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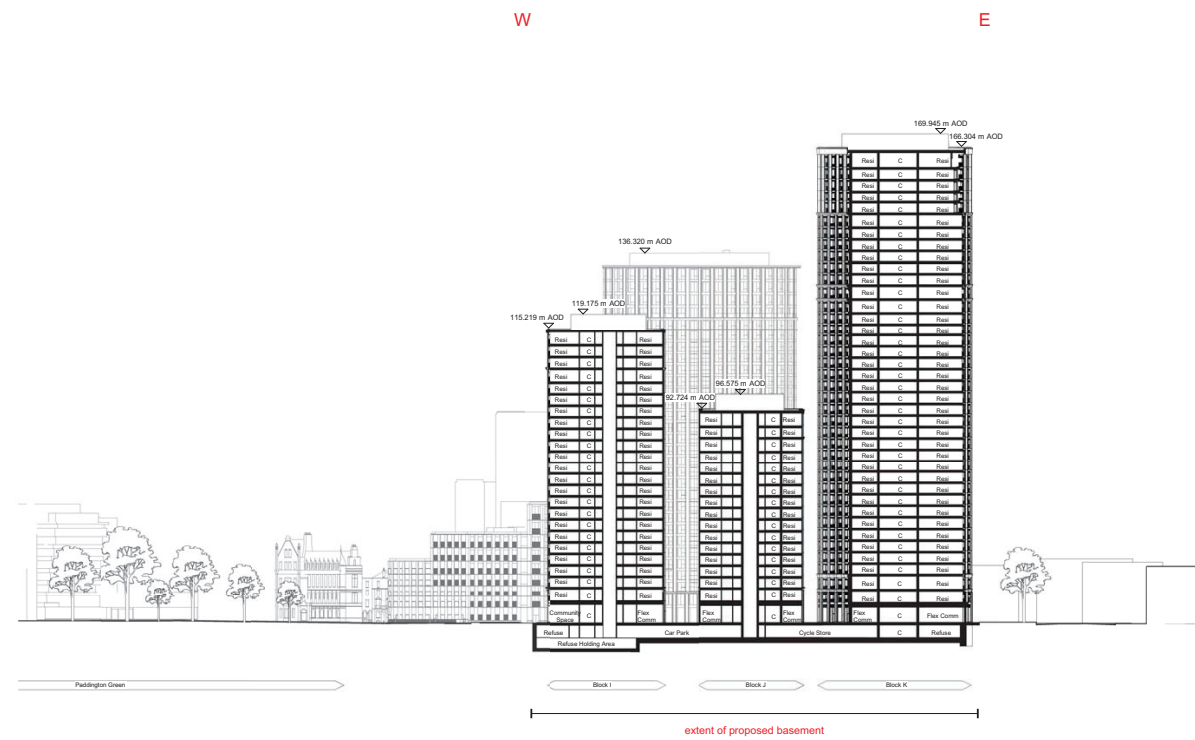


Fig 17 Proposed Section DD, 15044-SQP-ZZ-ZZ-DS-A-PL01653, Rev P2, 18/11/2022

Replacement Archaeological Desk Based Assessment MOLA 2022

Technical Appendix 2.7(R): Flood Risk Assessment Statement

Richard Green
Greater London Authority
City Hall
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Dear Mr Barrett

15.11.2022

PADDINGTON GREEN: REPLACEMENT FLOOD RISK ASSESSMENT STATEMENT

Ramboll UK Limited ('Ramboll') has been commissioned by Berkeley Homes (Central London) Limited (the 'Applicant') to prepare a Flood Risk Statement for the proposed redevelopment of a site at 2-4 Harrow Road, Paddington, London W2 1XJ (hereinafter referred to as the 'site').

The Applicant submitted an application on 1 April 2021 for full planning permission for the redevelopment of the site (21/02193/FULL). A 'Flood Risk Assessment' (FRA) letter was submitted as part of this application as required by WCC for major development applications. The succinct reporting format was adopted due to the small site area, the flood zone designation and the proposed use, as had been agreed during the EIA Scoping Process. The FRA letter formed an appendix to the Environmental Statement which reported on the environmental impact assessment of the redevelopment proposals (the '2021 propose development').

The application was considered at the Westminster City Council (WCC) planning committee on 9 September 2021. Whilst WCC officers made a recommendation for approval, the planning committee resolved to refuse the application contrary to the officers' recommendation.

The application was subsequently referred to the Mayor of London for 'Stage 2' review. Following a review of the application and the proposed decision of WCC, the Mayor of London considered that the proposed development was of strategic importance and had the potential to make an important contribution to housing and affordable housing supply. On 22 November 2021 the Mayor of London directed that he would act as the local planning authority for the purpose of determining the application.

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The Mayor of London's Stage 2 report (reference 2021/0711/S2) identified various areas where further work was anticipated in the event that the Mayor of London took over determination of the application. In particular, further work on urban design, building height, residential quality, climate change and transport was identified to be necessary.

The Applicant is now proposing to make amendments and refinements to the 2021 proposed development in order to address these areas of further work.

These amendments comprise the following:

- Removal of Block I bullnose and movement of block footprint 8 m east;
- Reduction of Block J footprint width by 10 m;
- Increase in distance between Block I and Block J from 9 m to 10 m;
- Removal of Block K shoulder element;
- Removal of podium element (now three standalone blocks linked at basement level);
- Increase in the height of Block I from 62.020 m above ground floor finished floor level (FFL) (94.355 m AOD) (18 storeys) to 83.019 m above ground Floor FFL (115.219 m AOD) (24 storeys);
- Increase in the height of Block J from 54.145 m above ground floor FFL (86.480 m AOD) (15 storeys) to 60.389 m above ground floor FFL (92.724 m AOD) (17 storeys);
- Increase in the height of Block K from 110.720 m above ground floor FFL (143.055 m AOD) (32 storeys) to 133.969 m above ground floor FFL (166.304 m AOD) (39 storeys);
- Removal of roof level communal, residential amenity space at Block J;
- Removal of office floorspace and amenity space;
- Relocation of internal residential amenity space at Block K from level 25 to level 1;
- Amendment of residential unit / floorplate design to increase percentage of social rented units;
- Removal of all north facing single aspect residential units and increase in dual aspect residential units up to approximately 55 %;
- Amendments to core arrangement (all cores now have a dual staircase, with one staircase terminating at basement level and one terminating at ground floor level);
- Amendments to B2 footprint (overall minor increase), previously B2 accessed via Block J core terminating at B2 level, now accessed via Block I core terminating at B2 level and redesign of waste management services;
- Amendments to B1 footprint (reduction of the western extent and north-eastern extent), on account of the following layout changes:
 - Omission of office bin store, office lifts and office facilities;
 - Relocation of residential bin store in Block K further south, to suit the new location of the refuse chute;
 - Relocation of plant to the north;
- Complete stopping-up of Newcastle Place to vehicle traffic with the exception of fire / emergency access;
- Increase in ground level public realm provision from 3,553 m² to 4,744 m²;
- Reduction in external communal amenity space provision from 835 m² to 0 m²;
- Increase in play space provision from 1,138 m² to 1,215 m²;
- Fully updated landscape design proposals; and
- Amendments to glazing ratio and the addition of spandrel panels to the façade to improve energy performance.

The proposed development as amended by the proposed amendments is hereafter referred to as the '2022 amended proposed development'.

A full update of the EIA has been undertaken to consider and assess the likely significant effects of the 2022 amended proposed development on the environment. This Flood Risk Assessment Statement has also been updated to assess the 2022 amended proposed development.

SITE INFORMATION AND BASELINE CONDITIONS

Site Location

As shown in Figure 1, the site is located at 2-4 Harrow Road, Paddington, London W2 1XJ. The immediate boundaries of the site are defined by the following:

- West End Gate (WEG) development to the north;
- Edgware Road to the east;
- Harrow Road and the A40 to the south;
- Paddington Green Road and open space to the west; and
- 14-17 Paddington Green (PG) development.

The wider context surrounding the site is of a mixed nature with residential use predominant to the north, north-west and north-east; small scale commercial use along Edgware Road to the east; larger scale mixed-use to the south of the A40 in the Paddington Basin (including hotels; the Saint Mary's Hospital; offices; and residential uses); public open space in the form of Paddington Green to the west; and educational facilities (including the City of Westminster College Paddington Green campus) to the north-west.

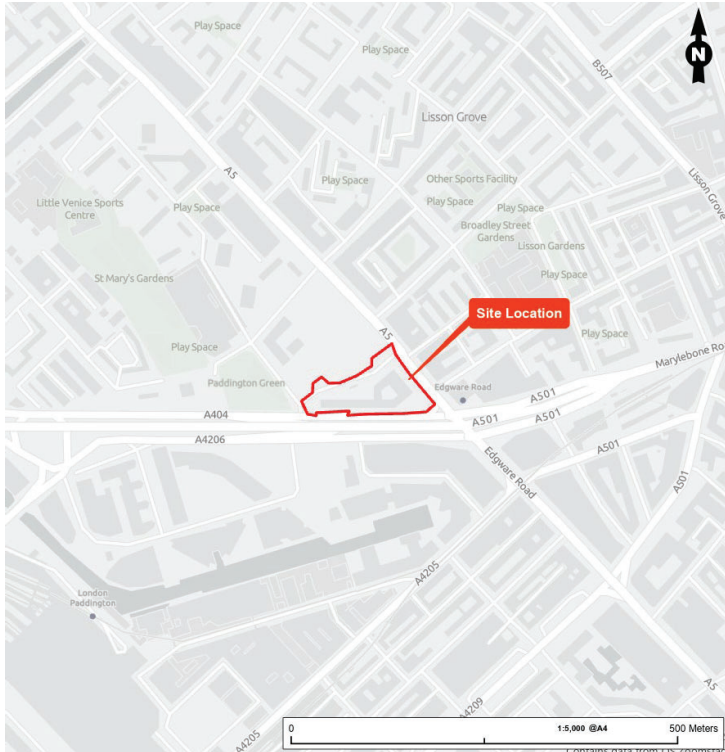


Figure 1: Site Location

The Edgware Road London Underground Station (which is served by the Bakerloo Line) is located approximately 50 m to the east of the site. Paddington Mainline Station is located approximately 400 m to the south-west.

The site is surrounded by a number of tall buildings located in the Hall Place Estate (Hall Tower and Braithwaite Tower, Parsons House) and WEG to the north; and the Hilton London Metropole Hotel, Burne House, Capital House and Merchant Square development to the south. There are further tall buildings with planning permission in the Paddington basin which are partially or yet to be implemented.

Current Site Description

The site covers an area of approximately 0.83 hectares (ha) and is currently occupied by the Paddington Green Police Station, which has been in this location since the 1970's, and Newcastle Place. The building was acquired by the Applicant in 2020 following the relocation of the police station to Church Street in 2018.

The site consists of the following:

- A single, interconnected building, albeit with a number of different, interrelated built forms, with hardstanding. This includes the 17 storey accommodation/section house on the eastern side of the site, a main office and police front of house 3 storey building below this on the eastern side of the site, and an 8 storey annex at the western side of the site, connected by a single storey building that previously housed high security cells;
- A single level of basement and a surface level podium car park to the rear, both accessed from Newcastle Place;
- Newcastle Place;
- An electricity substation in the north-eastern corner; and
- 13 existing trees.

The remaining areas of the site are formed of concrete, tarmac, cobble and paving hardstanding.

2022 Amended Proposed Development

The planning application description of the 2022 amended proposed development is as follows:

"Demolition of the existing building and redevelopment of the site to provide three buildings of 39, 24 and 17 storeys in height, providing residential units (including affordable units)(Class C3), commercial uses (Class E), a community use (Class F.2), 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, disabled car parking and cycle parking and connection through to the basement of the neighbouring West End Gate development."

The 2022 amended proposed development would comprise the following:

- Demolition of the Paddington Green Police Station;
- Excavation of a basement connection to the WEG development basement;
- Erection of three blocks (I, J, K) up to 39 storeys in height;
- Delivery of ground floor commercial uses and residential at upper floors, with associated landscaping and public realm; and
- Stopping up and partial pedestrianisation of Newcastle Place with associated landscaping and cycle parking.

The proposed land uses would comprise the following:

- 556 homes, including 219 affordable housing units (Class C3);
- 1,326 m² gross external area (GEA) flexible commercial and community space (Class E and F2);
- Servicing, disabled parking and cycle parking at basement level;
- Connection to the WEG basement; and
- Air Source Heat Pump led energy solution with a connection to the WEG CHP led energy centre for resilience purposes only.

An outline surface water drainage strategy has been prepared for the 2022 amended proposed development by Walsh Structural and Civil Engineers in October 2022¹, in accordance with local and national policy.

The principle of the surface water drainage strategy is that the 2022 amended proposed development would aim to reduce surface water discharge to greenfield runoff rates in accordance with the London Plan (as described below). There is limited space on-site to incorporate rainwater storage systems for reuse, and the use of infiltration techniques is not considered viable due to the basement extent on the site, the requirement for infiltration devices to be at least 5 m away from permanent structures and as the geological strata is likely to be London Clay Formation.

The use of open water features such as ponds as a design feature has also not been considered practical given the limited size of the site and amount of external area, relative to building envelope areas. Therefore, the outline surface water drainage strategy for the 2022 amended proposed development proposes to include green roofs as the primary SuDS feature with further surface water attenuation in the form of attenuation tank systems located on the basement slab.

It is proposed for all surface water runoff from sitewide catchments, including building roofs and ground floor external landscaping, to ultimately be routed to an attenuation storage tank located below the basement B1 slab. Stored water would then to be pumped to ground level at restricted rate, before discharging to the public combined network under gravity via a demarcation chamber.

Upstream of the proposed attenuation tank, the roofs of all three blocks would provide an opportunity to control surface water at source through the use of a green/brown roof system with a total area of approximately 800 m². The first level basement occupies almost the entire building footprint and therefore a large proportion of the ground floor soft landscaping areas are suspended above the basement structure. These areas would therefore act similarly to green roof features, by managing water at source.

There is an area south of Block K which is located outside of the basement extent line and is considered an opportunity area for permeable block paved landscaping areas. Such permeable paving could manage and treat surface water runoff from a section of the paved areas by means of sloping the hardstanding towards the block paving. However, this would need to be confirmed at detailed design stage.

There is also an opportunity for close-to-source attenuation in the form of blue roofs at podium level, provided there is sufficient pavement build up above the ground floor slab available to incorporate a shallow blue roof attenuation tank. The inclusion of attenuation at podium level could, if proved feasible at detailed design, allow for the shallow surface water runoff from these raised areas to bypass the attenuation tank at basement level and avoid being pumped.

Bioretention systems in the form of rain gardens are proposed within the wider planning application boundary area to the east of Block K in the locations of the existing TfL underpass. It is the intention of TfL that these would collect and treat runoff from the adjacent hard landscaping areas prior to discharge into the sewer system.

¹ Walsh Structural and Civil Engineers, Drainage Strategy Paddington Green Police Station (Doc No: 5362-WAL-ZZ-XX-RP-C-0300), October 2022

The proposed drainage network would be designed and installed to accommodate a 1 in 100 annual probability event including a potential 40 % increase in rainfall depths to allow for climate change in accordance with current national policy² which was updated in May 2022. Surface water discharge rates would be restricted to greenfield runoff rates, at a total rate of 4.86 l/s for the 1 in 100 (1%) Annual Exceedance Probability (AEP) event including 40 % climate change event.

A 40 % increase in rainfall depth within the London Management Catchment allows for a development lifetime beyond 2100 and uses the Upper End climate scenario (based on the 95th percentile). Therefore, the 2022 amended proposed development would not lead to any increase in downstream flood risk.

POLICY CONTEXT

National Policy

National Planning Policy Framework

The NPPF was updated in July 2021³, with flood risk remaining primarily regulated through planning policy. The NPPF requires that an FRA should be submitted with planning applications for all development sites within Flood Zones 2 and 3; and all development sites over 1 ha in area to determine the risks of flooding from all sources including rivers, the sea, sewers and groundwater. The NPPF sets out that flood risk should be defined according to Flood Zone 3 (High Probability), Flood Zone 2 (Medium Probability) and Flood Zone 1 (Low Probability).

Flood Zone 3 represents land that the EA considers could be affected by flooding:

- from the sea by an event with a 0.5% (1 in 200) or greater chance of occurring each year; or
- from a river by an event with a 1% (1 in 100) or greater chance of occurring each year.

Flood Zone 2 represents land that the EA considers could be affected by flooding, from rivers or the sea with up to a 0.1% (1 in 1,000) chance of occurring in each year.

Flood Zone 1 represents land assessed as having less than a 0.1% (<1 in 1,000) annual probability of flooding from rivers or the sea.

In terms of flood risk, the NPPF classifies land uses according to vulnerability as follows:

- Essential Infrastructure;
- Highly Vulnerable;
- More Vulnerable;
- Less Vulnerable; and
- Water-compatible Development.

Planning Practice Guidance

The Planning Practice Guidance (PPG) is an online resource which was first launched in March 2014 and is continuously updated. The 'Flood Risk and Coastal Change' part of the PPG provides further information on the requirements for SuDS. Surface water drainage for a proposed development should aim to discharge as high up the following hierarchy of options as reasonably practicable, in accordance with the following hierarchy:

- Into the ground (infiltration);
- To a surface water body;

² <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

³ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>.

- To a surface water sewer, highway drain, or another drainage system; and
- To a combined sewer.

The PPG also sets out that clear arrangements should be put in place for ongoing maintenance of any SuDS and drainage measures. However, it is acknowledged in the PPG that it is unlikely to be reasonably practical to expect compliance with the technical standards if these are more expensive than complying with building regulations.

Regional and Local Policy

London Plan, 2021

A new version of The London Plan⁴ was published on 3 March 2021.

Policy 'SI 12 - Flood Risk Management' states that "current and expected flood risk from all sources across London should be managed in a sustainable and cost-effective way in collaboration with the Environment Agency, the Lead Local Flood Authorities, developers and infrastructure providers".

Policy 'SI 13 - Sustainable Drainage' describes that, as London is at particular risk from surface water flooding, mainly due to the large extent of impermeable surfaces, "development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible. There should also be a preference for green over grey features, in line with the following drainage hierarchy:

1. rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)
2. rainwater infiltration to ground at or close to source
3. rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)
4. rainwater discharge direct to a watercourse (unless not appropriate)
5. controlled rainwater discharge to a surface water sewer or drain
6. controlled rainwater discharge to a combined sewer."

Sustainable Design Construction Supplementary Guidance, 2014

The 'Sustainable Design and Construction Supplementary Planning Guidance'⁵ produced by the Mayor of London, sets out that developers will be expected to clearly demonstrate that all opportunities to minimise runoff have been taken, such that discharge is as close to greenfield rate as practical.

It is suggested that, on previously developed sites, runoff rates should not be more than three times the calculated greenfield rate; however, it is acknowledged that there are exceptions to this where a pumped discharge would be required to meet the standards or where surface water drainage is to tidal waters.

Westminster City Council City Plan, 2021

The WCC City Plan 2019-2040⁶ was adopted on 21 April 2021.

WCC City Plan Policy '35 - Flood Risk' requires that "all developments should be safe for their lifetime from the risk of flooding, complying with the council's Strategic Flood Risk Assessment (SFRA), Surface Water Management Plan (SWMP), Local Flood Risk Management Strategy (LFRMS) and the Mayor of London's Regional Flood Risk Appraisal (RFRA)".

⁴ Greater London Authority, 2021. The London Plan, The Spatial Development Strategy for Greater London.

⁵ Greater London Authority, 2014. Sustainable Design and Construction. Supplementary Planning Guidance. London Plan 2011 Implementation Framework. London.

⁶ Westminster City Council, 2019. Westminster's Draft City Plan 2019 - 2040. London. WCC.

It is confirmed that "A site-specific Flood Risk Assessment (FRA) must be submitted for:

- developments of 1 hectare or greater;
- all developments in Flood Zones 2 and 3; and
- all developments within a Surface Water Flood Risk Hotspot".

As described in this Flood Risk Statement, the site is less than 1 ha in area, is located entirely outside of Flood Zones 2 and 3, and is located outside of a Surface Water Flood Risk Hotspot (although land offsite to the west is located within a Surface Water Flood Risk Hotspot as identified within the 2019 Draft Strategic Flood Risk Assessment). Therefore, an FRA is not considered to be a requirement as part of the planning application.

ASSESSMENT OF FLOOD RISK

Tidal and Fluvial

The EA Flood Map for Planning (Figure 2) is used to identify the risk of flooding from tidal and/or fluvial flooding sources, using the three Flood Zones described previously. This mapping shows the entire site to be located within Flood Zone 1 (Low probability) with a less than a 1 in 1,000 (0.1%) annual probability of flooding from tidal or fluvial sources. The closest areas within Flood Zones 2 or 3 are located at least 2.5 km distant from the site. The EA's online geo-spatial data (as shown in Figure 2) suggests that there are no records of historic flooding at the site; the closest record of historic flooding being approximately 3.9 km south-east. Therefore, the risk of flooding from this source is considered low.

In accordance with NPPF, new development proposals located within Flood Zone 1 and less than 1 ha would not require the submission of an FRA as part of a planning application. No further assessment of fluvial or tidal flood risk is considered necessary.

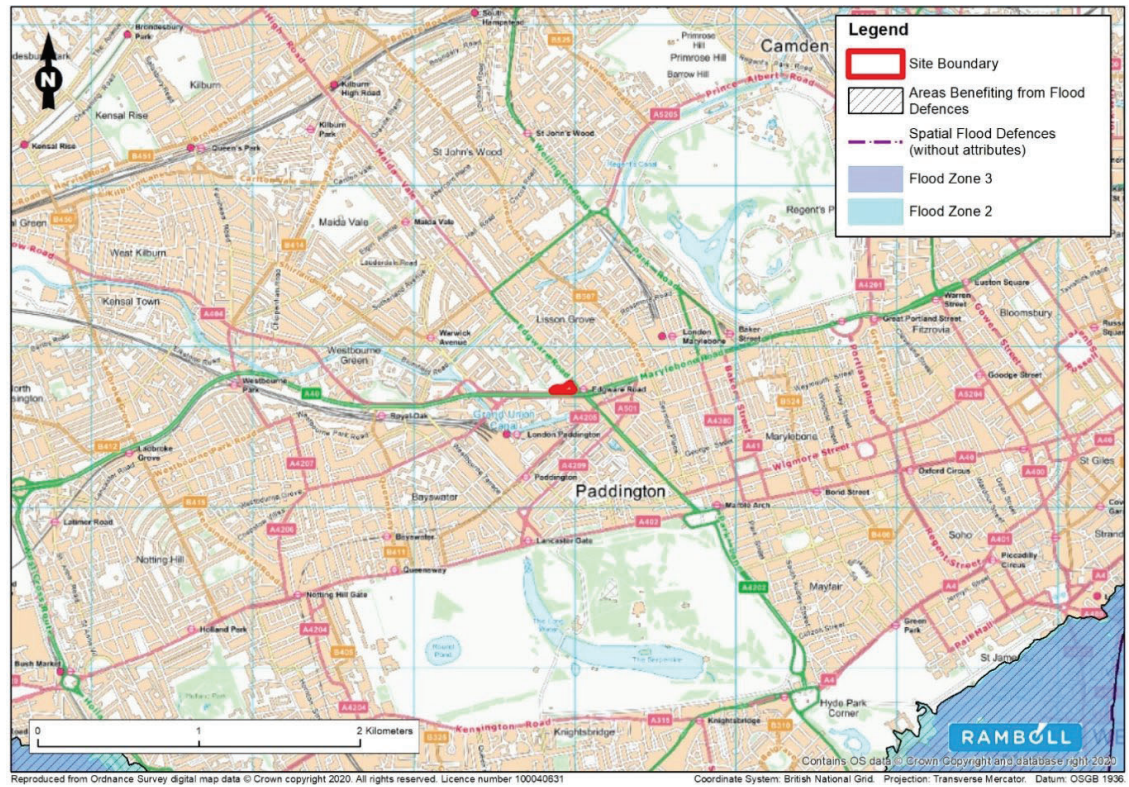


Figure 2: Flood Zone Extents

Pluvial (Surface Water)

The EA’s online Flood Map for Surface Water⁷ presents a broad scale assessment of potential pluvial flood risk which is not considered within the extents of Flood Zones 2 and 3. The Flood Map for Surface Water delineates risk into the following four categories:

- Very Low - each year, this area has a chance of flooding of less than 1 in 1,000 (<0.1 %);
- Low - each year, this area has a chance of flooding of between 1 in 1,000 (0.1 %) and 1 in 100 (1 %);
- Medium - each year, this area has a chance of flooding of between 1 in 100 (1 %) and 1 in 30 (3.3 %); and
- High - each year, this area has a chance of flooding of greater than 1 in 30 (3.3 %).

The EA Flood Map for Surface Water Flooding as shown in Figure 3, shows the majority of the site, within an area at Very Low risk of flooding from surface water. There are areas in the eastern corner, part of the A404 immediately south and Newcastle Place immediately north which are shown to be at Low and Medium surface water flood risk. However, the modelling used to determine these areas of surface water flood risk does not take detailed account of existing drainage assets nor of those which would be installed as part of the 2022 amended proposed development. The mapping is also based on pre-development topography. Accordingly, the EA’s Flood Map should be interpreted with caution. No further assessment of pluvial flood risk is considered necessary. The SFRA indicates that land off-site to the west is within a Surface Water Flood Risk Hotspot but this does not affect the site.

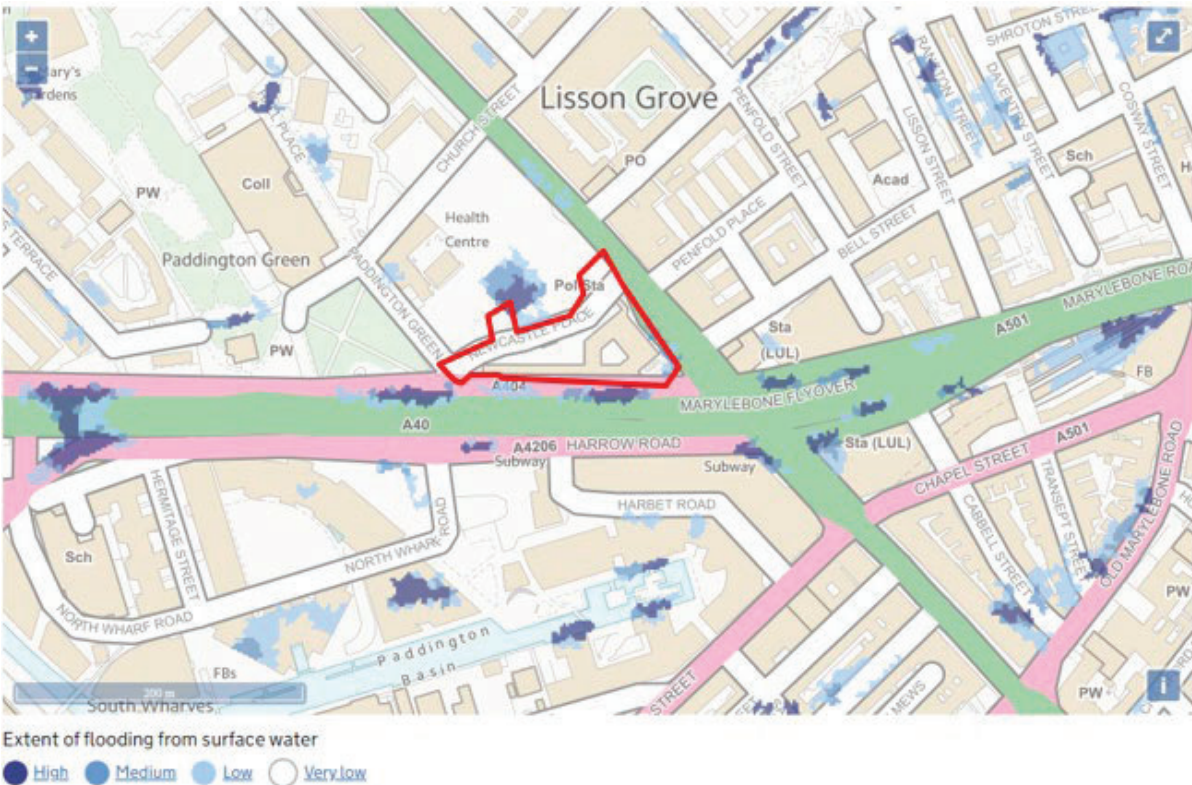


Figure 3: EA Online Flood Map for Surface Water

⁷ <https://flood-warning-information.service.gov.uk/long-term-flood-risk>.

Reservoir

The EA publishes online flood mapping which presents the flood risk associated with failure of reservoirs. Such mapping represents a ‘worst case’ scenario assuming that a reservoir would release all the water it contains, if it were to fail. The site is not shown to be located within an area at risk from a reservoir breach.

Groundwater

The City of Westminster Strategic Flood Risk Assessment (SFRA)⁸ sets out that the London Regional Flood Risk Appraisal (2009) advises that: “There are no known locations where groundwater flooding has been a problem”. It is concluded in the SFRA that flooding from rising groundwater is not considered to be a major problem in Westminster.

The basement waterproof grade would be determined at the detailed design stage by the principal contractor, subject to agreement with the Applicant and WCC Building Control, which would ensure no ingress of groundwater. All waterproofing provisions would be subject to agreement with building control. The design of the waterproofing systems would be audited, approved and certified by an independent specialist registered with the Property Care Association (PCA). The retaining walls would be designed to account for potential hydrostatic pressure and would also be designed to prevent flotation.

SUMMARY

The site is considered to be at low risk of flooding from the sources described above. As the site is less than 1 ha in area, no further assessment of flood risk is considered necessary and the 2022 amended proposed development is considered acceptable in flood risk terms.

An outline surface water drainage strategy has been prepared for the 2022 amended proposed development, informed by the constrained nature of the site. It is proposed that surface water discharge rates would be restricted to greenfield runoff rates, at a total rate of 4.86l/s for the 1 in 100 (1%) Annual Exceedance Probability (AEP) event including 40% climate change event.

The strategy proposes to include green roofs as the primary SuDS feature with further surface water attenuation in the form of attenuation tank systems located on the basement slab. Stored water would then be pumped to ground level at restricted rate, before discharging to the public combined network. Further opportunities to reduce surface water run off rates exist in the form of permeable paving and blue roofs, subject to confirmation at the detailed design stage.

The proposed drainage network has, therefore, been designed to contain a 1 in 100 annual probability event including a potential 40 % increase in rainfall depths to allow for climate change in accordance with national policy. Therefore, the 2022 amended proposed development would not lead to any increase in downstream flood risk.

Yours sincerely

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⁸ City of Westminster Planning and City Development, Strategic Flood Risk Assessment, May 2010.

Technical Appendix 2.8(R): Transport Data

PGPS EIA Traffic Flow Assumptions

2015 Baseline Traffic Flows have been taken from the West End Gate (WEG) EIA (planning ref: 16/11562/FULL). DfT traffic data over time has been reviewed. This was available for Edgware Road and Westway. The data shows that traffic flows have not increased since 2015 (see graphs below). Background traffic growth is generally not expected in Central London locations. On this basis, no TEMPRO growth has been applied to future year scenarios. Traffic growth has been accounted for by applying traffic from cumulative schemes in the local area. The data presented is the best information available, given traffic surveys were not possible because of the 2020 covid / lockdown situation.

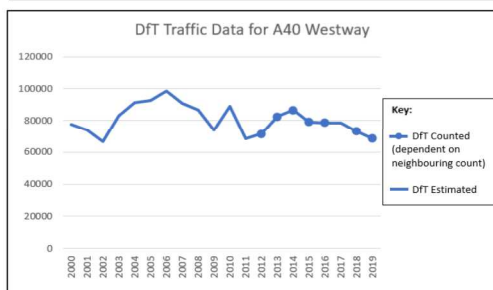
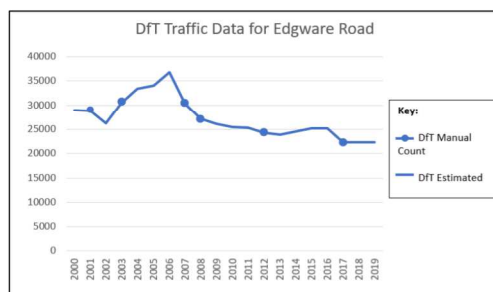
For the A40 Westway, baseline flows taken from 2019 DfT count data.

WEG EIA was assessed for 812 units. The WEG development flows by link have been adjusted on a pro-rata basis to the number of expected WEG units in each scenario. A subsequent planning application (ref: 16/12162/FULL) provided a loading bay on Newcastle Place, and an approximate adjustment has been made to reallocated WEG residential delivery trips from Church Street to Newcastle Place to reflect this. WEG AAWT: Residential weekday to AADT ratio of 95% assumed.

Survey data of residential developments suggests that HGVs for servicing are not likely to be a daily occurrence. For a robust assessment, 5% of residential deliveries have been assumed to be HGVs.

No average speed data is available and speed limits have been provided.

Construction traffic has been provided by Berkeley Homes. WEG construction traffic distributed 50% north and 50% west based on the WEG EIA. PGPS construction traffic distributed 25% north and 75% west based on assumed likely traffic routes on the strategic PGPS peak construction traffic is 2025, when WEG is expected to be completed (March 2025). This scenario has therefore been used for the Demolition and Construction Future Baseline.



Subject	Paddington Green Police Station (PGPS) – Proposed Vehicle Trips in the AM and PM Peak
Job No/Ref	277685-00
Date	18 November 2022

1. Demolition and Construction

Based on construction information provided by Berkeley Homes, the highest construction traffic generated in one week is estimated to be 75 HGVs (one-way). Assuming a 5.5 day working week and a 10 hour working day, this equates to an average of c.one HGV per hour (one-way).

The expected level of vehicle movement is very low and will not affect severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, or accidents and safety. Demolition and construction traffic would be managed through the Construction Logistics Plan (CLP). Accordingly, no significant traffic and transport effects are expected during demolition and construction.

Completed Development

The proposed development will be car-free, except for the provision of 17 accessible car parking spaces. Therefore, it is not expected there the proposed development will be a significant net contributor to residential car trips onto the surrounding roads.

The proposed development is estimated to generate the following vehicle trips in the peak hours:

- 10 and 9 two-way car trips in the AM and PM peak, respectively. These will access the basement via Church Street.
- Two no. two-way taxi trips in both peak hours. These will access Newcastle Place/loop street north of The Westmark.

Six delivery vehicles in the AM peak and two vehicles in the PM peak. The residential deliveries will access Newcastle Place/loop street, the residential bulky deliveries 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 1 and Figure 2 show the proposed scheme vehicle trips in the AM and PM peak hours.

Subject Paddington Green Police Station (PGPS) – Proposed Vehicle Trips in the AM and PM Peak

Job No/Ref 277685-00

Date 18 November 2022

Figure 1: Proposed vehicle trips in the AM peak

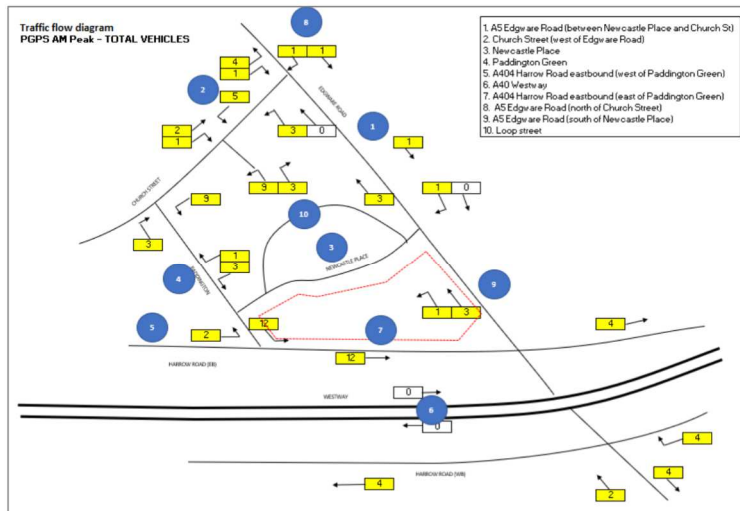
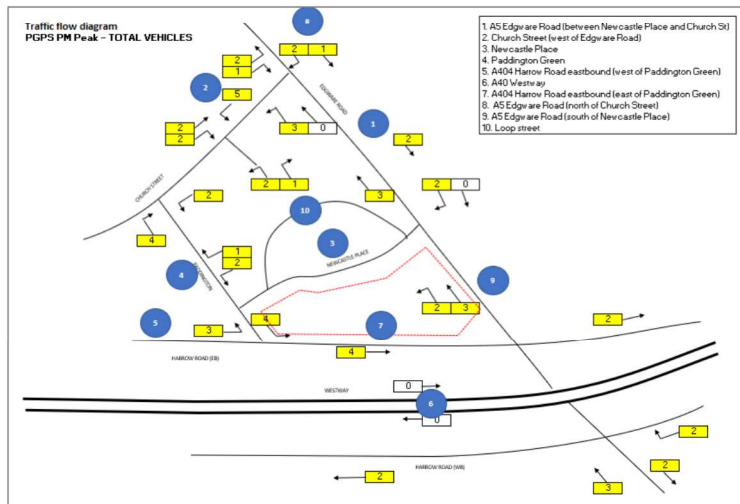


Figure 2: Proposed vehicle trips in the PM peak



Subject Paddington Green Police Station (PGPS) – Proposed Vehicle Trips in the AM and PM Peak

Job No/Ref 277685-00

Date 18 November 2022

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

- Church Street: 12 vehicles to the west and 10 vehicles to the east of basement access.
- Newcastle Place / loop street: 4 vehicle trips.
- Paddington Green (south of Newcastle Place): 14 vehicle trips
- Edgware Road: 4 vehicle trips
- Harrow Road: 12 vehicle trips

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

- Church Street: 6 vehicles to the west and 6 vehicles to the east of basement access.
- Newcastle Place / loop street: 3 vehicle trips
- Paddington Green (south of Newcastle Place): 7 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 number of additional vehicles on the local streets. The highest increase is 14 vehicle trips on Paddington Green, south of Newcastle Place. This equates to, on average, one vehicle every four minutes. The peak hour flows are therefore not expected to exceed the relevant thresholds at which significant traffic and transport and accessibility effects could result.

PGPS Traffic Flows for EIA - FULL OUTPUT

v4

Scenarios

The following demolition and construction assessment scenarios have been considered:

- *Scenario 1: Existing Baseline (2022) (which includes the completed and occupied cumulative schemes at Paddington Exchange and at WEG Blocks A to F. No Tempus background growth applied from 2020 to 2022 due to car-free TfL policy in London);
- *Scenario 2: Future Baseline (2026) year of peak construction (which includes completed and occupied cumulative scheme at 14-17 PG Blocks G + H);
- *Scenario 3: Future Baseline (2026) year of peak construction (which includes completed and occupied cumulative scheme at 14-17 PG Blocks G + H) + Proposed Development; and
- *Scenario 4: Future Baseline (2026) + Proposed Development + Cumulative Development.

The following completed development assessment scenarios have been considered:

- *Scenario 1: (2022) (which includes the completed and occupied cumulative Paddington Exchange scheme and WEG Blocks A to F. No Tempus background growth applied from 2020 to 2022 due to car-free TfL policy in London);
- *Scenario 2: Future Baseline (2030) (which includes completed and occupied 14-17 PG Blocks G + H); and
- *Scenario 3: Future Baseline (2030) + Proposed Development; and
- *Scenario 4: Future Baseline (2030) + Proposed Development + Cumulative Development.

WEG 2015 Existing Baseline

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	26,619	3,823	14%	22,351	3,060	14%	32
2. Church Street (west of Edgware Road)	1,560	33	2%	1,554	37	2%	32
3. Newcastle Place	376	47	13%	368	55	15%	32
4. Paddington Green	1,221	32	3%	1,304	37	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,296	1,307	5%	21,513	1,138	5%	48
6. A40 Westway*	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	24,586	1,698	7%	20,910	1,479	7%	48
8. AS Edgware Road (north of Church Street)	27,673	3,854	14%	23,247	3,087	13%	32
9. AS Edgware Road (south of Newcastle Place)	26,706	3,664	14%	22,380	2,928	13%	32

* DfT Count Data for 2019, AAWT derived from 2015 factor

Occupied WEG Block A-F (628 units)

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	402	50	13%	423	53	13%	32
2. Church Street (west of Edgware Road)	610	67	11%	642	71	11%	32
3. Newcastle Place	19	0	0%	20	0	0%	32
4. Paddington Green	82	0	0%	86	0	0%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	70	9	12%	73	9	12%	48
6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	485	9	2%	510	9	2%	48
8. AS Edgware Road (north of Church Street)	209	17	8%	220	18	8%	32
9. AS Edgware Road (south of Newcastle Place)	403	50	12%	424	53	13%	32

Occupied Cumulative Schemes in Existing Baseline

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	66	0	0%	70	0	0%	32
2. Church Street (west of Edgware Road)	0	0	0%	0	0	0%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	0	0	0%	0	0	0%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	0	0	0%	0	0	0%	48
6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	46	0	0%	48	0	0%	48
8. AS Edgware Road (north of Church Street)	66	0	0%	70	0	0%	32
9. AS Edgware Road (south of Newcastle Place)	66	0	0%	70	0	0%	32

Demolition and Construction

Scenario 1: Existing Baseline (2022) - includes the completed and occupied cumulative schemes at Paddington Exchange and at WEG Blocks A to F. No Tempus background growth applied from 2020 to 2022 due to car-free TfL policy in London).

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	27,088	3,873	14%	22,844	3,113	14%	32
2. Church Street (west of Edgware Road)	2,170	100	5%	2,196	108	5%	32
3. Newcastle Place	395	47	12%	388	55	14%	32
4. Paddington Green	1,303	32	2%	1,390	37	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,366	1,316	5%	21,586	1,147	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,117	1,707	7%	21,468	1,488	7%	48
8. AS Edgware Road (north of Church Street)	27,948	3,871	14%	23,537	3,105	13%	32
9. AS Edgware Road (south of Newcastle Place)	27,175	3,714	14%	22,874	2,981	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

Occupied WEG Blocks in 2026 (844 units)

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	540	68	13%	569	71	12%	32
2. Church Street (west of Edgware Road)	763	90	12%	803	95	12%	32
3. Newcastle Place	83	0	0%	87	0	0%	32
4. Paddington Green	110	0	0%	116	0	0%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	94	11	12%	98	12	12%	48

Residential Weekday to AADT factor

0.95

A40 AADT to AAWT factor (all vehicles)

0.85

A40 AADT to AAWT factor (HGV)

0.88

6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	652	11	2%	686	12	2%	48
8. AS Edgware Road (north of Church Street)	281	23	8%	295	24	8%	32
9. AS Edgware Road (south of Newcastle Place)	542	68	12%	570	71	12%	32

Occupied Cumulative Schemes in Future Baseline

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	66	0	0%	70	0	0%	32
2. Church Street (west of Edgware Road)	0	0	0%	0	0	0%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	0	0	0%	0	0	0%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	0	0	0%	0	0	0%	48
6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	46	0	0%	48	0	0%	48
8. AS Edgware Road (north of Church Street)	66	0	0%	70	0	0%	32
9. AS Edgware Road (south of Newcastle Place)	66	0	0%	70	0	0%	32

Scenario 2: Future Baseline (2026) (which includes completed and occupied 14-17 PG Blocks G + H)

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	27,226	3,891	14%	22,990	3,131	14%	32
2. Church Street (west of Edgware Road)	2,323	123	5%	2,357	132	6%	32
3. Newcastle Place	459	47	10%	455	55	12%	32
4. Paddington Green	1,331	32	2%	1,420	37	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,390	1,318	5%	21,611	1,150	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,284	1,709	7%	21,644	1,491	7%	48
8. AS Edgware Road (north of Church Street)	28,020	3,877	14%	23,612	3,111	13%	32
9. AS Edgware Road (south of Newcastle Place)	27,314	3,732	14%	23,020	2,999	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

PGPS Demolition and Construction Traffic (2025)

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	1	1	100%	2	1	50%	32
2. Church Street (west of Edgware Road)	1	1	100%	2	1	50%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	1	1	100%	2	1	50%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	8	5	63%	10	6	60%	48
6. A40 Westway	1	1	100%	2	1	50%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	8	5	63%	10	6	60%	48
8. AS Edgware Road (north of Church Street)	3	2	67%	3	2	67%	32
9. AS Edgware Road (south of Newcastle Place)	1	1	100%	2	1	50%	32

Scenario 3: Future Baseline (2026) (which includes completed and occupied 14-17 PG Blocks G + H) + Proposed Development construction traffic

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	27,227	3,892	14%	22,992	3,132	14%	32
2. Church Street (west of Edgware Road)	2,324	124	5%	2,359	133	6%	32
3. Newcastle Place	459	47	10%	455	55	12%	32
4. Paddington Green	1,332	33	2%	1,422	38	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,398	1,323	5%	21,621	1,156	5%	48
6. A40 Westway	68,592	3,023	4%	58,639	2,646	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,292	1,714	7%	21,654	1,497	7%	48
8. AS Edgware Road (north of Church Street)	28,023	3,879	14%	23,615	3,113	13%	32
9. AS Edgware Road (south of Newcastle Place)	27,315	3,733	14%	23,022	3,000	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

Scenario 4: Future Baseline (2026) + Proposed Development construction traffic + Cumulative Development.

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. AS Edgware Road (between Newcastle Place and Church Street)	27,309	3,892	14%	23,078	3,132	14%	32
2. Church Street (west of Edgware Road)	2,324	124	5%	2,359	133	6%	32
3. Newcastle Place	459	47	10%	455	55	12%	32
4. Paddington Green	1,332	33	2%	1,422	38	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,398	1,323	5%	21,621	1,156	5%	48
6. A40 Westway	68,592	3,023	4%	58,639	2,646	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,292	1,714	7%	21,654	1,497	7%	48
8. AS Edgware Road (north of Church Street)	28,105	3,879	14%	23,701	3,113	13%	32
9. AS Edgware Road (south of Newcastle Place)	27,397	3,733	14%	23,108	3,000	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

Completed Development

Scenario 1: Completed Development: Existing Baseline (2022) [which includes the completed and occupied cumulative Paddington Exchange scheme and WEG Blocks A to F. No Temporo background growth applied from 2020 to 2022 due to car-free TfL policy in London].

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	27,088	3,873	14%	22,844	3,113	14%	32
2. Church Street (west of Edgware Road)	2,170	100	5%	2,196	108	5%	32
3. Newcastle Place	395	47	12%	388	55	14%	32
4. Paddington Green	1,303	32	2%	1,300	37	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,366	1,316	5%	21,586	1,147	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,117	1,707	7%	21,468	1,488	7%	48
8. A5 Edgware Road (north of Church Street)	27,948	3,871	14%	23,537	3,105	13%	32
9. A5 Edgware Road (south of Newcastle Place)	27,175	3,714	14%	22,874	2,981	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

Scenario 2: Future Baseline (2030) [which includes completed and occupied 14-17 PG Blocks G + H]

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	27,226	3,891	14%	22,990	3,131	14%	32
2. Church Street (west of Edgware Road)	2,323	123	5%	2,357	132	6%	32
3. Newcastle Place	459	47	10%	455	55	12%	32
4. Paddington Green	1,331	32	2%	1,420	37	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,390	1,318	5%	21,611	1,150	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,284	1,709	7%	21,644	1,491	7%	48
8. A5 Edgware Road (north of Church Street)	28,020	3,877	14%	23,612	3,111	13%	32
9. A5 Edgware Road (south of Newcastle Place)	27,314	3,732	14%	23,020	2,999	13%	32
10. Loop road (north of Westmark)	35	0	0%	37	0	0%	32

PGPS Proposed Development

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	41	2	5%	45	2	4%	32
2. Church Street (west of Edgware Road)	59	4	7%	66	5	8%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	83	5	6%	92	5	5%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	21	2	10%	24	2	8%	48
6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	62	3	5%	68	3	4%	48
8. A5 Edgware Road (north of Church Street)	42	3	7%	48	4	8%	32
9. A5 Edgware Road (south of Newcastle Place)	41	2	5%	45	2	4%	32
10. Loop road (north of Westmark)	50	2	4%	55	3	5%	32

Scenario 3: Future Baseline (2030) + Proposed Development

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	27,267	3,893	14%	23,035	3,133	14%	32
2. Church Street (west of Edgware Road)	2,382	127	5%	2,423	137	6%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	1,414	37	3%	1,512	42	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,411	1,320	5%	21,635	1,152	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2,645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,346	1,712	7%	21,711	1,494	7%	48
8. A5 Edgware Road (north of Church Street)	28,062	3,880	14%	23,660	3,115	13%	32
9. A5 Edgware Road (south of Newcastle Place)	27,355	3,734	14%	23,065	3,001	13%	32
10. Loop road (north of Westmark)	544	49	9%	547	58	11%	32

Cumulative Developments

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	82	0	0%	86	0	0%	32
2. Church Street (west of Edgware Road)	0	0	0%	0	0	0%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	0	0	0%	0	0	0%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	0	0	0%	0	0	0%	48
6. A40 Westway	0	0	0%	0	0	0%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	0	0	0%	0	0	0%	48
8. A5 Edgware Road (north of Church Street)	82	0	0%	86	0	0%	32
9. A5 Edgware Road (south of Newcastle Place)	82	0	0%	86	0	0%	32
10. Loop road (north of Westmark)	0	0	0%	0	0	0%	32

Scenario 4: Future Baseline (2030) + Proposed Development + Cumulative Development

Highway Links	AADT			AAWT			Speed Limit
	All Vehs	HGVs	% HGV	All Vehs	HGVs	% HGV	
1. A5 Edgware Road (between Newcastle Place and Church Street)	27,349	3,893	14%	23,121	3133	14%	32
2. Church Street (west of Edgware Road)	2,382	127	5%	2,423	137	6%	32
3. Newcastle Place	0	0	0%	0	0	0%	32
4. Paddington Green	1,414	37	3%	1,512	42	3%	32
5. A404 Harrow Road eastbound (west of Paddington Green)	25,411	1,320	5%	21,635	1152	5%	48
6. A40 Westway	68,591	3,022	4%	58,637	2645	5%	48
7. A404 Harrow Road eastbound (east of Paddington Green)	25,346	1,712	7%	21,711	1494	7%	48
8. A5 Edgware Road (north of Church Street)	28,144	3,880	14%	23,746	3115	13%	32
9. A5 Edgware Road (south of Newcastle Place)	27,437	3,734	14%	23,151	3001	13%	32
10. Loop road (north of Westmark)	544	49	9%	547	58	11%	32

Technical Appendix 6.1(R): Socio-Economic Planning Policy and Legislation

Appendix 6.1(R): Socio-Economic Legislation and Policy

PROJECT NAME	Paddington Green Police Station
REF.	Appendix 6.1(R)
DATE	October 2022

NATIONAL PLANNING POLICY

National Planning Policy Framework, 2021

The National Planning Policy Framework (NPPF) sets out the Government’s planning policies for England and how these are expected to be applied. It should be seen as a framework within which locally prepared plans and other development can be produced.

The planning system has three over-arching objectives (paragraph 8):

- An economic objective: to build the economy by ensuring that the right amount of land is available at the right time and place in order to support growth and innovation;
- A social objective: to support strong, vibrant and healthy communities, ensuring that sufficient homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs; and
- An environmental objective: contributing to protecting and enhancing our natural, built and historic environment.

At the heart of the NPPF is a presumption in favour of sustainable development, which should be applied to both plan-making and decision-making. In the case of the former, it means that the objectively assessed needs for housing and other uses should be provided for in plans. For the latter, it means approving proposals that accord with the development plan without delay and in the absence of a development plan or an out of date one, approving unless the NPPF provides a clear reason for refusal. In both plan-making and decision-taking, should the policies’ or proposals’ adverse impacts significantly and demonstrably outweigh the benefits when assessed against the NPPF’s policies then they should also not be progressed or the application refused.

The NPPF sets out a number of policies to deliver sustainable development, those of most relevance to this chapter are as follows:

- Chapter 5 – Delivering a sufficient supply of homes: the objective of significantly boosting the supply of homes with a sufficient amount and variety of land brought forward where it is needed, addressing the needs of groups with specific housing requirements, and developing land that has permission without unnecessary delay. Strategic policies should be informed by a local housing need assessment and where major housing development is proposed at least 10% of the homes are to be available for affordable home ownership.
- Chapter 6 – Building a strong, competitive economy: Policies should set a clear economic strategy encouraging sustainable economic growth with regard to Local Industrial Strategies and other local policies for economic development and regeneration. They should identify and set criteria for strategic sites, address potential barriers to investment (e.g. inadequate infrastructure, services or

Appendix 6.1(R): Socio-Economic Legislation and Policy

housing, or a poor environment) and be flexible, enabling a rapid response to changes in economic circumstances.

- Chapter 7 – Ensuring the vitality of town centres: Planning policies and decisions should support the role that town centres play at the heart of local communities, by taking a positive approach to their growth, management and adaptation. They should promote town centres’ long-term vitality and viability by allowing them to grow and diversify in a way that can respond to rapid changes in the retail and leisure industries, allowing a suitable mix of uses (including housing) that reflects their distinctive characters.
- Chapter 8 – Promoting healthy and safe communities: Planning policies and decisions should seek to achieve healthy, inclusive and safe places that promote social interaction, are safe and accessible, enable and support healthy lifestyles, and, provide the social, recreational and cultural facilities and services the community needs. In particular, Chapter 8 identifies the need for:
 - mixed-use developments, strong neighbourhood centres, street layouts that allow for easy pedestrian and cycle connections within and between neighbourhoods, and active street frontages;
 - prevention of crime and disorder, and the fear of crime, so that they do not undermine the quality of life or community cohesion, using clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas;
 - policies and proposals that address identified local health and well-being needs through the provision of safe and accessible green infrastructure, sports facilities, local shops, access to healthier food, allotments, and, layouts that encourage walking and cycling;
 - sufficient choice of school places to meet the needs of existing and new communities;
 - promotion of public safety, taking into account wider security and defence requirements by anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate (including transport hubs, night-time economy venues, cinemas and theatres, sports stadia and arenas, shopping centres, health and education establishments, places of worship, hotels and restaurants, visitor attractions and commercial centres);
 - access to a network of high quality open spaces and opportunities for sport and physical activity to support the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and should consider opportunities for new provision.
- Chapter 12 – Achieving well-designed places: Good design is a key aspect of sustainable development, creating better places in which to live and work and helping to make development acceptable to communities. Amongst several benefits of good design, the NPPF references the benefits that design can have in creating places that are safe, inclusive and accessible, promoting health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Appendix 6.1(R): Socio-Economic Legislation and Policy

Planning Practice Guidance

The Planning Practice Guidance (PPG) was last updated by the MHCLG in June 2021. Relevant guidance addresses the following:

- Ensuring the vitality of town centres;
- Health and wellbeing; and
- Housing and economic land availability assessment.

REGIONAL PLANNING POLICY

London Plan, 2021

The London Plan 2021 is the Spatial Development Strategy for Greater London, adopted in March 2021. It sets out a framework for how London will develop over the next 20-25 years and the Mayor’s vision for Good Growth.

Good Growth is about working to re-balance development in London towards more genuinely affordable homes for working Londoners to buy and rent, delivering a more socially integrated and sustainable city, where people have more of a say, and bringing the best out of existing places while providing new opportunities to communities.

The population of London is estimated to increase by 70,000 every year, reaching 10.8 million in 2041. This means that to meet demand, tens of thousands of new homes need to be built, along with space for new jobs.

The minimum ten-year housing provision target for the period from 2019/20 -2028/29 for the City of Westminster (CoW) is 9,850 homes, which corresponds to an annual target of 985 homes.

Policy ‘GG1 – Building strong and inclusive communities’ builds on the city’s tradition of openness, diversity and equality and helps deliver strong and inclusive communities.

Policy ‘GG4 Delivering the homes Londoners need’ creates a housing market that works better for all Londoners.

Policy ‘GG5 – Growing a good economy’ conserves and enhances London’s global economic competitiveness and ensures that economic success is shared amongst all Londoners.

Policy ‘H1 – Increasing housing supply’ sets the ten-year targets for net housing completions that each local planning authority should plan for.

Policy ‘H10 – Housing size mix’ states that schemes should generally consist of a range of unit sizes.

Policy ‘S1 – Developing London’s social infrastructure’ states that boroughs should ensure the social infrastructure needs of London’s diverse communities are met.

Policy ‘S2 – Health and social care facilities’ states that boroughs should work with Clinical Commissioning Groups (CCGs) and other NHS and community organisations to identify and address local health and social care needs.

Policy ‘S3 – Education and childcare facilities’ states that boroughs should ensure there is a sufficient supply of good quality education and childcare facilities to meet demand and offer educational choice.

Appendix 6.1(R): Socio-Economic Legislation and Policy

Policy ‘S4 – Play and informal recreation’ states that development proposals for schemes that are likely to be used by children and young people should increase opportunities for play and informal recreation and enable children and young people to be independently mobile.

Policy ‘G4 Open space’ states that it should be ensured open space, particularly green space, included as part of development remains publicly accessible.

LOCAL PLANNING POLICY

Westminster City Plan 2019 – 2040, 2021

Between 2017 and 2021, the Westminster City Council worked on the production of a new City Plan 2019-2040 for Westminster. The plan was informed by several rounds of public consultation and ongoing engagement with our key partners and stakeholders.

The plan was submitted to the Secretary of State on 19 November 2019. Following an independent examination by the Planning Inspectorate the council received the Inspectors’ Report on the City Plan 2019-2040 on 19 March 2021. This concluded that with the recommended main modifications, the plan was sound and compliant with legal requirements.

The conclusions of the report meant that the Council could now proceed towards formal adoption at Full Council. The City Plan 2019-2040 was subsequently adopted on 21 April 2021.

It contains the following policies which are relevant to this assessment:

- Policy ‘8 – Housing delivery’;
- Policy ‘13 – Supporting economic growth’;
- Policy ‘17 – Community infrastructure and facilities’; and
- Policy ‘18 – Education and skills’.

Technical Appendix 6.2: Socio-Economic Magnitude Thresholds

Appendix 6.2(R): Socio-Economic Magnitude Thresholds

TOPIC	MAGNITUDE THRESHOLD
Demolition & Construction Employment	High: >250 jobs Medium: >50/≤250 jobs Low: ≤50 jobs
Housing	<u>Neighbourhood</u> High: ≥150 units Medium: ≥10/<150 units Low: <10 units <u>Local Authority</u> High: ≥20% of target over plan period Medium: ≥1/<20% of target over plan period Low: <1% of target over plan period
Education Facilities	High: ≥3 class sizes Medium: ≥1/<3 class sizes Low: <1 class size
Healthcare Facilities	High: >2 GPs Medium: >0.5/≤2 GPs Low: ≤0.5 GPs
Open Space & Playspace	The significance of effect related to this topic has been based on professional judgment, national and local guidance and the population generation.
Operational Employment	High: >200 jobs Medium: >50/≤200 jobs Low: ≤50 jobs
Additional Spending	High: >£10 million Medium: >£5 million/≤£10 million Low: ≤£5 million
Crime	The significance of effect related to this topic has been based on professional judgment.

Technical Appendix 6.3(R): Pupil and Net Capacity Forecast Data

Appendix 6.3(R): Socio-Economic Cumulative Scheme Details

PROJECT NAME	Paddington Green Police Station
REF.	Appendix 6.3(R)
DATE	November 2022

This note details the likely effects of the proposed development in combination with other cumulative schemes within the study area.

Following a review of the cumulative schemes identified, all have been considered in respect of the cumulative socio-economic effects.

Cumulative effects are predominantly considered relevant in socio-economic terms regarding construction employment creation, operational employment creation, demand for school places at both primary and secondary levels, demand for primary healthcare provision, demand for open space and play space and consideration of crime. The following subsections have considered the combined cumulative effects in respect of the proposed development and the following cumulative schemes:

- 18/05018/FULL – One Merchant Square and Six Merchant Square (1 & 2);
- 10/09757/FULL – Two Merchant Square (3);
- 09/09773/FULL, 14/04393/FULL, 15/00529/FULL, S73 – 15/02673/FULL – The Landseer 38-44 Lodge Road and 18/08105/FULL – 36 St John’s Wood Road, 38-44 Lodge Road (4 & 5);
- 12/07668/FULL – Paddington Triangle (6);
- 16/09050/FULL, S73 18/08240/FULL – Paddington Cube (7);
- 17/05609/FULL – 1A Sheldon Square, W2 (8);
- 17/08619/FULL – Luton Street/Capland Street/Bedlow Close site, NW8 (9); and
- 19/03673/FULL – 5 Kingdom Street (10).

In addition, consideration has been given to the following scheme to present a worst-case assessment:

- 16/11562/FULL & 18/08004/FULL – West End Gate (WEG) and 14-17 Paddington Green (11).

An overview of the cumulative scheme details is provided in Table 1.

Appendix 6.3(R): Socio-Economic Cumulative Scheme Details

Table 1
Cumulative Scheme Details

CUMULATIVE SCHEME	CONSTRUCTION PERIOD	UNIT NUMBER	POPULATION	PRIMARY AGED CHILDREN	SECONDARY AGED CHILDREN	OPERATIONAL EMPLOYMENT	OPEN SPACE/ PLAY SPACE (SQM)
1 & 2	2019 – 2022	426	779	33	20	83	3,852 m ² / 544 m ²
3	Currently under construction	N/A	N/A	N/A	N/A	1,617	N/A
4 & 5	Currently under construction	129	Unknown	Unknown	Unknown	Unknown	3,335 m ²
6	Unknown	N/A	N/A	N/A	N/A	2,332	N/A
7	Unknown	N/A	N/A	N/A	N/A	3,217	N/A
8	Unknown	N/A	N/A	N/A	N/A	330	N/A
9	Currently under construction	168	N/A	N/A	N/A	Unknown	N/A
10	2020 – 2024	N/A	N/A	N/A	N/A	3,890 – 5,086	N/A
11	Currently under construction	812	1,594	63	41	91	7,042 m ² / 1,788 m ²

Appendix 6.3(R): Socio-Economic Cumulative Scheme Details

A summary of the likely operational effects of the cumulative schemes (where possible sourced from publicly available information), and the operational cumulative effects is provided in Table 2.

Appendix 6.3(R): Socio-Economic Cumulative Scheme Details

Table 2
Operational Socio-Economic Cumulative Effects

CUMULATIVE SCHEME	HOUSING DELIVERY	SCHOOL PROVISION	HEALTHCARE PROVISION	EMPLOYMENT	OPEN SPACE/PLAYSPACE	CRIME
1 & 2	Moderate Beneficial	Negligible	Negligible	Minor Beneficial	Minor Beneficial	Not assessed
3	N/A	N/A	N/A	Minor Beneficial	N/A	Not assessed
4 & 5	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
6	N/A	N/A	N/A	Significant Beneficial	N/A	Not assessed
7	N/A	N/A	N/A	Minor Beneficial	N/A	Not assessed
8	N/A	N/A	N/A	Unknown	N/A	Not assessed
9	Unknown	Unknown	Unknown	Unknown	Unknown	Not assessed
10	N/A	N/A	N/A	Major Beneficial	N/A	Moderate Beneficial
11	Major to Moderate Beneficial	Negligible Adverse	Negligible Adverse	Negligible Beneficial	Open Space: Minor Adverse Playspace: Minor Beneficial to Negligible Beneficial	Moderate Beneficial

Technical Appendix 7.1(R): Air Quality Legislation, Policy and Guidance

1. AIR QUALITY LEGISLATION AND POLICY

1.1 International Legislation and Agreements

European Union Ambient Air Quality and Clean Air for Europe, 2008

- 1.1.1 EU Directive 2008/50/EC¹ on ambient air quality and cleaner air for Europe (the CAFE directive) sets out the ambient air quality standards for nitrogen dioxide (NO₂) and particulate matter with an aerodynamic diameter of less than 10 µm (PM₁₀) to be achieved by 1 January 2010 and 2005 respectively. The Air Quality Standards Regulations 2010² implements the requirements of the Directive into United Kingdom (UK) legislation.
- 1.1.2 The Directive contains a series of limit values for the protection of human health and critical levels for the protection of vegetation. Compliance with the EU Limit Values is mandatory. However, Member States can apply for a time extension for compliance, subject to approval of an action plan by the European Commission.
- 1.1.3 In December 2015, the Department for Environment Food and Rural Affairs (Defra) on behalf of the UK Government produced plans to improve air quality in the UK in order to meet the EU targets in the shortest possible time³. The adequacy of these plans to bring about the necessary improvements in air quality to meet the relevant NAQOs within the shortest time possible were successfully challenged within the High Court in 2016.
- 1.1.4 Subsequently, in 2017 a plan for the reduction in roadside NO₂ concentrations was released⁴ which requires local authorities to identify local actions to accelerate the improvement in air quality in their jurisdictions. It also includes the national measures, including banning the sale of conventionally powered cars and light goods vehicles by 2035 (subsequently reduced to 2030) and further investment in cleaner transport.

1.2 National Legislation and Policy

Local Air Quality Management

- 1.2.1 Part IV of the Environment Act 1995⁵, requires the UK Government to publish an Air Quality Strategy and local authorities to review, assess and manage air quality within their areas. This is known as Local Air Quality Management (LAQM).
- 1.2.2 The 2007 Air Quality Strategy⁶ establishes the policy for ambient air quality in the UK. It includes the AQOs for the protection of human health and vegetation for 11 pollutants. Those AQOs included as part of LAQM are prescribed in the Air Quality (England) Regulations 2000⁷ and the Air Quality (Amendment) (England) Regulations 2002⁸. Table 1.1 presents the AQOs for NO₂ and PM₁₀ the two pollutants of most concern in urban areas.

Table 1.1: Objectives Included in Air Quality Regulations (England) 2000 for Purpose of Local Air Quality Management			
Pollutant	Air Quality Objective		
	Concentration	Measured As	Date to be Achieved By
NO ₂	200 micrograms per metre cubed (µg/m ³) not to be exceeded more than 18 times per year	1 hour	31 December 2005
	40 µg/m ³	Annual mean	

Table 1.1: Objectives Included in Air Quality Regulations (England) 2000 for Purpose of Local Air Quality Management			
Pollutant	Air Quality Objective		
	Concentration	Measured As	Date to be Achieved By
PM ₁₀	50 µg/m ³ not to be exceeded more than 35 times per year	24 hour mean	31 December 2004
	40 µg/m ³	Annual mean	

- 1.2.3 Analysis of long-term monitoring data suggests that if the annual mean NO₂ concentration is less than 60 µg/m³ then the one-hour mean NO₂ objective is unlikely to be exceeded where road transport is the main source of pollution. Therefore, in this assessment this concentration has been used to screen whether the one-hour mean objective is likely to be achieved⁹. Similar to NO₂, a PM₁₀ annual mean below 32 µg/m³ has been used to screen whether the 24-hour PM₁₀ mean objective is likely to be achieved.
- 1.2.4 The 2007 Air Quality Strategy also introduced a new policy framework for tackling PM_{2.5} which included an exposure reduction target and a ‘backstop’ annual mean AQO. The exposure reduction target is focussed on reducing average concentrations across the most polluted urban areas and is therefore not applicable to individual schemes, whilst the annual mean AQO can be considered a concentration cap to ensure environmental compliance. The UK AQOs for PM_{2.5} are provided in Table 1.2.

Table 1.2: UK Objectives for PM _{2.5}		
Averaging Period	Objective	Target Date
Annual mean	25 µg/m ³	2020
3 year running annual mean	15 % reduction in concentrations measured at urban background sites	Between 2010 and 2020

- 1.2.5 The AQOs apply to external air where there is relevant exposure to the public over the associated averaging periods within each AQO. Guidance is provided within LAQM.TG (22)¹⁰ issued by Defra for Local Authorities, on where the AQOs apply, as detailed in Table 1.3. The AQOs do not apply in workplace locations, to internal air or where people are unlikely to be regularly exposed (i.e. centre of roadways).

Table 1.3: Locations Where National Air Quality Objectives Apply		
Averaging Period	Objectives should apply at	Objectives should generally not apply at
Annual mean	All locations where members of the public might be regularly exposed. Building façades of residential properties, schools, hospitals, care homes etc.	Building façades of offices or other places of work where members of the public do not have regular access. Hotels, unless people live there as their permanent residence. Gardens of residential properties.
24 Hour Mean	All locations where the annual mean objective would apply, together with hotels. Gardens of residential properties.	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.
1 Hour Mean	All locations where the annual mean and: 24 and 8-hour mean	

¹ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

² Secretary of State, 2010. Statutory Instrument 2010 No. 1001, Air Quality Standards Regulations 2010. HMSO.

³ Defra, December 2015. Improving air quality in the UK, Tackling nitrogen dioxide in our towns and cities, UK overview document. Defra.

⁴ Department for Environment, Food and Rural Affairs, 2017. UK plan for tackling roadside nitrogen dioxide concentrations. Defra.

⁵ Secretary of State, 1995. The Environment Act part IV Air Quality, HMSO.

⁶ Department for Environment, Food and Rural Affairs, 2007. Air Quality Strategy for England, Scotland, Wales and Northern Ireland. HMSO.

⁷ Secretary of State, 2000. Statutory Instrument 2000, No 921, The Air Quality (England) Regulations 2000. HMSO, London.

⁸ Secretary of State, 2002. Statutory Instrument 2002, No 3034, The Air Quality (England) (Amendment) Regulations 2002. HMSO, London.

⁹ Department for Environment, Food and Rural Affairs, 2022. Local Air Quality Management Technical Guidance LAQM.TG (22). HMSO.

¹⁰ Department for Environment, Food and Rural Affairs, 2022. Local Air Quality Management Technical Guidance LAQM.TG (22). HMSO.

Table 1.3: Locations Where National Air Quality Objectives Apply		
Averaging Period	Objectives should apply at	Objectives should generally not apply at
	objectives apply. Kerbside sites (for example, pavements of busy shopping streets). Those parts of car parks, bus stations and railway stations etc. which are not fully enclosed, where members of the public might reasonably be expected to spend one hour or more. Any outdoor locations where members of the public might reasonably expect to spend one hour or longer.	

- 1.2.6 It should be noted that the EU Limit Values are numerically the same as the AQO values but differ in terms of compliance dates, locations where they apply and legal responsibility. The compliance date for the NO₂ Limit Values was 1 January 2010, which is five years later than the date for the AQO.
- 1.2.7 The Limit Values are mandatory whereas the AQOs are policy objectives. Local authorities are not required to achieve them, but have to demonstrate effort of working towards their achievement. In addition, the Limit Values apply in all locations except:
- where members of the public do not have access and there is no fixed habitation;
 - on factory premises or at industrial installations; and
 - on the carriageway/central reservation of roads except where there is normally pedestrian access.

- 1.2.8 Where a local authority’s review and assessment of its air quality identifies that air quality is likely to exceed the AQOs, it must designate these areas as AQMAs and draw up an Air Quality Action Plan (AQAP) setting out measures to reduce pollutant concentrations with the aim of meeting the AQOs.

Clean Air Strategy, 2019

- 1.2.9 Defra published a new Clean Air Strategy¹¹ in January 2019, setting out how the UK will significantly reduce harmful air pollutant emissions by 2020 and 2030. The Clean Air Strategy contains an intention of working towards the World Health Organisation (WHO) guideline value for PM_{2.5} of 10 µg/m³. On 19 August 2020 Defra published a policy paper¹² setting out the process for setting a target for PM_{2.5} concentrations which the 2020 Environment Bill¹³ requires to be set by 31st October 2022. At present therefore, there is no target or timetable set for meeting the WHO guideline value for PM_{2.5} concentrations.

Environment Act, 2021

- 1.2.10 The Environment Act¹⁴ requires the government to set a long-term target for air quality (to be achieved no sooner than 15 years after the target has been set), as well as a target for PM_{2.5} concentrations. Targets are to be set by 31st October 2022 and current proposals are:
- An annual mean concentration target of 10 µg/m³ to be met across England by 2040; and
 - A Population Exposure Reduction target of a 35% reduction in population exposure by 2040 compared to a base year of 2018.

1.3 National Planning Policy and Legislation
The National Planning Policy Framework

- 1.3.1 The revised National Planning Policy Framework (NPPF)¹⁵ sets out the Government’s planning policies for England and how they are expected to be applied (Ministry of Housing, Communities & Local Government, 2021). In relation to achieving sustainable development, paragraph 8 states that:

"Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):...

c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy."

So that sustainable development is pursued in a positive way, at the heart of the Framework is a pre-sumption in favour of sustainable development. Paragraph 11 states that plans and decisions should apply a presumption in favour of sustainable development, which for decision-taking means:

"... d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless: ...

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

Paragraph 55 on planning conditions and obligations states:

"Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition."

Paragraph 104 on promoting sustainable transport states:

"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: ...

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; ..."

Paragraph 105 continues to state:

"Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health."

Paragraph 174 on conserving and enhancing the natural environment states:

"Planning policies and decisions should contribute to and enhance the natural and local environment by: ...

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions

¹¹ Defra, 2019. Clean Air Strategy.
¹² <https://www.gov.uk/government/publications/environment-bill-2020/august-2020-environment-bill-environmental-targets>.
¹³ <https://services.parliament.uk/Bills/2019-21/environment/documents.html>.

¹⁴ Environment Act 2021, 2021 Chapter 30. HMSO.
¹⁵ Ministry of Housing, Communities and Local Government, 2021. National Planning Policy Framework. HMSO.

such as air and water quality, taking into account relevant information such as river basin management plans; and...”

Paragraph 185 within ground conditions and pollution states:

“Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.”

Paragraph 186 states that:

“Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.”

Paragraph 187 states that:

“Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or ‘agent of change’) should be required to provide suitable mitigation before the development has been completed.”

Planning Practice Guidance

- 1.3.2 The Planning Practice Guidance (PPG)¹⁶ was launched as an online resource in March 2014 to support the NPPF and has separate guidance on air quality. Paragraph 001, Reference 32-001-20191101 06 (revision date 01 11 2019) of the PPG provides the following summary as to why air quality is a consideration for planning:
- “... It is important that the potential impact of new development on air quality is taken into account in planning where the national assessment indicates that relevant limits have been exceeded or are near the limit, or where the need for emissions reductions has been identified.”*

- 1.3.3 The PPG identifies when air quality could be relevant for a development management process, provides guidance on how detailed an assessment needs to be and provides guidance on how an impact on air quality can be mitigated.

**1.4 Regional Policy
London Plan, 2021**

- 1.4.1 The London Plan 2021¹⁷ is the Spatial Development Strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years and the Mayor’s vision for Good Growth. The Plan is part of the statutory development plan for London, meaning that the policies in the Plan should inform

decisions on planning applications across the capital. Borough’s Local Plans must be in ‘general conformity’ with the London Plan, ensuring that the planning system for London operates in a joined-up way and reflects the overall strategy for how London can develop sustainably, which the London Plan sets out.

- 1.4.2 The Policy Planning policy GG3 on Creating a healthy City states:

“To improve Londoners’ health and reduce health inequalities, those involved in planning and development must:

F seek to improve London’s air quality, reduce public exposure to poor air quality and minimise inequalities in levels of exposure to air pollution...”

- 1.4.3 Policy D3 on Optimising site capacity through the design-led approach states:

“D Development proposals should:

9) help prevent or mitigate the impacts of noise and poor air quality”

- 1.4.4 Policy 'SI 1 Improving Air Quality' states:

“A Development Plans, through relevant strategic, site-specific and area based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.

B To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed:

1) Development proposals should not:

a) lead to further deterioration of existing poor air quality

b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits

c) create unacceptable risk of high levels of exposure to poor air quality.

2) In order to meet the requirements in Part 1, as a minimum:

a) development proposals must be at least Air Quality Neutral

b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures

c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1

C Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

a) how proposals have considered ways to maximise benefits to local air quality, and

b) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.

D In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.

E Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is

¹⁶ Ministry of Housing, Communities & Local Government, 2014. Planning Practice Guidance. ‘Air Quality’.

¹⁷ Greater London Authority, 2021. The London Plan. March 2021. London.

done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development."

1.4.5 The plan states on air quality positive approach:

"9.1.11 An air quality positive approach is linked to other policies in the London Plan, such as Healthy Streets, energy masterplanning and green infrastructure. One of the keys to delivering this will be to draw existing good practice together in a holistic fashion, at an early stage in the process, to ensure that the development team can identify which options deliver the most improvement to air quality. Large schemes, subject to Environmental Impact Assessments, commonly have project and design teams representing a range of expertise, that can feed in to the development of a statement to set out how air quality can be improved across the proposed area of the development."

9.1.14 The GLA will produce guidance in order to assist developers and boroughs in identifying measures and best practice to inform the preparation of statements for developments taking an air quality positive approach."

1.4.6 The policy requirements of Policy S1 fall into two categories; parts B1a) and B1b) concern the impact of development and part B1c) concerns site suitability. There are separate requirements for each, with explanatory text providing further detail on how the policy should be applied.

1.4.7 The explanatory note 9.1.3 indicates that new developments should reduce the extent to which the public are exposed to poor air quality and must not cause new exceedances of legal air quality standards, referencing the Air Quality Standard Regulations 2010. These include an annual average limit value of 25 µg/m³ for PM_{2.5} and 40 µg/m³ for PM₁₀. Where limit values are already met, or are predicted to be met at the time of completion, new developments must endeavour to maintain ambient air quality whilst complying with sustainable development principles.

1.4.8 The explanatory note 9.1.4 refers specifically to the phrase ‘existing poor air quality’ and is considered relevant to section B1a) only (there is no further mention of ‘existing poor air quality’ within the policy). B1a) states that development should not ‘lead to further deterioration of existing poor air quality’.

1.4.9 The rest of the clarifying text is relevant to developments which are impacting air quality. First further clarification is provided as to what is considered to be ‘existing poor air quality’ and this is where the guidance specifies the World Health Organisation (WHO) targets for particulate matter as well as the existing legal limits and locations within 10% of these limits. The footnote reference at the end of the section refers to the Institute of Air Quality Management (IAQM) Guidance, which is provided in relation to development impacts. The IAQM guidance indicates that where existing air quality exceeds or is within 5% of the limits an increase of just 0.5 % of the limit is considered to be a slight impact. In essence, the clarification of what is meant by ‘existing poor air quality’ is to limit deterioration to no more than negligible in accordance with the IAQM definition which could be considered appropriate in terms of minimising future deterioration in areas of existing poor air quality.

1.4.10 With regards to site suitability and need for mitigation within a site comes within B1c) ‘create unacceptable risk of high levels of exposure to poor air quality’. This policy does not include the word ‘existing’ and the requirement is to prevent unacceptable risk of high levels of exposure. In this case there is no definition of what is meant by ‘poor air quality’, but this is dealt with in Paragraph 9.1.3 which deals with exposure to poor air quality, and which only requires that legal standards be met: ‘Where limit values are already met, or are predicted to be met at the time of completion, new developments must endeavour to maintain the best ambient air quality compatible with sustainable development principles.’ The policy wording specifically allows for predictions to be made for the time of completion.

London Environmental Strategy, 2018

¹⁸ Greater London Authority, 2018. London Environment Strategy. London.
¹⁹ The World Health Organisation (WHO), 2005, Air Quality Guidelines.

1.4.11 The London Environmental Strategy¹⁸, published in May 2018, evaluates the current condition of London’s environment at a city-wide level. This is the first strategy to bring together approaches to every aspect of London’s environment, integrating the following areas:

- air quality;
- green infrastructure;
- climate change mitigation and energy;
- waste;
- adapting to climate change;
- ambient noise; and
- low carbon circular economy.

1.4.12 The Strategy aims, among other objectives:

“for London to have the best air quality of any major world city by 2050, going beyond the legal requirements to protect human health and minimise inequalities”.

1.4.13 Policy 4.3.1.a states that “*The Mayor will set new concentration targets for PM_{2.5}, with the aim of meeting World Health Organization guidelines by 2030*”. The WHO guidelines¹⁹ relevant for this assessment are presented in Table 1.4.

Table 1.4: WHO Guidelines		
Pollutant	Time Period	Objective
NO ₂	Annual Mean	40 µg/m ³
PM ₁₀		20 µg/m ³
PM _{2.5}		10 µg/m ³

Sustainable Design and Construction Supplementary Planning Guidance, 2014

1.4.14 The Sustainable Design and Construction SPG²⁰ forms part of the Implementation Framework for the London Plan. The SPG aims to support developers, local planning authorities and neighbourhoods to achieve sustainable development. It provides guidance on to how to achieve the London Plan objectives effectively, supporting the Mayor’s aims for growth, including the delivery of housing and infrastructure. The SPG is intended to:

- provide detail on how to implement the sustainable design and construction and wider environmental sustainability policies in the London Plan;
- provide guidance on how to develop more detailed local policies on sustainable design and construction;
- provide best practice guidance on how to meet the sustainability targets set out in the London Plan; and
- provide examples of how to implement sustainability measures within developments.

1.4.15 The SPG on ‘Sustainable Design and Construction’ provides guidance on:

- Minimising air quality emissions from location, transport, construction and demolition, and design and occupation;
- Protecting internal air quality;
- What is meant by ‘air quality neutral’;
- Emissions standards for combustion plant; and

²⁰ Greater London Authority, 2014. Sustainable Design and Construction.

- Offsetting provisions.

1.4.16 ‘Air quality neutral’ applies across London as a whole and emission benchmarks have been proposed in terms of buildings’ operation and transport emissions in order to meet these criteria. It is understood that the benchmark should be capable of being met without the need for significant additional mitigation.

1.4.17 Where individual and/or communal gas fired boilers are installed in commercial and domestic buildings they should achieve a NOx rating of less than 40 mg NOx/kWh. If the particular combustion equipment is not known at the time of the planning application, developers are required to provide a written statement of their commitment and ability to meet the emissions standards within their Air Quality Assessments. Emissions standards are provided for solid biomass boilers and CHP plants.

1.4.18 Where developments do not meet the air quality neutral benchmarks, it is suggested that appropriate on-site mitigation measures will be required to off-set any excess in emissions. Measures could include:

- Green planting/walls and screens;
- Upgrade or abatement work to combustion plant;
- Retro-fitting abatement technology for vehicles and flues; and
- Exposure reduction.

Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance, 2014

1.4.19 In addition, as part of the Implementation Framework for the London Plan, a SPG on the control of dust and emissions during construction and demolition²¹ was published in July 2014. The methodology proposed and mitigation outlined is broadly in line with that provided by the IAQM²².

1.4.20 This SPG provides guidance for the preparation of an ‘Air Quality and Dust Risk Assessment’ and requires one to be submitted at the time of a planning application; with an Air Quality and Dust Management Plan submitted prior to the commencement of works.

1.4.21 Chapter 7 of the SPG states the following:

- From 1 September 2020 any Non-Road Mobile Machinery (NRMM) of net power between 27 kW and 560 kW used on any site in London will be required to meet Stage IIIB emission criteria of EU Directive 97/68/EC;
- Construction plant with a net power between 37 kW and 560 kW used within the London Low Emission Zone (LEZ) is required to be compliant with this standard, and registered on the NRMM register; and
- NRMM where the power output is less than 37 kW is required to be fitted with an after treatment device stated on the approved list managed by the Energy Saving Trust²³.

London Local Air Quality Management Technical Guidance (LLAQM TG19), 2019

1.4.22 London Local Air Quality Management Technical Guidance (LLAQMA)²⁴ provides the methodology by which key air pollutants such as NO₂, PM₁₀ and PM_{2.5} should be monitored, assessed and reported for the purposes of local air quality management, and provides guidance on the actions to be taken by local authorities to improve local air quality.

London Councils Air Quality and Planning Guidance, 2007

1.4.23 London Councils Air Quality and Planning Guidance²⁵ is aimed at developers, their consultants and local authorities. It revises the previous guidance issued in 2001 and provides technical advice on how to deal with planning applications that could have an impact on air quality.

London Plan Guidance Air Quality Positive Consultation Draft, 2021

1.4.24 The AQP²⁶ consultation guidance explains how to apply the air quality positive approach required by Policy SI1 (Part C) of the London Plan. The air quality positive approach applies to large-scale developments proposals which are referable to the Mayor of London and subject to an Environmental Impact Assessment (EIA).

**1.5 Local Policy
Westminster City Plan, 2016 (for information)**

1.5.1 The Westminster City Plan²⁷ was adopted in November 2016 and is used to help shape the future of the area and to determine individual planning applications and deliver development, in conjunction with the London Plan, and any (adopted) neighbourhood plans. Policies in relation to air quality are as follows:

1.5.2 Policy S31 Air quality states:

"The council will require a reduction of air pollution, with the aim of meeting the objectives for pollutants set out in the national strategy.

Developments will minimise emissions of air pollution from both static and traffic-generated sources.

Developments that include uses that are more vulnerable to air pollution (Air Quality Sensitive Receptors) will minimise the impact of poor air quality on occupants through the design of the building and appropriate technology."

1.5.3 Policy S41 Pedestrian Movement and Sustainable Transport states:

"All developments will prioritise pedestrian movement and the creation of a convenient, attractive and safe pedestrian environment, with particular emphasis in areas with high pedestrian volumes or peaks.

Sustainable transport options will be supported and provided for, including the following priorities:

Providing for cycling facilities as part of all new development, including facilities for residents, workers and visitors as appropriate;

Reducing reliance on private motor vehicles and single person motor vehicle trips;

Prioritising parking provision for disabled, car sharing and alternative fuel vehicles; and

Encouraging use of alternative sustainable fuels and technology."

1.5.4 Policy S39 Decentralised Energy Networks states:

"Infrastructure that is or has previously been in use as part of a heating network will be protected.

Major development should be designed to link to and extend existing heat and energy networks in the vicinity, except where the council considers that it is not practical or viable to do so.

Where it is not possible to link to an existing heat and energy network, major development will be required to provide site-wide decentralised energy generation that minimises greenhouse gas emissions and has the potential to be extended to serve other development sites in the vicinity, except where the

²¹ Greater London Authority, 2014. The Control of Dust and Emissions during Construction and Demolition.

²² Holman et al, 2014. IAQM Guidance on the assessment of dust from demolition and construction V1.1. Institute of Air Quality Management, London.

²³ Energy Saving Trust, 2019. Available online at: <https://energysavingtrust.org.uk/transport/freight-and-retrofit/non-road-mobile-machinery-nrmm-certification>.

²⁴ Mayor of London, 2019. London Local Air Quality Management Technical Guidance (LLAQM.TG(19)).

²⁵ The London Air Pollution Planning and the Local Environment (APPLE) working group, Revised version January 2007, London Councils Air Quality and Planning Guidance.

²⁶ Mayor of London, 2021. London Plan Guidance Air Quality Positive. Consultation draft. November 2021. Available at: <https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/london-plan-guidance/air-quality-positive-aqp-guidance>

²⁷ City of Westminster, 2016. Westminster City Plan.

council considers that it is not practical or viable to do so, including where all available technologies would have an unacceptable impact on local air quality.

Smaller developments will be encouraged to be enabled to connect into heat and energy networks.”

Westminster Unitary Development Plan, 2007 (Saved Policies 2010) (for information)

- 1.5.5 The Westminster Unitary Development Plan²⁸ was adopted in 2007 to set out planning policies for developing land, improving transport and protecting the environment. Some of these have now been replaced by the Westminster City Plan. Saved policies in relation to air quality are as follows:

- 1.5.6 Policy ENV 5 Air pollution states:

“(A) The City Council will encourage new development that does not lead to an increase in local air pollution.

(B) The City Council will promote measures to improve air quality, in particular encouraging developers to minimise global and local air pollution and emission of odours by:

- 1. minimising traffic generated by developments*
- 2. using natural ventilation systems and lighting wherever possible*
- 3. using the most energy efficient forms of heating, air conditioning and active ventilation systems*
- 4. careful design and siting of central heating and ventilation exhausts*
- 5. avoiding or reducing emissions from the burning of fossil fuels*
- 6. following the Westminster Considerate Builders’ code of practice to contain dust and fumes on building sites.*

(C) For those developments that require air conditioning systems, the City Council will encourage use of dry rather than wet systems.

(D) The City Council will monitor air pollutants, including those from motor vehicles, and seek reductions in those pollutants.

(E) When considering applications for development involving the storage or use of hazardous substances, the City Council will seek the advice of the Health and Safety Executive concerning the nature and severity of the risks presented by potential major hazards to people in the surrounding area.”

- 1.5.7 Policy TRANS 14 Transport Assessment states:

“(A) All development proposals will be assessed for their individual and cumulative impact in contributing to traffic generation, and on congestion, parking, safety, public transport, cyclists and pedestrians. The City Council will use Transport Assessments to seek to promote development that supports more sustainable travel choices and reduces the need to travel.

(C) In cases where the existing road network and/or junctions and/or the public transport networks cannot cope with the increased volume of movement generated by a development, the City Council will refuse permission for the development unless it is possible to devise suitable transport improvements to permit the generated movements to gain safe access to the transport networks. Such improvements must be acceptable within the terms of the other policies in this Plan.).

(D) Where necessary, the City Council will impose conditions on a planning permission or will seek legal agreements to enable such improvements to be carried out in conjunction with the development. Where the need for a transport improvement arises from the movements generated by a new

development, the City Council will normally require that the full cost of the improvement or an appropriate proportion of that cost be met by the developer.”

Westminster City Plan 2019-2040, 2021

- 1.5.8 The WCC submitted the City Plan 2019-2040²⁹ to the Secretary of State on 19 November 2019. Following an independent examination by the Planning Inspectorate the WCC received the Inspectors’ Report on the City Plan 2019-2040 on 19 March 2021. The City Plan 2019-2040 was adopted on 21 April 2021.

- 1.5.9 Policy 33. Air Quality states:

“A. The council is committed to improving air quality in the city and expects development to reduce exposure to poor air quality and maximise opportunities to improve it locally without detriment of air quality in other areas.

AIR QUALITY NEUTRAL AND POSITIVE

B. Major developments in Opportunity Areas and Housing Renewal Areas and those subject to an Environmental Impact Assessment should achieve Air Quality Positive status.

C. All other major developments and developments incorporating solid biomass boilers or Combined Heat and Power (CHP) should be at least Air Quality Neutral.

AIR QUALITY ASSESSMENTS

D. Air Quality Assessments will be required for:

- 1. Major developments;*
- 2. Proposals that include potentially air pollution generating uses or combustion-based technologies;*
- 3. Proposals incorporating sensitive uses; and*
- 4. All residential developments within Air Quality Focus Areas.”*

- 1.5.10 Policy 25. Sustainable transport states:

“A. The council will support a sustainable pattern of development which maximises trips made by sustainable modes, creates safer streets for all, reduces traffic, improves air quality and reflects the objectives in Westminster’s Transport and Public Realm Programme and Local Implementation Plan 2019/20 to 2021/2022.

B. New development and the connected transport modes should contribute towards maintaining and enhancing Westminster’s places and streets as one of the most attractive and liveable areas in London.

C. Development must:

- 1. Positively contribute towards the improvement of its public transport nodes in terms of accessibility and legibility and the improvement and delivery of walking and cycling routes that serve a site in order to create an environment where people actively choose to walk and cycle as part of everyday life.*
- 2. Support the reallocation of road and development space to promote walking, cycling and the use of public transport where appropriate.*
- 3. Positively contribute to the reduction of the dominance of private motor vehicles both in terms of traffic and congestion, whilst not worsening the excessive levels of on street parking and tackling poor air quality.*

²⁸ City of Westminster, 2007. Unitary Development Plan.

²⁹ City of Westminster, 2019. City Plan 2019-2040, Local Development Scheme. Available at: <https://www.westminster.gov.uk/planning-building-and-environmental-regulations/city-plan-neighbourhood-planning-and-planning-policy/city-plan-2019-2040>

4. *Contribute to the London Plan’s Healthy Streets approach to improve air quality, reduce congestion and make Westminster’s diverse communities become greener, healthier and more attractive places in which to live, work or visit.*
5. *Major development should provide or financially contribute towards creating well-connected, high-quality, convenient, safe cycle infrastructure and routes.”*

1.5.11 Policy 37. Energy states:

- "A. *The council will promote zero carbon development and expects all development to reduce on-site energy demand and maximise the use of low carbon energy sources to minimise the effects of climate change.*
- CARBON REDUCTION**
- B. *All development proposals should follow the principles of the Mayor of London’s energy hierarchy. Major development should demonstrate through an energy strategy how the carbon reduction targets set out in local policy or the London Plan, whichever is the greatest, can be achieved.*
- C. *Where it is clearly demonstrated that it is not financially or technically viable to achieve zero-carbon on-site, any shortfall in carbon reduction targets should be addressed via off-site measures or through the provision of a carbon offset payment secured by legal agreement.*
- HEAT NETWORKS**
- D. *Developments should be designed in accordance with the Mayor of London’s heating hierarchy. Major developments must connect to existing or planned local heat networks, or establish a new network, wherever feasible.*

1.5.12 Policy 38: Parking states:

- D. *When considering parking impacts, the council will prioritise alternative kerbside uses (such as car club spaces, cycle parking and electric vehicle charge points) ahead of parking for private vehicles.*
- E. *For major developments contributions will also be required for on-street provision of electric vehicle and other low emission vehicle infrastructure.*

Westminster Environmental Supplementary Planning Document, 2022

1.5.13 The Environmental Supplementary Planning Document³⁰, adopted February 2022, provides guidance on the City Plan’s environment policies and builds upon environmental policy within the City Plan 2019–2040. The SPD does not introduce new planning policies into the development plan.

1.5.14 Prominence and weight are attached to environmental issues such as reducing energy consumption, improving air quality, increasing the amount of green infrastructure in the city, and promoting the sensitive retrofitting of existing buildings. The SPD outlines the expected content of air quality assessments and air quality neutral assessments and refers to relevant guidance and standards used in this assessment.

City of Westminster Air Quality Action Plan 2019 - 2024

1.5.15 The City of Westminster Air Quality Action Plan³¹ sets out the actions that will be undertaken to improve air quality in Westminster between 2020 and 2024. Actions are split into five broad categories:

- Monitoring of air quality, including introduction of a city-wide diffusion tube monitoring network and prioritising the provision of PM_{2.5} monitoring;

- Reducing emissions from buildings and new development through actions such as the adoption and implementation of City Plan air quality policies and updating of code of construction guidance;
- Reducing emissions from transport through initiatives such as provision of electric vehicle charging infrastructure;
- Raising awareness of air quality; and
- Lobbying and partnership working.

1.6 Additional Guidance
Institute of Air Quality Management: Construction Dust Guidance, 2016

1.6.1 The IAQM produced guidance³² to assist in the assessment of air quality impacts from demolition and construction activities. This guidance provides a consistent methodology for assessing the risks of dust impacts from demolition and construction activities and for identifying the correct level of mitigation which should be applied to avoid significant air quality effects.

Environmental Protection UK/Institute of Air Quality Management Guidance, Land-Use Planning Guidance, 2017

1.6.2 Environmental Protection UK (EPUK), together with the IAQM, produced updated guidance in 2017³³ on how air quality impacts should be assessed within the land-use planning and development control process. This guidance provides clear criteria to determine when a detailed air quality assessment is required and a methodology for assessing the significance of air quality effects.

Defra, Local Air Quality Management Technical Guidance (LAQM TG22), 2022

1.6.3 Defra, in association with devolved regional environmental protection agencies, has produced technical guidance³⁴ designed to support local authorities in pursuit of their duties under the Environment Act 1995. It provides the methodology by which key air pollutants such as NO₂, PM₁₀ and PM_{2.5} should be monitored, assessed and reported for the purposes of local air quality management, and provides guidance on the actions to be taken by local authorities to improve local air quality. Whilst London has its own system of LAQM with guidance prepared by the Mayor of London, it in turn refers to this Technical Guidance.

³⁰ City of Westminster, 2022. Environmental Supplementary Planning Document.

³¹ City of Westminster,

³² Holman et al, 2016. IAQM Guidance on the assessment of dust from demolition and construction V1.1. Institute of Air Quality Management, London. Available: <http://www.iaqm.co.uk/text/guidance/construction-dust-2014>.

³³ Institute of Air Quality Management and Environmental Protection UK, 2017. Land-Use Planning & Development Control: Planning for Air Quality. Available: <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>.

³⁴ Department for Environment, Farming and Rural Affairs, 2022. Local Air Quality Management Technical Guidance (England) 2022 (TG22). HMSO.

2. DUST RISK ASSESSMENT METHODOLOGY

Table 2.1: Determining Dust Emission Magnitude

Large	Medium	Small
Demolition		
<ul style="list-style-type: none">total building volume >50,000 m³potentially dusty construction material (e.g. concrete)on-site crushing and screeningdemolition activities >20 m above ground level	<ul style="list-style-type: none">total building volume 20,000m³ – 50,000 m³potentially dusty constructiondemolition activities 10-20 mabove ground level	<ul style="list-style-type: none">total building volume <20,000 m³construction material with low potential for dust release (e.g. metal cladding or timber)demolition activities <10 m above groundduring wetter months
Earthworks		
<ul style="list-style-type: none">total site area >10,000 m²potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size)>10 heavy earth moving vehicles active at any one timeformation of bunds >8 m in heighttotal material moved >100,000 tonnes	<ul style="list-style-type: none">total site area 2,500 m² - 10,000 m²moderately dusty soil type (e.g. silt)5-10 heavy earth moving vehicles active at any one timeformation of bunds 4 m – 8 m in heighttotal material moved 20,000 - 100,000 tonnes	<ul style="list-style-type: none">total site area <2,500 m²soil type with large grain size (e.g. sand)<5 heavy earth moving vehicles active at any one timeformation of bunds <4 m in heighttotal material moved <20,000 tonnesearthworks during wetter months
Construction		
<ul style="list-style-type: none">total building volume >100,000 m³pilingon-site concrete batchingsandblasting	<ul style="list-style-type: none">total building volume 25,000 m³ - 100,000 m³potentially dusty construction material (e.g. concrete)pilingon-site concrete batching	<ul style="list-style-type: none">total building volume <25,000 m³construction material with low potential for dust release (e.g. metal cladding or timber)
Trackout		
<ul style="list-style-type: none">>50 HGV (>3.5t) movements in any one daypotentially dusty surface material (e.g. high clay content)unpaved road length >100 m	<ul style="list-style-type: none">10-50 HGV (>3.5t) movements in any one daymoderately dusty surface material (e.g. high clay content)unpaved road length 50 m – 100 m	<ul style="list-style-type: none"><10 HGV (>3.5t) movements in any one daysurface material with low potential for dust releaseunpaved road length <50 m

Table 2.2: Determining Receptor Sensitivity

High	Medium	Low
Sensitivities of People to Dust Soiling Effects		
<ul style="list-style-type: none">users can reasonably expect enjoyment of a high level of amenity; orthe appearance, aesthetics or value of their property would be diminished by soiling; and the people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land.indicative examples include dwellings, museums and other culturally important collections, medium and long term car parks and car showrooms.	<ul style="list-style-type: none">users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home; orthe appearance, aesthetics or value of their property could be diminished by soiling; orthe people or property would not reasonably be expected to be present continuously or regularly for extended periods as part of the normal pattern of use of the land.indicative examples include parks and places of work.	<ul style="list-style-type: none">the enjoyment of amenity would not reasonably be expected; orproperty would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling; orthere is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land.indicative examples include playing fields, farmland (unless commercially-sensitive horticultural), footpaths, short term car parks and roads.
Sensitivities of People to the Health Effects of PM10		
<ul style="list-style-type: none">locations where members of the public are exposed over a time period relevant to the air quality objective for PM₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day).indicative examples include residential properties, hospitals, schools and residential care homes should also be considered as having equal sensitivity to residential areas for the purposes of this assessment.	<ul style="list-style-type: none">locations where the people exposed are workers, and exposure is over a time period relevant to the air quality objective for PM₁₀ (in the case of the 24-hour objectives, a relevant location would be one where individuals may be exposed for eight hours or more in a day).indicative examples include office and shop workers but will generally not include workers occupationally exposed to PM₁₀, as protection is covered by Health and Safety at Work legislation.	<ul style="list-style-type: none">locations where human exposure is transient.indicative examples include public footpaths, playing fields, parks and shopping streets.
Sensitivities of Receptors to Ecological Effects		
<ul style="list-style-type: none">locations with an international or national designation <i>and</i> the designated features may be affected by dust soiling; orlocations where there is a community of a particularly dust sensitive species such as vascular species included in	<ul style="list-style-type: none">locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown; orlocations with a national designation where the features may be affected by dust deposition.	<ul style="list-style-type: none">locations with a local designation where the features may be affected by dust deposition.indicative example is a local Nature Reserve with dust sensitive features.

Table 2.2: Determining Receptor Sensitivity

High	Medium	Low
the Red Data List For Great Britain. <ul style="list-style-type: none">indicative examples include a Special Area of Conservation (SAC) designated for acid heathlands or a local site designated for lichens adjacent to the demolition of a large site containing concrete (alkali) buildings.	<ul style="list-style-type: none">indicative example is a Site of Special Scientific Interest (SSSI) with dust sensitive features.	

Table 2.3: Determining Sensitivity of the Area - Dust Soiling Effects on People and Property

Receptor Sensitivity	Number of Receptors	Distance from the Source (m)			
		<20	<50	<100	<350
High	>100	High	High	Medium	Low
	10-100	High	Medium	Low	Low
	1-10	Medium	Low	Low	Low
Medium	>1	Medium	Low	Low	Low
Low	>1	Low	Low	Low	Low

Table 2.4: Determining Sensitivity of the Area – Human Health Impacts

Receptor Sensitivity	Annual Mean PM ₁₀ concentration	Number of Receptors	Distance from the Source (m)				
			<20	<50	<100	<200	<350
High	>32 µg/m ³	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	>28-32 µg/m ³	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	>24-28 µg/m ³	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<24 µg/m ³	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium		>1	High	Medium	Low	Low	Low
Low		>1	Medium	Low	Low	Low	Low

Table 2.5: Determining Risk of Dust Impacts - Demolition

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Medium Risk
Medium	High Risk	Medium Risk	Low Risk
Low	Medium Risk	Low Risk	Negligible

Table 2.6: Determining Risk of Dust Impacts - Earthworks

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 2.7: Determining Risk of Dust Impacts – Construction

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Medium Risk	Low Risk
Low	Low Risk	Low Risk	Negligible

Table 2.8: Determining Risk of Dust Impacts –Trackout

Sensitivity of Area	Dust Emission Magnitude		
	Large	Medium	Small
High	High Risk	Medium Risk	Low Risk
Medium	Medium Risk	Low Risk	Negligible
Low	Low Risk	Low Risk	Negligible

3. AIR QUALITY NEUTRAL EMISSIONS BENCHMARKS

3.1 Transport Emissions Benchmarks

3.1.1 Two Transport Emissions Benchmarks (TEBs) have been defined, one for NO₂ and one for PM₁₀, for Retail (A1 and A2), Commercial (B1) and living accommodation (C3). The TEBs are based on a limited range of land-use categories to match the London Travel Demand Surveys (LTDS) data as closely as possible. Table 3.1 below shows those land-use categories for which it has been possible to produce a specific TEB and those for which it has not been possible. Table 3.2 provides the Transport Emissions Benchmarks approach for each land use category.

Table 3.1: Transport Emissions Benchmark (TEB) approach for each Land-use Category			
Land Use	Subcategory	TEB	Notes
Retail	A1 Shops	Yes	TEB developed for LGVs. Requires further work on HGVs.
	A2 Financial /professional services A3 Restaurants/cafes A4 Drinking establishments A5 Hot food takeaways	Yes	Developments will often be under the size criteria for the AQN policy. If part of a mixed use development, the A1 TEB should apply.
Commercial	B1 Business	Yes	TEB developed, assuming office use.
	B2 General industrial	No	Noted that industry requiring an Environment Permit is excluded from the Air Quality Neutral policy.
	B8 Storage and distribution	No	Further work required to develop the TEB for HGVs and extracting LTDS trip lengths for cars.
Living Accommodation	C3 Dwelling houses C4 Houses in multiple occupation	Yes	Residential TEB developed
	C1 Hotels	No	There are no data on trip lengths, and therefore a TEB cannot be derived
	C2 Residential Institutions Excluding hospitals	No	Includes wide range of land uses - care homes, boarding schools, residential colleges, training centres, prisons, military barracks etc. C3/C4 TEB may be applied.
	C2 Hospitals	No	There are no data on trip lengths, and therefore a TEB cannot be derived.
Institutional	D1 Non-residential institutions	No	Includes clinics, health centres, crèches, schools, art galleries, museums, libraries, places of worship etc. Trip length data available for education, health services and places of work, Too diverse land use class to have a generic D1 TEB.
Leisure	D2 Assembly and Leisure	No	Trip length data only available for public buildings. No data for other buildings within this category

Table 3.1: Transport Emissions Benchmark (TEB) approach for each Land-use Category			
Land Use	Subcategory	TEB	Notes
			Therefore a generic D2 TEB cannot be derived.
Other	Sui Generis	No	

3.1.2 The following table provides the TEBs based on the gross floor area and the location of the development.

Table 3.2: 'Air Quality Neutral' Emissions Benchmarks for Transport (TEBs)			
Land Use	CAZ	Inner	Outer
NO _x (g/m ² /annum)			
Retail (A1)	169	219	249
Office (B1)	1.27	11.4	68.5
NO _x (g/dwelling/annum)			
Residential (C3)	234	558	1553
PM ₁₀ (g/m ² /annum)			
Retail (A1)	29.3	39.3	42.9
Office (B1)	0.22	2.05	11.8
PM ₁₀ (g/dwelling/annum)			
Residential (C3,C4)	40.7	100	267

3.2 Trip Rate Assessment Valid for London Benchmark Trip Rates

- 3.2.1 Where a specific TEB has not been calculated, it will be possible to shown that a development would meet the benchmark if the scheme-generated trip rate for a particular land-use class does not exceed the benchmark trip rate, derived from Trip Rate Assessment Valid for London (TRAVL). If the scheme-generated trip rate exceeds the benchmark trip rate, it is not possible at this stage to derive the excess emissions, and it will be for the developer to suggest an alternative approach.
- 3.2.2 Benchmark trip rates for those land-use classes where it was not possible to derive trip lengths are shown in Table 3.3.

Table 3.3: Average Number of Trips per Annum for Different Development Categories			
Land Use	Number of Trips (trips/m ² /annum)		
	CAZ	Inner	Outer
A3	153	137	170
A4	2.0	8.0	-
A5	-	32.4	590
B2	-	15.6	18.3
B8	-	5.5	6.5
C1	1.9	5.0	6.9
C2	-	3.8	19.5
D1	0.07	65.1	46.1
D2	5.0	22.5	49.0

Technical Appendix 7.2(R): Environmental Health Officer Consultation

1. EHO CONSULATION EMAILS

From: McIntosh, XXXXXX: WCC <XXXXXX>
Sent: 19 November 2020 12:47
To: XXXXXX Gomes < XXXXXX >
Cc: Parsons, XXXXXX: WCC < XXXXXX >
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXXXX,

Thank you for your email. I have now received the consultation for the scoping report and will provide any comments via the consultation rather than discussing in detail outside this process.

Any questions please let me know

Kind regards
Gavin

XXXXXX **McIntosh**
Senior Practitioner
Environmental Sciences
Regulatory Support Team 1
City Management & Communities

Westminster City Council
15th Floor
Westminster City Hall
64 Victoria Street
London
SW1E 6QP

Tel: 07890380520
Email: environmentalsciences2@westminster.gov.uk
www.westminster.gov.uk



From: XXXXXX Gomes
Sent: 13 November 2020 12:58
To: Parsons, XXXXXX: WCC <[c](#) XXXXXX >
Cc: XXXXXX Vining < XXXXXX>; Barrett, XXXXXX: WCC < XXXXXX >; XXXXXX Seward < XXXXXX >
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXXXX,

Hope this email finds you well.

Thank you for your email of 16 September. In response we wish to clarify as follows:

The proposed development will provide up to 3% disabled car parking as required by the WCC and will not have an energy centre as it will be connected to the West End Gate energy centre with combined heat and power (CHP) plant. The sizing of the existing approved WEG CHP will not require increase to accommodate the additional residential units at PGPS.

We maintain that significant operational air quality effects are unlikely at surrounding existing receptors and therefore should be scoped out of the PGPS EIA. We have provided responses to your comments below in blue text.

This approach does not take into account the possibility of residents owning cars and parking in surrounding streets.

Vehicle ownership cannot be controlled via planning. There is nothing that the planning system can do to force individuals to not own vehicles directly; however, proposals can, as PGPS has been, be designed to encourage low vehicle ownership. It is clear from the design of the proposal and its location (very good access to public transport) that for the vast majority of residents, vehicle ownership would be an unnecessary inconvenience. The balance of probability would therefore be that residents are unlikely to choose to own a vehicle. Furthermore, even if the residents were to own cars and park in surrounding streets, there would be no basis to undertake an assessment upon, for example, how do you determine the scale of ownership, the streets where they would park and when they would use their cars?

Notwithstanding, it is also unclear whether residents would have “right to park” access to the existing car park at WEG. It may be possible, that should not all car parking spaces in the WEG basement be taken up by WEG residents, these could be offered to PGPS residents. However the impact of the WEG car parking has previously been comprehensively assessed in the WEG EIA, so the effects have already been accounted for.

If so, they may still own a car and if they can’t get a space that day, be forced into parking on-street. This would not be possible. In the eventuality that PGPS residents were to park in the basement of the WEG basement this would be on a permit basis/allocation basis. Therefore there would never be an instance in which a resident with a permit would not be able to park in the WEG basement and would subsequently be forced to seek a parking space in the surrounding area. A resident would either be entitled to park and therefore would have a space or they would not and they would therefore not expect a space.

Were we to grant permission, it is the City Council’s policy that we do not restrict parking permits so this cannot be prevented by planning condition or obligation. Accordingly, we consider there is a need to scope in operational air impacts. While the Applicant would take steps to encourage future residents not to own personal cars (e.g. implementation of residential travel plan), it is unavoidable that some will still elect to own vehicles. Where these residents choose to park these vehicles, would be beyond the control of the Applicant. It would not be possible for the Applicant to prevent future residents from owning an vehicle and attempting to park on nearby streets. However, it seems reasonable that were this to be the case, those who elect to purchase a local parking permit would only do so if it were possible for them to park in the immediate vicinity of their residence. If the surrounding streets are extremely busy, residents are likely to not opt for this inconvenient

and inconsistent approach and will seek more appropriate methods. For example a long stay private garage or not owning a car. The number of cars that can be parked on the surrounding roads is finite and therefore not subject to change if the proposal is approved. Furthermore, it would be beyond the scope of the transport consultants to predict the number and location of these additional vehicles. Therefore it would not be possible to take account of these operational traffic movements in the air quality assessment.

We have been made aware by the Applicant’s planning consultant that WCC has accepted scoping out operational air quality at the 114-150 Queensway (WCC Ref. 20/04934/FULL), where the same percentage of disabled car parking spaces are to be provided. Therefore we would be grateful for your clarification in respect of adopting a consistent approach.

I can’t access the link to this report
Please find the EFT v9 and EFT v10 performance reports attached.

I had thought the guidance advises against the use of kerbside sites? (as noted below, suggest considering RBKC Ladbroke Grove or possibly Cromwell Road instead)
Defra LAQM Technical Guidance TG(16) indeed advises against kerbside sites except ‘7.520 ...where kerbside sites are relevant for exposure, for example properties fronting directly onto the road. In that case, kerbside sites may be used in the model verification process’. Marylebone automatic site and Ram-boll diffusion tube monitoring programme are considered representative of the site since the monitoring sites were located along the same road as the more exposed to road traffic emissions site façades.

Do you know what the commercial uses are?
The scheme proposals are currently subject to ongoing design, however, it is expected to comprise a range of commercial uses for flexibility. The commercial ground floor space will target the new Class E use class and this currently extends approx. 10,000sqft. We expect that likely tenants will be a mix of F & B and other uses to active the street frontage.

Will there be any sensitive non residential uses proposed? Will be there be any chimneys or kitchen ex-traction required?
We expect one unit may be utilised as a restaurant, for which appropriate extraction would be included however this is still ongoing as part of detailed design.

Will the spec of the CHP need to change to accommodate the new properties?
As above, the current MEP strategy is to utilise the spare capacity anticipated in the WEG Energy Centre. The sizing of the existing approved WEG CHP will not require increase to accommodate the additional res-idential units at PGPS.

Please, let me know if you agree with the proposed above or if you have any questions. Thank you for your time.

Kind regards
XXXXXX **Gomes**
Senior Air Quality Consultant

M 07583 102977
XXXXXX

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW



From: Parsons, XXXX: WCC <XXXXXX >
Sent: 06 October 2020 13:03
To: XXXX Gomes <XXXXXX>
Cc: XXXX Vining <L XXXXXX >; Barrett, XXXXXX: WCC <XXXXXX >
Subject: RE: Air Quality Paddington Green Police Station

Hi XXXX,

Apologies for the delay, I am still catching up from having been on leave. Please see below comments in green.

Kind regards
XXXX

From: XXXX Gomes <XXXXXX>
Sent: 02 October 2020 10:17
To: Parsons, XXXX: WCC <XXXXXX >
Cc: Barrett, XXXXXX: WCC <XXXXXX >; XXXX Vining <XXXXXX >; Environmental Sciences: WCC <environmentalsciences2@westminster.gov.uk>
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXX,

I am wondering if you had the chance to review the below email. Please, could you let me know if you agree with the proposed below?
Thank you for your time.

Kind regards
XXXX Gomes
Senior Air Quality Consultant

M 07583 102977
XXXXXX

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Registered office: 240 Blackfriars Road, London SE1 8NW



From: XXXX Gomes
Sent: 16 September 2020 10:58

To: Parsons, XXXX: WCC <XXXXXX >
Cc: Barrett, XXXXXX: WCC <n XXXXXX >; XXXX Vining <XXXXXX >
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXX,

Thank you for your comments.

We now have the confirmation that the development will be car free and will not have an energy centre as it will be connected to the West End Gate energy centre with combined heat and power (CHP) plant. As such, the impacts of the development on local air quality are considered to be negligible and we are scoping out the Development operational impacts. The assessment will therefore focus on construction impacts and site suitability.

This approach does not take into account the possibility of residents owning cars and parking in surrounding streets. Notwithstanding, it is also unclear whether residents would have “right to park” access to the existing car park at WEG. If so, they may still own a car and if they can’t get a space that day, be forced into parking on-street. Were we to grant permission, it is the City Council’s policy that we do not restrict parking permits so this cannot be prevented by planning condition or obligation. Accordingly, we consider there is a need to scope in operational air impacts.

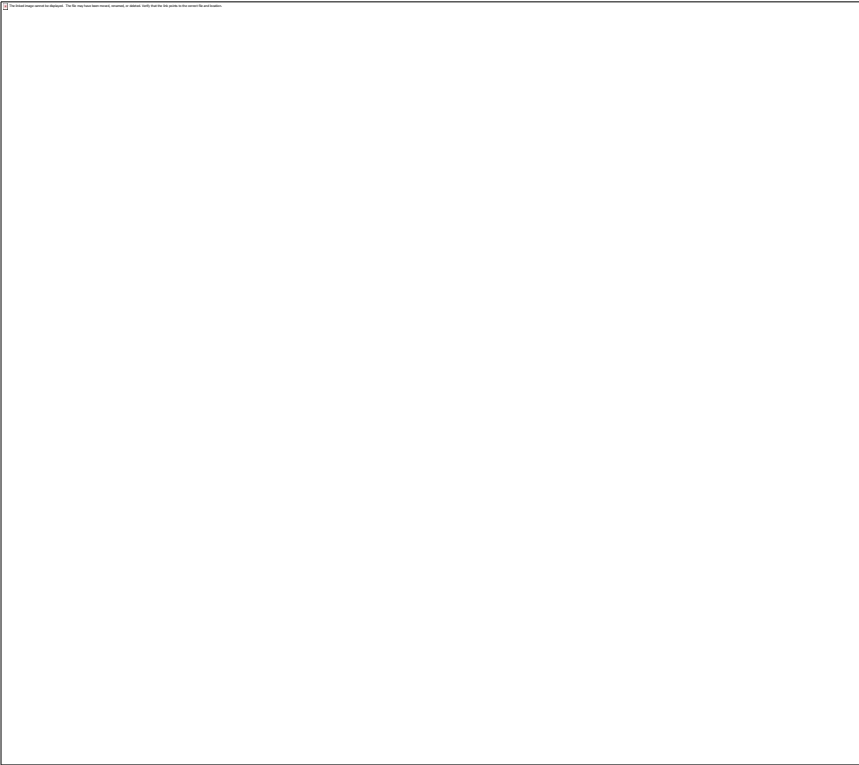
The applicant is keen on having residential use at lower levels, and taking into account the current concentrations levels exceeding the objectives, the development would employ mitigation in the form of mechanical ventilation with NOx (and PM if required) filters with air inlets located on the façade of the building. Please could you confirm if this would be acceptable? I am not able to confirm this at this stage unfortunately and would need to view the report as a whole first.

For background concentrations we will use Defra modelled concentrations calibrated with measured background concentrations from the closest background automatic stations, Bloomsbury (Camden) and Covent Garden. We will cross check the calibration factor with Air Quality Consultants (AQC) calibration report for consistency.
According to Air Quality Consultants, (I can’t access the link to this report) the EFT version 9 ‘now broadly match measured data at roadside monitors and CURED model is no longer required’. We expect the new EFT version 10 to follow the same pattern as version 9 and therefore do not consider necessary to use CURED.

Regarding potential verification sites, Marylebone is considered representative of the site since it is located along the same road as the one of the site facades (I had thought the guidance advises against the use of kerbside sites?) (as noted below, suggest considering RBKC Ladbroke Grove or possibly Cromwell Road instead) and, as an automatic site, is considered to be more accurate than diffusion tubes. As part of the West End Gate planning application, Ramboll carried a 6 months monitoring programme in 2018 with kerbside diffusion tubes located along Edgware Road (figure below) and located at Marylebone Station. We would therefore propose to verify the model with 2018 monitoring data from Ramboll diffusion tube at Edgware Road and Marylebone Station. The 2018 year would also represent a worst case as concentrations were significantly higher than 2019.

For meteorological data we prefer to use Heathrow Airport data since London Airport met data is limited by its location next to tall buildings.

Please, could you let me know if you agree with the proposed above? Also, do you have any further concerns regarding air quality? Do you know what the commercial uses are? Will there be any sensitive non residential uses proposed? Will be there be any chimneys or kitchen extraction required? Will the spec of the CHP need to change to accommodate the new properties?



Kind regards
XXXX Gomes
Senior Air Quality Consultant

M 07583 102977
XXXXXX

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From: Parsons, XXXX: WCC <XXXXXX >
Sent: 11 September 2020 16:54
To: XXXX Gomes <XXXXXX>
Cc: Barrett, XXXXXX: WCC <XXXXXX >
Subject: FW: Air Quality Paddington Green Police Station

Dear XXXX,

Please find comments in green below. I am on leave next week but can discuss on my return w/c 21 September.

Kind regards,
XXXX

From: XXXX Gomes <XXXXXX >
Sent: 04 September 2020 15:20
To: Parsons, XXXX: WCC <c XXXXXX >
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXX,

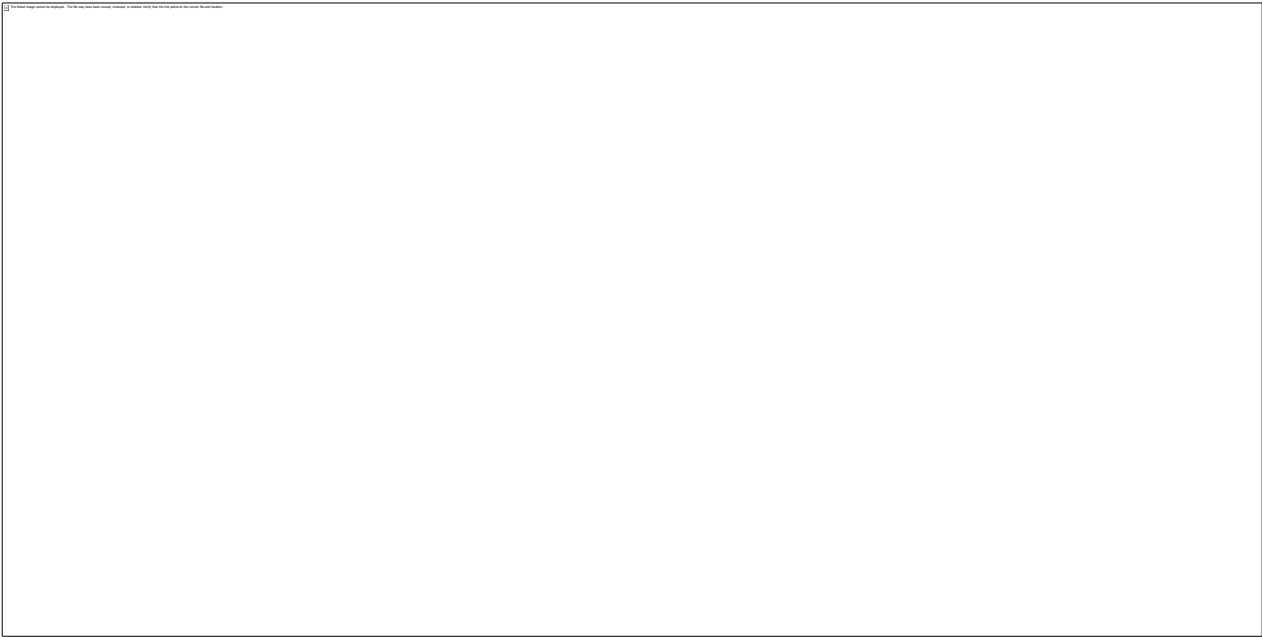
My apologies for the incomplete information.

The site is located at 4 Harrow Road, Paddington, London W2 1XJ to the immediate north of the A40 Westway as shown in the figure below, adjacent to West End Gate development (ref: 16/12162/FULL under construction).

The redevelopment proposals comprise a residential-led scheme, which are currently being refined through the on-going pre-application design and planning process, are envisaged to comprise the:

- demolition of the Paddington Green Police Station;
- excavation of a basement connection to the West End Gate development basement;
- erection of three blocks along, set back from, Harrow Road and Edgware Road;
- delivery of ground floor commercial uses and residential at upper floors, with associated land-scaped residential gardens; and
- approximately 656 homes, including 263 affordable housing units, and flexible commercial space;
- servicing and disabled parking at basement level; and
- connection to the West End Gate energy centre with combined heat and power (CHP) plant.

Building heights would range from approximately Ground plus 14 to Ground plus 25 storeys with the taller element up to Ground plus 39 storeys. The proposed development will be car free with the exception of minimal disabled parking provision.



Kind regards
XXXX Gomes
Senior Air Quality Consultant

M 07583 102977

XXXXXX

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Registered office: 240 Blackfriars Road, London SE1 8NW

From: Parsons, XXXX: WCC <XXXXXX >
Sent: 04 September 2020 14:09
To: XXXX Gomes <XXXXXX>
Subject: RE: Air Quality Paddington Green Police Station

Dear XXXX,

Could you please advise what the planning application is for as I am not familiar with the development proposals.

Many thanks,
XXXX

From: XXXX Gomes <XXXXXX>
Sent: 03 September 2020 09:29
To: Walshe, XXXXXX: WCC <XXXXXX >
Cc: Webber, XXXXXX: WCC <XXXXXX >; Parsons, XXXX: WCC <XXXXXX >
Subject: Air Quality Paddington Green Police Station

Dear XXXXXX,

Ramboll has been commissioned to undertake an environmental impact assessment to support the planning application for the Paddington Green Police Station Development at W2, 1XJ. We are contacting you to present our proposed approach for the air quality assessment.

Existing local air quality, the likely future air quality in the absence of the new development, and the likely future air quality if the development goes ahead, will all be defined. The assessment will cover two potential air quality issues:

- The impact of the development on the surrounding area, during both the construction and operational phases; and
- The impact of existing local pollution sources, in particular local road traffic emissions, on the development site itself.

The assessment of construction impacts will focus on the anticipated duration of works. The potential impacts of dust during construction will be assessed, making reference to the London Mayor’s Supplementary Planning Guidance (SPG) on The Control of Dust and Emissions during Construction and Demolition. Please also refer to WCC COCP - <https://www.westminster.gov.uk/code-construction-practice> Air quality impacts arising from construction and operational stage road traffic will be assessed with reference to guidance issued by the IAQM and Environment Protection UK (EPUK) in their document: *Land-use Planning & Development Control: Planning for Air Quality*. Traffic uplift (including construction traffic) should be screened against the IAQM EPUK criteria and should be taken from the approved transport assessment and include servicing and delivery trips.

What will you use for background concentrations – e.g. Defra background concentrations? The worst case scenario data should be utilised but alternatively if there are large discrepancies Defra background maps can be calibrated with the background monitoring station. Modelling future years scenarios should assume a worst case scenario and due to uncertainties in real world driving emissions and emissions associated with the Latest EFT then some correction should be discussed. I am not advocating the use of AQC CURED methodology but CURED V3A will predict higher

emissions than EFT V9, therefore suggest that some correction is used in the form of a sensitivity test when predicting future emissions. Street canyon modelling should be used where appropriate.

- Sensitive receptors to represent worst-case locations should be selected at the proposed development site and at surrounding buildings to assess operational effects;
- A site suitability assessment should be included and both assessment should be compared against the relevant objective. i.e. the annual mean for residential and the 1 hour mean for commercial uses as set out in LLAQM 2019. Should any ground floor outdoor seating areas be proposed associated with the commercial uses, then this should be assessed against the relevant objective;
- Impact of the development to existing receptors should be assessed using the EPUK IAQM methodology; and
- Impacts to future occupiers should be assessed against London Councils Air Quality and Planning Guidance.

The assessment of operational road traffic impacts will be undertaken using the ADMS Roads detailed dispersion model. The assessment of operational impacts will combine the emission factors and back-grounds of the earliest year that the development is likely to be operational with the completed development traffic data to provide a worst case assessment. The model will be used to predict concentrations within the development site to assess the suitability of the site for residential development, and also at off-site receptors to assess the impacts of additional traffic associated with the development. We propose to verify the model with 2019 monitoring data from Marylebone automatic station and monitoring undertaken by Breathe London pods at Edgware Road. Please, could you confirm if those monitoring locations would be considered acceptable to verify the model?

I don't consider the Breathe London pods are suitable as the data is not ratified. Marylebone Road is a kerbside site and should not be used for data verification unless it is applicable for the location area i.e. proposed property is on the kerbside. The best option would be to go for a site specific diffusion tube survey. Otherwise if there is not site specific diffusion tube data available, I recommend looking for a similar placed diffusion tube in a different borough, e.g. RBKC Ladbroke Grove or possibly Cromwell Road may be a bit more representative. Also need to consider any **site combustion sources**? Combustion sources should include any back up generators that are proposed onsite. It is recommended that should combustion plant be proposed they are assumed operational 365 days a year at full capacity. Any plant should meet the requirements of the Mayor SPG Sustainable Design and Construction. Should any proposed on-site combustion plant be present, the impacts should be assessed using ADMS 5 dispersion modelling software or equivalent.

What are your proposals for meteorological data? 3 years data is recommended for any combustion modelling required. An air quality neutral calculation will be required for both building and transport emissions. The calculation should use transport data taken from the approved transport assessment. For building emissions, this should assume works case scenario and assume all plant operating for 365 days a year at maximum capacity and should include a standard testing cycle for any emergency plant.

Air quality will be assessed in relation to the national air quality objectives, established by the Government to protect human health. However, the 2019 Intend to Publish Version of the London Plan states that the Mayor is committed to achieving both the current legal limits for air quality, but also achieving World Health Organisation (WHO) targets for other pollutants such as Particulate Matter (PM). This potentially reduces the PM_{2.5} (ultra fine particles with a diameter of 2.5 microns) limit from 25 down to 10 µg/m³. The London Environment Strategy indicates that a new target will be introduced to meet the lower WHO health-based guideline by 2030. Please, could you clarify the Council's position on the target PM_{2.5} objective?

I have noted below information from the draft AQAP https://www.westminster.gov.uk/sites/default/files/air_quality_consultation_policy.pdf on the target PM_{2.5} objective:



All practical and reasonable measures which can be implemented to mitigate any detrimental impacts associated with construction and operation of the proposed scheme will be considered, and highlighted within the Air Quality chapter.

Thank you for your time.

Kind regards
XXXX Gomes

Senior Air Quality Consultant

M 07583 102977
[XXXXXX](#)

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Technical Appendix 7.3(R): Model Inputs, Transport Data and Results Processing Tools

1. MODEL INPUTS AND RESULTS PROCESSING TOOLS

1.1 Proposed Development Traffic Flows

Table 1.1: 2022 Amended Proposed Development Demolition and Construction Traffic (2026)			
Links	AADT	HGVs	% HGV
1. A5 Edgware Road (between Newcastle Place and Church Street)	1	1	100%
2. Church Street (west of Edgware Road)	1	1	100%
3. Newcastle Place	0	0	0%
4. Paddington Green	1	1	100%
5. A404 Harrow Road eastbound (west of Paddington Green)	8	5	63%
6. A40 Westway	1	1	100%
7. A404 Harrow Road eastbound (east of Paddington Green)	8	5	63%
8. A5 Edgware Road (north of Church Street)	3	2	67%
9. A5 Edgware Road (south of Newcastle Place)	1	1	100%

Table 1.2: 2022 Amended Proposed Development Completed Development Traffic Flows			
Links	AADT	HGVs	% HGV
1. A5 Edgware Road (between Newcastle Place and Church Street)	41	2	41
2. Church Street (west of Edgware Road)	59	4	59
3. Newcastle Place	0	0	0
4. Paddington Green	83	5	83
5. A404 Harrow Road eastbound (west of Paddington Green)	21	2	21
6. A40 Westway	0	0	0
7. A404 Harrow Road eastbound (east of Paddington Green)	62	3	62
8. A5 Edgware Road (north of Church Street)	42	3	42
9. A5 Edgware Road (south of Newcastle Place)	41	2	41
10. Loop Road (North of Westmark)	50	2	

1.2 Modelled Traffic Flows

1.2.1 The model requires the user to provide various input data, including the Annual Average Daily Traffic (AADT) flow, the proportion of HGV, road characteristics (including road width and street canyon height, where applicable), and the vehicle speed. AADT flows and the proportions of HGVs for roads within the study area and within 250 m of receptors, monitoring locations are presented below in Table 1.3 to 1.4, and Chapter 7: Transport and Accessibility(R).

Table 1.3: Modelled Traffic Flows					
Road Link	Data Source	2019 Baseline		Scenario 2: Future Baseline (2030)	
		AADT	HGV	AADT	HGV
A40 Flyover East	DfT 70181 1/2	26,863	1,716	26,863	1,716
A40 Flyover West	DfT 70181 1/2	41,729	2,440	41,729	2,440
A404 Harrow Road eastbound (west of Paddington Green)	Arup	25,303	1,314	25,412	1,320
A404 Harrow Road eastbound (east of Paddington Green)	Arup	24,613	1,705	25,327	1,712
A404 East (East Edgware Road)	calculated	11,604	1,258	11,873	1,270
A404 West (West Edgware Road)	DfT 58173	21,198	840	21,198	840
A404 West (East Edgware Road)	calculated	11,604	1,258	11,922	1,258
Chapel Street	LAEI	7,616	556	7616	556
Church Street	Arup	1,564	36	2,332	123
A5 Edgware Road (south of Newcastle Place)	Arup	26,725	3,667	27,267	3,893
A5 Edgware Road (north of Church Street)	Arup	27,695	3,861	28,020	3,877
Edgware Road (south Chapel Street)	DfT 26146	36,005	2,843	36,005	2,843
A5 Edgware Road (south A404)	DfT 74972	36,005	2,843	36,005	2,843
Newcastle Place	Arup	376	47	459	47

Table 1.3: Modelled Traffic Flows					
Road Link	Data Source	2019 Baseline		Scenario 2: Future Baseline (2030)	
		AADT	HGV	AADT	HGV
Paddington Green	Arup	1,228	39	1,331	37
Paddington Green (south Newcastle Place)	Arup	1,604	86	1,790	86
Praed St	DfT 37775	5,541	1,103	5,541	1,103
Sale Place	LAEI	1,614	60	1,756	202
Loop Road	Arup			35	0
Verification Road Links					
Alsop Place (north York Terrace)	LAEI	7,866	195		
Alsop Place (south York Terrace)	LAEI	6,803	205		
Baker Street (north Marylebone Road)	DfT 26464	8,885	1,874		
Baker Street (south Marylebone Road)	DfT 74978	9,885	1,504		
Belsize Road	LAEI	3,517	539		
Brondesbury Road	LAEI	15,064	1,017		
Cambridge Avenue	LAEI	8,748	1,811		
Cromwell Road (East Earls Court Road)	DfT 6121	58,191	1,962		
Cromwell Road (East Queen's Gate)	DfT 58164	44,853	2,886		
Earls Court (north Pembroke Road)	LAEI	4,078	678		
Earls Court (south Pembroke Road)	DfT 48645	24,593	1,547		
Earls Court (south Cromwell Road)	DfT 8081	27,603	2,003		

Table 1.3: Modelled Traffic Flows					
Road Link	Data Source	2019 Baseline		Scenario 2: Future Baseline (2030)	
		AADT	HGV	AADT	HGV
Harrington Road	LAEI	13,088	1,551		
Kilburn High Road (North Brondebuty Villas)	DfT 75135	16,393	2,458		
Kilburn High Road (south Belsize Road)	LAEI	19,422	3,015		
Marloes Road	LAEI	955	39		
Marylebone High Street	LAEI	4,299	190		
Marylebone Road (west Baker Street)	DfT 57537	70,015	5,160		
Marylebone Road (east Baker Street)	DfT 27236	70,844	5,226		
Outer Circle	LAEI	13,698	222		
Pembroke Road	DfT 48645	24,593	1,547		
Queen's Gate north and south bound (north Cromwell Road)	LAEI	9,153	418		
Queen's Gate south bound (south Cromwell Road)	LAEI	6,467	348		
Queen's Gate north bound (south Cromwell Road)	LAEI	6,640	521		
Queen's Gate north and south bound (south Harrington Road)	LAEI	5,346	210		
Stanhope Gardens	LAEI	13,991	857		
W Cromwell east bound	DfT 28505	33,813	1,394		
W Cromwell west bound	DfT 28505	31,014	1,498		

Table 1.3: Modelled Traffic Flows					
Road Link	Data Source	2019 Baseline		Scenario 2: Future Baseline (2030)	
		AADT	HGV	AADT	HGV
York Gate	LAEI	9,105	292		

Table 1.4: Modelled Traffic Flows for Scenario 3 and Scenario 4					
Road Link	Data Source	Scenario 3: Future Baseline (2030) + Proposed Development		Scenario 4: Future Baseline (2030) + Proposed Development + Cumulative Development	
		AADT	HGV	AADT	HGV
A40 Flyover East	DfT 70181 1/2	26,863	1,716	26,863	1,716
A40 Flyover West	DfT 70181 1/2	41,729	2,440	41,729	2,440
A404 Harrow Road eastbound (west of Paddington Green)	Arup	26,863	1,716	26,863	1,716
A404 Harrow Road eastbound (east of Paddington Green)	Arup	25,346	1,712	25,346	1,712
A404 East (East Edgware Road)	calculated	11,908	1,270	11,928	1,270
A404 West (West Edgware Road)	DfT 58173	21,198	840	21,198	840
A404 West (East Edgware Road)	calculated	11,908	1,270	11,928	1,270
Chapel Street	LAEI	7,616	556	7616	556
Church Street	Arup	2,382	127	2,382	127
A5 Edgware Road (south of Newcastle Place)	Arup	27,355	3,734	27,437	3,734
A5 Edgware Road (north of Church Street)	Arup	28,062	3,861	28,144	3,880
Edgware Road (south Chapel Street)	DfT 26146	36,005	2,843	36,005	2,843

Table 1.4: Modelled Traffic Flows for Scenario 3 and Scenario 4					
Road Link	Data Source	Scenario 3: Future Baseline (2030) + Proposed Development		Scenario 4: Future Baseline (2030) + Proposed Development + Cumulative Development	
		AADT	HGV	AADT	HGV
A5 Edgware Road (south A404)	DfT 74972	36,005	2,843	36,005	2,843
Newcastle Place	Arup	0	0	0	0
Paddington Green	Arup	1,414	37	1,414	37
Paddington Green (south Newcastle Place)	Arup	1,958	86	1,958	86
Praed St	DfT 37775	5,541	1,103	5,541	1,103
Sale Place	LAEI	1,614	60	1,756	202
Loop Road	Arup	544	49	544	49

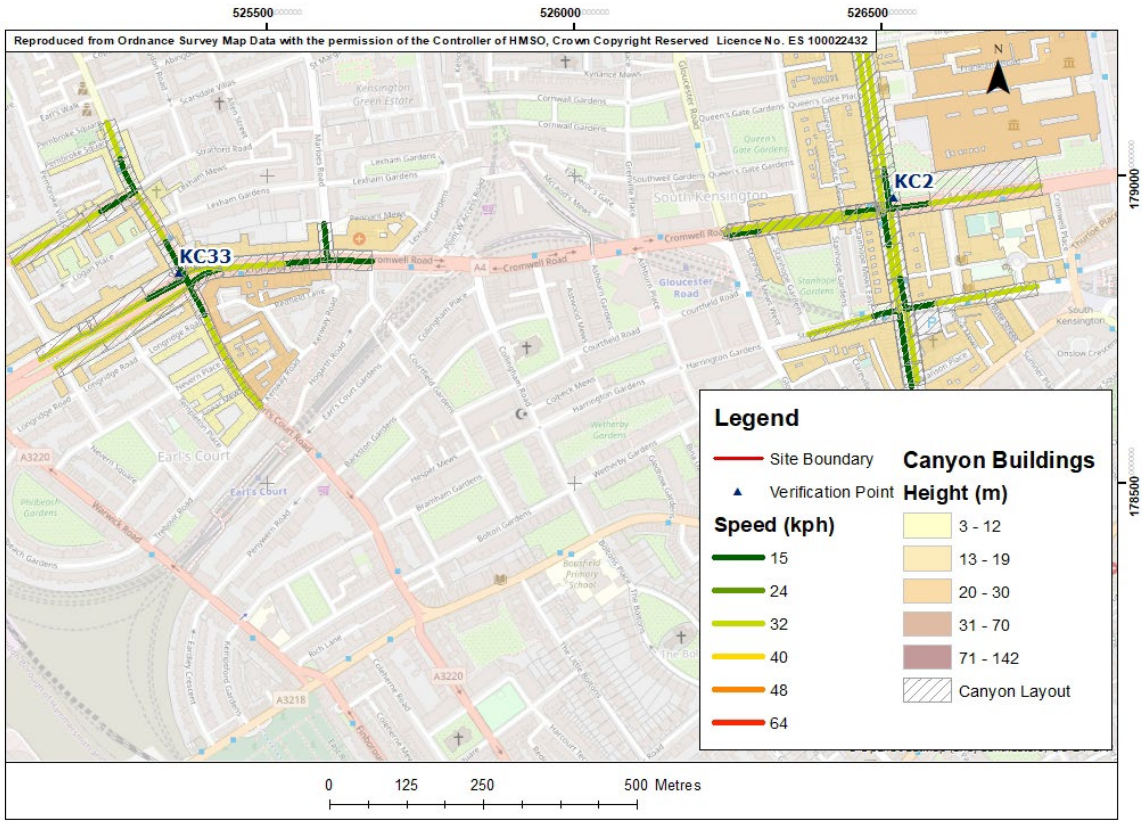


Figure 1.1a: Air Quality Verification Modelled Roads and Speed

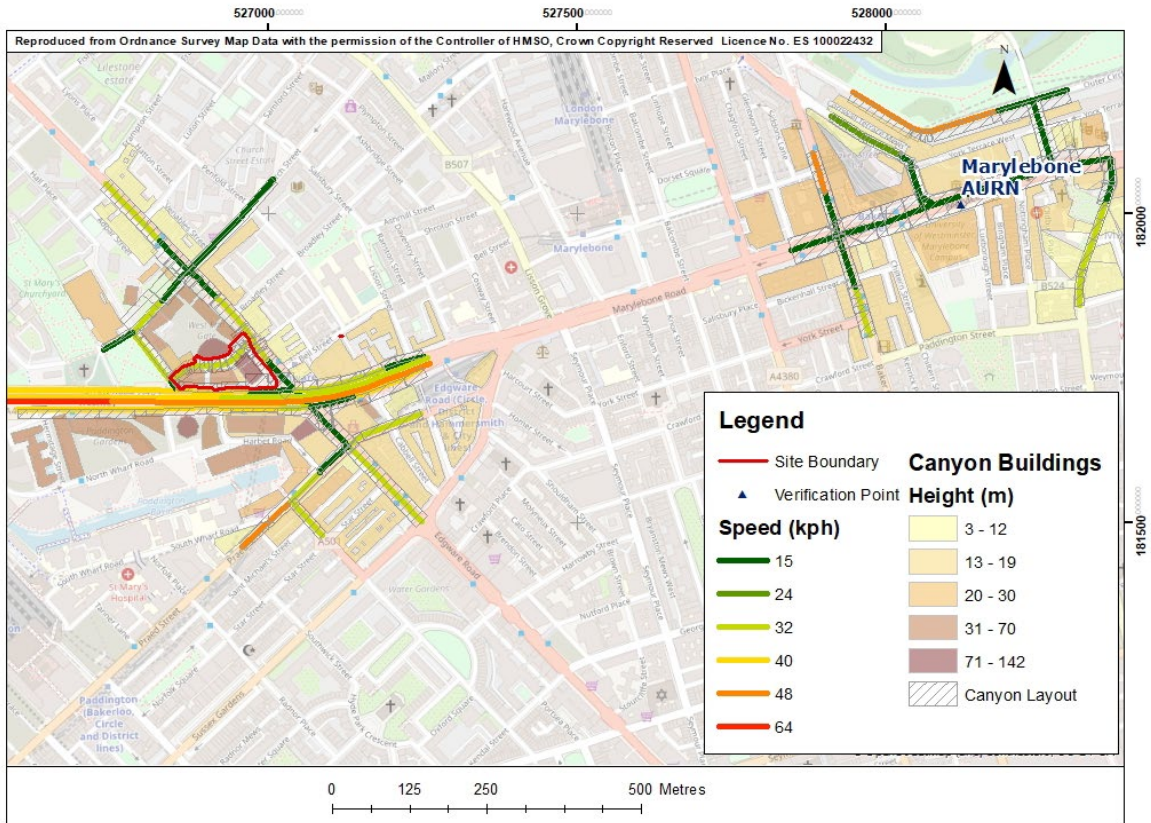


Figure 1.2b: Air Quality Site and Verification Modelled Roads and Speed