The three blocks would be arranged on the southern frontage of the site enclosing a proposed landscaped area to the north along Newcastle Place.

Commercial uses would be located at the ground floor level, along the main frontages of Edgware Road and Harrow Road, and at the first floor and part second floor, with residential uses above.

Ancillary residential amenities are currently envisaged to comprise residents' gardens at roof and terrace levels with additional resident facilities provided at ground floor. Residents would also have access to a residents' lounge and use of the facilities at the WEG development.

Children's and young person's play space would be provided as appropriate.

The emerging landscape proposals would aim to deliver considerable public realm, biodiversity and amenity enhancement especially along Harrow Road and Edgware Road.

The Applicant would seek to achieve a number of sustainable design initiatives. It is envisaged that these will be in line with Government and, in particular, the Mayor of London's 'Energy Hierarchy' and sustainability targets, as well as requirements set out by WCC. The proposed development would therefore aim to:

- minimise overall energy demand and consumption through practicable energy efficient design;
- minimise carbon dioxide emissions arising from the operation of the proposed development as far as practicably possible through the use of efficient plant, fittings and fixtures; and
- reduce carbon dioxide emissions arising from the operation of the proposed development as a result of on-site low carbon technology

6. POTENTIAL SIGNIFICANT ENVIRONMENTAL IMPACTS AND LIKELY EFFECTS SCOPED IN

This section summarises the potential significant environmental impacts and likely effects that are at this stage anticipated to arise in connection with all stages of the proposed development and will therefore be addressed in the EIA. It sets out the approach to be adopted in each instance, the scope of technical assessments to be undertaken and the assessment methods proposed.

6.1 Socio-Economics

A socio-economics technical assessment will be presented in ES Volume 1. The assessment will be undertaken by CBRE and will consider the potential socio-economic impacts of the proposed development; particularly the impact on employment, spending in the local economy, housing demand, population and community infrastructure. The assessment will be undertaken in the context of the existing site conditions, prevailing socio-economic baseline conditions and the relevant policy framework.

6.1.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Creation of demolition and construction employment and the anticipated direct and indirect effects within the local economy;
- Creation of operational employment, considering the gross employment as well as net additional above any existing employment levels on-site;
- Spending arising from on-site occupants (employees and residential population);
- Provision of new housing (residential units);
- Introduction of a new population accommodated within the residential units and resulting demand for community facilities (primary healthcare, schools, open space and playspace); and
- Change in the site conditions with regard to surveillance, activity and lighting.

6.1.2 Approach and Methodology

There is no published specific assessment guidance or technical significance criteria to assess socio-economic effects. Accordingly, the assessment will be undertaken based on professional experience and judgement. For transparency, the approach adopted in applying professional judgement will be confirmed by providing the sensitivity of receptor criteria, magnitude of impact criteria and scale of effect matrix.

Consultation

No specific consultation over and above this scoping exercise is considered necessary.

Study Area

This assessment will be considered at the neighbourhood level (Little Venice ward); the local authority level (CoW); and the regional level (Greater London), or where applicable within a certain distance of the site boundary, as summarised in Table 6.1.

Table 6.1: Socio-Economic Study Area	
Assessment	**Study Area**
Demolition and Construction Employment	Local Authority
Completed Development Employment	Local Authority
Additional Spending	Local Authority
Housing Delivery	Neighbourhood and Local Authority
Primary Education Demand	Neighbourhood (1.6 km from site boundary)[45]
Secondary Education Demand	Local Authority (3.2 km from site boundary)[46]
Primary Healthcare (GP practices) Demand	Neighbourhood (1.6 km from site boundary)[47]
Open Space	Neighbourhood and Local Authority (800 m from site boundary)[48]
Playspace Demand	Neighbourhood (Under 5s: 100 m, 5-11 years: 400 m and 12+: 800 m)[48]
Crime	Neighbourhood

Baseline Characterisation

A desktop study will be undertaken, which will include a review of available information to determine the existing baseline conditions at neighbourhood, local authority and regional levels. This will focus on demographic, economic and employment data and location/capacity (where possible) of community facilities (including education, healthcare and open space/playspace). The existing baseline will be established using a combination of data sources including nationally published statistics from the Office for National Statistics (ONS)[49], Ministry of Housing, Communities and Local Government (MHCLG)[50] and GLA[51] where relevant. This includes the Business Register and Employment Survey[52], Annual Business Survey[53] and Census 2011[54]. The baseline and capacity of the social infrastructure will be established based on data from NHS Choices and NHS Digital[55] and the Annual School Census[56]. Relevant policy and supplementary planning guidance produced by the GLA and the WCC will also be considered.

Demolition and Construction

- Demolition and construction-related employment effects will be assessed using the latest published results in the Annual Business Survey[53].

Completed Development

- Completed development direct operational employment will be calculated by using land use specific employment densities from the Homes and Communities Agency (HCA) Employment Density Guide (2015)[57], which will be applied to the non-residential floorspace schedule.

45 Department for Education, 2014. New Home to School Travel and Transport Guidance.
46 Secondary School Planning occurs at borough level given secondary school aged children tend to travel further to school.
47 1.6 km is a 1520 minute walking distance (TfL, 2016) which is considered to be a reasonable walking distance to access GP services based on professional judgement.
48 Based on Greater London Authority (GLA) Supplementary Planning Guidance (2012) on Play and Informal Recreation.
49 Office for National Statistics (ONS), various data sets and years.
50 Ministry of Housing, Communities and Local Government (MHCLG), various data sets and years.
51 Greater London Authority (GLA), various data sets and years.
52 Business Register and Employment Survey, various years.
53 Annual Business Survey, various years.
54 Office for National Statistics (ONS), 2011. Census.
55 National Health Service, NHS Choices and NHS Digital data, 2020.
56 Department for Education, 2020. Annual Schools Census data.
57 Homes and Communities Agency (HCA), 2015. Employment Density Guide (3rd edition).

- An estimate of spending generated as a result of the completed proposed development will be calculated using average household spending figures and an average figure for daily worker spending[58,59].
- Delivery of housing will be evaluated by using the quantum of proposed residential units against the identified housing targets set out in WCC policy and the London Plan.
- Residential population and child yield will be modelled by entering the residential accommodation schedule into the GLA's Population Yield Calculator[60].
- Current capacity in primary schools and secondary schools will be established using the Annual School Census[56]. This information will be compared to the expected demand for school places from the new population of the proposed development.
- The Healthy Urban Development Unit (HUDU) benchmark of 1,800 registered patients per NHS General Practitioner (GP) will be used to assess existing GP capacity against demand arising from the proposed development. This will be assessed against the currently capacity of GP surgeries within 1.6 km of the site.
- Open Space and playspace will be assessed in line with local policy requirements.

The evaluation of proposed development's effects will be based on an assessment of the magnitude of the impact and the sensitivity of the identified receptor. The scale of effects will be identified on a matrix basis.

Mitigation measures integral to the development proposals (i.e. embedded mitigation) will be considered, whilst any additional mitigation measures will be identified, where necessary, to reduce likely adverse effects.

Cumulative Effects

Consideration will be given to cumulative effects where quantitative information is available within the public domain.

6.2 Air Quality

An air quality technical assessment will be presented in ES Volume 1. The air quality assessment will be undertaken by Ramboll and will consider the implications of current and future ambient air quality at the site for the proposed residential use, as well as the implications of emissions from the proposed development on local air quality.

Potential new sources of air pollution arising from the proposed development during its demolition and construction stage, and once completed (i.e. any heating plant) will be considered.

The proposed development will be car-free, with the exception of minimal disabled parking provision and subject to scoping with WCC. Together with servicing trips, the total vehicle trip generation for the site would be minimal and therefore the effects of the proposed development traffic emissions would be not significant and have been scoped out of the assessment.

6.2.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Demolition and construction dust and the associated effects on off-site human health and amenity, as well as early occupied units on-site;
- Demolition and construction HGV/Heavy Duty Vehicles (HDV) traffic and the associated emission effects on on-site and off-site human health receptors; and

58 Office for National Statistics (ONS), Family Spending in the UK Statistical Bulletin.
59 Visa Europe, 2015. UK Working Day Spend Report.
60 Greater London Authority (GLA), 2019. Population Yield Calculator. London: GLA.

- Predicted air quality with the proposed development completed and operational to determine the suitability of the site for residential development and to identify the need for mitigation.

Effects on local air quality and sensitive receptors from a centralised energy plant emissions (NO_X) have been scoped out on the basis that the proposed development would not introduce significant gas fired energy plant (e.g. combined heat and power (CHP) and boilers). However, consideration will be given to the CHP emissions arising from the adjacent WEG development as the proposed development will connect to the existing energy centre located in the basement.

The proposed development would not give rise to any odour impacts and associated effects; accordingly, odour effects have been scoped out of the EIA.

6.2.2 Approach and Methodology

The suite of air quality assessments will be undertaken in accordance with the Mayor of London's 'Control of Dust and Emissions during Construction and Demolition SPG'[61] and the most recent Environmental Protection UK (EPUK) and Institute of Air Quality Management (IAQM) air quality planning guidance[62].

Consultation

Consultation with WCC Environmental Health Officer (EHO) will be undertaken during the EIA process to agree the scope of the assessment.

Study Area

The following sensitive receptors have been identified:

- Nearby existing and proposed areas where the public might reasonably be expected to spend extended periods of time, for example residential properties, hotels, public amenity areas / open spaces;
- Residential units introduced by the proposed development, as well as short term outdoor amenity areas if applicable; and
- Outdoor restaurant/bar seating where included in the proposed development.

No statutory designated ecological sensitive receptors have been identified that are likely to be impacted by changes in air quality as a result of the proposed development.

In respect of off-site impacts, the demolition and construction study area will be limited to within 350 m of the boundary of the site/50 m of the route(s) used by demolition and construction vehicles on the public highway, up to 500 m from the site entrance(s).

Baseline Characterisation

Existing baseline will be established by means of desk base review of WCC monitoring location data. Future baseline will be established by the use of air dispersion modelling and the Defra tools for predicting future air quality.

Demolition and Construction

A qualitative assessment of the potential impact on local air quality from demolition and construction activities will be undertaken. The latest guidance on the assessment of demolition and construction impacts on air quality published by the IAQM and the Mayor of London will be used to

[61] Greater London Authority, 2014. The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance. London. GLA. Available: https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/supplementary-planning-guidance/control-dust-and

[62] EPUK & IAQM, May 2015. Land-Use Planning & Development Control: Planning for Air Quality. Guidance from Environmental Protection UK and the Institute of Air Quality Management for the consideration of air quality within the land-use planning and development control processes.

assess the magnitude and significance of these impacts during the demolition and construction stage.

The risk of dust arising in sufficient quantities to cause annoyance and/or health impacts will be determined using four risk categories: negligible, low, medium and high risk. A development is allocated to a risk category based on the following two factors:

- The scale and nature of the works, which determines the potential dust emission magnitude as small, medium or large; and
- The sensitivity of the area to dust impacts, which is defined as low, medium or high sensitivity.

These two factors will be combined to determine the risk of dust impacts. The risk category assigned to the proposed development can be different for each of the four potential activities (demolition, earthworks, construction and track out). Consideration will be given to off-site receptors as well as on-site receptors (occupied early phases of the proposed development).

Potential impacts from exhaust emissions from construction vehicles using the local road network will be assessed following the methodology set out for operational vehicles given below for the completed proposed development.

Completed Development

To assess potential on-site impacts from road traffic emissions, the assessment will utilise the latest version of the ADMS-Roads modelling software[63] and consider the current and future baseline air quality in the area.

The proposed development would connect into the wider WEG masterplan plant. Emissions from this source would be modelled using the ADMS model and included within the future baseline. No other significant point source emissions of pollutants are anticipated.

The following scenarios will be assessed, as appropriate:

- Scenario 1: Existing Baseline (2019);
- Scenario 2: Future Baseline (year of opening accounting for any background growth excluding cumulative schemes);
- Scenario 3: Future Baseline + proposed development; and
- Scenario 4: Future Baseline + proposed development + cumulative development.

Modelled concentrations in the existing baseline year will be compared against local monitoring data in order to verify the model output.

The suitability of the site for residential development and the need for additional mitigation will be determined from the air quality concentrations predicted for the 'future baseline + proposed development + cumulative development' scenario.

There is no official guidance in the UK on how to assess the significance of local air quality emissions from existing sources on a new development. The assessment of the suitability of the site will be limited to predicting air quality at on-site receptors and the significance of this will be based on whether the national air quality objectives for each pollutant, as set out in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland[64], are exceeded or not.

In addition, an air quality neutral assessment will be carried out following the methodology outlined in the GLA's 'Sustainable Design and Construction SPG' and the 'Air Quality Neutral Planning

[63] Cambridge Environmental Research Consultants, 2019. ADMS-Roads [online]. Available at: http://www.cerc.co.uk/environmental-software/ADMS-Roads-model.html

[64] Department of the Environment, Transport and the Regions (DETR, 2007) in Partnership with the Welsh Office, Scottish Office and Department of the Environment for Northern Ireland, 2007. The Air Quality Strategy for England, Scotland, Wales, Northern Ireland. HMSO, London.

Support Update'[65].

The draft New London Plan introduces the concept that developments should now be demonstrating that they are air quality positive. However, at the current time no guidance has been provided as to how this should be carried out and therefore it is not proposed to include this as part of the assessment.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 4, where quantitative information is available within the public domain.

6.3 Noise and Vibration

A noise and vibration technical assessment will be presented in ES Volume 1. The assessment will be undertaken by Ramboll and will consider the effects of ambient noise on the proposed development, from local road and rail traffic in addition to other environmental noise and vibration sources, and the site's suitability for new residential dwellings. The assessment will also consider the potential noise impacts from the proposed development upon nearby noise sensitive receptors, including demolition and construction noise and vibration, road traffic noise, and noise from any new plant items.

6.3.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and likely effects:

- Demolition and construction noise and vibration at noise sensitive receptors (NSRs) in close proximity to the proposed development, as well as early occupied units on-site;
- Demolition and construction HGV traffic noise and the associated potential noise level changes on the local road network at NSRs, as well as early occupied units on-site;
- Public transport operational noise – although not a direct effect on the existing noise sensitivities as a result of the development, the operations of TfL (both bus and rail) and surrounding London airports will be taken into consideration to ensure a suitable acoustic environment prevails for any future residential occupants of the developed site;
- Vibration from public transport, in particular from the London Underground tunnels below the site, and an assessment on the likely effects of vibration and associated re-radiated noise on the proposed development;
- Noise effects on future residents of the proposed development from the operation of non-residential components of the proposed development (e.g. commercial); and
- Building services plant noise effects associated with the operation of the proposed development upon existing and future residents and amenity areas introduced by the proposed development.

6.3.2 Approach and Methodology

The noise and vibration assessments will be undertaken in accordance with relevant British Standards as set out below, as well as the Calculation of Road Traffic Noise (CRTN)[66] method and World Health Organisation's (WHO) 'Guidance for Community Noise' (1999)[67].

[65] Air Quality Consultants and ENVIRON (now Ramboll), 2014. Air Quality Neutral Planning Support Update: GLA 80371. Available at: http://www.aqconsultants.co.uk/getattachment/Resources/Download-Reports/GLA-AQ-Neutral-Policy-Final-Report-April-2014.pdf.aspx
[66] The Department for Transport, 1988. Calculation of Road Traffic Noise.
[67] World Health Organization, 1999. Guidelines for Community Noise, Stockholm University & Karolinska Institute.

Consultation

Consultation with the WCC's EHO will be undertaken to agree the proposed assessment survey and assessment methodologies.

Study Area

In respect of on-site impacts, the study area covers the:

- site; and
- nearest NSRs to the site boundaries, namely the WEG development immediately north, houses/apartments on the opposite side of Edgware Road and the Merchant Square development to the south.

In respect of off-site impacts, the:

- demolition and construction study area will be limited to within 350 m of the boundary of the site/50 m of the route(s) used by construction vehicles on the public highway, up to 500 m from the site entrance(s).
- completed development study area will extend to off-site sensitive receptors identified as at risk of impacts from the proposed development.

The study area has been defined based on professional judgement and experience.

Baseline Characterisation

Environmental noise measurements will be undertaken at a selected number of positions around the site (some of which will be identical to those employed on site previously) to establish the existing baseline noise levels. A combination of attended and unattended monitoring of the prevailing noise levels over weekday periods will be required in order to ensure that the noise climate at sensitive times is fully quantified.

Attended vibration measurements will be undertaken on the podium slab and at other relevant positions to allow subsequent assessment of any vibration impact on proposed new dwellings.

Measurements of all relevant noise indices (L_{Aeq}, L_{Amax}, L_{A10}, and L_{A90}) will be made at each position during each hour of the survey and octave band spectra will be recorded as necessary in order to fully quantify the existing noise climate. A noise and vibration survey report will be prepared and included as a Technical Appendix in Volume 3 of the ES.

The future baseline will be predicted by means of traffic data and estimates of development related traffic.

Demolition and Construction

The assessment of demolition and construction noise and vibration on surrounding existing and on-site future NSRs will be considered in accordance with the following standards, guidance and methodologies:

- BS5228-1: 2009 for demolition and construction plant noise and traffic noise + A01:2014 for code of practice for noise and vibration control on construction and open sites[68].;
- BS7385 for vibration in buildings[69]; and
- BS6472-1 for vibration effects on humans[70].

[68] British Standards Institution, 2014. BS 5228-1: 2009 + A01:2014 Code of practice for noise and vibration control on construction and open sites, BSI.
[69] British Standards Institution, 1993. BS 7385 Evaluation and measurement for vibration in buildings, BSI.
[70] British Standards Institution, 2008. BS 6472-1 Guide to evaluation of human exposure to vibration in buildings, BSI.

Completed Development

The results of the noise measurements will be used not only to establish an existing baseline for the local noise climate but also to enable the design of suitable building fabric for proposed dwellings to achieve suitable internal noise levels in line with guidance in BS8233:2014[71] and any planning requirements of WCC.

Using the results of surveys conducted on-site, a full quantitative assessment of the potential noise and vibration effects will be undertaken, and their potential significance rated in accordance with the established standards. The significance of any effects will be determined from the interaction of the impact magnitude, the duration of exposure and the sensitivity of the NSRs. Pre-mitigation effects, as well as post-mitigation (residual) effects will be evaluated.

An assessment of the change in road traffic noise from roads around the proposed development will be conducted by comparing the number of vehicle movements with and without the proposed development. The results of this assessment will be used to establish the acoustic effects of the development on existing dwellings in the area. The assessment would be undertaken for road links subjected to at least a 20 % change in traffic flow.

The assessment of noise on and from the proposed development will be undertaken in accordance with prevailing best practice standards, guidance and methodologies, in particular:

- Noise Policy Statement for England (NPS), March 2010;
- ProPG – Planning and Noise, 2017;
- WHO Environmental Noise Guidelines, 2018;
- Design Manual for Roads and Bridges Volume 11 Section 7 Part 3[72];
- BS8233:2014 and WHO 'Guidance for Community Noise': 1999 for noise break-in, external amenity space (balconies and communal open space) noise; and
- BS4142: 2014 for industrial and commercial noise[73].

The assessment will consider the following four scenarios:

- Scenario 1: Existing Baseline (2020);
- Scenario 2: Future Baseline (year of opening accounting for any background growth excluding cumulative schemes);
- Scenario 3: Future Baseline + proposed development; and
- Scenario 4: Future Baseline + proposed development + cumulative development.

Where the identified impacts indicate a notable change in noise and vibration levels compared to the baseline an assessment, appropriate additional mitigation measures will be recommended.

In order to determine the significance of likely effects, the magnitude of the impact and sensitivity of the NSR will be considered together. On that basis, the scale of identified effects will be determined.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 4, where quantitative information is available within the public domain.

[71] British Standards Institution, 2014. BS 8233:2014 Guidance on sound insulation and noise reduction for buildings, BSI.
[72] Highways Agency, 2011. Design Manual for Roads and Bridges Volume 11 Section 3 Part 7, HA.
[73] British Standards Institution, 2014. BS 4142: 2014 Methods for rating and assessing industrial and commercial sound, BSI.

6.4 Wind and Microclimate

A wind microclimate technical assessment will be presented in ES Volume 1. The assessment will be undertaken by RWDI and will consider the potential wind impacts of the proposed development; particularly with regard to the suitability of the proposed development for the intended pedestrian and occupier use, as well as unsafe wind conditions as defined by the Lawson Comfort Criteria[74].

6.4.1 Potential Impacts and Likely Effects

Given the proposed scale and geometry of the proposed development, it is important to avoid undesirable wind speeds being generated at ground level and at any other level where pedestrian activity is proposed. The wind microclimate assessment will quantify the potential changes to the local wind environment (both on-site and within the immediate study area) in terms of sensitive pedestrian areas, such as existing and proposed entrances, thoroughfares, amenity and open space, and quantify these in relation to their 'usability' for a range of pedestrian activities defined by the Lawson Comfort Criteria.

The assessment will consider the change in wind conditions as a result of the introduction of new built form and the associated effects on pedestrian comfort and safety with the completed proposed development.

6.4.2 Approach and Methodology

The wind microclimate assessment will be undertaken, by reference to the Lawson Comfort Criteria. For the completed development a fully quantitative wind tunnel modelling exercise will be undertaken.

Consultation

No specific consultation over and above this scoping exercise is considered necessary.

Study Area

The wind tunnel model will comprise a scale representation of the proposed development and its surroundings, to a minimum radius of 360 m from the centre of the site. Accessible areas at ground levels will be considered in and immediately around the proposed development itself, with a focus on off-site areas which pedestrians are able to access such as thoroughfares, entrances, ground level amenity spaces and bus stops. The range relative to the site to which these uses are considered will be established throughout the assessment and based upon experience/professional judgement and the layouts of surrounding buildings, roads, thoroughfares etc.

Baseline Characterisation

The existing baseline will be characterised by means of wind tunnel testing. Due to the advanced construction stage of the WEG development, it will be considered as part of the existing baseline.

Demolition and Construction

As the proposed development is constructed, the wind conditions on-site will alter on a regular basis with the environment expected to gradually transition between that of the existing baseline and completed development scenarios with a period of restricted access throughout the demolition and construction works. The worst-case scenario in terms of wind conditions would be when the proposed development is completed. Therefore, the demolition and construction stage will not be assessed quantitatively withing the wind tunnel, with wind conditions commented on using professional judgement.

[74] Lawson TV, 2001. Building Aerodynamics. London. Imperial College Press.

Completed Development

Quantitative assessment will be undertaken by means of a wind tunnel testing exercise. Scale models (likely 1:300) will be built for the following scenarios:

- Scenario 1: Existing baseline (The buildings currently occupying the site and the existing surrounding buildings/area);
- Scenario 2: Existing baseline + proposed development (The completed proposed development within the context of the existing surrounding buildings/area); and
- Scenario 3: Existing baseline + proposed development + cumulative development (The completed proposed development in the presence of cumulative schemes/future surrounding buildings).

Wind tunnel testing would be undertaken without landscaping to represent a worst-case. Landscaping will only be modelled in the event that mitigation is required. Should uncomfortable or unsafe wind speeds be measured a mitigation workshop will be conducted which will mitigate these conditions through the addition of hard or soft landscaping.

Mean and peak wind speeds will be measured around the base of the buildings forming the proposed development, accessible elevated levels of the development including a select number of balconies, and other surrounding buildings, paths, roads, and areas of open spaces, for all wind directions. Consideration will be given to the sensitive uses associated with these areas, such as entrances, thoroughfares, amenity spaces, pedestrian crossings, pick-up/drop-off points, spill-out seating and so on. These results will be combined with long-term meteorological climate data for the London area (obtained from Heathrow, Gatwick & Stanstead airports combined).

The results of this analysis will be benchmarked against the Lawson Comfort Criteria to determine the suitability of the different pedestrian use areas both within and surrounding the site for sitting, standing, entering a building, strolling or walking, with an additional distress/strong winds criteria applied for areas likely to be unsafe for pedestrians. The following target conditions will be assessed:

- For thoroughfares, strolling or calmer conditions during the windiest season for a mixed-use development in an urban area, similar to the proposed development.
- For main entrances, standing use wind conditions or calmer throughout the year.
- For rarely used service entrances or fire escapes, strolling level wind conditions throughout the year.
- For amenity areas, sitting conditions during the summer season (e.g. cafes & benches).
- For private balcony and communal roof terraces, sitting to standing conditions during the summer season.

Should mitigation measures be required to ensure that wind conditions are suitable for their intended use, the areas requiring mitigation will be identified and mitigation measures will be proposed. The potential for strong winds to occur will also be quantified.

Through the determination of the suitability for use of the pedestrian areas surrounding the site, a direct comparison can then be made with the baseline/existing off-site conditions where applicable, and the effect to these surrounding areas assessed, with the significance of effects identified. However, it should be noted that the focus of discussions will be a comparison of the measured conditions to the desired use of the proposed development. The results of these assessments will be presented within the ES Chapter.

Up to 20 selected balcony locations will be tested within the wind tunnel to determine the suitability of these areas for future residents of the proposed development. Although the assessment of these spaces and other amenity spaces at ground and podium/terrace levels will be completed for all

seasons, the focus will be on the wind microclimate during the summer when these areas are more likely to be frequently used.

The focus of ground level locations such as thoroughfares, entrances and bus stops will be for the windiest season, as these locations are expected to be usable at all times throughout the year.

Where exceedances of the comfort criteria are marginal and can be readily addressed by means of standard mitigation measures such as landscaping and recessed building entrances, it is not proposed to wind tunnel test mitigation measures. Instead professional judgement will be applied in confirming the effectiveness of the mitigation measures. If required for significant or safety exceedances, additional testing will be conducted to develop and evaluate the effectiveness of the mitigation strategy.

Cumulative Effects

Consideration will be given to cumulative effects within Scenario 3, where quantitative information is available within the public domain.

6.5 Daylight, Sunlight, Overshadowing and Solar Glare

A daylight, sunlight, overshadowing and solar glare technical assessment will be undertaken and presented in ES Volume 1. The assessment will be undertaken by GIA and will consider the potential daylight, sunlight, overshadowing and solar glare impacts of the proposed development; particularly to the existing neighbouring residential buildings and emerging developments, as well as existing amenity space and road viewpoints surrounding the site.

Internal daylight and sunlight to the new residential units and overshadowing to new open space created by the proposed development will be assessed separately and the results presented in a stand-alone report accompanying the application. Accordingly, these assessments will not form part of the scope of the EIA and have not been considered further within this EIA Scoping Report.

6.5.1 Potential Likely Effects

Given the scale of the new buildings that would be introduced to the site, the potential for the following effects with respect to daylight, sunlight and overshadowing have been identified:

- Temporary changes to the daylight and sunlight amenity within surrounding receptors having a reasonable expectation to natural light, because of the demolition and construction works;
- Temporary changes to the overshadowing of surrounding outdoor amenity spaces, because of the demolition and construction works;
- Gradually increasing changes to solar reflections at surrounding road viewpoints, because of construction works;
- Changes to the daylight and sunlight amenity to surrounding receptors having a reasonable expectation to natural light because of the completed proposed development;
- Changes to overshadowing of surrounding outdoor amenity spaces because of the completed proposed development; and
- Changes to solar glare occurring at surrounding road viewpoints because of the Proposed Development.

6.5.2 Approach and Methodology

The assessment of daylight, sunlight, overshadowing and solar glare will be based upon the guidance and recommendations set out in the Building Research Establishment's (BRE) Site Layout Planning for Daylight and Sunlight; A Guide to Good Practice (2011)[75], relevant national and

[75] Building Research Establishment, 2011. Site Layout Planning for Daylight and Sunlight: A guide to Good Practice (BRE209)

development plan policies and other related guidance, as well as application of professional judgment.

The initial baseline to be considered as part of the daylight, sunlight and overshadowing assessments will be the existing site conditions at the time of the submission of the application. Due to the advanced construction stage of the WEG development, it will be considered as part of the existing baseline. However, Blocks B and H of the 14-17 Paddington Green scheme, which overlaps with the WEG development, will be considered as a cumulative scheme.

Daylight and sunlight amenity at any surrounding developments which have been granted planning consent, and are in close proximity to the proposed development are considered to be future residential receptors are therefore also assessed.

Therefore, the proposed development will be assessed against both the existing baseline (the baseline conditions at the site and immediate surrounding area at the time of the assessment) and against the future baseline to account for completed cumulative schemes that will introduce sensitive receptors with a reasonable expectation of daylight and sunlight.

Consultations

No additional consultation over and above this EIA scoping exercise is considered necessary to inform the assessment.

Study Area

Existing sensitive receptors, buildings under construction and cumulative schemes with planning permission with windows facing the proposed development, and within close proximity of the site boundary will be assessed. These will be determined using professional judgement based on scale, proximity and planning status.

Additionally, sensitive locations i.e. traffic junctions at surrounding roads from which the proposed development is visible comprise the study area in relation to solar glare.

Baseline Characterisation

Baseline conditions will be established by means of desk study, site visits and modelling.

Demolition and Construction

The level of effect on daylight and sunlight availability to existing and emerging neighbouring receptors would vary throughout the demolition and construction stage and would steadily increase in magnitude as the proposed development is built. Any temporary accommodation or construction equipment such as cranes would only have a temporary effect on the daylight and sunlight levels to the surrounding sensitive receptors.

Similarly, the overshadowing effect to surrounding public and private open areas of amenity would experience varying effects throughout the demolition and construction stage, gradually increasing as the proposed development is built out, with potential temporary overshadowing effects as a result of construction equipment.

In terms of solar glare during the demolition and construction stage, as the superstructure is clad, any reflective elements may give rise to solar reflections at surrounding sensitive road locations.

Those effects that would be perceptible during the demolition and construction stage would be no worse than those of the completed development. A qualitative assessment will be undertaken using professional judgement, with the worst-case scenario represented by the completed development.

Completed Development

Daylight and Sunlight to Surrounding Receptors

The likely significant effects of the completed development will be discussed within the ES chapter. Daylight, sunlight and overshadowing analysis is being undertaken throughout the design stages and as such mitigation measures are incorporated into the design of the proposed development.

The BRE Guidelines state that residential properties have a reasonable expectation of daylight and sunlight. Therefore, the daylight and sunlight assessment will consider impacts to surrounding existing and emerging residential properties identified by a site inspection and a desktop study. In addition, survey information will be used to identify residential properties most likely to experience effects from the proposed development.

Information on the receptors will be gathered using details available on the WCC's planning database, estate agent's property particulars and site inspections. Where analysis is to be undertaken of buildings under construction or emerging developments, information available on WCC's planning portal will be used to determine the position of windows. If information is available to determine the layout of the rooms, the interior layouts will also be applied to the analysis model and additional daylight and sunlight testing will be undertaken. Where information on existing receptors are not available, reasonable room layout assumptions will be made and presented in the assessment.

The studies to be undertaken will use a three-dimensional computer model of the site and the surrounding buildings in the study area for the following scenarios:

- Scenario 1: Baseline (representing the current site conditions);
- Scenario 2: Baseline + proposed development (representing the completed development); and
- Scenario 3: Baseline + proposed development + cumulative development (representing the future baseline).

The effect of the proposed development on the daylight and sunlight amenity received by the neighbouring buildings will be analysed using bespoke software.

The buildings considered in the baseline will be assessed using Vertical Sky Component (VSC), No Sky Line (NSL). Consented future residential properties will be assessed using Average Daylight Factor (ADF) assessments to determine the levels of daylight retained with the proposed development in place.

The sunlight amenity will be considered by reference to the Annual Probable Sunlight Hours (APSH) method for the existing and future baseline and proposed development scenarios for all receptors sensitive to sunlight impacts identified above. With shadows being cast in a northerly direction in the northern hemisphere, this assessment will consider those windows serving rooms which face the site and are located within 90 degrees of due south.

In analysing the resultant daylight and sunlight assessment data, consideration will be given to the criteria set out in the BRE Guidelines. However, since the BRE Guidelines do not specifically relate to metropolitan locations, and as stated in the BRE Guidelines, a degree of flexibility will be applied to the site, as it is located in an urban area. In order to quantify the level of effect as a result of the proposed development, a degree of significance will be assigned to the results for each receptor.

The initial numerical criteria for determining the scale of effect is based on percentage alterations, as follows:

- 0 – 19.9 % alteration = Negligible;
- 20 - 29.9 % alteration = Minor;
- 30 - 39.9 % alteration = Moderate; and

- Greater than 40 % alteration = Major.

The significance of effects, will be determined using professional judgement and by reference to Appendix I of the BRE Guidelines, which state;

"*the assessment of impact will depend on a number of factors, and there is no simple rule of thumb that can be applied*".

The guidelines provided by the BRE for determining the significance of effects on daylight and sunlight amenity are as follows:

"I6 Where the loss of skylight or sunlight does not meet the guidelines in this book, the impact is assessed as minor, moderate or major adverse. Factors tending towards a minor adverse impact include:

- *only a small number of windows or limited area of open space are affected*
- *the loss of light is only marginally outside the guidelines*
- *an affected room has other sources of skylight or sunlight*
- *the affected building or open space only has a low level requirement for skylight or sunlight*
- *there are particular reasons why an alternative, less stringent, guideline should be applied…"*

"I7 Factors tending towards a major adverse impact include:

a large number of windows or large area of open space are affected

- *the loss of light is substantially outside the guidelines*
- *all the windows in a particular property are affected*
- *the affected indoor or outdoor spaces have a particularly strong requirement for skylight or sunlight, e.g. a living room in a dwelling or a children's playground."*

"*I8 Beneficial impacts occur when there is a significant increase in the amount of skylight or sunlight reaching an existing building where it is required, or in the amount of sunlight reaching an open space. Beneficial impacts should be worked out using the same principles as adverse impacts*."

According to the BRE Guidelines, surrounding residential buildings have an expectation of natural light in habitable rooms. Therefore, surrounding buildings are considered receptors of high sensitivity to daylight and sunlight levels of equal weighting, and each individual receptor is not assigned a level of sensitivity as per the usual EIA methodology i.e. high, medium or low.

The overall degree to which each receptor is affected is also considered alongside the magnitude of change to each assessed room/window to assess the overall significance of effect.

Based on the above guidance, a set of numerical parameters will be devised for each of the respective BRE Report's recommended assessments methods, in order to determine the significance of effects if and where the target values in the BRE Guidelines are not achieved. This numerically based significance criteria will be detailed in full in the ES.

With regard to the potential significance of any effect, the results will first be considered against the BRE Guidelines criteria "P. Littlefair (2011) Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (BR 209)". It is primarily on this basis that the significance of the effect will be determined. Where the BRE Guidelines criteria are not met, and before an overall significance is concluded for a particular dwelling, house or room, the retained levels of daylight and sunlight will be also considered against alternative target values set for this site. This approach has been accepted by other local authorities in London, where the need for new homes and consequently densification is acknowledged. Evidence for the alternative target values will be produced for discussion at Pre-Application meetings and to accompany the application, in line with that discussed with other local authorities for projects of similar size, nature and urban location.

Overshadowing

With regard to any overshadowing of surrounding areas of amenity space by the proposed development, this will be assessed initially by undertaking transient overshadowing assessments. For this assessment, the path of shadow will be mapped for each of the Scenarios on the following dates as suggested by the BRE Guidelines:

- 21st March (Spring Equinox);
- 21st June (Summer Solstice); and
- 21st December (Winter Solstice).

The nature (beneficial or adverse), scale (negligible, minor, moderate or major) and ultimately the significance of overshadowing effects will be determined using professional judgement.

Solar Glare

Solar reflections off a building are particularly important at road junctions including pedestrian crossings, and traffic signals as glare can cause temporary blinding of drivers. Typically, those elements of a Proposed Development considered reflective are either glazed elements or specular metal cladding.

Therefore, the ES will consider an assessment to determine the time of day, period of year, duration and positioning of potential solar glare in relation to the driver's line of sight.

Solar glare is not a comparative assessment; the fact that it may occur in the baseline does not necessarily justify occurrence as a result of the proposed development. Consequently, the assessments will consider the effect of the proposed development in absolute terms, using professional judgement

Cumulative Effects

Consideration will be given to cumulative effects, where quantitative information is available within the public domain. Additionally, the likely impacts of the proposed development upon the future sensitive receptors will be assessed within this section.

Solar glare is not considered in a cumulative scenario as the worst-case scenario is shown in the proposed development scenario.

6.6 Townscape, Visual and Built Heritage

A Townscape, Visual and Built Heritage Assessment (TVHA) will be presented in ES Volume 2. The assessment will be undertaken by Montagu Evans and will consider the potential impacts of the proposed development on townscape character, views and heritage significance, particularly the:

- effect on the character and appearance of Paddington Green Conservation Area (a small part of which is within the redline boundary) the settings of conservation areas, listed buildings and other heritage assets in the study area;
- effect on townscape character in the study area;
- effect on visual amenity as experienced by people in the study area; and
- cumulative effects in conjunction with other consented schemes.

6.6.1 Potential Impacts and Likely Effects

The assessment will consider the following potential impacts and associated likely effects during the demolition and construction of the proposed development:

- Temporary visibility of development works and associated machinery, cranes and other equipment used in the demolition and construction works; partially completed buildings; hoarding; and site lighting at street level within:
  - local views and effects on the quality of local views and the amenity of the viewer;
  - views of the local townscape character, together with the change in spatial character and built form; and
  - the setting of heritage assets and the degree to which the significance of the heritage asset's significance can be appreciated, experienced and understood.

The degree of effects will vary according to the proximity of the receptor to the site and will largely be adverse and short-term. No permanent effects would arise from the demolition and construction works except those relating to the completed development.

The assessment will consider the following potential impacts and associated likely effects of the completed proposed development:

- Visibility of the proposed development in local views and effects on the quality of local views, the amenity of the viewer and the character of the local townscape;
- Visibility of the proposed development and associated change in the townscape and spatial character and quality within the study area; and
- The effect of the proposed development on heritage assets (conservation areas, listed or locally listed buildings) and potential effects on their heritage significance, including consideration of visibility and other non-visual setting effects.

6.6.2 Approach and Methodology

The TVHIA will be reported in a single, separate volume.

Townscape and Visual Impact

The methodology for the townscape and visual impact assessment will be based on the principles set out in the third (2013) edition of 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA)[76], produced by the Landscape Institute with the Institute of Environmental Management and Assessment. Reference will also be made to national, regional and local guidance and policies.

Consultation

In respect of the townscape character assessment, no consultation over and above the scoping process, is considered necessary.

In respect of the visual impact assessment, no consultation has yet been undertaken in relation to the scope of this assessment. The set of views selected for assessment will be separately agreed with the WCC and other relevant consultees. A list and plan of proposed views will be provided for consideration by the WCC. The viewpoint plan will be derived from modelling work and field inspection, including a zone of theoretical visibility, and the identified views combine both indicative local views, strategic views and those with a particular heritage interest or value.

Study Area

The proposed townscape character assessment study area would comprise an area of 750 m from the site boundary.

The townscape character areas to be covered will be identified in accordance with the approach set out in the 3rd edition of the Guidelines on Landscape and Visual Impact Assessment. The approach will be informed by published character area studies, including conservation area appraisals.

[76] Landscape Institute, 2013. Guidelines for Landscape and Visual Impact Assessment (GLVIA3).

The study area for the visual assessment will be centred on the site and will be limited to locations from which the site can be seen, or from which new buildings on the site have the potential to result in a significant visual impact at the height proposed.

Four principal types of viewing location have been identified:

- Views that have been identified as significant, by the WCC or others, e.g. in relevant planning policy and guidance documents (including the LVMF SPG) and conservation area appraisals;
- Other locations or views of particular sensitivity, including those viewpoints in which the proposed development may significantly affect the settings of World Heritage Sites, listed buildings and/or conservation areas;
- Representative townscape locations from which the proposed development will be visible; and
- Locations where there is extensive open space between the viewer and the proposed development so that it will be prominent rather than obscured by foreground buildings.

The set of viewpoints has been chosen so that it covers:

- Protected views;
- The range of points of the compass from which the proposed development will be visible;
- A range of distances from the site; and
- Different types of townscape area.

Possible locations in these categories within the study area have been identified based on an examination of maps and aerial photographs; maps of conservation areas; and maps and lists of listed buildings. The study area and the possible locations have been visited to establish candidate viewpoints.

Demolition and Construction

The assessment of demolition and construction works will be based on the typical impacts and effects associated with a development of the proposed nature and scale taken in conjunction with the particular site and its sensitivities. The visual character and effects of the process would alter at different times of day and throughout the different phases of demolition and construction work, and so it is not possible to accurately represent the process in the verified views. Additionally, none of the effects resulting from the process, apart from those associated with the completed proposed development, would continue beyond the construction process, and so it is considered appropriate for the townscape and visual assessments to consider the effects of the completed proposed development in greater detail than those of demolition and construction, because those effects will be permanent and long-term.

Accordingly, a qualitative assessment will be undertaken based on professional judgement and experience. In carrying out this appraisal, the assessment will have regard to the generally lesser weight that temporary construction effects have on townscape character areas and views.

Completed Development

The assessment of the effect of the proposed development on a receptor (an area of townscape or view) will be made on the basis of professional judgement which will take into account relevant planning policies and guidance.

The sensitivity of the receptor as existing will be assessed as high, medium or low, depending on the importance, value and quality of the receptor, and its susceptibility to change, taking into account the quality of the receptor, and the nature and expectation of the viewer for views. The assessment of sensitivity will take into account the presence of any designated heritage assets (listed buildings, conservation areas, registered parks and gardens of special historic interest, world heritage sites) and non-designated heritage assets (locally listed buildings), and the amenity value

of the viewing location and area in which it is located. The assessment of the sensitivity of the receptor under consideration will be moderated to take into account a judgement about its quality in the round.

The magnitude of the impact resulting from the proposed development will be assessed as high, medium, low or negligible according to the change to the receptor. These two measures will be combined to provide a measure of the significance – major, moderate, minor or negligible - of the effect on the receptor which will result from the proposed development. It is generally considered that moderate to major effects are considered 'significant' in the context of the EIA Regulations and this is the approach that is proposed to be adopted in this EIA.

Effects will be assessed as beneficial, adverse, or neutral. There may be both beneficial and adverse effects to each receptor. These effects are outlined within the qualitative assessment for each receptor. The assessment for each receptor as a whole is a 'net equation' of all effects, resulting in a single quantifiable entry into the scale of effect matrix.

The townscape character assessment will be made of the site and the surrounding townscape in its existing state based on a study of the historic development of the area with reference to relevant publications, and study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications.

This analysis will inform the division of the study area into townscape character areas i.e. geographical areas which have readily identifiable characteristics in common. The impact of the proposed development on these townscape areas will then be assessed, based on conclusions drawn from the view's analysis.

The visual impact assessment will be made of the proposed development's visibility within the selected views. Viewpoints will be assessed in winter to assess a worst-case scenario when vegetation is not screening the proposed development.

For each of the identified views, there will be images of the view 'as existing' and 'as proposed', based on recent photography Where there is a high degree of tree cover that would affect the visual effects, winter views will be produced.

Where other developments have been granted consent and implemented and would be visible in the view, the other development would be shown in wireline (diagrammatic representations showing the outline of the proposed development, 'AVR1') as the 'future baseline'.

'As proposed' images are to be provided as 'Accurate Visual Representations' ('AVRs'). AVRs are provided either as rendered (photorealistic) images ('AVR3') or as 'wirelines' ('AVR1'). Rendered and wireline images illustrate accurately the degree to which the proposed development will be visible, and its form in outline. Rendered images also show the detailed form and the proposed use of materials.

Where other developments in the wider area which are proposed or have been granted consent would be visible to a significant extent in the view, a further image showing these schemes together with the proposed development will be produced.

For each of the identified views, a description of the view as existing will be given, identifying its visual quality, sensitivity to change and reason for that sensitivity. A description of the view as proposed will then be given with an assessment, based on the method set out above, of the significance of the effect that the proposed development will have on the view.

Cumulative Effects

A further assessment will consider cumulative effects, if any, for each view ('as proposed with cumulative' images will also be provided as AVRs). The approach to cumulative assessment for

views and townscape will be to focus on the additional effects of the proposed development on top of the cumulative baseline (not in combination).

Built Heritage Assessment

The methodology for the built heritage assessment will be consistent with best practice guidance from Historic England, and specifically dealing with managing significance in decision-making significance (GPA2), assessing setting effects and the effect on significance (GPA3) and tall buildings guidance (HEAN4), as well as the updated tall buildings advice note currently out for consultation until 28 May 2020). The chapter will have regard to guidance contained in character area appraisals from the relevant LPAs, including conservation area appraisals.

Study Area

The assessment will consider the potential for the proposed development, as a whole, to affect the heritage significance of identified and relevant heritage assets, within the study area (within 1 km of the site). The study area is based, in part, on views testing, which will identify the likely zone of visual influence and range within which significant effects of development of this scale would be experienced within the existing townscape context. Where there is potential for a significant effect on designated heritage assets outside the 1km study area then these assets will be scoped into the assessment.

There are no listed buildings located on-site. The northern half of Newcastle Place, which is within the redline boundary, is located within Paddington Green Conservation Area, but otherwise the site is not within a CA.

There are a number of designated heritage assets within the study area. The number heritage assets which will be scoped in to the assessment will be refined using professional judgement in order to ensure that the assessment is focussed on those assets which may experience likely effects of the proposed development. For example, where there is no setting relationship between the heritage asset and the site – whether that is intervisibility, historical association or otherwise – then these assets have been scoped out.

The heritage assets which have been scoped in to the assessment comprise the following:

- The Children's Hospital, Paddington Green, grade II listed;
- 17 and 18 Paddington Green, grade II listed;
- Church of St Mary, grade II* listed;
- Westminster Arms public house, grade II listed;
- Marylebone Lower House North Westminster Community School, grade II listed;
- Paddington Green Conservation Area;
- Maida Vale Conservation Area;
- Lisson Grove Conservation Area;
- Bayswater Conservation Area;
- Regent's Park, both as a Registered Park and Conservation Area;
- St John's Wood Conservation Area;
- Molyneux Conservation Area; and
- Hyde Park, Royal Parks Conservation Area and Registered Park.

Non-designated heritage assets for the purposes of the assessment are locally listed buildings identified by the WCC and other structures which meet the terms of a non-designated heritage

asset as set out in the NPFF, that is, have a degree of architectural or historic significance meriting consideration in the planning process. These are to be identified by appropriately qualified staff undertaking the assessment and through the consultation process with the WCC. Non-designated heritage assets within 500 m of the site will be scoped into the assessment.

Demolition and Construction

The assessment of demolition and construction works will be based on the typical impacts and effects associated with a development of the proposed nature and scale taken in conjunction with the particular site and its sensitivities. The visual character and effects of the process would alter at different times of day and throughout the different phases of demolition and construction work, and so it is not possible to accurately represent the process in the verified views. Additionally, none of the effects resulting from the process, apart from those associated with the completed proposed development, would continue beyond the construction process, and so it is considered appropriate for the Built Heritage assessment to consider the effects of the completed proposed development in greater detail than those of demolition and construction, because those effects will be permanent and long-term. Accordingly, a qualitative assessment will be undertaken based on professional judgement and experience. In carrying out this appraisal, the assessment will have regard to the generally lesser weight that temporary construction effects have on heritage assets which by their nature are long standing.

Completed Development

An assessment will be made of the significance of the identified heritage assets in their existing states (cross-referencing the townscape and visual baseline, see above). This will be based on study of the historic development of the area with reference to relevant publications, and study of the present-day condition of the area based on site visits, study of maps and aerial photographs, and relevant publications. These assessments will be proportionate to the significance of the assets and the likely effect of the proposed development on them. In line with paragraph 189 of the NPPF they will demonstrate an understanding of the potential impact of the proposal on their significance.

The assessment of the effect of the proposed development on a receptor (a heritage asset, as identified above for the purposes of this assessment) will be made on the basis of professional judgement which takes into account relevant planning policies and guidance. The methodology set out below is consistent with the following legislation and guidance:

- The Planning (Listed Buildings and Conservation Areas) Act 1990;
- Sections 12 and 16 of the NPPF (2019);
- The accompanying parts of the PPG;
- Historic Environment Good Practice Advice in Planning Notes 2 and 3 on The Assessment of Heritage Significance and The Setting of Heritage Assets (2015 and 2017)[77]; and
- Tall Buildings Historic England Advice Note 4 (2015)[78].

The sensitivity to change of each heritage asset or groups of assets will be considered in relation to impacts (taking into account both direct and indirect effects). This is based on the designation and grade of the heritage asset and an assessment of its heritage significance (in light of NPPF policy), i.e. what elements of its fabric / constituent parts and setting contribute to its heritage significance (at the designated grade/level). It will be assessed as high, medium or low.

The likely significance of effects is derived through consideration of the magnitude of impact and the sensitivity to change of the heritage assets. This assessment takes into account the heritage significance of the particular heritage asset and how the proposed development will impact on this.

[77] Historic England, 2017. The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Notes 3.
[78] Historic England, 2015. Tall Buildings Historic England Advice Note 4.

The proposed development may have a nil of negligible effect to a receptor. Where effects are identified they will also be assessed qualitatively as beneficial, adverse, or neutral in respect of their effect on the heritage significance of the heritage asset. This is in recognition of the fact that an effect on a heritage asset or its setting can enhance its heritage significance (a beneficial effect), harm its heritage significance (an adverse effect) or be overall neutral (a neutral effect). This consideration is independent of whether it is a major, moderate or minor effect. This assessment takes into account the nature and condition of the heritage asset and its setting as found today and how these contribute to its heritage significance.

The viewpoint selection has been informed by the presence of heritage assets, and the assessment on the historic environment will take those views into account for setting purposes.

The general conclusions about the impact of the proposed development on heritage assets include consideration of the overall impact on the historic environment in the round.

Cumulative

An assessment will be given of cumulative effects, if any. The approach to cumulative assessment for built heritage will be to focus on the additional effects of the proposed development on top of the cumulative baseline.

7. POTENTIAL NON-SIGNIFICANT ENVIRONMENTAL IMPACTS AND EFFECTS

During the EIA scoping process, consideration has been given to ensuring that the EIA is proportionate and therefore only focuses on the likely significant effects of the proposed development. Accordingly, the scoping process has identified a number of environmental topics that are unlikely to generate significant environmental effects and therefore, are proposed to be scoped out of the ES. These issues are discussed in this section.

7.1 Transport and Accessibility

A Transport and Accessibility technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant adverse effects in relation to Transport.

A Transport Assessment (TA) will be produced and submitted separately as part of the application, which will consider the implications of the proposed development on the local transport network, including walking and cycling environment, public transport and highway network.

7.1.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential transport environmental impacts[79] may arise:

- Demolition and construction works and the temporary disruption in terms of effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.
- Completed development and changes to traffic flows and pedestrian and cycle environment in terms of effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.

7.1.2 Considerations

Demolition and construction works will be subject to mitigation in the form of implementing a Construction Logistics Plan, and contractors will be required to sign up to the Construction Logistics and Cyclist Safety (CLOCS) standards for managing work related road risk, and follow WCC's Code of Construction Practice (CoCP). A Construction Staff Travel Plan will also be implemented to manage construction workforce travel.

As part of the construction management measures, suitable signage will be required where appropriate for pedestrian and cyclists to minimise disruption and there are existing signal-controlled pedestrian crossings on Edgware Road and Harrow Road. Construction traffic routes to the site would use the strategic highway network, minimising any effects on local roads and sensitive receptors, and the increase in traffic would not be significant given the existing high traffic flows on the A40 and A5 Edgware Road. On this basis, the demolition and construction stage would not give rise to significant adverse effects on severance, pedestrian delay, pedestrian amenity, fear and intimidation, driver delay, and accidents and safety.

In terms of the completed development, the proposal will be car-free with only disabled car parking provided, subject to scoping with WCC. The site is located in central London with a PTAL rating of 6b (the highest possible score on the PTAL scale, which indicates an "excellent" connectivity to the surrounding network). It is therefore anticipated that journeys to the site would largely be via public transport. The car parking will be provided in the basement, accessed from Church Street and via the West End Gate basement. Together with servicing trips, the total vehicle trip generation

[79] Environmental effects in accordance with the IEMA document 'Guidelines for the Environmental Assessment of Road Traffic' (1993)

for the site would be minimal and not significant. On this basis, no significant adverse effects are expected on severance, pedestrian delay, fear and intimidation or driver delay.

There are public realm improvements proposed on Newcastle Place, which would improve pedestrian amenity. Any changes to junctions will be subject to a Stage 1 Road Safety Audit. Therefore, beneficial effects can be expected for pedestrian amenity and no significant adverse effects are expected for accident and safety.

Multi-modal movements resulting from the proposed development on pedestrians, cyclists, and public transport will be assessed in the TA. A separate assessment on accidents and safety will also be included in the TA.

Accordingly, no significant adverse environmental effects are likely to arise in relation to Transport. A Transport and Accessibility technical assessment chapter is therefore proposed to be scoped out as a discrete chapter within the ES; however, a separate Transport Assessment will be submitted as part of the planning application.

7.2 Ecology

An Ecology technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant adverse effects in relation to Ecology.

7.2.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential ecological impacts may arise:

- Direct and indirect demolition and construction impacts (dust, noise, lighting, contaminated surface water, etc.) to designated sites;
- Direct loss of limited on-site habitats;
- Direct harm to protected species, if on-site; and
- Potential for biodiversity enhancement through the introduction of new landscaping as part of the proposed development.

7.2.2 Considerations

The site has been in use as a police station since the 1970s. It comprises an existing building and hardstanding areas. In addition, the site is located in a dense urban environment predominantly characterised by buildings, roads and hardstanding areas.

An extended Phase 1 Habitat Survey of the site was carried out on 4 September 2020, which included external building inspections for bat potential, together with a desk-based data search using data obtained from Greenspace information for Greater London (GiGL), to identify, characterise and map the habitats within the site according to the Phase 1 habitat survey[80] methodology. The results of the survey will be documented in an ecological appraisal report for the site.

The desk study confirms that no designated sites are present within the site. St Mary's Churchyard and Paddington Green Site of Importance for Nature Conservation (SINC) is present to the west of the site.

The extended Phase 1 habitat survey confirms that the site comprises habitats that are of negligible to site level importance for wildlife. Limited vegetation is present, with street trees of site level importance and scattered ephemeral vegetation of negligible importance. The street trees are suitable for use by common bird species. No potential roost features were recorded on the buildings or trees, and the site is considered to be of negligible potential for use by bats.

[80] JNCC, 1990. Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Nature Conservancy Council

The appraisal confirms that on-site ecological conditions are consistent with a typical London urban site. Whilst impacts are likely to occur, these can be mitigated by means of standard measures in advance of redevelopment. Proposed mitigation measures comprise the following:

- Appropriate timing of demolition works to avoid impacts on nesting birds;
- Appropriate demolition and construction management controls to be set out within a Construction Environmental Management Plan (CEMP) to minimise dust impacts to St. Mary's Churchyard and Paddington Green SINC;
- Landscape planting and bat and bird boxes within the proposed development to mitigate for the loss of habitats within the site; and
- Green/brown roofs and living walls to deliver biodiversity enhancement.

During the demolition and construction stage, any potential ecological impacts such as from construction pollutants, would be effectively controlled by employing best practice measures to be implemented through a CEMP as agreed with WCC.

The emerging design and landscape proposals for the proposed development would deliver considerable biodiversity and amenity enhancement.

The above mitigation measures would either be embedded into the proposed development or secured by means of appropriately worded planning conditions.

Accordingly, the proposed development is unlikely to give rise to significant adverse environmental effects in relation to Ecology. A formal Ecology technical assessment is therefore proposed to be scoped out as a discrete chapter within the ES; however, an Ecological Impact Assessment will be presented in ES Volume 3.

7.3 Contamination

A Contamination technical assessment chapter is proposed to be scoped out of the ES because the proposed development would not give rise to significant environmental effects in relation to Contamination.

7.3.1 Potential Impacts and Likely Effects

In the absence of mitigation, the following potential pollutant linkages could present a potentially unacceptable risk (as defined in Model Procedures for the Management of Contaminated Land, CLR 11[81]):

- Demolition and construction workers may come into direct contact with potentially contaminated shallow soils, Made Ground (which may include asbestos containing materials) and impacted shallow groundwater;
- Adjacent site users may inhale /ingest potentially contaminated dust from demolition and construction works;
- Accidental spills could lead to contamination of surface water runoff, ground and controlled waters;
- Direct contact of potentially contaminated soils with proposed structures on-site, including potable water supply pipes; and
- Future site users may be exposed to potential ground contamination in the soil, ground gas ingress and/or vapour ingress into new buildings.

[81] Environment Agency, 2004. Model Procedures for the Management of Land Contamination

7.3.2 Considerations

The site has been in use as a police station since the 1970s. It comprises an existing building and hardstanding areas. In addition, the site is located in a dense urban environment predominantly characterised by buildings, roads and hardstanding areas.

Geological maps for the area indicate that the geology beneath the site is underlain by Langley Silt Member (Clay and Silt), Lynch Hill Gravels and London Clay Formation, as explained in Section 4.3.

The adjacent WEG development has been the subject of site investigations and remediation. It is anticipated that similar ground conditions are present on the site given the close proximity and linked history. By way of background, contaminants identified on the WEG development included hotspots of hydrocarbon contamination in the soil and asbestos within the made ground. Contaminants were also detected in groundwater including hydrocarbons and sulphate. These contaminants are common to brownfield sites.

The remediation strategy prepared for the WEG development discussed the removal of underground fuel tanks and the basement excavation which will remove much of the soil. Watching briefs and material management plans were recommended. Clean soil was also recommended in landscaping. These are standard remediation techniques that are likely to be appropriate for the site.

Furthermore, the following standard mitigation measures would be adopted as part of the development works:

- A Preliminary Risk Assessment (PRA) will be prepared and will be presented in ES Volume 3. The PRA will identify the risks associated with soil and groundwater contamination and how remediation (if required) would reduce risks to allow the development proposal to proceed in a manner that minimises risks to human health, controlled waters and the small areas of landscaping and reduces the risks to acceptable level.
- Site investigations will be undertaken to confirm the most appropriate remediation strategy and health and safety precautions to be adopted for construction workers and surrounding residents during ground disturbance and excavation works.
- A Remediation Strategy will be prepared (if required) and agreed in consultation with WCC environmental health;
- A Piling Risk Assessment will be undertaken to determine most appropriate means of piling to avoid the creation of pollution pathways during substructure works before the removal of material during excavation of the basement area; and
- A CEMP will be used to effectively control and manage contamination risks at the site as agreed with WCC.

The above mitigation measures would be secured by means of appropriately worded planning conditions.

On this basis, it is considered that the proposed development is unlikely to give rise to significant adverse environmental effects in relation to Ground Conditions. A formal Ground Conditions technical assessment is therefore proposed to be scoped out as a discrete chapter within the ES, but the PRA will be presented in ES Volume 3.

7.4 Water Resources and Flood Risk

A Water Resources and Flood Risk technical assessment chapter is proposed to be scoped out of the EIA because the proposed development would not give rise to significant environmental effects in relation to Water Resources and Flood Risk.