing points, footpath width, lighting, surveillance etc), design for cycling (e.g. type and width of facility, priority at junctions, cycle parking etc), and down to more

[1] https://tfl.gov.uk/corporate/about-tfl/how-we-work/planning-for-the-future/healthy-streets

detailed items such as street trees and planting, spacing of benches, location of public transport stops, etc.

While many of these elements are subject to refinement, at planning stage a preliminary Healthy Streets appraisal can be undertaken to demonstrate how a typical street within the proposed development would be measured against the Healthy Streets indicators.

For PGPS, Healthy Streets Check for Designers has been undertaken for the street sections highlighted in Figure 30 for the existing and proposed situation. The results of the assessment are presented in Table 6.

Figure 30: Healthy Streets Check street sections

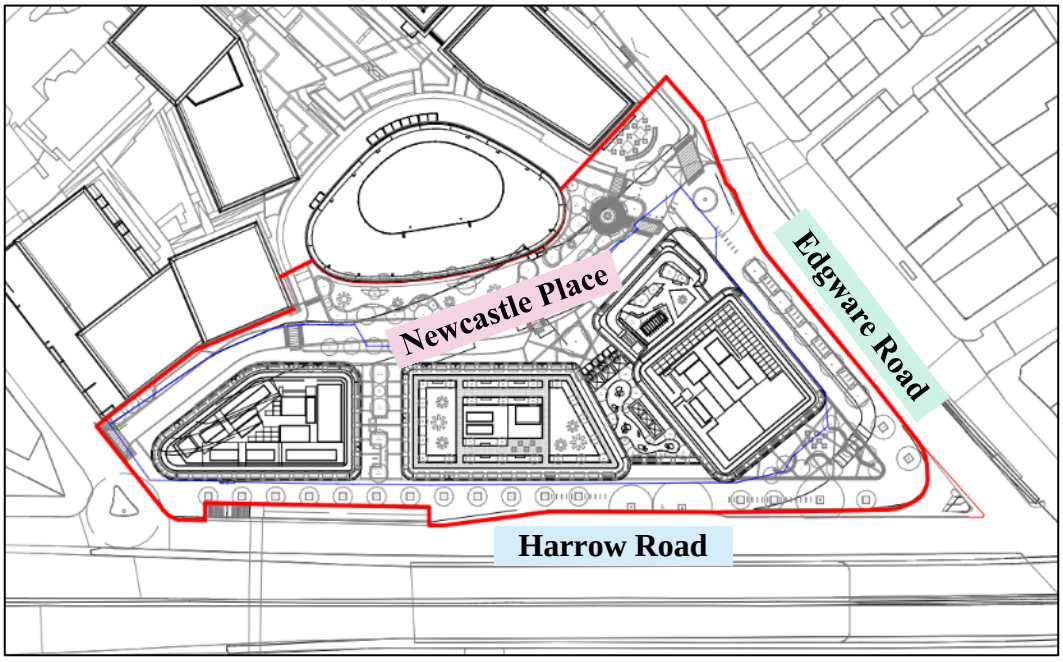


Table 6: Healthy Streets Check for Designers - scoring outputs

Healthy Streets Indicators' scores (%)	Newcastle Place		Edgware Road		Harrow Road	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Pedestrians from all walks of life	60	86	59	70	63	70
Easy to cross	60	87	53	57	53	57
Shade and shelter	33	83	33	83	50	67
Places to stop and rest	33	93	47	93	60	87
Not too noisy	53	87	33	60	47	67
People choose to walk, cycle and use public transport	60	86	59	70	63	70
People feel safe	60	89	62	73	65	73
Things to see and do	33	83	44	78	56	72
People feel relaxed	61	88	61	71	64	71
Clean Air	42	83	33	75	50	75
Overall Healthy Streets Check score	**57**	**87**	**57**	**71**	**62**	**70**
Number of 'zero' scores	0	0	1	1	1	1

Table 6 shows that the proposals will improve the Healthy Streets Check score for all three streets, particularly evident on Newcastle Place. The detailed assessment is contained in Appendix F.

3.7 Car Parking

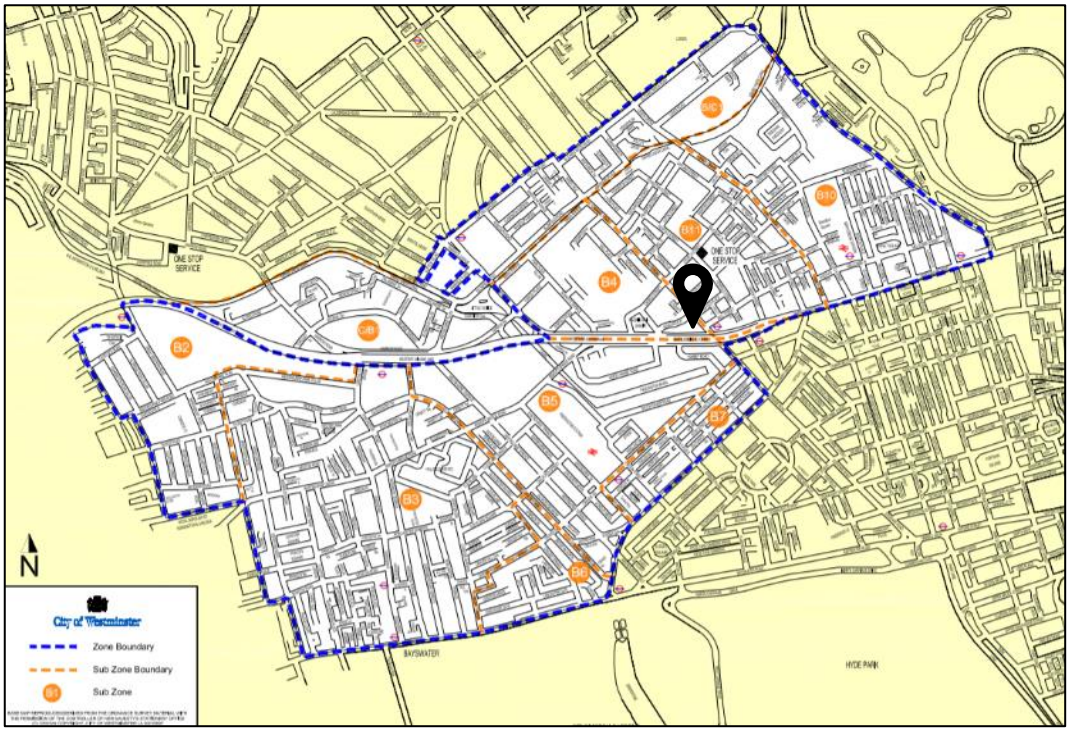
3.7.1 Existing Car Parking

As summarised in Section 1.3, Paddington Green Police Station has car parking at basement and podium levels which were accessed from Newcastle Place via secure entrance and exit ramps.

3.7.1.1 On-Street Parking Controls

Newcastle Place has double yellow lines on both sides. The site is located in Controlled Parking Zone (CPZ) B4. Zone B permit holders can park in any ‘B’ zone. The nearest on-street residential permit bays are located along Paddington Green and Church Street. WCC CPZ plan showing CPZ Zone B, together with the site location, is provided as Figure 31.

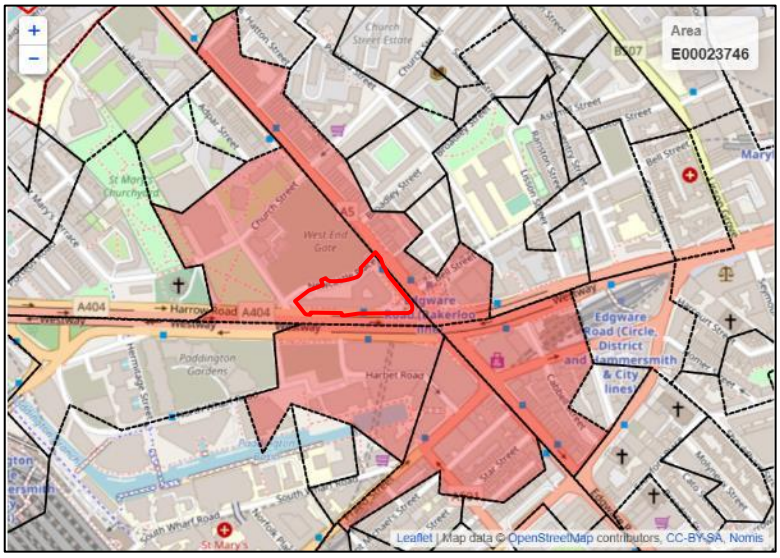
Figure 31: WCC Controlled Parking Zones



3.7.1.2 Car Ownership

2011 Census data on car ownership has been examined for the area shown in Figure 32. The data shows that 75% of homes in the local area do not own a car. The census data would not include new developments, which are more likely to have low car parking provision and increase the overall number of car-free households.

Figure 32: Census area examined for car ownership



3.7.2 Proposed Car Parking Strategy

The proposed development will be car-free, with 18 accessible parking spaces provided at B1 basement level:

- 17 of the spaces meets the 3% disabled car parking provision set out within the London Plan for the proposed 556 residential homes. Car parking spaces are only leased to residents.
- Should the demand for additional accessible parking spaces arise beyond 3% of homes, the WEG basement car parking can be used. Minor adjustments to parking bay markings will be made to accommodate the accessible parking demand. Residential parking will be leased, with priority given to Blue Badge holders, and the WEG and PGPS basement car parks are subject to a Parking Design and Management Plan. It is proposed that the PGPS car parking will be managed as per the WEG car park, and a Car Parking Management Plan has been submitted to discharge conditions for WEG (March 2020). The management of the car parking will allow suitable permit allocation and identifying the most suitable accessible locations by blocks.
- One of the spaces is for the non-residential uses, which is in keeping with New London Plan policy.

The PGPS car park will be accessed via Church Street and the WEG basement.

During pre-application discussions, the above car parking approach was supported by both WCC and TfL. The strategy was developed based on the following context:

1. **TfL and WCC Policies -** London Plan supports car-free at this location. WCC policies support sustainable travel and reduce dominance of the private car, but there is an emphasis on not worsening on-street parking stress.
2. **Accessibility** – The site has a PTAL of 6b and there is a wide range of local amenities within walking distance.
3. **CPZ** – The site is within permit zone B. In practice, only the residential bays on Church Street and Paddington Green would be within walking distance.
4. **Car Ownership** – As set out in Section 3.7.1.2, 75% of homes in the local area are car-free (Census 2011 data would not include new developments with better sustainable travel measures).
5. **West End Gate** – The WEG development has 844 residential units and 346 car parking spaces. This is equivalent to 0.4 car parking spaces per unit, which is higher than local car ownership as stated in the WEG TA. The WEG development has a low uptake of car parking to date of 23.9% (i.e. 76.1% car-free).
6. **Sustainable Travel Measures** – The PGPS development provides measures to encourage sustainable travel, such as cycle parking, public

realm improvements. The development will be mixed use development and there will be retail on-site which could meet the day to day needs.

A car-free lifestyle will be supported. However, recognising WCC's policies in relation to impact on existing parking stress, there is the potential for the WEG basement car parking to be used for PGPS as discussed during the pre-application meetings with WCC.

- The maximum car ownership is expected to be 23.9% (commensurate with local car ownership of 25%), which is equivalent to 335 cars for both WEG and PGPS (total of 1,400 homes).
- In total, the WEG and PGPS basement will provide 364 car parking spaces which can fully meet this demand.
- Therefore, no overspill car parking on-street or worsening of parking stress is expected.

Subject to a separate planning application, it is proposed that around 12 car parking spaces in WEG will be lost to provided 104 cycle parking spaces for PGPS. This quantum of car parking is not expected to have a significant impact or result in an increase in on-street parking stress.

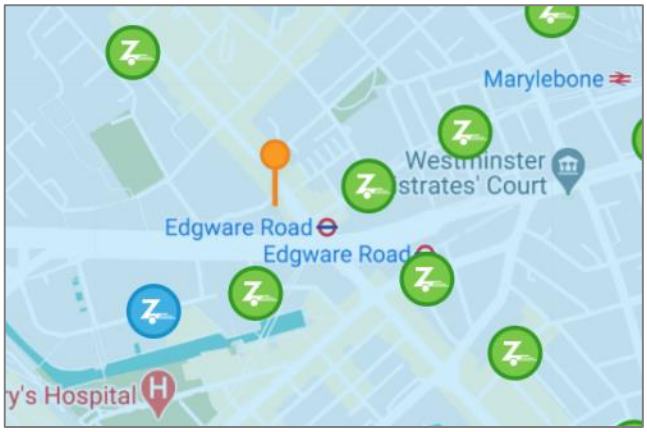
Electric vehicle charging points will be provided in line with WCC Draft City Plan (2020), which requires 50% of car parking spaces at B1 of the PGPS basement to be provided with active charging points and the remaining 50% with passive provision.

3.7.3 Car Clubs

There are car club vehicles in the local area which operate on fixed and 'flexible' locations (no fixed bays). The nearest car clubs are as follows and the locations are shown in Figure 33:

- Zipcar – 1 van, 30 Bell Street
- Zipcar – 2 cars, Merchant Square, Harbet Road
- Zipcar – 1 car, Chapel Street
- Zipcar – 1 van, Cuthbert Street
- Zipcar – 1 car, 89 Bell Street
- Zipcar Flex – 1 car, Bouverie Place

Figure 33: Locations of car clubs in the vicinity of the site



As agreed with TfL during pre-application discussions, the proposed development will prioritise encouraging sustainable travel patterns and no Car Clubs will be provided within the development.

3.8 Delivery and Servicing

3.8.1 Existing Arrangements

There is an off-street loading area off Newcastle Place at the eastern end of Paddington Green Police Station. Any large deliveries by HGVs would use Newcastle Place, where loading is permitted on the double yellow lines. Waste collection takes place from Newcastle Place.

3.8.2 Proposed Arrangements

The proposed approach to deliveries and servicing is in keeping with the principles at the WEG development. At WEG, a basement servicing area is provided, accessed from Church Street. A further on-street loading bay is provided on Newcastle Place immediately to the south of the Westmark building for residential deliveries.

The proposed delivery and servicing strategy for PGPS is as follows and a Delivery and Servicing Plan (DSP) is included in Appendix C:

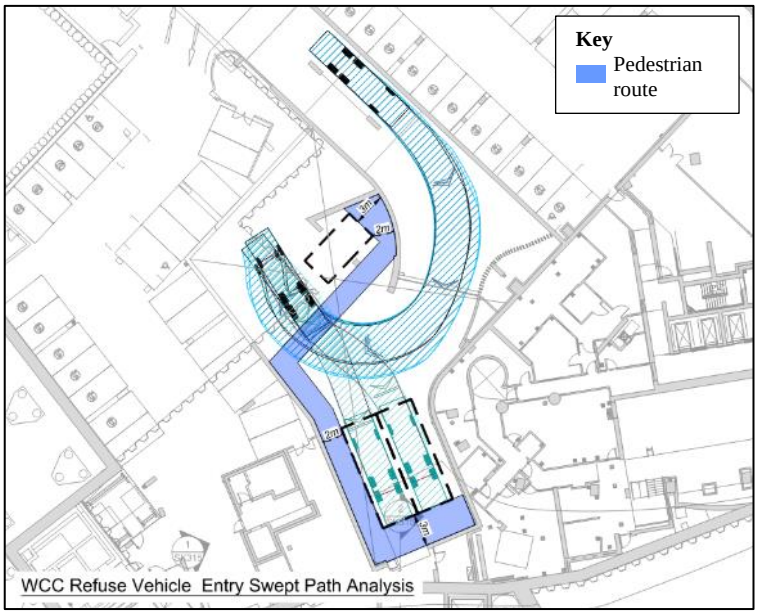
- All commercial deliveries and refuse collection to take place in the WEG B2 basement. Any special residential deliveries or residential move in / move out activities can also be pre-booked in the basement.
- Ad-hoc residential deliveries will take place on-street on Newcastle Place. Vehicular access will be controlled to help enforce pedestrian priority through the landscaped street. The consented on-street loading bay for Westmark will be reconfigured but retained. Two further loading locations are proposed.

3.8.2.1 WEG Basement

The design and access to the WEG basement was consented as part of the WEG applications. A servicing area is provided at the B2 Basement and the design has been developed further to show the area can accommodate two HGV bays and one LGV bay.

The layout of the servicing area at WEG B2 basement is shown in Figure 34, together with the swept path of a refuse vehicle. Further swept paths are contained in the DSP.

Figure 34: WEG basement servicing area and swept path of a refuse vehicle



Goods will be transported from the WEG basement servicing area to the PGPS B2 basement where a lift is provided to the B1 basement. At B1 level, corridors are provided to access each PGPS block. This helps to reduce servicing and delivery activities at ground floor level in the public realm.

Bin storage rooms are located adjacent to the large HGV bays. A separate Waste Management Strategy prepared by Squire and Partners is submitted with the planning application.

3.8.2.2 Newcastle Place

As discussed earlier, the existing Newcastle Place will be ‘stopped up’ and realigned to deliver a public realm space. Newcastle Place will remain one-way, with entry from Edgware Road and exit onto Paddington Green, as per the existing situation.

Loading bays are incorporated into the landscape design of Newcastle Place, positioned within close proximity to the entrance of each building block. This includes a reconfigured loading bay on the northern side (previously consented for WEG, planning ref: 16/12162/FULL), a centralised loading bay suitable for accommodating the occasional large vehicle, and a further layby at the western

end of Newcastle Place. The loading bays are designed to extend onto the footway to increase pedestrian priority when not in use. This is in keeping with TfL Streetscape Guidance (2019).

The landscape plan is shown on Figure 25 and swept path analysis of Newcastle Place is contained the DSP.

4 Active Travel Zone

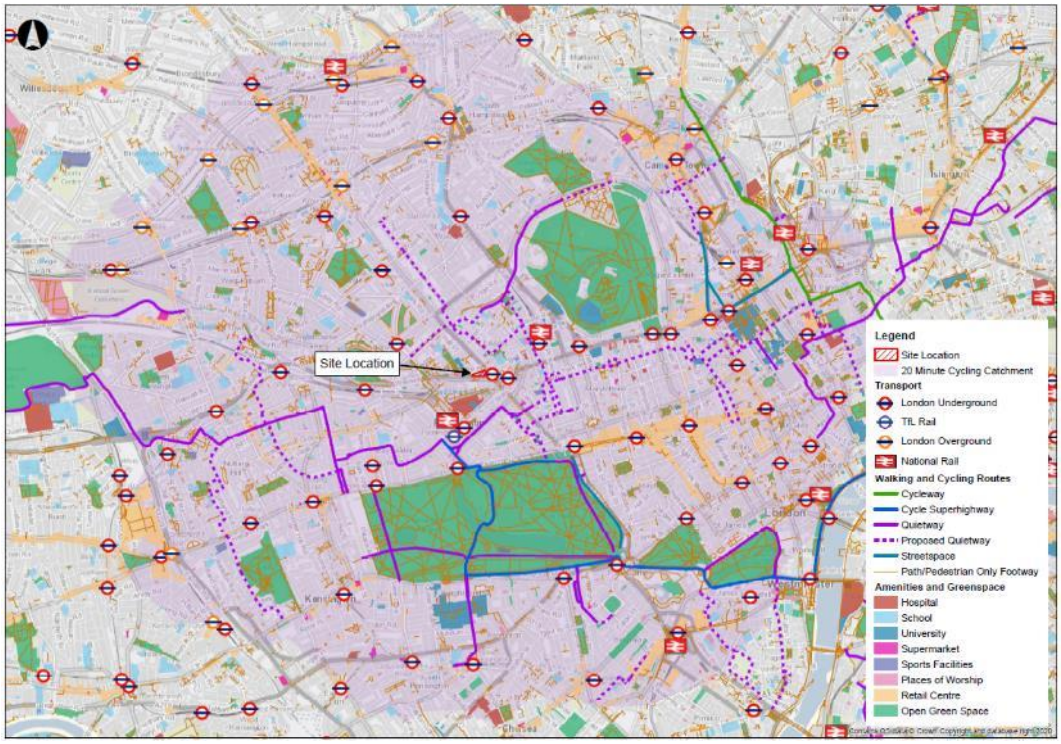
4.1 ATZ Assessment Extent

The Active Travel Zone (ATZ) assessment is a component of the Healthy Streets TA approach. Due to the current Covid-19 situation, as discussed and agreed with TfL during the pre-application meeting, a desktop assessment has been undertaken.

The purpose of an ATZ assessment is to appraise the key active travel routes to and from the site, which comprise those routes to nearby public transport interchanges and key destinations, and identify where gaps or shortcomings exist.

A desktop study has been undertaken on the ATZ extent for the site. The ATZ is defined as a 20-minute cycle distance from a site, representing a comfortable and realistic time people might be willing to travel without the use of a motor vehicle. Figure 35 presents the 20-minute cycling extent from the site.

Figure 35: ATZ catchment and key destinations



In line with the categories set out in the TfL guidance, the most relevant key destinations and those that are most likely to be accessed using active transport modes from the site are identified in Table 7.

Table 7: Key Destinations from the site

Categories	Key Destinations
Public transport stops	Bus stops EM/EC, EX/EW, ET, ED, LN/LJ
Public transport stations	Edgware Road stations, Paddington railway station, Marylebone railway station
London's current and future London-wide strategic cycle network	Cycleway 3, Quietway 2, Quietway 16
Town centres	Edgware Road
Parks	Paddington Green, St Mary's Churchyard, Hyde Park, The Regent's Park
Schools/colleges	King Solomon Academy, Phileas Fox Nursery School, L'Ecole Bilingue Elementary school, City of Westminster College, Christ Church Bentinck C of E Primary School, Marylebone Boy's School
Hospitals/doctors	St Mary's Hospital, NHS Nightingale Hospital, Little Venice medical centre, Lisson Grove medical centre
Places of worship	St David's Welsh Church, Christ Church of England, Central London Seventh-day Adventist Church, Catholic Church of Our Lady of the Rosary, Masjid Salahuddin, Rossmore Hall Evangelical Church

4.2 Key Active Travel Routes

Based on the identified key destinations, five key routes have been identified to capture the key destinations that are most likely to attract active travel trips for the ATZ assessment. The routes are shown in Figure 36 and takes into account comments from TfL and the pre-application meeting.

Figure 36: Key Active Travel Routes and attractors

Table 8: Key Active Travel Routes and key destinations

Routes	Directions	Key Destinations
1	Towards the Regent's Park	King Solomon Academy, Christ Church of England, Christ Church Bentinck C of E Primary School, Nightingale Hospital, Marylebone Stations, The Regent's Park
2	Towards Hyde Park	Edgware Road stations, Catholic Church of Our Lady of the Rosary, St Mark St Marylebone Church (C of E), Central London Seventh-day Adventist Church, Edgware Road shops, Quietway 2/ Cycleway 3, Hyde Park
3	Towards St Mary's Gardens	Paddington Green, St Mary's Gardens, City of Westminster College, St Mary's Church, Phileas Fox Nursery School, L'Ecole Bilingue Elementary School
4	Towards Paddington Station	Paddington Basin, St Mary's Hospital, Paddington Stations
5	Towards Regent's Canal (Quietway 16)	Little Venice medical centre, Quietway 16

A desktop review of each of the five key routes has been undertaken, with observations for each route made based on the Healthy Streets principals, allowing recommendations on how these aspects could be improved with reference to the Healthy Streets indicators. Observations and recommendations

have been made for sections of each route where a quality or safety improvement would be most beneficial.

4.2.1 Route 1 – Towards the Regent's Park

Route 1 is to the east of the site, along Bell Street, Lisson Grove, Melcombe Place, Dorset Square and Baker Street towards Regent's Park, as shown in Figure 37.

There are local destinations along this route and it provides access to Edgware Road and Marylebone stations. The route runs approximately parallel to the A501 Marylebone Road, but this route has lower traffic flows and provides a more attractive and shorter pedestrian route to destinations. Footways and pedestrian crossings are provided along this route.

Key photos along the route is shown in Figure 38 and observations and opportunities for improvements are provided in Table 9.

Figure 37: Route 1

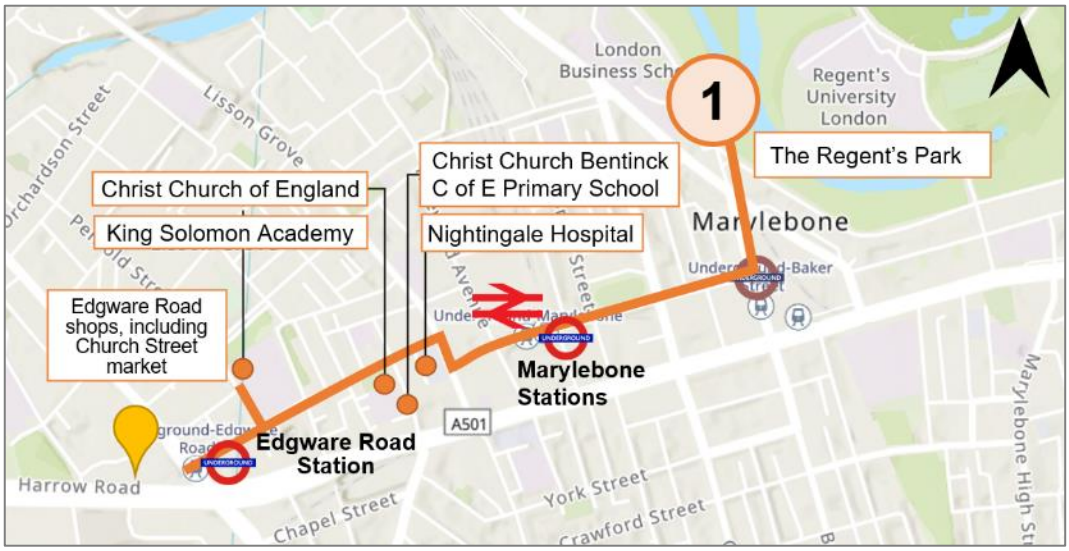


Figure 38: Key photos along Route 1 (towards Regent's Park)

Typical frontage and on-street parking along Bell Street / Melcombe Street / Baker Street.

Bell Street to Penfold Street towards King Solomon Academy.

Bell Street

Crossings close to Marylebone station

Crossing facilities at Lisson Grove / Melcombe Street junction

Dorset Square

Melcombe Street

Baker Street

Source: Google Streetview

Table 9: Route 1 Healthy Streets Indicators and Opportunities for Improvements

Observations	Relevant Healthy Streets Indicators to Consider	Opportunities for the Highway Authority to Improve
• Sheffield stands are present along the route. • Cycle routes are clearly marked on street with clear signage. • Schools and shops along the route provide good active frontage and passive surveillance. • Guardrails present at crossings, especially close to schools. • Mix of crossing facilities are provided including zebra crossings / signalised crossings. • Dropped kerbs present along the route, some have tactile paving but not all. • Footway along Bell Street relatively narrower, and there are trees and street furniture. • Parts of Baker Street may have relatively higher level of traffic compared to the rest of the route, possibly resulting in lower air quality and noise pollution.	Pedestrians from all walks of life Easy to cross People feel safe Things to see and do Place to stop and rest	• Improve maintenance of footway paving where required. • Provide tactile paving at dropped kerbs, where appropriate, to assist all users. • Review locations of street furniture and reduce street clutter where possible.

4.2.2 Route 2 – Towards Hyde Park

Route 2 is to the south of the site, along Edgware Road towards Hyde Park, as shown in Figure 39.

This is a vibrant route with shops and amenities along Edgware Road. Edgware Road is dual carriageway along the entirety of the route and it is along a key bus corridor. Footways and pedestrian crossings are provided.

Key photos along the route is shown in Figure 40 and observations and opportunities for improvements are provided in Table 10.

Figure 39: Route 2

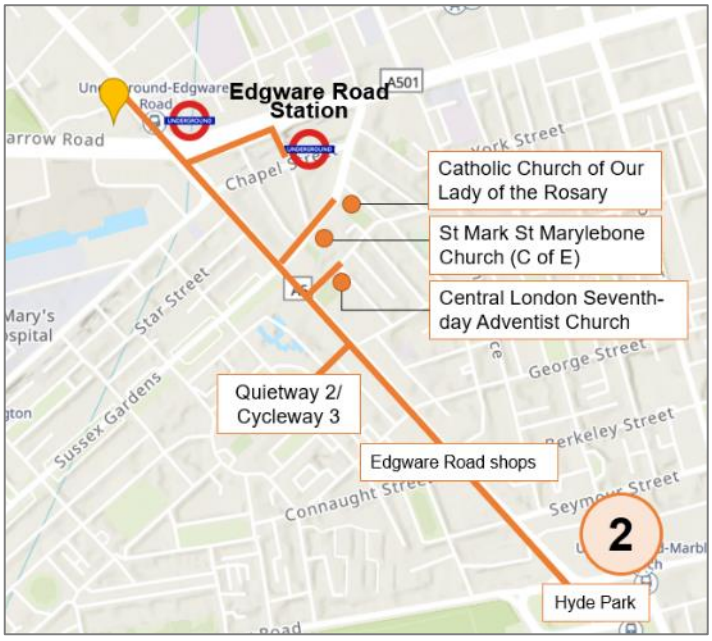


Figure 40: Key photos along Route 2 (towards Hyde Park)

Edgware Road / Burwood Road junction

Typical Edgware Road street frontage

Edgware Road / Harrowby Street junction

Edgware Road / Bayswater Road junction

Source: Google Streetview

Table 10: Route 2 Healthy Streets Indicators and Opportunities for Improvements

Observations	Relevant Healthy Streets Indicators to Consider	Opportunities for the Highway Authority to Improve
• Dual carriageway on Edgware Road which can be noisy and likely to have low air quality. • Bus stops and street furniture locations on footways could potentially affect pedestrian flow capacity. • Generally wide footways along Edgware Road. • Tactile paving and dropped kerbs are present. Some paving requires repairing / maintenance. • Frequent signalised pedestrian crossing points along the route which makes it easy to cross. • Sheffield stands are present along the route. Signs are clear at the connection to Cycleway 3/Quietway 2. • Some trees are present along the route, creating shade for pedestrians.	Pedestrians from all walks of life Things to see and do Easy to cross People feel relaxed Not too noisy Clean air	• Improve maintenance of footways. • Review location of street furniture to improve footway capacity. • Consider increasing trees / landscaping along the route to reduce noise and improve air quality generated from traffic.

4.2.3 Route 3 – Towards St Mary's Gardens

Route 3 is to the west of the site, along Harrow Road or Newcastle Place, towards Paddington Green, Church Yard Walk, and St Mary's Terrance, as shown in Figure 41.

This route provides access to the immediate local amenities to the west of the site, and there are traffic-free sections through the adjacent parks and green space.

Key photos along the route is shown in Figure 42 and observations and opportunities for improvements are provided in Table 11.

Figure 41: Route 3

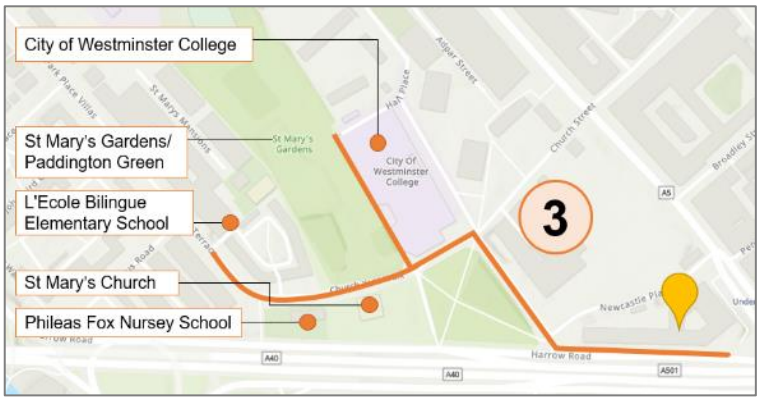


Figure 42: Key photos along Route 3 (towards St. Mary's Gardens)

Paddington Green

St Mary's Gardens access

St Mary's Terrace facing St Mary's Gardens

St Mary's Terrace

Source: Google Streetview

Table 11: Route 3 Healthy Streets Indicators and Opportunities for Improvements

Observations	Relevant Healthy Streets Indicators to Consider	Opportunities for the Highway Authority to Improve
• Footways provided along Harrow Road and Paddington Green. • Bollards are present at access routes between parks. • Cycle hire docking station is located at Paddington Green/Harrow Road.	Pedestrians from all walks of life Clean air Things to see and do Place to stop and rest Shade and shelter People feel relaxed People feel safe Not too noisy	• Provide tactile paving at dropped kerbs, where appropriate, to assist all users.

4.2.4 Route 4 – Towards Paddington Station

Route 4 is to the south of the site, via the Harrow Road subway, North Wharf Road, a footbridge over Paddington Basin towards the entrance into Paddington Station and St Mary's hospital, as shown in Figure 43.

Key photos along the route is shown in Figure 44 and observations and opportunities for improvements are provided in Table 12.

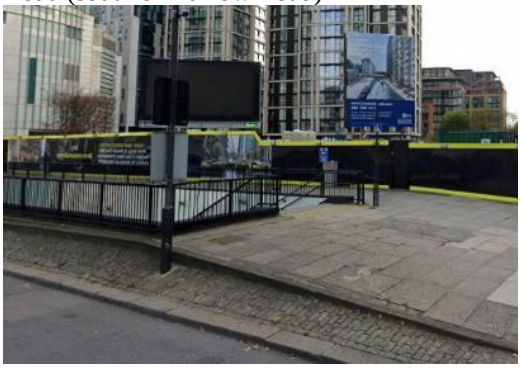
Figure 43: Route 4

Figure 44: Key photos along Route 4 (towards Paddington Station)

Subway access by the site on the northern side of Harrow Road

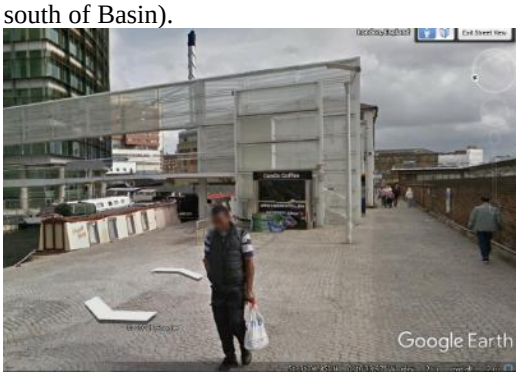
Harrow Road subway

Subway access at Harrow Road / North Wharf Road (south of Harrow Road)

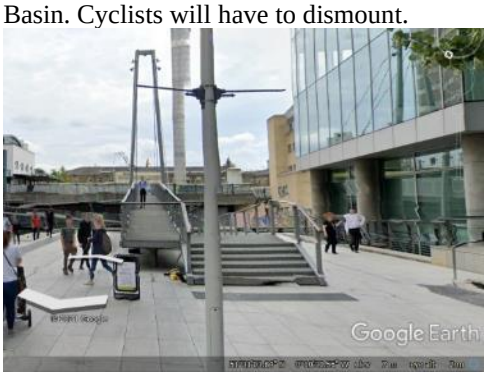


North Wharf Road

Bridge across Paddington Basin (view from south of Basin).

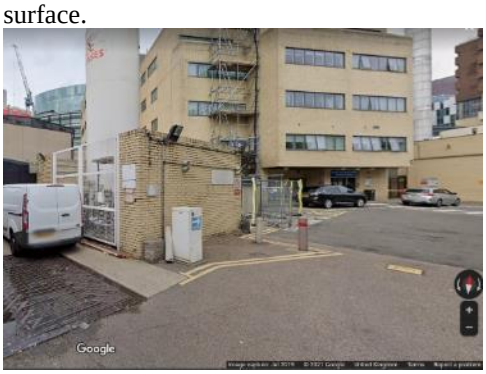


Alternative footbridge to cross Paddington Basin. Cyclists will have to dismount.



Pedestrian path to St Mary's Hospital

Route to St Mary's Hospital with shared surface.



Source: Google Streetview

Table 12: Route 4 Healthy Streets Indicators and Opportunities for Improvements

Observations	Relevant Healthy Streets Indicators to Consider	Opportunities for the Highway Authority to Improve
• Subway on Harrow Road adjacent to the site has steps and ramp. This provides a traffic-free route to south of Westway. • Various developments along North Wharf Road are currently under construction. Width and surface quality of footways and carriageway will be improved once construction is complete. • Footways along North Wharf Road closer to Paddington Basin are wider and of high quality. • Footbridge across Paddington Basin is not step-free. • Some parts of the route towards St Mary's Hospital have narrow or no footways and the area act as shared surface.	Pedestrians from all walks of life Not too noisy Things to see and do Place to stop and rest People feel relaxed Easy to cross	• Improve the maintenance of the Harrow Road subway, e.g. removing graffiti. • Consider providing more rest points and shelters / shading along the route.

4.2.5 Route 5 – Towards Regent's Canal (and Quietway 16)

Route 5 is to the north of the site, along Edgware Road and Frampton Street, as shown in Figure 45.

This route is vibrant along Edgware Road and the local shops (including food stores) are expected to meet the day to day needs of residents at the proposed development.

Key photos along the route is shown in Figure 46 and observations and opportunities for improvements are provided in Table 13.

Figure 45: Route 5

Figure 46: Key photos along Route 5 (towards Regent's Canal)

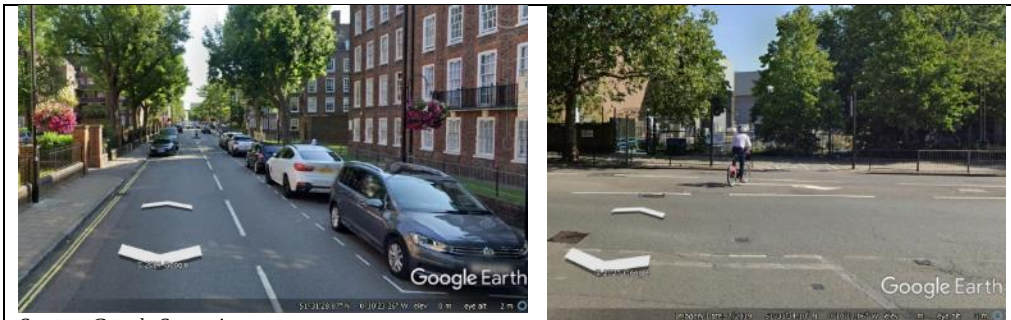
Edgware Road crossing by West End Gate

Typical frontage along Edgware Road

Cycle hire docking station at Edgware Road

Frampton Street

Connection to canal path at Frampton Street / Lisson Grove



Source: Google Streetview

Table 13: Route 5 Healthy Streets Indicators and Opportunities for Improvements

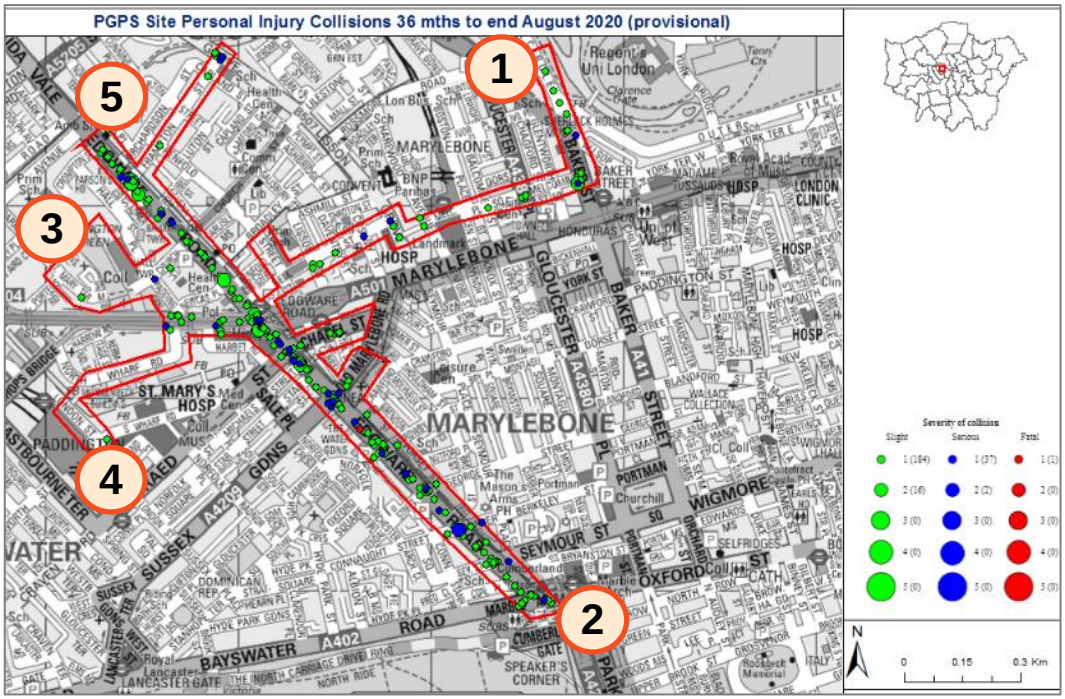
Observation	Healthy Streets Indicator	Opportunities for the Highways Authority to Improve
• Footway provided along Edgware Road, with sections of landscaping and trees for shading. • Sheffield stands are present along the route. Frampton Street provides Advanced Stop Lines at crossings. • Dropped kerbs are provided and tactile paving are present at most, but not all, crossings. • Street furniture and bus shelters are aligned which minimises obstruction to pedestrian flows. • Pedestrian guard-railing is present near schools. • Frequent crossing points along the route.	Pedestrians from all walks of life People feel safe Things to see and do Easy to cross	• Provide tactile paving at dropped kerbs, where appropriate, to assist all users • Consider providing more rest points along Edgware Road.

4.3 Vision Zero

The Mayor's Transport Strategy focuses on achieving vision zero objectives which seeks to eliminate all deaths and serious injuries from London's transport network by 2041. As agreed in the pre-application discussion, personal injury collision data has been made obtained from TfL for the last three years (up to the end of December 2020) within a 500m-radius from the site (see Figure 47).

The data has been analysed to seek to draw out any clusters or patterns, particularly by location or by mode. Serious and fatal incidents have been considered individually. Reflecting TfL's 2041 Vision Zero aspiration, this section identifies where some measures could be considered to reduce the risk of a serious or fatal incident occurring again, or to reduce the risk associated with any identified patterns. The collisions occurred along the identified Key Active Travel Routes (refer to Section 4.2) are analysed in this section.

Figure 47: Locations of Collisions along Key Active Travel Routes for the last 3 years



4.3.1 Study Area Analysis

The collected data shows that, during this 36-month period, a total of 240 Personal Injury Accidents (PIAs) were recorded within the study area. One collision resulted in a fatality, 39 collisions resulted in serious injuries, and 200 collisions results in slight injuries. The summary of PIAs is presented in Table 14.

Table 14: Summary of PIAs by severity and type of casualty

	Slight	Serious	Fatal
Pedestrians	50	15	1
Vehicles (drivers and/or passengers)	129	11	-
Cyclists	46	13	-

Note: 240 PIAs resulted in a total of 265 injuries.

One fatal PIA occurred within the study area, to the north of the Edgware Road/Burwood Place junction in the evening in October 2019. The pedestrian, was reported to be wearing dark clothes, stepped into the road behind parked cars, both the pedestrian and driver failed to look and vehicle that was turning out of Burwood Place hit the pedestrian.

Within the vicinity of the site, three slight PIAs occurred near the Edgware Road / Newcastle Place junction, they were due to human errors such as failing to look when crossing, masked by stationary vehicles or speeding cars. Two slight PIAs occurred near the Paddington Green / Harrow Road junction. The PIAs were caused by human errors where the parties involved failed to look or judge other vehicle's path.

The recent highways improvements from the Safer Junction scheme discussed in Section 3.4.2.1 is designed to improve safety at the Harrow Road / Edgware Road junction, therefore historic accidents at this location are not analysed.

The majority of the collisions occurred along Edgware Road within the study area (along ATZ Routes 2 and 5). Junctions of Edgware Road with Chapel Street, Old Marylebone Road and Connaught Street recorded more than one occurrence of serious collision. Nine PIAs were related to bus standing/boarding passengers.

Based on Figure 47, some clusters of 'serious' PIAs along the Key Active Travel Routes can be identified:

- **Old Marylebone Road / Edgware Road / Sussex Gardens** – Nine serious collisions were reported at this junction. Analysis suggests some collisions were by vehicles/cyclists making either poor turn or illegal turn at this junction.
- **Burwood Place/Edgware Road** – This junction is the connection to cycle quietway Q2 and where the fatal collision occurred, along with one serious and four slight PIAs. The collisions do not appear to show common PIA causal factors. Only one cyclist was involved in the nine collisions around this junction, but it was due to carelessness of the driver.
- **Frampton Street / Edgware Road** – Three serious collisions were reported at this junction. PIA data suggests collisions were caused by vehicle failing to look / judge path of vehicles/cyclists/pedestrian near this junction.

This section reviews the PIAs that occurred in the past 36 months within the study area. All PIAs were attributed to human error and no highway design issues were identified as causation factors.

Vision Zero Guidance suggests that the TA should identify opportunities for improving highway safety. It should be further noted that WCC has implemented 20mph speed limit across the borough, which should help reduce the number and severity of accidents. In addition, there would be an opportunity to address the instances of human error in relation to making illegal turns whereby additional / reenforced signage and road markings may assist.

5 London-wide Network

This chapter sets out the trip generation assessment of the development and impact assessment for the proposals on the wider public transport and highway networks.

5.1 Trip Generation Methodology

The proposed trip generation methodology makes reference to the approach used in the 2016 consented WEG application (ref: 16/07226/FULL and 16/11562/FULL for 14-16 Paddington Green) and the latest TRICS data. The trip rates and trip generation methodology has been agreed with TfL as part of the pre-application discussions.

Multi-modal trip generation is based on 2011 Census travel to work data for residents and staff ('workday population') in Westminster 009 Middle Super Output Areas (MSOA). This is in keeping with the approach in the consented WEG TA. Adjustments are made where appropriate to reflect the car parking provision. It should be noted that using travel to work data can lead to overestimates of public transport trips and underestimates local walking and cycle trips which are associated with other trip purposes, such as education.

The existing site was formerly a police station and would have generated vehicle and person trips. The police station ceased operation in 2018 and a separate change of land use class application has been submitted for the western tower.

A floor area of 1,316 sqm has been consented to change from sui generis use to offices (land use class E). Therefore, the site would have generated trips which would serve to mitigate the demand being forecast for the proposed development. However, for a robust assessment, any trips associated with the existing or consented office use has not been considered in the trip generation.

The trip generation assessment is proposed for the AM peak hour (08:00 to 09:00) and the PM peak hour (18:00 to 19:00 for residential, 17:00 and 18:00 for offices).

5.2 Residential

5.2.1 Person Trip Rates

For context, the residential person trip rates used in the 2016 WEG TA are shown in Table 15. These were established from Private Flats sites in TRICS.

Table 15: WEG Residential Person Trip Rates

	WEG TA		
	In	Out	Total
AM Peak (08:00-09:00)	0.11	0.567	0.677
PM Peak (17:00-18:00)	0.329	0.191	0.520

Given the duration since the preparation of the WEG TA, an updated TRICS site survey interrogation has been undertaken. The approach has been to identify rates for both Private Flats and Affordable Flats. The proposed development is proposed to include approximately 38% affordable homes.

As agreed with TfL during pre-application discussion, TRICS sites with a PTAL of 5 to 6b, surveyed in 2015 or later, and located in Inner London have been included. Very small sites with fewer than 20 units have been excluded.

For the affordable flats sites, only one London survey was undertaken in 2015 (IS-03-D-04). However, TfL suggested to use more than one site to determine the trip rates. A comparison of trip rates between using one site or three sites (including IS-03-D-02 and IS-03-D-03), as presented in Table 16, suggests the average of three identified surveys produces higher peak hour trips. For robustness, this assessment uses three affordable flats surveys to forecast the trip rates and demand.

Table 16: Comparison of trip rates – affordable flats

	Affordable Flats (three sites)			Affordable Flats (one site)		
	In	Out	Total	In	Out	Total
AM Peak (08:00-09:00)	0.133	0.535	0.668	0.094	0.505	0.598
PM Peak (17:00-18:00)	0.345	0.233	0.578	0.201	0.109	0.309
PM Peak (18:00-19:00)	0.311	0.188	0.499	0.39	0.131	0.521

The TRICS sites selected are set out in Table 17.

Table 17: Selected TRICS Residential Sites

Reference	Town/City	PTAL	Units
Private Flats			
HM-03-C-02	Sovereign Court, Hammersmith	6b	194
SK-03-C-02	London Square, Bermondsey	6b	29
IS-03-C-07	Canaletto Tower, Islington	5	185
Affordable Flats			
IS-03-D-03	Hume Court, Islington	6a	36
IS-03-D-02	Barnsbury Estate, Islington	5	250
IS-03-D-04	Liverpool Road Estate, Highbury	5	247

Table 18 shows the person trip rates obtained from the TRICS sites for the AM and PM peak hours.

Table 18: TRICS Residential Person Trip Rates Per Unit

	Private Flats			Affordable Flats			Average (62% Private / 38% Affordable)		
	In	Out	Total	In	Out	Total	In	Out	Total
AM Peak (08:00-09:00)	0.088	0.427	0.515	0.133	0.535	0.668	0.105	0.468	0.573
PM Peak (17:00-18:00)	0.179	0.098	0.277	0.345	0.233	0.578	0.242	0.149	0.391
PM Peak (18:00-19:00)	0.434	0.142	0.576	0.311	0.188	0.499	0.387	0.159	0.547

When compared to the WEG person trip rates in Table 15, the latest TRICS sites with a split of 62% private flats and 38% affordable flats generate similar trip rates. It is proposed that the updated TRICS trip rate assessment shown in Table 18 is applied to the proposed scheme. For robustness, the trip rates for 18:00 to 19:00 are used for the PM peak.

5.2.2 Residential Mode Shares

2011 Census residential travel to work data was used in the WEG TA. This is shown in Table 19. The approach to the proposed car driver mode share for PGPS is as follows:

- The proposed development will support a car-free lifestyle and only 3% disabled car parking (17 spaces for residential and one space for non-residential) will be provided within the site.
- It is not expected that all disabled car users will travel in the peak hours. For the purposes of the trip generation assessment, it is assumed that around half of the car owners will travel outbound in the peak hour (8 cars) and the car driver mode share has been adjusted accordingly (3%).
- The car driver mode share has otherwise been redistributed to public transport modes.

It should be noted that as set out in Section 3.7.2, there is the potential for the WEG basement to be used for PGPS if required. The number of car parking spaces in WEG and associated vehicle trips are already consented and no net additional car parking are proposed apart from the 3% disabled parking in the PGPS basement.

Table 19: Residential population travel to work mode share

Modes	Census mode shares	Adjusted mode share
Underground	25%	29%
Rail	6%	7%
Bus	28%	32%
Car Driver	12%	3%
Car Passenger	1%	0%
Taxi	1%	1%
Motorcycle	1%	1%
Cycling	4%	4%
Walking	23%	23%

5.2.3 Multi-Modal Trip Generation

The resulting residential multi-modal trip generation is shown in the following table.

Table 20: Residential Multi-Modal Trip Generation

Mode	%	AM Peak (08:00 – 09:00)			PM Peak (18:00 – 19:00)		
		In	Out	Total	In	Out	Total
Underground	29%	17	75	92	62	25	87
Rail	7%	4	17	21	14	6	20
Bus	32%	19	83	102	69	28	97
Car Driver	3%	2	8	10	6	3	9
Car Passenger	0%	0	1	1	1	0	1
Taxi	1%	0	2	2	2	1	2
Motorcycle	1%	1	2	3	2	1	3
Cycling	4%	2	11	13	9	4	12
Walking	23%	14	61	75	50	21	71
Total	**100%**	**58**	**260**	**318**	**215**	**88**	**303**

The proposed 556 units are forecast to generate 318 trips in the AM peak hour and 303 trips in the PM peak hour. The majority of trips use underground, rail and bus. There are 10 and 9 car trips in the AM and PM peak hour respectively. It should be noted that Census travel to work mode share has been used but it is expected to overestimate public transport trips and underestimates local walking and cycle trips which are associated with other trip purposes.

5.3 Offices / Affordable workspace

5.3.1 Person Trip Rates

The WEG TA included trip generation for offices but the proposed area was only 19 sqm and the TRICS sites used were more than seven years old. Therefore, the TRICS database has been reviewed for more recent (2015 or later) and

comparable sites. The selected sites with PTAL 5 to 6b and between 1,000 and 9,000 sqm are presented in the following table.

Table 21: Selected TRICS office sites

Reference	Description	Town/City	GFA (sqm)
HM-02-A-01	Regus Offices	Hammersmith	2,036
KN-02-A-01	Fruit Drinks Company	Kensal Green	2,255
LB-02-A-02	Music Company	Streatham, Lambeth	3,054
TH-02-A-01	Office Space for Rent	Bethnal Green, Tower Hamlets	7,049

The person trip rates and the proposed trips for the office use is set out in Table 22.

Table 22: Office person trip rates per 100 sqm

	In	Out	Total
AM Peak (08:00 to 09:00)	1.66	0.153	1.813
PM Peak (17:00 to 18:00)	0.132	1.744	1.876

5.3.2 Mode Shares

2011 Census workday population method of travel to work data has been used to determine mode share. The car driver mode share has been adjusted to 1% to generate one car trip to reflect one disabled bay in the basement for the office use. The car driver mode share has been redistributed to public transport modes. The mode shares are shown in Table 23.

Table 23: Workday population travel to work mode share

Modes	Census mode share	Adjusted mode share
Underground	29%	36%
Rail	21%	26%
Bus	17%	21%
Car Driver	17%	1%
Car Passenger	1%	1%
Taxi	0%	0%
Motorcycle	1%	2%
Cycling	5%	5%
Walking	9%	9%

5.3.3 Multi-Modal Trip Generation

The office multi-modal trips are set out in Table 24. It should be noted that the office PM peak hour was 17:00 to 18:00.

Table 24: Office Multi-Modal Trip Generation

Mode	%	AM Peak (08:00 – 09:00)			PM Peak (17:00 - 18:00)		
		In	Out	Total	In	Out	Total
Underground	36%	30	3	33	2	32	34
Rail	26%	22	2	24	2	23	25
Bus	21%	17	2	19	1	18	20
Car Driver	1%	1	0	1	0	1	1
Car Passenger	1%	1	0	1	0	1	1
Taxi	0%	0	0	0	0	0	0
Motorcycle	2%	1	0	1	0	1	1
Cycling	5%	4	0	4	0	4	5
Walking	9%	8	1	8	1	8	9
Total	**100%**	**84**	**8**	**92**	**7**	**89**	**95**

5.4 Flexible Commercial / Retail

The proposed scheme will provide flexible commercial space on the ground floor. Given the high street nature of the local area, these uses are expected to generate pass-by and linked trips and would not be major trip attractors in their own right.

As such, it is proposed that these trips are excluded from the total proposed trip generation. This approach was agreed with TfL and WCC during pre-application discussions.

5.5 Delivery and Servicing Trip Generation

The forecast delivery and servicing trips are estimated by using the residential and retail servicing trip rates extracted from the WEG TA. The office servicing trip rates are taken from a selection of TRICS sites, as set out in Appendix C. The forecast servicing trips are provided in Table 25.

Table 25: Forecast servicing trips (vehicles)

	Servicing trip rates per unit, or per 100 sqm			Forecast servicing vehicles		
	AM Peak	PM Peak	Daily	AM Peak	PM Peak	Daily
Residential	0.004	0.004	0.079	2	2	45
Office	0.018	0.018	0.200	1	1	9
Retail	0.289	0.000	1.375	3	0	14
Total	-	-	-	**6**	**3**	**68**

As shown in the above table, it is forecast that the site would generate around 6 delivery vehicles in the AM peak, and 3 delivery vehicles in the PM peak. The above forecast suggests that up to 68 deliveries could be expected daily. Further information on servicing trip generation is contained in the DSP in Appendix C.

For a robust case, the servicing trip rates do not include an allowance for potential consolidation of delivery trips with WEG. This would be encouraged as part of the DSP.

5.6 Total Trip Generation

The total proposed trip generation by mode for the proposed development is shown in Table 26.

Table 26: Total Proposed Multi-Modal Trip Generation

Mode	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Underground	47	78	124	64	57	121
Rail	26	19	45	16	29	45
Bus	36	85	121	70	47	117
Car Driver	3	8	10	7	4	10
Car Passenger	1	1	3	1	1	3
Taxi	1	2	3	2	1	3
Motorcycle	2	2	4	2	2	4
Cycling	6	11	17	9	8	17
Walking	21	62	83	51	29	80
Total	**143**	**268**	**410**	**222**	**177**	**399**

In total, the proposed development is forecast to generate 410 and 399 person trips in the AM and PM peak hours, respectively. Around 170 trips are expected to be walking to an underground or railway station, and 120 trips to a nearby bus stop. There are also around 83 dedicated walking trips and 17 cycling trips.

It should be noted that a robust assessment has been undertaken and the trip generation assessment does not take into account the current occupation of part of the police building as offices. Therefore the assessment assumes all the proposed residential and office trips will be new to the network.

5.7 Pedestrian Comfort Level (PCL) Assessment

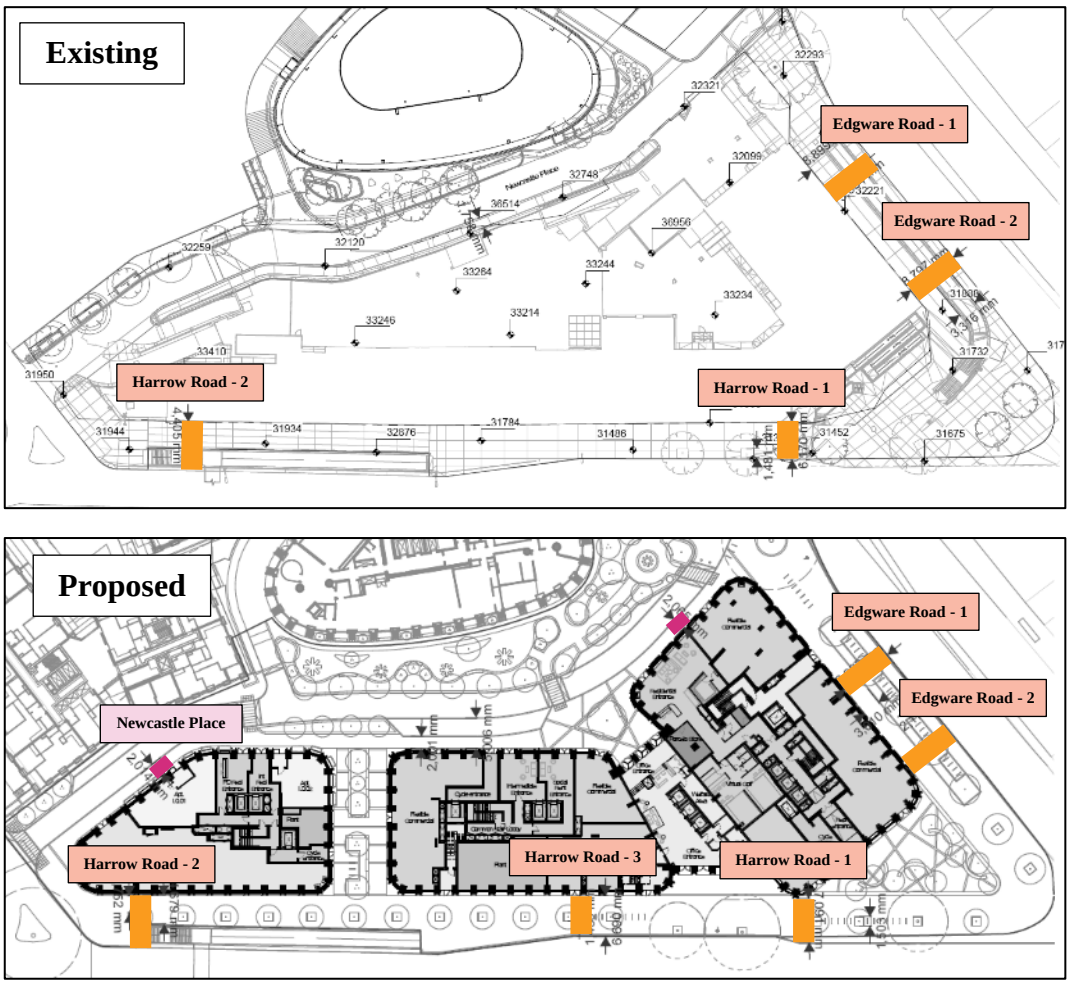
TfL's pre-application advice requested for a Pedestrian Comfort Level (PCL) assessment to be undertaken. This section summarises the findings of the baseline PCL assessments. The assessment is undertaken in accordance with the TfL Pedestrian Comfort Guidance for London guidance document (2019).

It should be noted that due to travel restrictions related to Covid-19, pedestrian survey counts have not been undertaken and therefore the assessment is based on the best information available. Robust assumptions are made where possible.

PCLs classify the level of comfort based on level of crowding a pedestrian would experience on the street. A score is given to each link/crossing, with an 'A' classification being the most comfortable and 'E' being the most uncomfortable. A score of 'B' or higher is accepted as a comfortable pedestrian environment.

The PCL assessment focuses on Edgware Road (between Newcastle Place and Harrow Road) and Harrow Road (between Paddington Green and Edgware Road). High level considerations have also been undertaken for Newcastle Place. The PCL points are shown in Figure 48.

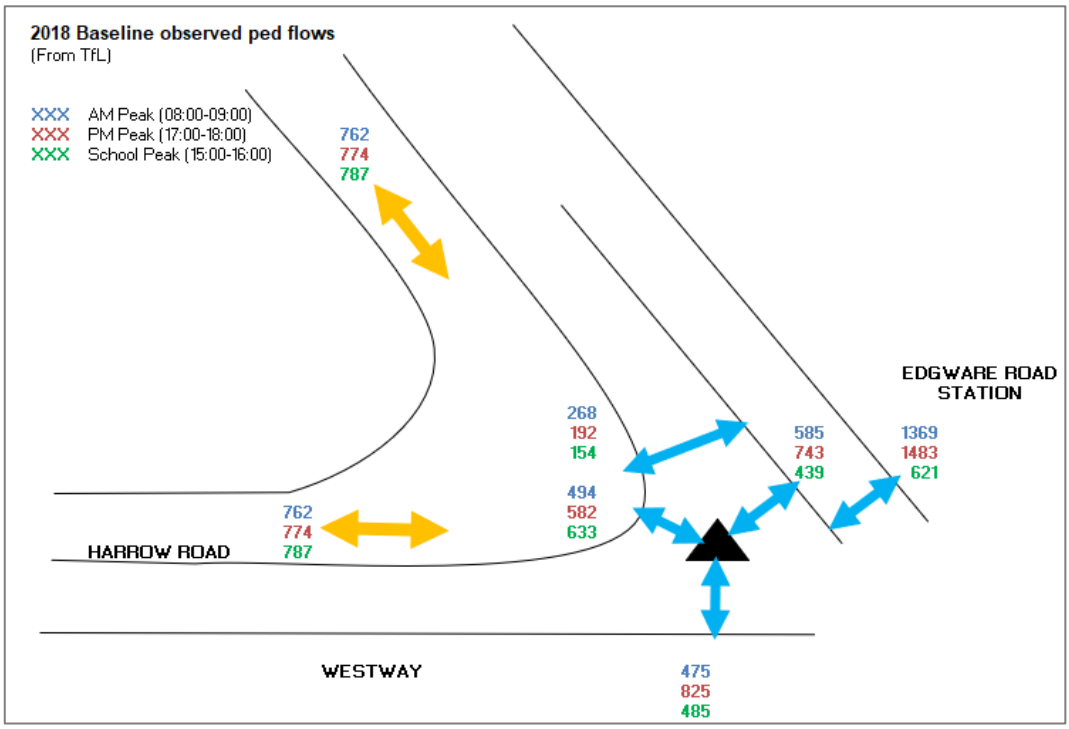
Figure 48: PCL locations (existing and proposed)



Crossing counts at the Edgware Road/Harrow Road junction have been obtained from TfL. The pedestrian count surveys were conducted on 1 November 2018 (Thursday). The observed two-way counts in the AM, and PM peak hours are presented in Figure 49. Following discussions with TfL, the afternoon school peak has also been considered due to the proximity to Westminster College.

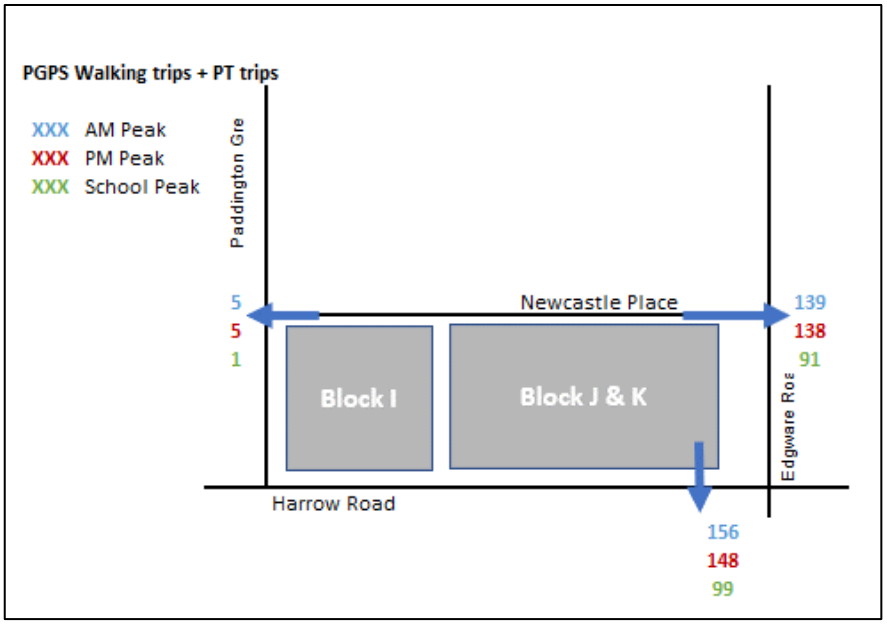
For robustness, it is assumed that all the pedestrians crossing between Harrow Road to Edgware Road (E) are distributed to both Edgware Road (W) and Harrow Road.

Figure 49: Observed baseline (2018) pedestrian flows – Two way



The forecast number of walking trips (including walking to access public transport) for PGPS is illustrated in Figure 50.

Figure 50: Forecast PGPS walking trips on the local network



The traffic counts and road widths were input to the TfL PCL assessment calculator, the findings of the PCL assessment for peak hour flows of the baseline and future with development is summarised in Table 27.

Table 27: PCL summary (for peak hour flows) – Baseline and proposed

PCL location	Existing	Future Baseline (with WEG)	Future with proposed scheme (WEG and PGPS)
Harrow Road – 1	A	A	A
Harrow Road – 2	A	A	A
Harrow Road – 3	A	A	A-
Edgware Road – 1	A	A+	A
Edgware Road – 2	A	A	A

The assessment suggests that the facilities and level of activities in 2018 provide a very comfortable level. With the new development, the assessment suggests a negligible change in comfort level. However, the enhanced public realm and pedestrian prioritisation on the assessed links in the future would create a much improved pedestrian environment overall.

In terms of Newcastle Place, it will be a pedestrian priority street, with formal footways and high quality public realm. Given the low traffic flows and the proposed controlled vehicle access on Newcastle Place, it is expected that the area would act as a shared space. The development pedestrian flows are relatively low, with up to 143 pedestrians in the AM peak. On this basis, it is not expected that the proposals will generate any PCL concerns. A designated footway of 2m is provided along Newcastle Place and based on PCL guidance, this width can comfortably provide up to 1,200 pedestrians an hour (PCL of B+).

The assessment concludes that, in general, the footways available for walking are good and remain comfortable in PCL terms, and there is sufficient space to accommodate pedestrian movements along Harrow Road and Edgware Road. The proposed development will significantly improve the local pedestrian environment.

5.8 Public Transport Network Capacity

This section provides a public transport capacity assessment of the proposed scheme. The assessment is based on the allocation of trips onto individual lines and services, the frequencies of the public transport services and the number of proposed trips per service.

5.8.1 London Underground Assessment

Edgware Road Underground stations (Bakerloo Line station, and Hammersmith & City, Circle and District Lines station) are the nearest to the development. The other Underground stations within walking distance are served by the same lines as Edgware Road. Therefore, all London Underground trips are expected to use the two Edgware Road stations.

The proposed development is expected to generate 124 trips and 121 trips on the Underground network in the AM peak and PM peak respectively.

Census journey to work and location of usual residence data was interrogated for office trips and residential trips, respectively. The distribution of trips on LUL is summarised in Table 28.

Table 28: Distribution of trips (%) by LUL and direction

LU lines	Direction	Journeys to Work (from Edgware Road LU)	Journeys to Work (to Edgware Road LU)
Bakerloo	NB	8%	68%
	SB	68%	12%
H&C	EB	1%	0%
	WB	8%	12%
Circle	EB	-	2%
	WB	6%	-
District	EB	-	6%
	WB	9%	-
Total		**100%**	**100%**

The forecast PGPS trips generated by LUL are distributed across the services by branch, based on directional percentages to/from the site shown Table 28. The forecast demand on each line and branch is shown in Table 29.

Table 29: Forecast PGPS trip distribution on LUL

LU Lines	Branch	AM Peak			PM Peak		
		In	Out	Total	In	Out	Total
Bakerloo	NB	5	6	11	5	6	11
	SB	32	52	84	43	39	82
H&C and Circle	EB	4	1	5	1	4	5
	WB	0	1	2	1	1	2
Circle	WB	3	9	12	8	4	11
District	WB	3	7	10	6	4	10
Total		**47**	77	**124**	**64**	**57**	**121**

Link Loading Capacity

Link loading data at Edgware Road station is obtained from TfL's NUMBAT database. The link loading data shows the number of passengers travelling along a link between one station and another in 15-minute intervals. The existing outboard and inbound trips are shown in Table 30.

Table 30: Existing link loading on Edgware Road LUL

LU Line	Branch*	From Edgware Road		To Edgware Road	
		AM Peak	PM Peak^	AM Peak	PM Peak^
Bakerloo	NB	5,878	8,191	9,901	6,452
	SB	10,213	7,730	7,056	8,465
H&C and Circle	WB	4,183	6,118	7,083	4,834
	EB	7,112	5,755	4,960	6,545
District	WB	406	741	625	437

** Branch of the line from Edgware Road station*

^ PM Peak Hour = network peak hour (17:00-18:00)

The train planning capacity of the different LUL at Edgware Road stations is presented in Table 31 based on rolling stock information.

Table 31: LUL train planning capacity by direction

	Max capacity*	Frequency per direction	LUL capacity (pphd)
Bakerloo line (NB)	583	21	12243
Bakerloo line (SB)	583	23	13409
H&C and Circle (EB)	789	13	10257
H&C and Circle (WB)	789	18	14202
District (WB)	789	6	4734

** Maximum observed standing capacity (5 customers per sqm)*

As the District Line and one branch of the Circle line terminates at Edgware Road, there is no eastbound services for these lines. Therefore, for the purposes of this assessment, the westbound services for H&C, Circle and District Lines are assessed together. The ratio of demand of the proposed development trips on LUL capacity is shown in Table 32.

Table 32: LUL network demand assessment

	LUL capacity (pphd)	PGPS only				Ratio of PGPS Demand to Capacity			
		AM		PM		AM		PM	
		In	Out	In	Out	In	Out	In	Out
Bakerloo line (north)	12243	5	6	5	6	0.04%	0.05%	0.04%	0.05%
Bakerloo line (south)	13409	32	52	43	39	0.24%	0.39%	0.32%	0.29%
H&C and Circle (east)	10257	4	1	1	4	0.04%	0.01%	0.01%	0.04%
H&C and Circle and District (west)	18936	6	17	14	9	0.03%	0.09%	0.08%	0.04%

The above table shows that the proposed development will have a negligible demand on the LUL network capacity.

A cumulative assessment has been undertaken on the total ratio of existing and future demand on capacity. The future baseline includes the committed WEG LUL trips. This assessment has been undertaken for the AM peak as this has the highest proposed trip generation and link loading. Table 33 and Table 34 presents the results at the two Edgware Road stations.

Table 33: Ratio of demand to capacity on Bakerloo Line (AM Peak)

	LUL capacity (pphd)	Baseline flows 2020	Ratio of demand to capacity	Proposed PGPS LUL trips	Future Baseline (+WEG) + PGPS	Ratio to Demand capacity	Cumulative % Difference
Bakerloo line (to north)	14,700	5,878	48.0%	6	5,891	48.1%	0.11%
Bakerloo line (from north)	14,700	9,901	80.9%	5	9,906	80.9%	0.05%
Bakerloo line (to south)	16,100	10,213	76.2%	52	10,321	77.0%	0.80%
Bakerloo line (from south)	16,100	7,056	52.6%	32	7,098	52.9%	0.32%

Table 34: Ratio of demand to capacity on H&C, Circle and District Lines (AM Peak)

	LUL capacity (pphd)	Baseline flows 2020	Ratio of demand to capacity	Proposed PGPS LUL trips	Future Baseline (+WEG) + PGPS	Ratio to Demand capacity	Cumulative % Difference
H&C and Circle (to east)	10,257	7,112	69.3%	1	7,126	69.5%	0.14%
H&C and Circle (from east)	10,257	4,960	48.4%	4	4,966	48.4%	0.06%
H&C, Circle and District (to west)	18,936	4,589	24.2%	17	4,628	24.4%	0.20%
H&C, Circle and District (from west)	18,936	7,518	39.7%	6	7,528	39.8%	0.05%

Table 33 and Table 34 show there is currently existing spare capacity on all the existing LUL at Edgware Road. The busiest line is Bakerloo from the north, with a ratio of demand to capacity of around 80%.

The highest forecast cumulative increase in ratio of flow to capacity is 0.80% on the Bakerloo line to the south. This is a negligible change in passenger levels and a reasonable ratio of demand to capacity (77%) can still be achieved.

Gateline Demand and Capacity

TfL's pre-application advice requested an assessment on gateline capacity. The gateline information at the two Edgware Road stations from 2019 are shown in Table 35.

Table 35: 2019 gateline data at Edgware Road stations – average weekday

Stations	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	In	Out	Total	In	Out	Total
Edgware Road (District)	907	1715	2622	1811	854	2665
Edgware Road (Bakerloo)	416	1297	1713	1519	462	1981

The proposed trip distribution to the two Edgware Road stations is shown in Table 36. The percentage increase is shown in Table 37.

Table 36: Gateline demand – Proposed development (PGPS)

Stations	AM Peak			PM Peak		
	In	Out	Tot	In	Out	Tot
Edgware Road (District)	10	19	29	16	13	28
Edgware Road (Bakerloo)	36	59	95	49	44	93

Table 37: Percentage change in gateline demand at Edgware Road Station

Stations	AM Peak			PM Peak		
	In	Out	Tot	In	Out	Tot
Edgware Road (District)	1.1%	1.1%	1.1%	0.9%	1.5%	1.1%
Edgware Road (Bakerloo)	8.8%	4.5%	5.6%	3.2%	9.6%	4.7%

As shown, the proposed development will account for approximately 1% increase in gateline demand at Edgware Road station (District) and approximately 6% increase at Edgware Road station (Bakerloo).

An assessment has been undertaken on the gateline capacity:

- Edgware Road (H&C, Circle and District) Station has seven standard gates and two wide gates. The cumulative demand (existing demand plus WEG and PGPS) requires five gates in both the AM and PM peak periods.
- Edgware Road (Bakerloo) Station has four gates. The cumulative demand (existing demand plus WEG and PGPS) requires four gates in both the AM and PM peak periods.
- This shows that there is currently a sufficient number of gates at both stations to accommodate demand and no additional gates are required.

5.8.2 Bus Network Assessment

The proposed development is forecast to generate up to 123 trips and 117 trips in the AM and PM peak hour, respectively. As discussed in Section 3.3.2, there are 91 services in the vicinity of the site in the peak hour.

The bus trips generated by the site is around one additional passenger per bus and this is considered to be a negligible impact to the capacity of the bus services. A high level assessment has been undertaken on the general direction of bus trips and the associated bus routes. This is shown in Table 38.

Table 38: Bus trips by direction and bus route

Direction	%	Bus routes	Freq.	AM Peak			PM Peak		
				In	Out	Total	In	Out	Total
North	25%	6, 16, 98, 332, 414	42	9	22	31	18	12	30
East	11%	18, 27, 205	23	4	9	13	8	5	13
South	55%	6, 7, 16, 23, 27, 36, 98, 205, 414	78	20	46	66	38	25	64
West	9%	7, 18, 23, 36, 332	39	3	8	11	6	4	11
Total	**100%**	**-**	**182**	**36**	**85**	**121**	**70**	**46**	**117**

5.9 Highway Network Capacity

The proposed development is expected to generate the following vehicle trips:

- 11 and 10 two-way car trips in the AM and PM peak, respectively. These will access the basement via Church Street.

- Three two-way taxi trips in both peak hours. These will access Newcastle Place.
- Six delivery vehicles in the AM peak and 3 vehicles in the PM peak. The residential deliveries will access Newcastle Place and the commercial deliveries will take place in the basement via Church Street.

These trips have been distributed onto the local highway network, taking into account one-way streets and restricted turns. Figure 51 and Figure 52 show the proposed scheme vehicle trips in the AM and PM peak hours.

Figure 51: Proposed vehicle trips in the AM peak

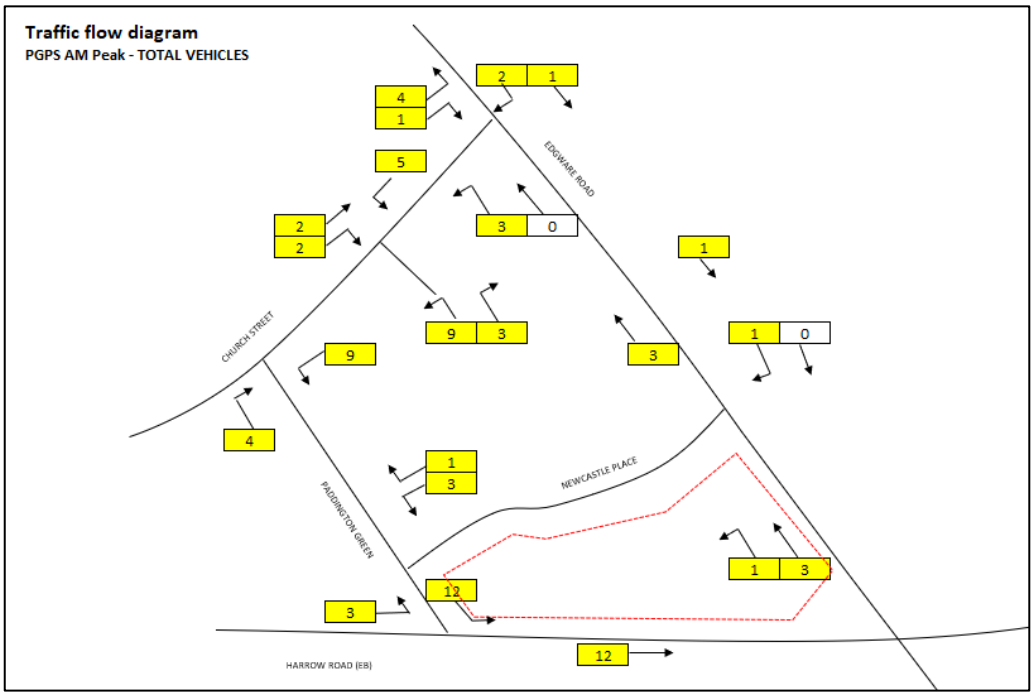
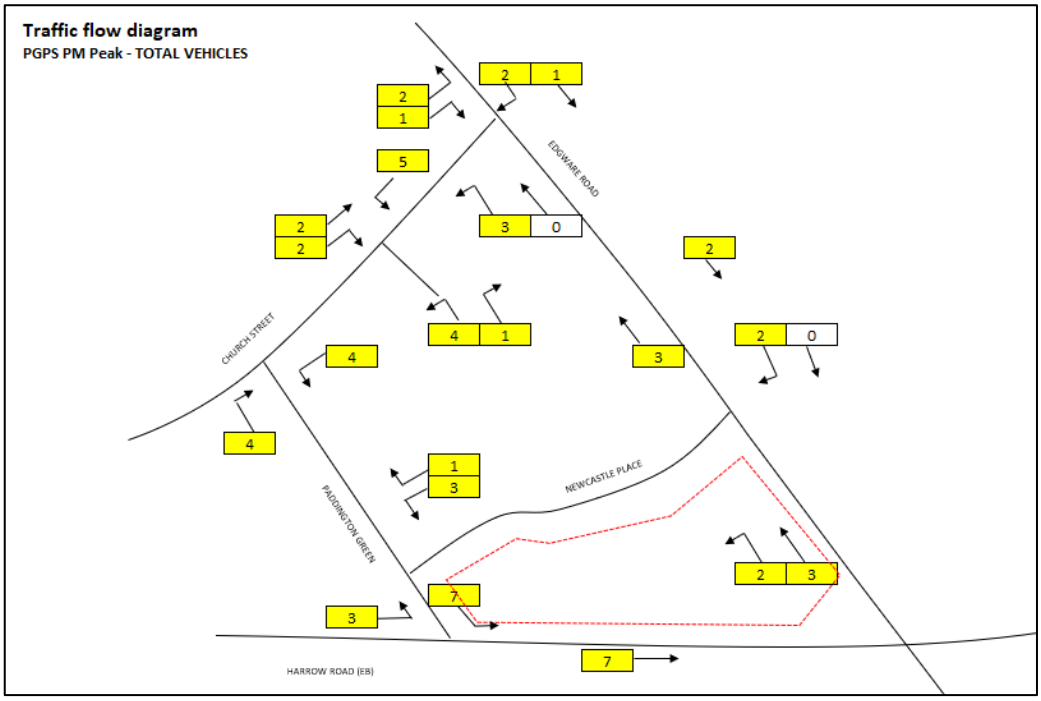


Figure 52: Proposed vehicle trips in the PM peak



In the AM peak, the proposed vehicle trips by street:

- Church Street: 13 vehicles to the west and 10 vehicles to the east of basement access.
- Newcastle Place: 4 vehicle trips.
- Paddington Green (south of Newcastle Place): 15 vehicle trips
- Edgware Road: 4 vehicle trips
- Harrow Road: 12 vehicle trips

In the PM peak, the proposed vehicle trips by street:

- Church Street: 8 vehicles to the west and 8 vehicles to the east of basement access.
- Newcastle Place: 4 vehicle trips
- Paddington Green (south of Newcastle Place): 10 vehicle trips
- Edgware Road: 5 vehicle trips
- Harrow Road: 7 vehicle trips

The assessment shows that the proposed development will result in a very low amount of additional vehicles on the local streets. The highest increase is 15 vehicle trips on Paddington Green, south of Newcastle Place. This equates to, on average, one vehicle every four minutes which would result in an imperceptible change. Therefore, the proposed development is not expected to have an impact on the capacity of the highway network.

6 Construction

6.1 Introduction

Berkeley Homes have provided information on the proposed construction strategy, which has informed the Outline Construction and Logistics Plan (CLP) contained in Appendix B.

This chapter sets out a summary of the construction proposals.

6.2 Construction Programme and Phasing

Demolition and construction is expected to take place between 2022 and 2028, with the construction of Block I followed by J and K. The construction programme is presented in Table 39.

Table 39: Indicative construction programme

Phase	Duration (months)	Start Date	Completion Date
Enabling, Demolition and Clearance Works	12	Q1 2022	Q1 2023
Substructure Works	20	Q4 2022	Q3 2024
Superstructure Works: Block I	12	Q1 2023	Q1 2024
Superstructure Works: Block K and Block J	29	Q1 2024	Q3 2026
Envelope Works: Block I	12	Q3 2023	Q3 2024
Envelope Works: Block K and Block J	30	Q4 2024	Q2 2027
Fit Out Works: Block I	17	Q1 2024	Q2 2025
Fit Out Works: Block K and Block J	33	Q4 2025	Q3 2028
External Works and Landscaping: Block I	6	Q4 2024	Q2 2025
External Works and Landscaping: Block K and Block J	20	Q4 2026	Q3 2028

6.3 Construction Hours

Working hours would be agreed with WCC, but are expected to be:

- 08:00 to 18:00 hours Monday to Friday.
- 08:00 to 13:00 hours Saturday.
- No working on Sundays or Bank Holidays.

All work which is intended outside of these hours, excluding emergencies, would be subject to prior agreement, and / or reasonable notice to WCC.

6.4 Construction Access

Construction access has been considered in detail in terms of minimising impact on local streets, and taking into account junctions with banned turns and restricted space for manoeuvring large vehicles. Further discussions on the construction access strategy will take place with local authorities prior to and during the construction process.

The site is well located to the strategic highway network and for the duration of the construction period, direct access from the A404 Harrow Road is proposed. Three locations for construction site vehicular gates have been identified and it is proposed that up to two gates will be operational at any one time. The gates will be marshalled to minimise risks of conflicts with pedestrians. A summary of the indicative phasing of access and gates are as follows:

- **Initial Demolition Access** - Access has to be from Edgware Road at this stage to commence demolition from the existing police station courtyard. Access will be limited to 7.5t vehicles. The intention is to use the adjacent WEG construction site to provide access for large plant for the initial stage of the demolition.
- **Demolition and Enabling Works** - Gate 2 on Harrow Road.
- **Excavation** – Gates 2 and 3 on Harrow Road.
- **Construction of Block I** – Gates 1 and 3 on Harrow Road.
- **Construction of Blocks J and K** – Gates 2 and 3 on Harrow Road.

The locations of the gates aim to maximise stacking capacity within the site and minimise any potential risk of queuing on the public highway. Extracts of the tracking for three gates are provided in Figure 53 and Figure 55, and swept path analysis is contained in the Outline CLP contained in Appendix B.

Figure 53: Proposed Gate 1 on Harrow Road

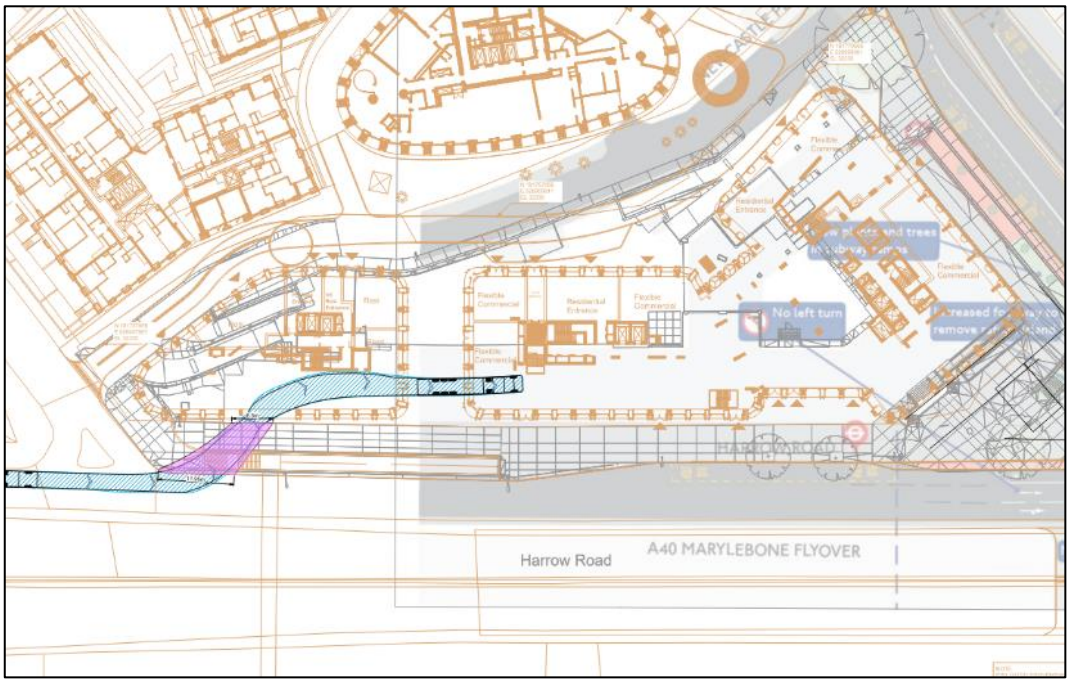


Figure 54: Proposed Gate 2 on Harrow Road

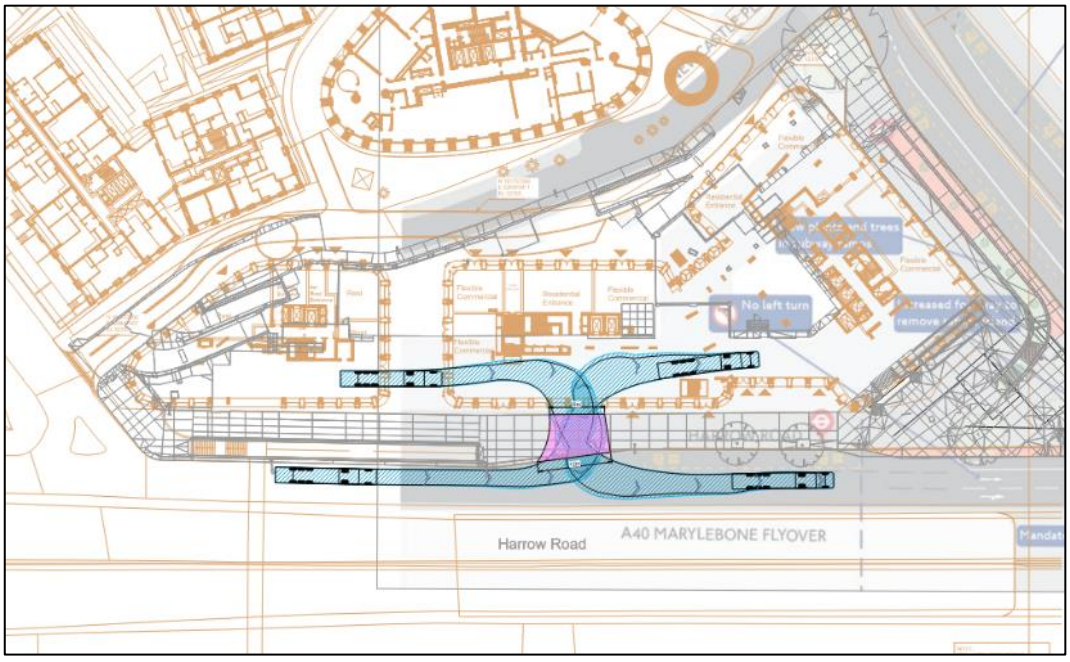
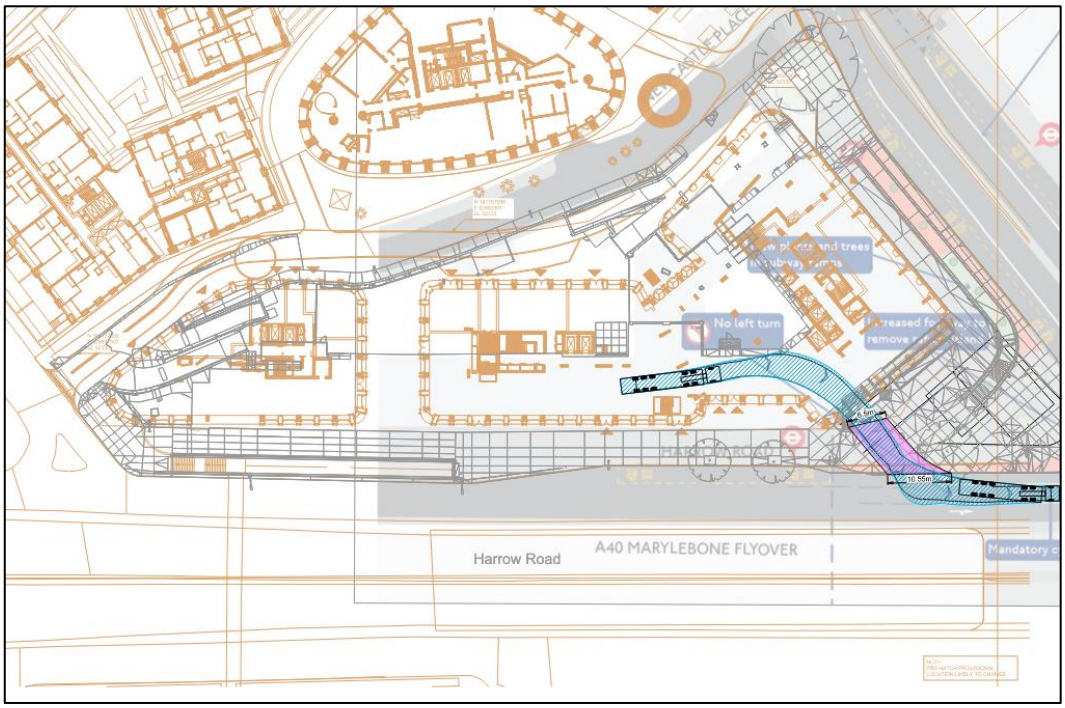


Figure 55: Proposed Gate 3 on Harrow Road

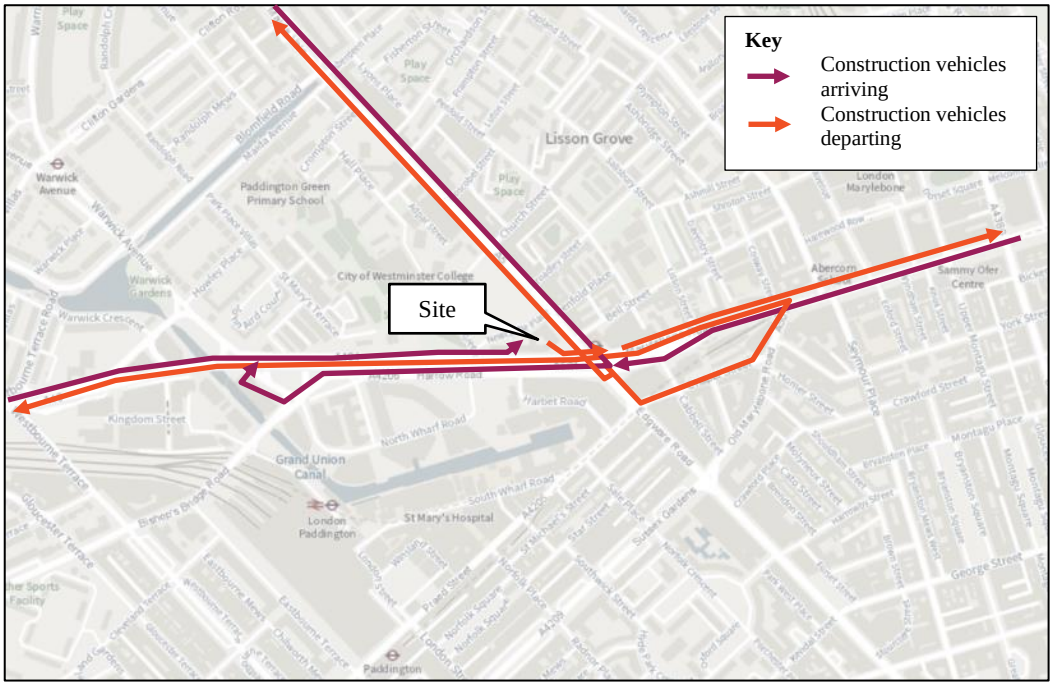


Hoarding will be provided along Harrow Road to maintain a 2.5m footway. Gate 1 by Paddington Green will require the temporary closure of the stairs to the underpass. However, the step-free ramp will remain open and pedestrian diversion signs will be provided. The location of the gate locations do not affect the operation of the bus stops along Harrow Road, or the Harrow Road / Edgware Road junction.

6.5 Construction Routes

In line with TfL's Construction Logistics Plan guidance, construction routes will be routed along the Strategic Road Network (SRN) and the Transport for London's Road Network (TLRN) as they are best suited to heavy traffic, and less likely to create congestion which in turn could minimise impacts on local air quality. The indicative construction routing is shown in Figure 56.

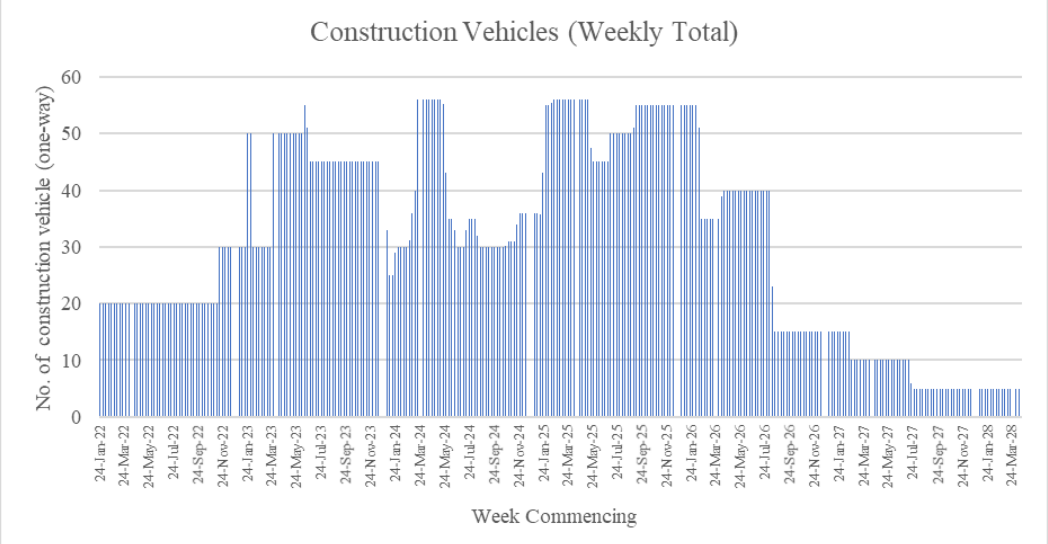
Figure 56: Indicative construction routing



6.6 Construction Traffic Movements

The estimated weekly total number of construction vehicles from 2022 to 2028 are provided in Figure 57.

Figure 57: Indicative construction traffic movements



The highest number of vehicles in one week is expected to be 56. Berkeley Homes has advised that the peak number of daily vehicles could be 29. This equates to around 3 vehicles an hour when considered over a 10 hour working day. This level of vehicle movement is not expected to have a perceptible impact on the highway network. Measures to minimise the impact of construction are set out in the Outline CLP contained in Appendix B.

7 Summary and Conclusions

The proposal is to redevelop the police station and deliver 556 residential homes, offices, flexible retail space. The development will provide basement car and cycle parking and the scheme involves stopping up Newcastle Place to deliver a high quality public realm between the development and the WEG to the north.

In accordance with TfL's Healthy Streets TA guidance, a summary table is provided below which sets out the key transport impacts and issues, and the proposed solutions and mechanisms.

The proposed development is in keeping with the TfL Healthy Streets agenda and will significantly improve the public realm in the surrounding area. The development is considered to be policy compliant and will have minimal impact on the local transport network, therefore it should be supported by WCC and TfL.

Table 40: TA summary table

	Key transport impacts / issues	Solutions / mechanisms
Site and surroundings	The site is located on the corner of Edgware Road and Harrow Road, bounded by Paddington Green to the west and Newcastle Place to the north. It has a PTAL of 6b and is easily accessible by walking, cycling and public transport.	Public realm improvements form part of the design, including significant enhancements along Newcastle Place, Edgware Road and Harrow Road. Residential access to the development will be from Newcastle Place and Harrow Road. There will be active frontages along Harrow Road and Edgware Road will access points to the flexible commercial units and the offices. Short stay cycle parking will be provided in the public realm and long stay cycle parking will be located in the B1 basement with step-free access provided. All delivery and servicing activity will take place within the site, using loading bays in the basement or on Newcastle Place which are seamlessly integrated into the public realm.
Active Travel Zone (ATZ)	There are a number of key destinations within a 20-minute cycle of the site.	The public realm proposals will enhance the local pedestrian environment.

	Key transport impacts / issues	Solutions / mechanisms
	The identified routes highlight how well connected the site is to the public transport network.	The proposed pedestrian and cycling access points will be located to meet desire lines to key destinations.
London-wide network	There will be increases in trips across all modes in the AM and PM peak hours. The proposed development is car-free with low numbers of vehicle trips generated. An assessment of the public transport usage / capacities, walking and cycling infrastructure, and vehicular flows, show that the increases are considered will not cause any significant adverse impacts on the operation of the transport networks.	Mitigation embedded in the design of the scheme, such as improved pedestrian and cycling facilities and car parking limited to accessible bays only, to promote active travel and reduce impact on public transport and the highway network.
Construction	The site is well located to the strategic highway network. The number of construction vehicles are expected to be low, around one vehicle an hour.	Outline CLP has been prepared. Direct access to the site from the strategic network is proposed to minimise the impact on local streets.

Appendix A

TfL Pre-App Letter

Transport for London

Katherine Wong
Arup
13 Fitzroy Street
London
W1T 4BQ

By email only to: [redacted]

Transport for London
City Planning

5 Endeavour Square
Westfield Avenue
Stratford
London E20 1JN

Phone 020 7222 5600
www.tfl.gov.uk

10 December 2020

Dear Katherine,

RE: Former Paddington Green Police Station, 4 Harrow Road, Westminster

Thank you for taking advantage of the TfL pre-application advice service, the aim of which is to ensure that development is successful in transport terms and in accordance with the relevant current and Intend to Publish London Plan policies.

This letter concerns the recent pre-application meeting, which was held on 26 November 2020, to discuss the proposals for the Paddington Green Police Station development site in Westminster. The advice in this letter is based on the Transport Assessment Scoping Report, dated October 2020, as well as a summary of discussions during the meeting.

The following comments are made by Transport for London (TfL) officers on a 'without prejudice' basis only. You should not interpret them as an indication of any subsequent Mayoral decision on any planning application based on the proposed scheme and these comments do not necessarily represent the views of the Greater London Authority (GLA).

General

A Transport Assessment (TA) should be produced by the applicant as part of the planning application submission in line with TfL's Healthy Streets Transport Assessment guidance. It should include a full Active Travel Zone (ATZ) assessment, which depending on the time of submission, should be a desktop survey given the Government's guidance on working from home and social distancing. Guidance is available at: https://tfl.gov.uk/info-for/urban-planning-and-construction/transport-assessment-guide/transport-assessments. The

development should also be in line with the transport policies within the Intend to Publish London Plan (ITP London Plan).

Following recent events, the TA should now also consider the Streetspace for London programme which sets out how to create more space on streets for walking, cycling and social distancing. This may be important before, during and after construction and as it is a changing situation, could be consulted regularly. https://tfl.gov.uk/travel-information/improvements-and-projects/streetspace-for-london.

The attendees of the pre-app meeting are listed below. Prior to the meeting, the Transport Assessment Scoping Report (dated October 2020) was circulated to attendees and formed the basis of discussions. TfL Bus Network Impact and Public Transport Service Planning have also reviewed the pre-app materials and provided written feedback which is included in this letter.

TfL attendees:

Chloe Flower – Spatial Planning, Case Officer
Clare Seiler – Spatial Planning, Principal Planner
Harry Burden – Spatial Planning, Assistant Planner
Laura Georgescu - Urban Design Advisor
Eleanor Marshall, Assistant Urban Design Advisor
Sian Houston - Principal Sponsor

Applicant attendees:

Katherine Wong, Arup
Andy Ford, Arup
Laurence Brooker, Turley
Clara-Rose Wright, Berkeley Home
Erin Bryant, Berkeley Homes
Graeme Davidson, Squire & Partners

Westminster City Council attendees:

Sean Dwyer - Highways Officer

Site Location and Context

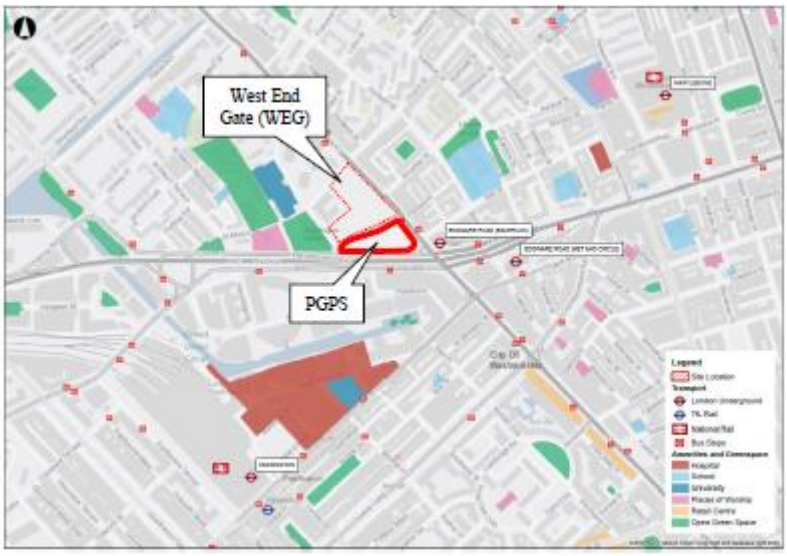
The Paddington Green Police Station development site is south of the West End Gate masterplan area. The site is bound by Harrow Road, Newcastle Place, Paddington Green and Edgware Road. Harrow Road and Edgware Road form part of the Transport for London Road Network (TLRN). Marylebone Flyover, connecting to Harrow Road forms part of the Strategic Road Network.

The site is very well connected by public transport with Edgware Road London Underground (LU) stations to the east of the site on Edgware Road, served by the Bakerloo, Hammersmith & City, Circle and District LU lines. Approximately 650m to the south-west of the site is Paddington National Rail and LU Station. Marylebone National Rail and LU Station is 800m to the east of the site. There are a number of bus stops on Edgware Road and Harrow Road, providing strategic connections throughout London and therefore, the site benefits from a public transport access level (PTAL) of 6b, on a scale of 0 – 6b where 6b is the highest.

There are also a number of cycle hire docking stations within the vicinity of the site. The closest is located on Paddington Green, to the west of the site. Further docking stations are located on Edgware Road.

Development Proposals

The existing site comprises the former Paddington Green Police Station with secure residential accommodation and associated offices. The development proposals are currently to develop the site for 550 residential units, offices, retail and community space. The development will provide basement car and cycle parking and the scheme proposes to permanently stop up Newcastle Place. The site is located to the south of West End Gate (WEG) development which is currently under construction for 844 new homes, retail, restaurant and office space. The developments will be connected by public realm space on Newcastle Place and share the WEG basement which provides car and cycle parking, servicing access and plant facilities. The development site boundary and relationship to West End Gate is shown in the plan below. It is understood that an application will be submitted in 2021.



Proposed Access Arrangements

It is proposed that Newcastle Place will be regenerated, prioritising walking and cycling with general traffic either banned by formally stopping up the road or limiting it to development service vehicles only. Newcastle Place currently operates as one-way, east to west. Options are being considered to either retain the one-way system or introduce two-way running providing access onto Edgware Road. Newcastle Place is managed by Westminster City Council and therefore the acceptability of permanently stopping up this road is under their jurisdiction. It was noted at the meeting that further discussion regarding the benefits of the proposed stopping up of Newcastle Place are required and that the developer aspirations could probably be achieved with it remaining as public highway.

TfL would not be supportive of two-way operation of Newcastle Place as this could adversely affect the traffic operation, particularly buses, on Edgware Road. In any case, it is recommended that all access options and highway proposals are fully justified, and evidence in the form of traffic flows and associated analysis is included to demonstrate the impact. Formal traffic modelling may also be required depending on the projected vehicle flows.

As well as public realm improvements to Newcastle Place, the footways around Harrow Road and Edgware Road will be improved with landscaping and tree planting. The proposed maintenance and ownership arrangements of all areas of public realm should be provided. The junction treatment of the Edgware Road/Newcastle Place junction should also be considered in line with Vision Zero policy.

In terms of site servicing, the majority of servicing will take place within the WEG basement which is accessed from Church Street. This is acceptable and is a welcome solution to reduce the impact of the developments' vehicle trips on the local network. The proposed operation of servicing on Newcastle Place should be set out in further detail, with explanation of the interaction between pedestrians, cyclists and vehicles.

Healthy Streets, Vision Zero and Active Travel Zone (ATZ) Assessment

TfL has launched the Healthy Streets Approach, which aims to improve air quality, reduce congestion and make attractive places to live, work and do business. Within ITP London Plan Policy T2, there are 10 Healthy Streets (HS) indicators which put people and their health at the heart of decision making and aim to result in a more inclusive city, where people choose to walk, cycle and use public transport. An assessment of the development against the 10 Healthy Streets Indicators should be prepared.

The site lies just outside the Paddington Opportunity area, is adjacent to Church Street Market and housing Regeneration Area, as well as Westminster College and mixed-use town centre amenities/facilities on Edgware Road.

As discussed at the meeting, given the wider area land uses and prominent site location adjacent to the strategic road network and bus corridors as well as neighbouring Edgware Road LU Stations it is important to understand how the end users of the site will navigate through the development and connect to the local amenities.

Pedestrian and Cycle Access

In order to understand the proposed pedestrian and cycle connectivity and access, a series of movement and circulation diagrams should be prepared highlighting expected desire lines. The site layout plan proposes residential access from Newcastle Place only. This would require residents accessing Edgware Road LU Station and bus stops on Harrow Road to travel through the site via the new pedestrian street or, use the most direct route along the eastern footway of Edgware Road. Having a secondary residential access directly onto Harrow Road would provide a more direct route to the Station and bus stops. Harrow Road has wide footways compared to the eastern footway of Edgware Road which may not be able to accommodate the increased flow of pedestrians from the development.

It should be demonstrated that the proposed pedestrian routings can accommodate the development trips, taking into consideration the existing demand on the footways from the adjacent area land uses. Further recommendations on this matter are provided in the trip generation section.

A cycle routes map should be provided which shows existing strategic and local routes plus any proposals as well as, cycle parking access from the street into the development. The currently proposed cycle parking access is on Harrow Road which has been separated from the core residential access areas. It is recommended this location is revised to be better integrated with the development, ensuring a convenient and attractive access. Further analysis of cycle parking is provided later in this letter.

ATZ Assessment

The TA will need to include an ATZ assessment with a Killed or Seriously Injured (KSI) assessment. The ATZ assessment, depending on the time of submission, should be a desktop study given the ongoing social distancing / home working guidelines. As well as the pedestrian and cycling requirements noted above, the ATZ assessment should include local amenities, transport hubs, local schools and an assessment of local public transport waiting areas

(bus stops). The connection to proposed Cycleway 16 formerly Quietway) should also be included within the ATZ assessment.

Public Realm Proposals

Based on a review of the Presentation and Scoping Note it is evident that the development proposes high-quality public realm, improving the area for residents and visitors. It should be demonstrated how the public realm meets the Healthy Streets Indicators and is an improvement on the existing situation. As already stated, the operation of Newcastle Place for servicing and active travel uses should be set out. Any potential conflict of these uses should be designed out, making sure Vision Zero is at the forefront of the design.

In the formal application the proposed surface materials for all new areas of public realm should be included. The Newcastle Place/ Edgware Road junction should be deigned as a level surface; at grade with the footway to ensure pedestrian priority. The designs should also deliver visual and physical links to the station.

The subway on Harrow Road adjacent to the site has potential to be incorporated into the development's public realm. TfL would welcome improvements to the subway; at present the guard railing around the subway entrance acts as severance to the clear footway space around the site and for a proposal in this location, improving the subway should be part of the scope of development given its proximity and expected interaction with / use by occupiers of the site. TfL would welcome further discussion on the subway prior to submission.

The footway of Harrow Road has three mature TfL trees which should be maintained as part of the proposals. At formal application stage TfL require detailed plans of all landscaping and arboriculture details for review.

Vision Zero

Alongside the Healthy Streets Approach, the Mayor's Vision Zero Agenda, aims to eliminate death or serious injury on London's roads, supports changes to our road network to improve the safety of vulnerable road users. The applicant is strongly encouraged to identify any improvements, no matter how small, in order to reduce the likelihood of an incident by improving road safety in this location. The results of the ATZ and KSI assessment may highlight areas with accident clusters which could be mitigated to benefit end-users of the site.

The site will directly benefit from TfL's Safer Junction Scheme at Edgware Road/ Harrow Rd junction. This scheme is almost complete and has removed the multi-stage crossing to provide a quicker and more direct crossing to Edgware Rd LU Station and enhanced cycle priority features. All highway

proposals and change in access arrangements should be supported by swept path assessment and a Stage 1 RSA, as required.

Car Parking

The development will not provide any new general car parking spaces which meets ITP London Plan Policy T6, however as the basement car park is shared with the WEG site car parking will be available for residents. TfL recommends that in accordance with ITP Policy T6, a Parking Design and Management Plan is included in the formal submission which sets out how the car parking allocation for both sites will be managed with reference to TfL guidance on parking management and parking design.

As new development in this PTAL 6b location would be expected to be completely car-free the PDMP should set out how car parking levels could be reduced over time. It was noted at the meeting that car parking in the WEG is significantly underutilised, that would suggest there is scoping for repurposing parking spaces.

ITP London Plan compliant levels of blue badge parking are proposed, with 3% of spaces provided from the outset. To meet Policy T6.E, it should be set out within the PDMP where a further 7% of spaces will be located, should further demand for blue badge spaces arise in the future. To meet Policy T6.G provision for Electric Vehicles should be provided. Car parking spaces should be leased not sold and residents should be prohibited from obtaining local on-street car parking permits.

Cycle Parking and Cycle Hire

Cycle parking is to be provided in line with ITP London Plan Policy T5 in terms of quantum. TfL expects the site as a whole to deliver high quality, short and long stay cycle parking which is integrated into each residential core and new public realm space successfully. Short-stay visitor spaces should be provided for the commercial and retail elements in addition to short-stay residential spaces.

All cycle parking should be designed in line with the LCDS (London Cycle Design Standards). There should be a mix of Sheffield Stands, spaces for larger cycles and two-tier racks in order to comply with the LCDs accessibility guidance. At formal application stage, detailed cycle parking layout plans should be submitted which set out the compliance with LCDS requirements in detail.

The access to the cycle store is to be located on Harrow Road which will mean cyclists may have to double back on themselves to park their bike and then travel through the basement area to access their residence. In practice, cyclists

may use the residential lifts to avoid the lengthy detour to park their bike. It is recommended that each residential core has its own cycle store, positioned close to the main residential entrance. Providing smaller, conveniently located cycle stores will be safer and more secure than a single entrance on Harrow Road which does not have the same level of natural surveillance.

An assessment of the capacity of the nearest cycle hire docking stations should be included in the TA. A potential contribution to increase the capacity or provide a new cycle hire docking station may be required by TfL, once this assessment has been undertaken a view will be taken.

Trip Generation, Modal Split and Mitigation

The Transport Scoping Note outlined that the trip generation exercise would be completed using TRICS which is acceptable. The site selection should include London sites only and data should be no older than five years. The trip generation should include both the existing and proposed trip generation and not just the net trips.

Based on a review of the Scoping Note, Public Transport Service Planning colleagues provided the following additional comments. It is recommended the following points are revised for the formal application.

- In table 2 on page 9, there are not three/four times more trains going southbound than northbound on the Bakerloo line. Presumably, the 6 tph refers to the trains that go the whole way to Harrow & Wealdstone whereas there are more that reverse at Queen's Park (plus a few at Stonebridge Park).
- In 6.2 on page 32, it states that the trips will be assigned to individual lines and services; this should include stations and directions.
- In the same section, the proposed 'high level capacity assessment', involving simply dividing trips by services, is not acceptable to TfL. Analysis of the existing usage of existing capacity needs to be undertaken, followed by analysis of the impact from the additional traffic generated by the development. Furthermore, there is no reference to the impact on station capacity; this should be looked at in the same way for the key components, especially the gateline and (in the case of the Bakerloo line station) lifts.

In summary, to understand the sites impact on LU services at Edgware Road station capacity assessments should be prepared. This should use NUMBAT data as a base and provide an assessment impact on assets (e.g. gateline capacity) currently, and with the development in place. The development + the cumulative impact of other consented development should also be included, making use of the station planning standards for formulas to calculate the impact.

Furthermore, a comprehensive link load assessment should be provided that makes use of NUMBAT data for the base scenario and calculates the capacity of services utilised now, + development and + development & cumulative impact of other consented development. This analysis will provide the network peak on the LU network, which should be used for assessing the impact of LU trips from the development and the demand on the footways and crossings between the site and the Station entrance.

In terms of the development's impact on the footways around the site, a Pedestrian Comfort Level (PCL) assessment should be prepared to understand if the development can be accommodated in addition to the high existing footfall in this area due to the level of public transport provision and local amenities.

Servicing and Deliveries

To meet ITP London Plan Policy T7 loading and servicing should be off-street where possible, any on-street loading should be fully justified in order to be acceptable to TfL. Servicing will be mostly off-street via the WEG basement with some deliveries occurring on Newcastle Place. A Delivery and Servicing Plan should be provided at formal application stage. This document should set out servicing for all elements of the site. Consolidation of servicing trips should be considered, in line with TfL's DSP guidance; http://content.tfl.gov.uk/delivery-and-servicing-plans.pdf

As recommended for the proposed highway changes, it is further recommended that a Stage 1 Road Safety Audit is prepared for all new servicing arrangements, particularly for any use of shared space. Swept path analysis and visibility splay drawings (as required) should also be provided as part of the formal application for all servicing activity areas.

Feedback provided from Bus Operations team requests that no loading bays are proposed on Edgware Road.

Construction

As discussed in detail at the meeting, the construction logistics of this site will require early engagement with TfL Network Sponsorship, Network Impact and Bus Network/ Operations teams, via Spatial Planning. A further TfL pre-application meeting should be arranged to discuss and agree the scope of the Framework Construction Logistics Plan before the formal application is submitted. The CLP should be written in accordance with TfL's best practice guidance which can be found at: http://content.tfl.gov.uk/construction-logistics-plan-guidance.pdf. This document should consider measures such as a delivery booking system, off-site fabrication, consolidation of deliveries and co-operation between construction sites in the area (including common procurement). A Code of Construction Practice document will be required by Westminster as

part of the formal application, the scope of this document should be part of the constructions logistics discussions with both the Council and TfL.

It is expected that the impacts of construction will be carefully managed with early consultation in order to ensure that highway operation, bus services and pedestrian movements remain unaffected during the works. Due to the cumulative impact of development around Edgware Road, TfL require early consultation to be able to coordinate the works on the strategic road network safely, and in line with the cumulative impact of other development sites in this area.

Given the location of the site, on an extremely busy bus corridor it is important for TfL to understand the proposals on site, prior to construction, during construction and after construction. It is requested that further information is provided, which can be discussed at a further pre-app, regarding the following;

- A map should be provided which shows any pit lanes required.
- Details regarding construction vehicle route, timings, frequencies are required.
- Details should be provided regarding any hoarding, scaffolding or footway closures proposals on Harrow Road or Edgware Road. As well as any plans to temporarily close bus stops.
- Any impact on bus services should be documented so TfL can plan for an alternative within good time.
- The location of cranes and holding areas for buildings/materials should be set out on plan.
- The use of Newcastle Place in the construction process should be confirmed.
- Servicing of the site should preferably be overnight to avoid the peak hours during the day. The vehicle, pedestrian and public transport peak times should be considered when planning for construction deliveries.

The options process for arriving at the construction logistics plans should be provided so that TfL can understand how the plans have been formulated. Swept path assessments should be included showing vehicle movements throughout the site.

Travel Planning

A Framework Travel Plan should be produced in accordance with TfL's guidance for travel planning. WCC should secure, enforce, monitor, review and ensure the funding of the Full Travel Plan through S106 agreement to ensure conformity with ITP London Plan Policy T4 at formal application stage. The Travel Plan should provide measures to encourage walking and cycling and reduce car trips and site car parking over time.

Mayoral Community Infrastructure Levy (MCIL2)

The development will be liable to Mayoral Community Infrastructure Levy 2 (MCIL2) as well as Borough CIL. MCIL2 is charged at a rate of £85/sqm for most qualifying development in Westminster. The site falls within the Central London charging zone where higher rates are charged for office, retail and hotel floorspace. The applicant should ensure they are fully aware of the regulations.

Summary

This letter has set out a number of strategic transport issues, which should be addressed as part of any future planning application. If you have any queries, further questions or seek clarification, please contact Chloe Flower, case officer at [redacted]

Yours sincerely,

Lucinda Turner
Director of Spatial Planning
Email: [redacted]

Appendix B

Outline Construction Logistics Plan

Paddington Green Police Station

2 – 4 Harrow Road, London, W2 1XJ

Outline Construction Logistics Plan

Arup

March 2021

Berkeley

Designed for life

Document verification

ARUP

Job title		Paddington Green Police Station			**Job number** 277685-00
Document title		Outline Construction Logistics Plan			**File reference**
Document ref					
Revision	**Date**	**Filename**			
V1	March 2021	**Description**	Version 1		
			Prepared by	Checked by	Approved by
		Name	SM	KW	AF
		Signature			
V2	March 2021	**Filename**			
		Description	Version 2		
			Prepared by	Checked by	Approved by
		Name	SM	KW	AF
		Signature			
V3	March 2021	**Filename**			
		Description	Version 3		
			Prepared by	Checked by	Approved by
		Name	SM	KW	AF
		Signature			
V4	March 2021	**Filename**	Version 4		
		Description			
			Prepared by	Checked by	Approved by
		Name	SM	KW	AF
		Signature			
				Issue Document verification with document	✓

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Swept Path Analysis

1 Introduction

1.1 Background

Ove Arup & Partners ('Arup') has been commissioned by Berkeley Homes (Central London) Limited (BHCL) to provide transport advice to support the redevelopment of Paddington Green Police Station (PGPS).

The local planning and highways authority is Westminster City Council (WCC). The highways authority for A5 Edgware Road and very eastern section of A404 Harrow Road leading up to the junction with the A5 is Transport for London (TfL).

1.2 Objectives of the CLP

This Outline Construction Logistics Plan (CLP) has been prepared in accordance with Transport for London (TfL) Construction Logistics Planning Guidance, and Construction Logistics and Community Safety (CLOCS) Construction Logistics Planning Guidance (March 2020).

This document was requested by TfL during pre-application discussions to accompany the planning application.

An Outline CLP gives the planning authority an overview of the expected logistics activity during the construction programme. The overall objectives of this CLP is to outline the following measures:

- Congestion reduction by efficient management and co-ordination of construction vehicles.
- Environmental Benefits by minimising journeys needed to service a Construction Project.
- Improved vehicle safety.

The CLP demonstrates BHCL's commitment to undertaking construction activities to ensure that best practice is followed within the supply chain as often as possible, benefiting operators, customers and local residents.

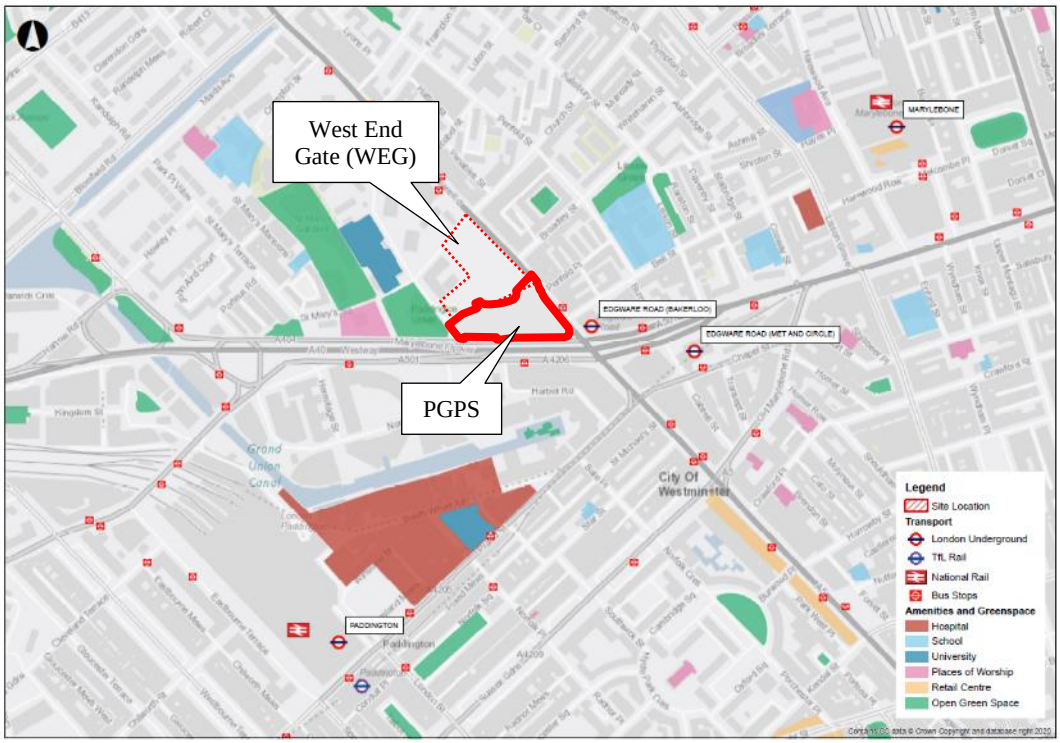
The BHCL Project Director is expected to be the CLP Co-ordinator.

This document has been prepared in consultation with BHCL.

1.3 Site Context

The site is bounded by Edgware Road to the east, A404 Harrow Road to the south, Paddington Green to the west and Newcastle Place to the north. To the north of Newcastle Place is a development known as West End Gate (WEG) which is currently under construction by Berkeley Homes. WEG will provide a total of 844 new homes, as well as retail and restaurant land uses. The site location is shown in Figure 1.

Figure 1: Site Location Plan



1.4 Development Proposals

The proposal is to redevelop the police station and deliver 556 residential homes, offices, affordable workspace and flexible commercial space. The development will provide basement car and cycle parking and the scheme involves stopping up Newcastle Place to deliver a high-quality public realm.

The proposed scheme comprises of three blocks (Block I, J and K) and will provide the following, subject to further design development:

- 556 new homes
- Flexible commercial / retail (1,088 sqm GIA)
- Office space (4,755 sqm GIA)
- Affordable workspace (328 sqm GIA)

The proposed site plan is shown in Figure 2.

Figure 2: Proposed Site Plan

1.5 CLP Structure

The structure of this report is as follows:

- **Chapter 2: Context, Considerations and Challenges** – sets out the policy context, local access including highway, public transport, cycling and walking, and location of any sensitive receptors such as schools, colleges, and residents.
- **Chapter 3: Construction Programme and Methodology** – sets out the outline construction programme and construction phasing.
- **Chapter 4: Vehicle Routing and Site Access** – sets out the proposed arrangement for site access and the indicative construction routes.
- **Chapter 5: Strategies to Reduce Impacts** – provides the policies and procedures to be in place for construction to reduce impact.
- **Chapter 6: Estimated Vehicle Movements** – sets out the construction traffic profile during the demolition and construction programme.
- **Chapter 7: Implementation, Monitoring and Updating** – provides the details for managing, monitoring and reviewing the CLP.

2 Context, Considerations and Challenges

2.1 Policy context

2.1.1 National Planning Policy Framework (NPPF)

The NPPF promotes the use of sustainable transport throughout the UK, safe road design, and the efficient and sustainable delivery of goods and supplies. The NPPF sets out the long term strategy for sustainable development.

2.1.2 The London Plan (2021)

The London Plan 2021 is the Spatial Development Strategy for Greater London.

Policy T7 on Deliveries, Servicing, and Construction highlights that development proposals should facilitate sustainable freight movement by rail, waterways and road. Construction Logistics Plans and Delivery and Servicing Plans will be required and should be developed in accordance with Transport for London guidance and in a way which reflects the scale and complexities of developments.

The same policy also notes that development proposals must adopt appropriate construction site design standards to enable the use of safe, lower trucks with increased levels of direct vision on waste and landfill sites, tip sites, transfer stations and construction sites.

Paragraph 10.7.4 refers to use of non-road vehicle modes and requests that as part of Construction Logistics plans, developments have taken all reasonable endeavours to use alternative modes of transport.

2.1.3 The Mayor's Transport Strategy (MTS) (2018)

The MTS promotes the use of CLPs as a '*travel plan that aims to improve the sustainability of construction freight movements by establishing site management and procurement processes to reduce the impact of construction traffic on the street network".*

2.2 Context Maps

Appendix A provides the following drawings:

- Regional plan at 1:15,000 scale
- Local plan between 1:2,000 and 1:3,000 scale
- Site boundary plan

2.3 Local Access

2.3.1 Highways, carriageways and footways

Newcastle Place is one-way westbound between Edgware Road and Paddington Green. Paddington Green is two-way, connecting with Harrow Road to the south at a priority junction. Edgware Road meets Harrow Road at a signal-controlled junction to the southeast of the site.

Both the Edgware Road (A5) and the eastern section of Harrow Road (A404) are part of the Transport for London Road Network (TLRN). Edgware Road forms a strategic northwest-southeast route and Harrow Road provides access to the A40 Westway and A501 Marylebone Road, a strategic east-west route.

2.3.2 Public Transport

The site is easily accessible by public transport and has a Public Transport Accessibility Level (PTAL) of 6b.

The site is located opposite Edgware Road underground station (Bakerloo Line) approximately 60m east, with other nearby stations including Edgware Road underground station (Hammersmith & City, Circle and District Lines) approximately 450m southeast, London Paddington station approximately 650m southwest and London Marylebone station approximately 800m east.

The nearest bus stops to the site are Stops EM / EC on Edgware Road and Stop EX on A404 Harrow Road. Additional bus stops are within walking distance of the site. In total, 14 bus routes are within walking distance to the site, providing a total peak frequency of 117 buses per hour in each direction.

2.3.3 Walking and Cycling

Footways are provided along all the local roads and dropped kerbs are provided at pedestrian crossing points. There are signal-controlled pedestrian crossings at the Edgware Road / Harrow Road junction and further signal-controlled crossings are available along Edgware Road. A further subway, with steps and ramp access, is provided underneath Harrow Road to the southwest of the site.

The steps and ramp to a former subway on the corner of Edgware Road / Harrow Road are closed as part of the TfL Safer Junction scheme.

Cycle parking are provided nearby and the following cycle routes are located within the vicinity of the site:

- Quietway 2 (650m) – Harrowby Street to Bayswater
- Quietway 16 (1.2km) – Lisson Grove to Regent's Park
- Cycleway 3 (1.4km) – an east-west cycleway between Barking and Lancaster Gate

2.4 Community Considerations

The following local community facilities have been identified with the aim to minimise the negative impacts of construction logistics activity:

- **Church Street residential area** – Construction vehicle routes will be along strategic routes and away from Church Street and other local residential areas.
- **Edgware Road** – There are high pedestrian flows associated with the Underground stations and bus stops, as well as shops and other amenities along Edgware Road. Construction vehicle routes to be away from Edgware Road where possible.
- **WEG construction** – Construction is currently underway for WEG (also a Berkeley Homes development), with construction site access from Paddington Green. Coordination between WEG and PGPS works will take place throughout the construction period.
- **City of Westminster College** – This is approximately 300m northwest of the site and discussions around minimising impact on pedestrian flows have taken place with TfL.
- **St. Mary's Hospital** - This is located is approximately 650m south of the site, but the construction arrangements are not expected to directly affect the hospital.

3 Construction Programme and Methodology

3.1 Construction Programme and Phasing

Demolition and construction is expected to take place between 2022 and 2028, with the construction of Block I followed by J and K. The construction programme is presented in Table 1.

Table 1: Indicative Construction Programme

Phase	Duration (months)	Start Date	Completion Date
Enabling, Demolition and Clearance Works	12	Q1 2022	Q1 2023
Substructure Works	20	Q4 2022	Q3 2024
Superstructure Works: Block I	12	Q1 2023	Q1 2024
Superstructure Works: Block K and Block J	29	Q1 2024	Q3 2026
Envelope Works: Block I	12	Q3 2023	Q3 2024
Envelope Works: Block K and Block J	30	Q4 2024	Q2 2027
Fit Out Works: Block I	17	Q1 2024	Q2 2025
Fit Out Works: Block K and Block J	33	Q4 2025	Q3 2028
External Works and Landscaping: Block I	6	Q4 2024	Q2 2025
External Works and Landscaping: Block K and Block J	20	Q4 2026	Q3 2028

3.2 Construction hours

Working hours would be agreed with WCC, but are expected to be:

- 08:00 to 18:00 hours Monday to Friday.
- 08:00 to 13:00 hours Saturday.
- No working on Sundays or Bank Holidays.

All work which is intended outside of these hours, excluding emergencies, would be subject to prior agreement, and / or reasonable notice to WCC.

3.3 Enabling Works

3.3.1 Site Offices/Welfare Facilities and General Site Access

Construction compounds, including welfare facilities for construction staff would be constructed on the pavement at the south east-corner of the site partly on adopted land owned by TfL and WCC.

Central good quality welfare facilities would be provided on the Site and would include toilets, washing and changing facilities and a canteen with a kitchen. These temporary provisions would be expanded to meet the requirements of the anticipated maximum construction workforce numbers.

The welfare facilities would be provided in stacked site cabins. As the levels of construction activity increase the provision would be increased and would remain *in-situ* for the duration of the proposed development.

Temporary utility connections would be made to existing utility services for temporary accommodation and for construction use where no existing connections exist.

3.3.2 Hoarding, Gates and Scaffolding

Prior to demolition and in accordance with WCC's requirements, a 2.8 m high perimeter site hoarding and access/egress gates would be erected. The hoarding and gates would be maintained throughout the duration of the works around the Site perimeter. The hoarding would segregate pedestrians and the general public from works and help to contain the work within the Site boundary.

The exact scaffolding and hoarding locations would be identified and agreed as part of the CEMP. Licences for scaffolding and hoarding located on the public highway would be obtained from WCC and TfL.

The hoardings would comply with the relevant technical guidance for demolition and construction where practicable.

Secure vehicle access points with wheel cleaning facilities would be established at the Site access locations. A separate pedestrian access point with security would be located close to the welfare facilities with a designated gate and footpath provided for the workforce.

The hoarding would be decorated appropriately with marketing graphics/ logo which would be approved under an advertisement application. Regular inspections would be carried out to ensure that the integrity of the hoarding is maintained, and the hoarding would be kept clean and in a good state of decoration. Graffiti would be removed as soon as possible. Sharp or splintered edges would be avoided to ensure pedestrian safety.

Fans and façade netting would be installed to contain falling debris. The scaffold would be wrapped in sheeting such as Monaflex, installed tight to the scaffold, to act a dust and visual barrier, prior to works commencing on the scaffold.

CCTV system for out of hours security to secure the demolition and construction site would be installed, with key areas being monitored as well as the perimeter.

Additional hoarding and anticlimb provision would be installed around key risk areas.

Lighting would be provided to the hoarding during official hours of darkness avoiding strong shadows on surrounding footpaths and roads that could compromise safety and security of the public.

3.3.3 Utility Diversions/Removals

The existing substation located on the north-east corner of the site would be relocated into a new permanent location. Its current location falls outside the building line for the new construction and would be able to remain until after the new buildings have been structurally built.

UKPN will be contacted at the earliest opportunity to ensure that the works are acceptable to all parties and completed in a timely manner.

Prior to any demolition works taking place, the location of services would be identified and marked on site using utilities record drawings and on-site investigation techniques such as hand dug trial holes and scanning using a cable avoidance tool.

3.3.4 Tower Crane Locations

Two tower cranes would be positioned on-site at various stages during the construction works. The key parameters are provided in Table 1.

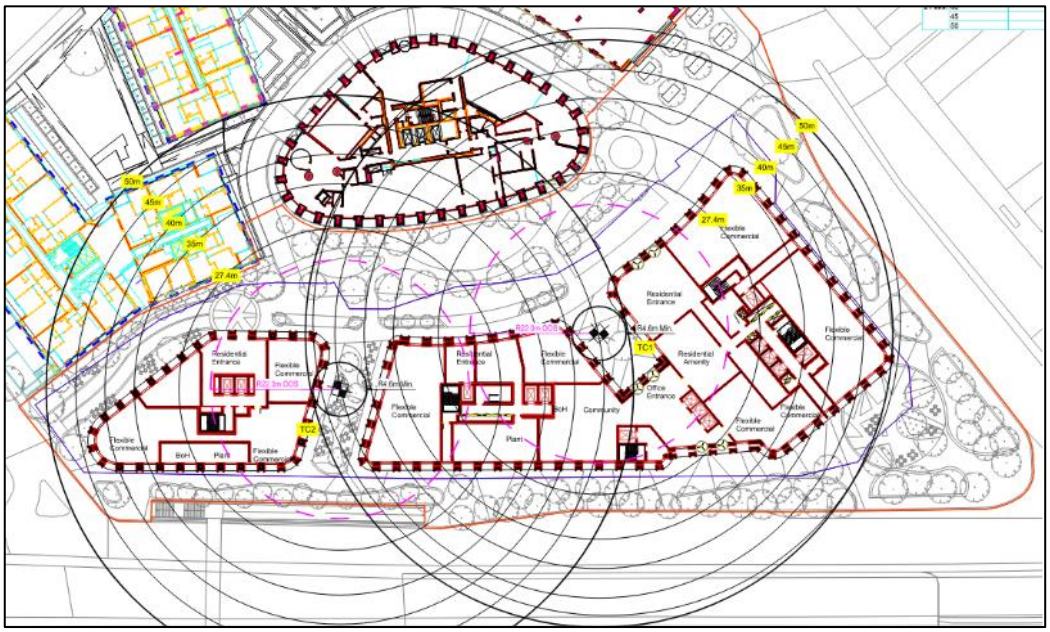
Oversail licences will be required for the tower cranes due to the shape of the site. These would be applied for and in place prior to any works being undertaken with regards to the tower cranes. It is expected licences will have to be agreed with WCC and TfL.

Table 2: Proposed Tower Crane Key Parameters

Tower Crane	Duration On-Site	Height (m)	Radius (m)	Approximate Grid Reference
TC1	57 months	120	50	N181737, E526897
TC2	44 months	70	50	N181749. E526939

The approximate locations of the tower cranes are shown in Figure 3.

Figure 3: Proposed Tower Crane Locations On-Site



3.3.5 Temporary Works

Some temporary works would be necessary during the course of the development works, in order to protect the public and ensure the structural integrity of the works as they progress. These would range from simple propping of hoardings to scaffold protection fans, temporary propping of walls and other temporary structures such as loading platforms. In all cases these works would comply with legislation, and would be designed and managed by the Applicant who is obliged by law to employ a temporary Works Co-ordinator.

In addition, temporary works within the basement excavation in the form of propping may be required for the perimeter sheet piled walls and existing diaphragm wall during the excavation process.

3.4 Demolition Works

Demolition works would include the demolition of the entire former Paddington Green Police station (a 17 storey concrete frame tower, 7 storey tower, connecting structure, single storey basement and existing foundations).

It is anticipated a mobile crane would be required periodically for the demolition of the 17 storey tower. The crane would be situated on-site, for lifting out existing building plant and lifting breakers onto the floor slab to commence demolition of the structure. It is envisaged the crane would be located within the site boundary.

The 17 storey tower would be broken down progressively from top down, to remove the debris and rubble from the workface. The lift shaft would be used to bring materials down to ground level, for removal with a long reach excavator.

It is envisaged that the buildings would be demolished using long reach mechanical plant incorporating breakers and crunchers working from inside the

Site boundary. Demolition on any road boundaries would principally be carried out by hand from the perimeter scaffolds which would allow screening to prevent from dust. Additionally, dust would be controlled using water mist sprays located on the long reach munching machines. Noise would be controlled and monitored throughout the demolition works

Materials would be crushed, graded and stockpiled with approximately 15 % targeted for on-site re-use within the piling mat for the perimeter retaining walls and bearing piles for the towers foundations. The remaining 85 % is likely to be transferred to suitable tipper or waste haulage vehicles and removed off-site for recycling.

3.5 Substructure Works

Substructure works would comprise the installation of a piled retaining wall for the basement structure; excavations, basement construction and foundations. This would run inside the existing diaphragm wall that runs along Harrow Road, with only a section of this being removed to form the link through to the adjoining basement of WEG.

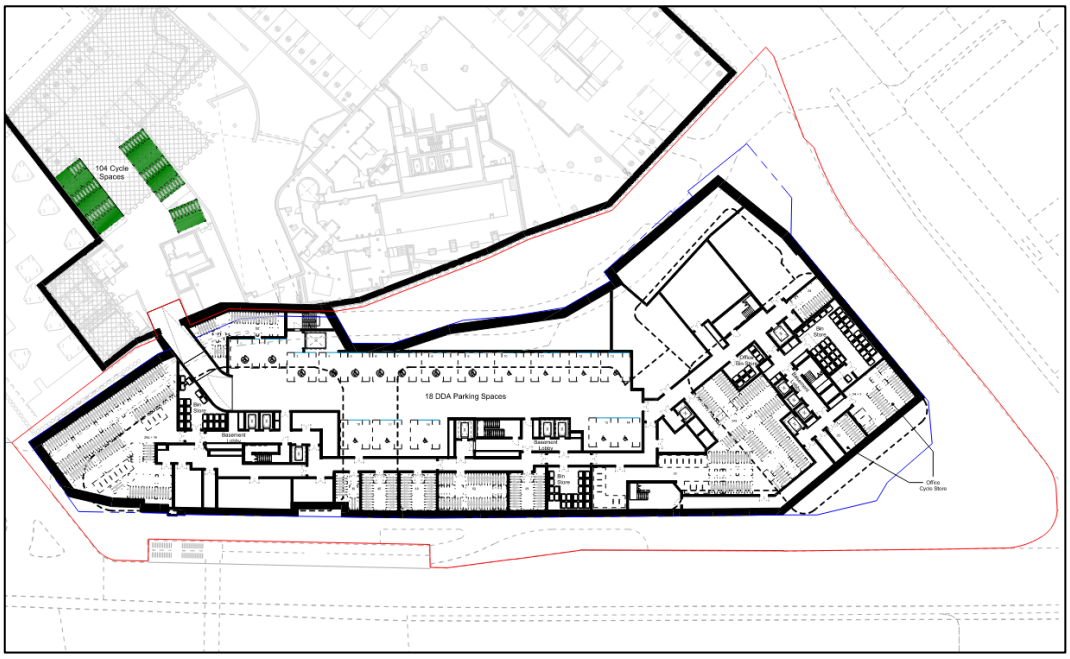
3.5.1 Basement Piling, Excavation and Construction Works

A retaining wall would be constructed within the boundary around the perimeter of the Site. Piles would augured secant, contig or/or bearing piles. The length of the piles would vary, depending on whether they are to support superstructure column loads, but it is anticipated that the piles would largely be between 15 m to 17 m in length. Where large loads are transferred from the superstructure, the piles would increase in length of between 35 m and 50 m below the ground surface.

A site-wide basement would be excavated and the method of perimeter retaining wall would take into account the ground conditions and environmental considerations such as noise levels. The existing diaphragm wall would be used and propped in the temporary case to support the ground and paving to the site perimeter removing the requirement for further retaining structures and the need to break out the existing diaphragm wall.

Figure 4 shows the proposed development basement plan.

Figure 4: Proposed Basement Plan



It is anticipated that the basement would be constructed using a traditional 'bottom-up' approach using temporary earth berms and props to support the perimeter retaining walls whilst the basement is excavated.

Based upon initial investigations there is the potential for excavation waste to be contaminated and therefore classed as hazardous waste. In addition, due to the limited extent of the Site, opportunities for the storage and re-use of excavated material is considered unlikely. The Applicants' company policy is for 90 % of the excavation waste arisings to be re-used and/or recycled off-site where possible. However, due to the potential for contamination, this target would be difficult to achieve.

3.5.2 Basement Construction Sequence

The methodology and sequence for the proposed basement construction would be as follows:

- Stage 1: Install temporary works propping system / raking props to existing diaphragm wall underside of existing ground floor slab and back prop to top of existing basement raft.
- Stage 2: Demolish ground floor slab.
- Stage 3: Demolish central section of raft beyond temporary works raking props and install pile platform. Once pile platform is installed, undertake piling along with the construction of the central section of new piled raft.
- Stage 4: Install second row of raking / horizontal props off constructed central section of the raft to existing perimeter diaphragm wall above existing raft level.

- Stage 5: Demolish remaining section of raft slab between existing diaphragm wall and the central section of new raft construction and install piling platform. Once piles are installed, construct the remained of the raft slab.
- Stage 6: Construct new perimeter basement RC wall off the raft against existing diaphragm wall.

3.5.3 Foundations

The foundations for the Proposed Development would typically comprise of a rotary piled foundation.

There are a number of existing piles which would be redundant. These would be mapped out and broken out to -500 mm below the new pile cut off level.

3.5.4 Cores

The cores would incorporate the lifts, stairs and service risers and would be designed to provide the main lateral stability system for the buildings.

The concrete walls would be constructed from reinforced concrete using either slip-form construction or jump-formed techniques. Concrete would be pumped and a hydraulic placing boom used to assist concrete placement. Tower cranes would be positioned to suit the Site logistics and used to lift reinforcement cages for the cores. Stairs would be installed once the cores are complete. In the meantime external hoists would be erected to provide vertical transportation of labour and materials.

3.6 Superstructure Works

The buildings would consist of PT concrete floor slabs for the two taller towers (Blocks I and K) and RC frames and slabs for the middle block (Block J):

The construction of the superstructure within each block would involve the erection of RC cores (to provide for the overall stability of the structure), followed by the formation of RC columns and slabs, to roof level. Flat slab construction is proposed. The ground floor slab would form a podium which would have a number of step changes in thickness, the slabs generally getting deeper where transfer structures are required.

Due to the height of the middle block (Block J), it is likely that cores would be constructed using traditional shuttering, and not slip-forming or jump-forming. The two taller towers (Block I and K) lending themselves more to slip-forming or jump-forming.

Slab thicknesses are intended to remain fairly constant throughout the Proposed Development at the Site.

Also, the use of concrete would be selected to provide adequate sound insulation within each block and to comply with fire protection requirements. Cement replacement content and secondary/recycled aggregate content would be

considered once the sub-contractors have been appointed, to minimise environment impacts.

Construction (sub- and superstructure) waste volumes have been estimated based on Building Research Establishment (BRE) Benchmarks. It is anticipated that all construction waste material would be removed off-site. However, as the Applicant's company policy is to divert 90 % of construction, demolition and excavation waste from landfill through re-use or recycling, it is conservatively expected that 50 % of all construction waste material would be recycled off-site in addition to the recycling and re-use of demolition and excavation waste volumes as discussed earlier.

The link building associated with Block J would comprise a metal frame construction, which would be installed upon removal of the logistics route through the 1st floor. This would be prefabricated into sections for speed of installations, utilising the tower crane.

3.7 Envelope and Fit out Works

Facades would be designed in accordance with air quality and noise performance criteria. Façades would consist of a mixture of pre-fabrication and unitised (window bays) cladding systems to assist in the ease of erection and installation. Each cladding unit would be supported from brackets from the floor slabs and installed from the floors using spidercrane to lift it into position.

It is envisaged the tower cranes would remain in location until the hoist has been removed and hoist infill panels installed.

Internal fit out of the proposed residential units would be undertaken as part of the Proposed Development and would include light fittings, kitchens and bathrooms.

Non-residential uses would be delivered to 'shell and core' only.

3.8 Landscaping Works

Landscaping of the Proposed Development, including public amenity area, private residential terraces and perimeter public realm would be undertaken in accordance with the Landscaping Strategy, following completion of the key construction works.

4 Vehicle Routing and Access

4.1 Construction Access

Construction access has been considered in detail in terms of minimising impact on local streets, and taking into account junctions with banned turns and restricted space for manoeuvring large vehicles. Further discussions on the construction access strategy will take place with local authorities prior to and during the construction process.

The site is well located to the strategic highway network and for the duration of the construction period, direct access from the A404 Harrow Road is proposed. Three locations for construction site vehicular gates have been identified and it is proposed that up to two gates will be operational at any one time. The gates will be marshalled to minimise risks of conflicts with pedestrians. A summary of the indicative phasing of access and gates are as follows:

- **Initial Demolition Access** - Access has to be from Edgware Road at this stage to commence demolition from the existing police station courtyard. Access will be limited to 7.5t vehicles. The intention is to use the adjacent WEG construction site to provide access for large plant for the initial stage of the demolition.
- **Demolition and Enabling Works -** Gate 2 on Harrow Road.
- **Excavation** – Gates 2 and 3 on Harrow Road.
- **Construction of Block I** – Gates 1 and 3 on Harrow Road.
- **Construction of Blocks J and K** – Gates 2 and 3 on Harrow Road.

The locations of the gates aim to maximise stacking capacity within the site and minimise any potential risk of queuing on the public highway. Extracts of the tracking for three gates are provided in Figure 5 and Figure 7, and swept path analysis is contained in Appendix B.

Figure 5: Proposed Gate 1 on Harrow Road

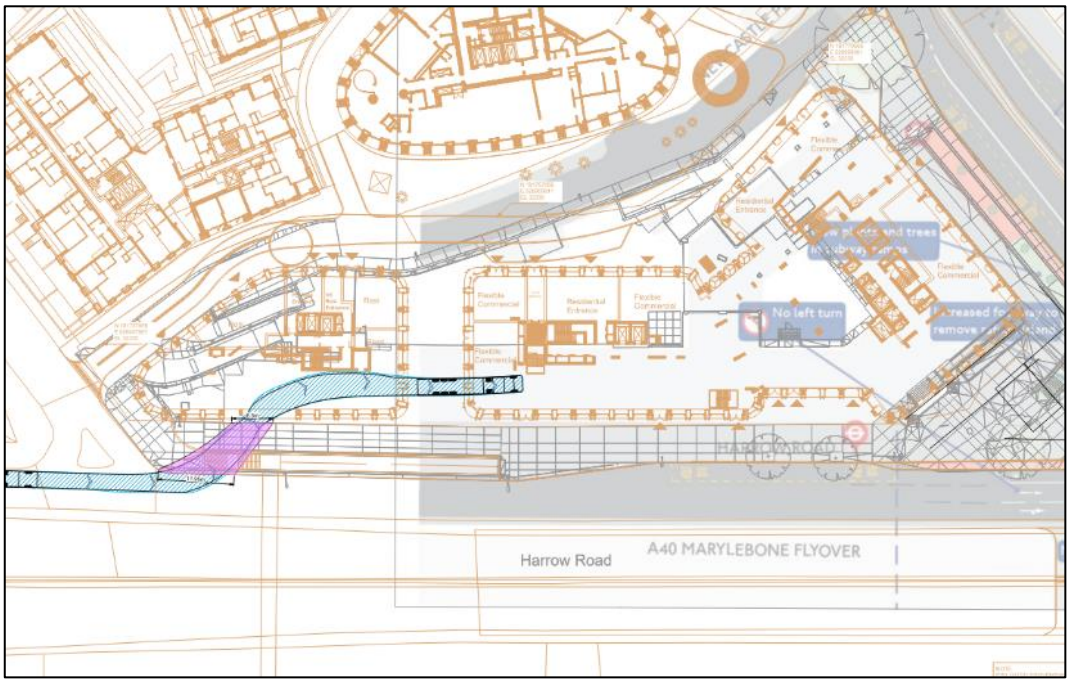


Figure 6: Proposed Gate 2 on Harrow Road

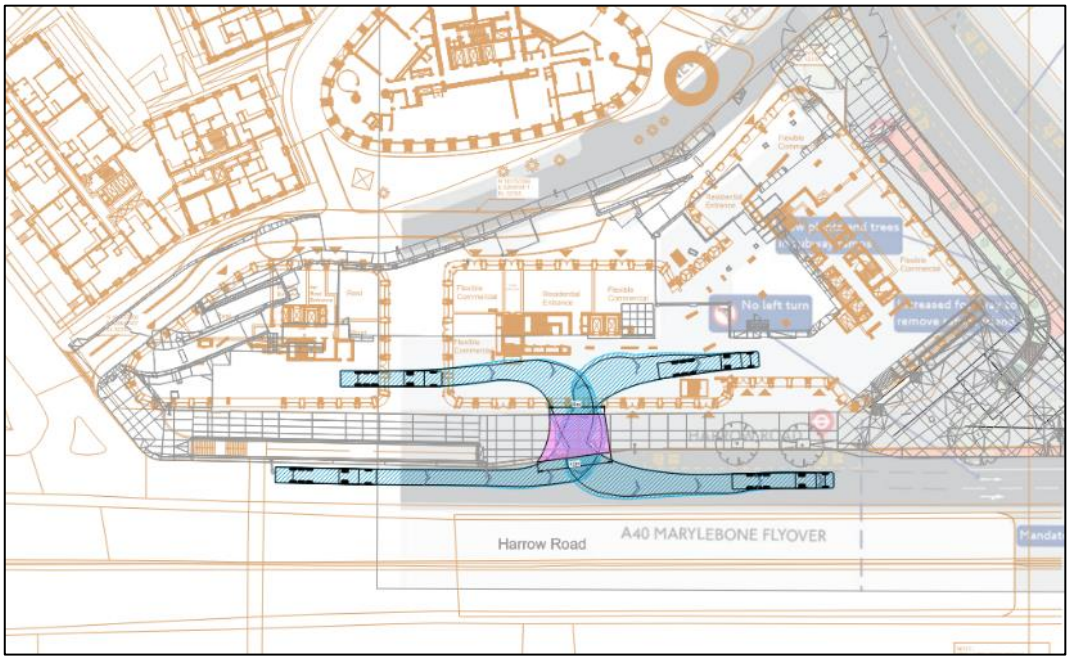
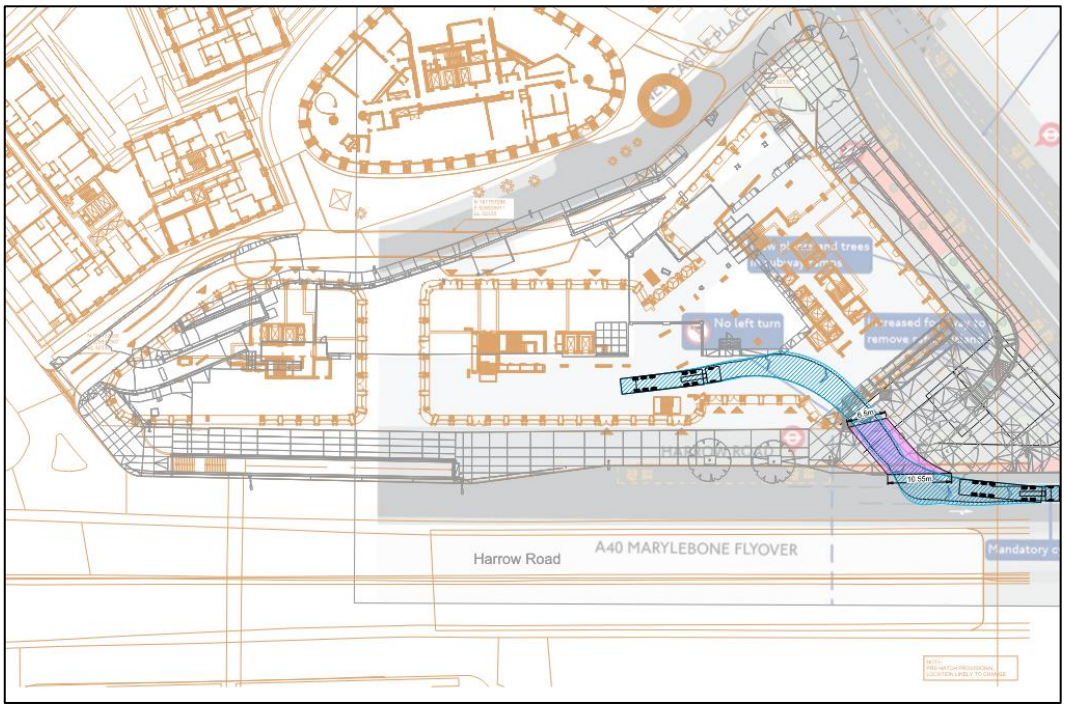


Figure 7: Proposed Gate 3 on Harrow Road



Hoarding will be provided along Harrow Road to maintain a 2.5m footway. Gate 1 by Paddington Green will require the temporary closure of the stairs to the underpass. However, the step-free ramp will remain open and pedestrian diversion signs will be provided. The location of the gate locations do not affect the operation of the bus stops along Harrow Road, or the Harrow Road / Edgware Road junction.

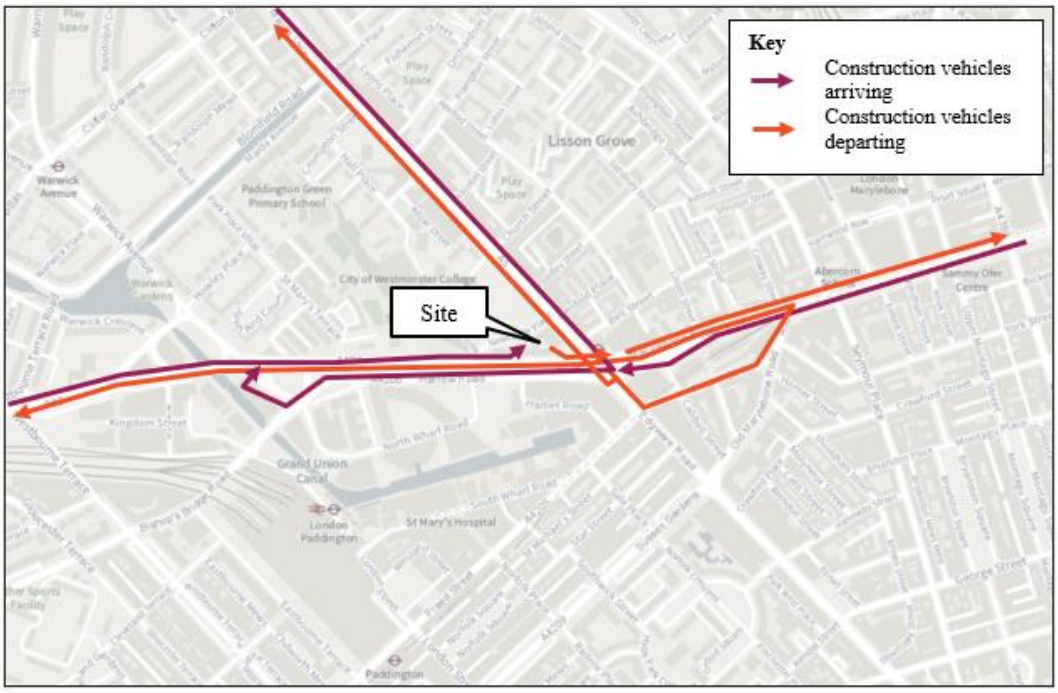
4.2 Construction Routes

The construction traffic routes that will facilitate the delivery of goods and material to and from the site would be agreed with WCC and other relevant authorities (e.g. TfL) prior to construction activity commencing.

In line with TfL's Construction Logistics Plan guidance, construction routes will be routed along the Strategic Road Network (SRN) and the Transport for London's Road Network (TLRN) as they are best suited to heavy traffic, and less likely to create congestion which in turn could minimise impacts on local air quality.

Figure 7 shows the indicative construction routes to and from the site. These routes are based on using main roads with direct movement in and out of London. The use of these routes will help to avoid travelling through urban communities and other sensitive areas such as schools.

Figure 8: Indicative Construction Routing



5 Strategies to Reduce Impacts

A number of mitigation measures and strategies are planned to reduce the impacts of construction on the local area. The planned measures can be categorised as follows:

- Committed – measures that will be implemented as part of the CLP.
- Proposed – measures that are feasible and likely to be implemented. Once a contractor is appointed these measures will be studied further and confirmed by the appointed contractor.
- Considered – measures that are unlikely to be implemented or feasible but could be investigated or become relevant in the future.

Table 3 summarises the planned measures for the construction of the proposed development, based on the checklist provided in TfL's CLP guidance.

Table 3: Construction Measures Influencing Construction Vehicles and Deliveries

Measures influencing construction vehicles and deliveries	Committed	Proposed	Considered
Safety and environmental standards and programmes	✓		
Adherence to designated routes	✓		
Delivery scheduling	✓		
Re-timing for out of peak deliveries		✓	
Re-timing for out of hours deliveries		✓	
Use of holding areas and vehicle call off areas			✓
Use of logistics and consolidation centres			✓
Vehicle choice			✓
Measures to encourage sustainable freight			
Freight by Water			✓
Freight by Rail			✓
Material procurement measures			
Design for manufacture and off-site manufacture		✓	
Re-use of material on site			✓
Smart procurement		✓	
Other Measures			
Collaboration with other sites in the area	✓		
Implement a staff travel plan	✓		

5.1 Measures Influencing Construction Vehicles and Deliveries

5.1.1 Safety and Environmental Standards and Programmes

BHCL will follow all guidance given in Construction Logistics and Community Safety Guide – Managing Work Related Road Risk in Contracts. The following will be included in every tender and subcontract order and is contained within the Project Specific Requirements of the Tender Documents:

> *Delivery Standards; FORS & CLOCS*
>
> *Loading and unloading from all vehicles shall be planned to eliminate the need to access the vehicle or be carried out using proprietary access equipment and adequate edge protection.*
>
> *The following hierarchy regarding deliveries to site must be followed as far as reasonably practicable:*
>
> *1) Pre-slung loads to eliminate the need to access the load bed*
>
> *2) Mechanical means of loading/unloading to eliminate the need to access the load bed*
>
> *3) Vehicle based (collective fall protection) system (guard rails if access to the load bed is required, a fixed ladder access point/fitted step must be provided)*
>
> *4) Site based (collective fall protection) systems (e.g. air bags)*
>
> *5) Site based (fall arrest) systems (e.g. overhead systems).*
>
> *Where working environments are not maintained by the contractor, clear up notices will be issued as per Berkeley procedure*
>
> *The above is applicable to all delivery vehicles (including smaller vans and pick-up trucks) and under no circumstances are delivery drivers to carry out any form of activity at height without suitable and adequate protection measures in place to prevent falls in line with the above mitigation controls.*
>
> *The Contractor is to specify the method of unloading within a specific section within the RAMS.*
>
> *All vehicles attending site must be 'Construction Logistics and Cyclist Safety' (CLOCS) compliant or 'Fleet Operator Recognition Scheme' (FORS) Gold (as a minimum) accredited.*
>
> *Failure to comply with this standard will result in vehicles being turned away from site without unloading. No loss of time claims will be entertained for such an event.*

Every vehicle which arrives at the gate will be checked for FORS Compliance and any vehicle not complying will be refused entry and directed to exit safely.

5.1.2 Adherence to Designated Routes

Monitoring will take place to check that construction vehicles are adhering to the designated routes. If an alternative construction traffic route is required, this will be agreed in advance with WCC.

5.1.3 Delivery Scheduling and Re-Timing

BHCL will adopt an on-line delivery booking and tracking system, equal or better to the Free TFL online system.

BHCL will track all deliveries to the project including vehicle type, source and destination to allow CO2 emission calculations to be competed and checked against Key Performance Indicators (KPIs).

All deliveries and collections to/from the site will be co-ordinated, and ensure that as far as reasonably possible:

- Prior to delivery or collection, if required, hauliers will notify the relevant authorities (TfL, Police, Highways Authority etc.) in accordance with the Road Vehicles (Authorisation of Special Types) (General) Order 2003;
- Liaison will be undertaken with occupants of adjacent buildings to avoid delays to service deliveries due to construction vehicles; and
- Deliveries will be made on a ‘just in time’ basis.

Larger vehicle movements will be scheduled to avoid peak hours on the local road network, so far as reasonably practicable.

5.1.4 Use of Holding Areas and Consolidation Centres

The use of holding areas and off-site consolidation centres will be investigated as part of the detailed CLP and will form part of the overall delivery and waste removal strategy for the site so far as reasonably practicable.

5.1.5 Vehicle Choice

Fuel efficient and low emission (or electric) vehicles will be sought where vehicles used on site and for movement of goods and waste to and from the site require replacement and renewal as cost-neutral improvements.

5.2 Measures to Encourage Sustainable Freight

As the site is not immediately adjacent to a navigable water body or a rail line capable of offloading freight it is not practicable to receive a substantial proportion of construction deliveries by modes other than road.

5.3 Material Procurement Measures

5.3.1 Design for Manufacture and Off-site Manufacture

Off-site manufacture will be investigated and is being proposed, for example unitised cladding systems.

5.3.2 Re-use of Material on site

The site will aim to optimise the efficient use of material resources. The possible means to enhance materials resource efficiency include:

- maximising the material recovered from the demolition of existing buildings
- implementing Site Waste Management Plans to minimise the waste generated and maximise the materials recovered, reused and recycled in both the demolition and new build
- exceeding a threshold proportion of recycled and reclaimed content in the products and materials used in the new buildings

As much waste as possible will be recycled and, where possible, the total number of trips will be reduced by making sure vehicles delivering materials to the Site leave with waste.

5.3.3 Smart Procurement

BHCL will set out the strategy on procurement in the Detailed CLP and develop a plan to maximise smart procurement as far as reasonably practical.

5.4 Other Measures

5.4.1 Collaboration with Other Sites in the Area

PGPS is located adjacent to the WEG development which is also under construction. Collaboration is proposed to share the WEG construction access from Paddington Green at the early stages. This will reduce the impact of additional construction access points on the highway network.

Further collaboration and opportunities to reduce vehicle movements and minimise impact will be explored throughout the construction programme. This includes giving consideration to:

- combining and consolidating deliveries between sites
- common procurement
- combined waste management strategies

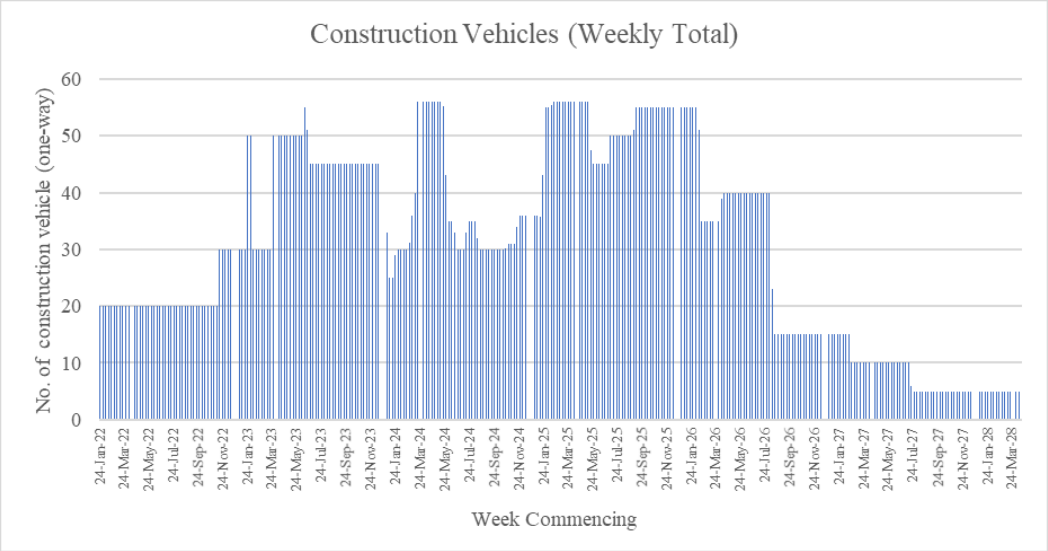
5.4.2 Staff Travel Plan

A staff travel plan will be prepared as part of the Detailed CLP to encourage the use of sustainable modes and take advantage of the site's accessibility by public transport. Given the site's accessibility, car use and construction related car parking will be discouraged. Staff cycle parking facilities will be provided.

6 Estimated Vehicle Movements

BHCL has provided the estimated weekly total number of construction vehicles, from 2022 to 2028. This is shown in Figure 9.

Figure 9: Indicative construction traffic movements



The highest number of vehicles in one week is expected to be 56. Berkeley Homes has advised that the peak number of daily vehicles could be 29. This equates to around 3 vehicles an hour when considered over a 10 hour working day. This level of vehicle movement is not expected to have a perceptible impact on the highway network.

7 Implementation, Monitoring and Updating

7.1 Management

The BHCL Project Director will be the CLP Co-ordinator and will take responsibility for the day to day management of the CLP and is the first point of contact for site issues.

The Project Director will oversee the effectiveness of the CLP and prepare regular updates to the Planning Authority when requested.

The CLP Co-ordinator will be named ahead of Construction commencing on the project and BHCL will notify the Planning Authority and TfL if and when the co-ordinator is replaced.

7.2 Monitoring and Review

The CLP will be communicated to all parts of the supply chain when tender enquiries are sent out and again when orders are placed. Periodic and reactive reminders will be sent to the entire supply chain reminding them of designated traffic routes to and from the project.

The CLP Co-ordinator will continually check vehicles arriving at the project and ensure they meet the required safety standards. Surveys of vehicle movements will be carried out at regular intervals throughout the construction project.

In accordance with guidance, the following will be monitored:

- Vehicle movements to site
    - Total vehicle movements
    - By vehicle type/size/age
    - Time spent on site
    - Consolidation centre utilisation (if relevant)
    - Origin and destination of vehicle arriving at or leaving site
    - Delivery/collection accuracy compared to schedule
    - Breaches and complaints:
- Community concerns about construction activities
    - Vehicle routing
    - Unacceptable queuing or parking
    - Adherence to safety & environmental standards & programmes
    - Low Emissions Zone (LEZ) and Ultra Low Emissions Zone (ULEZ) compliance
    - Anti-idling
- Safety:

- Logistics-related incidents
- Record of associated fatalities and serious injuries
- Methods staff are travelling to site
- Vehicles and operators not meeting safety requirements
- Personal safety surrounding the site

A Detailed CLP is expected to be required prior to works commencing on-site. As the construction activities are being monitored, the CLP will be reviewed and updated periodically where required.

Appendix A

Context Maps