5 Approach to Assessment

5.1 EIA Process

5.1.1 As set out in Chapter 1, EIA is a process through which the likely significant environmental effects of a development proposal can be identified and, where possible, adverse effects avoided or mitigated.

5.1.2 The overall aim of this ES is to provide an objective and systematic account of the likely significant environmental effects of the Proposed Development and to assess the ability of the Site and surrounding area, including receptors such as people, flora and fauna, to accept those effects.

5.1.3 This chapter describes the overarching methodology adopted for the EIA. In particular, this chapter details the process that has been undertaken for identifying the environmental issues that have been included in the EIA and the method of assessing the significance of resulting effects from the Proposed Development.

5.2 EIA Screening

5.2.1 The EIA Regulations require that before consent is granted for certain types of development, an EIA must be undertaken. The EIA Regulations set out the types of development which must always be subject to an EIA (Schedule 1 development) and other developments which will only require assessment if they are likely to give rise to significant environmental effects (Schedule 2 developments). Guidance and thresholds are available to help to decide whether EIA is required for a Schedule 2 development. This decision process is known as 'screening'.

5.2.2 The selection criteria for screening Schedule 2 development are provided in Schedule 3 of the EIA Regulations. Schedule 2 projects require EIA if they are likely to have significant effects on the environment by virtue of their nature, size or location. The potential for likely significant effects on 'sensitive areas', as defined in Regulation 2(1) of the EIA Regulations, is a particularly important consideration.

5.2.3 The Proposed Development falls within Schedule 2 Part 10 (a)"Industrial estate development projects". The criterion to be considered for Part 10 (a) Industrial Estate Development Projects is given in column 2 as "the area of the development exceeds 5 hectares."

5.2.4 The Proposed Development may also be considered to fall under Part 13(b) of Schedule 2 (changes and extensions to Schedule 2 developments) if it was considered that this project to be an extension of the already consented data centre development, however the criteria for Part 13(b) would be the same as Part 10(a).

5.2.5 The area of this development proposal is on a site of around 4.5ha which is below the 5ha threshold. However, when considered in combination with the adjacent site to the south, the total area of both developments exceeds this. Whilst the development to the south does not form part of the Proposed Development and benefits from planning consent data centres under application 38421/APP/2021/4045, given the Applicant is the same and the potential for cumulative impacts, it was agreed with the LPA to screen the Proposed Development in this context.

5.2.6 A Screening Opinion was received from LBH on 25 October 2024 which confirmed the Proposed Development would qualify as EIA development as such and Environment Statement has been prepared.

5.3 EIA Scoping

5.3.1 A formal scoping exercise has not being undertaken. Within the Screening Opinion, and through subsequent discussions with LBH, a clear indication and steer was provided and discussed on the required EIA scope. Notwithstanding this, separate technical discussions have been held as part of the pre-application consultation to confirm the assessment scope for the topics scoped into the EIA.

5.3.2 As part of this process a number of issues were considered unlikely to give rise to significant environmental effects and therefore were scoped out of the EIA. Further details on these is provided below.

Ground Conditions

5.3.3 The Site is considered to be low risk with regards to contaminated land. Historical maps indicate that the Site comprised agricultural fields prior to 1935. By 1935 the LON6/7 area had been developed with a rubber tyre factory. The LON8 area, remained agricultural prior to development of Wimpey Laboratories, including a plant yard and vehicle maintenance facilities onsite by the 1960s.

5.3.4 Four aboveground storage tanks (AST) are indicated on both areas in the 1970s and underground fuel storage tanks (UST) may also have been present.

5.3.5 Although the previous land uses give rise to some contamination risks, the sensitivity of receptors is considered to be low.

5.3.6 The construction phases of the Proposed Development would involve intrusive groundworks. The risk of pollution incidents would be managed through an established permitting process as part of the normal planning application process.

5.3.7 As noted with the EIA Screening Opinion the Proposed Development is not likely to have a significant environmental effect in relation to ground conditions in the context of EIA and has therefore been scoped out of the EIA.

5.3.8 A Geotechnical Desk Study report and Ground Contamination Preliminary Report have been prepared by ARUP as part of the suite of documents accompanying the hybrid planning application.

Townscape and Visual

5.3.9 Townscape analysis and initial view studies informed the design of the Proposed Development. It is considered that the Site is an appropriate location for increased height and density. Furthermore, there is an established emerging context of regeneration within Hayes, and Hillingdon and Ealing more widely, including the 2 consented Uxbridge Road schemes rising up to 15 storeys (Hyatt Place and 15-16 Uxbridge Road); and up to 17 storeys at the Hamburgh Tavern on the Broadway; as well as LON04 and LON05 (the consented data centres).

5.3.10 The Site location is considered to be an acceptable location for taller buildings and the quality of the design will enhance and have either a beneficial or neutral effect on visual amenity and townscape character.

5.3.11 As noted with the EIA Screening Opinion the Proposed Development is not likely to have a significant environmental effect on townscape or visual receptors in the context of EIA and has therefore been scoped out of the EIA.

5.3.12 A townscape and visual assessment has been undertaken by Iceni Projects as part of the suite of documents accompanying the hybrid planning application.

Heritage

5.3.13 The Site does not contain any designated heritage assets and it does not form part of a Conservation Area. In Hillingdon, the nearest listed building is Bulls Bridge and the nearest locally listed building is the Toll House near Bulls Bridge. Both are located in the Bulls Bridge Conservation Area which is sited circa 1600m to the South-West. In Ealing the closest listed buildings to the Site are Church of St George (Grade II) approximately 650m East of the Site at Tudor Road and the Grade II listed water tower at the Southall Gas Works site approximately 1200m to the South-East. The closest Locally listed buildings are Nos. 49-53 Northcote Avenue (the Northcote Arms).

5.3.14 Given the scale and nature of the Proposed Development and the separation between the Site and nearby heritage assets it is considered that the proposals are not likely to have a significant environmental effect in the context of EIA and has therefore heritage been scoped out of the EIA.

5.3.15 The setting and significance of the heritage assets has been identified and appraised within a heritage assessment prepared by Iceni Projects as part of the suite of documents accompanying the hybrid planning application. In summary, the significance of the Conservation Area primarily lies in its character, rooted in the Grand Union Canal's historic role as a nationally important transport route and expressed through its physical composition of waterways, banks, tow-paths, and bridges. The Site does not contribute to its setting, and the Proposed Development design ensures that its historic character as an urban canal remains legible and the significance of the asset is preserved. Overall, it is considered that there will be no harm to the Conservation Area.

Archaeology

5.3.16 The Site contains no nationally designated buried heritage assets and does not lie within an Area of Archaeological Priority as designated by the London Borough of Hillingdon and the archaeological potential of the Site was not considered to be of high significance.

5.3.17 Given the archaeological potential of the Site it was considered that the proposals are not likely to have a significant environmental effect in the context of EIA and has therefore archaeology has been scoped out of the EIA.

5.3.18 An Archaeological Desk-Based Assessment has been prepared by MOLA as part of the suite of documents accompanying the hybrid planning application.

Biodiversity

5.3.19 The Site itself is not subject to any statutory nature conservation designations. All statutory ecological designations in the surrounding area are well separated from the Site by existing development.

5.3.20 A single non-statutory nature conservation designation is located within the Site. The Yeading Brook, Minet Country Park and Hitherbroom Park SINC. The area of this designation which is located within the Site is entirely retained within the proposals. Furthermore, opportunities for

ecological enhancements within this area of the SINC are proposed. As such, it is considered that this designation will be fully safeguard and enhanced under the Proposed Development.

5.3.21 All other non-statutory designations in the surrounding area are well separated from the Site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected by the proposals.

5.3.22 A Phase 1 habitat survey was undertaken for the Site which established that it is dominated by ornamental planting, buildings and hardstanding, which is not considered to be of ecological importance. The habitats within the site do not appear to offer particularly suitable opportunities for protected, rare or notable species.

5.3.23 As such, the proposals are not likely to have a significant environmental effect on ecology in the context of EIA and has therefore been scoped out of the EIA.

5.3.24 A ecological assessment has been prepared by Aspect Ecology and accompanies the hybrid planning application.

Transport

5.3.25 During the construction of the Proposed Development, transport and access related issues will be managed and mitigated through the securement of a construction management and logistic plan.

5.3.26 In terms of the operational phase a reduction in trips across all modes are forecast in the AM and PM peak hours as a result of the Proposed Development. The Proposed Development is forecast to result in a net reduction in total person and vehicle movements and therefore no adverse impact expected on the network or mitigation required.

5.3.27 As such, the proposals are not likely to have a significant environmental effect in relation to transport and therefore this has been scoped out of the EIA.

5.3.28 A Transport assessment has been prepared by ARUP and accompanies the hybrid planning application.

Hydrology

5.3.29 The Site falls within the Flood Zone of the adjacent Yeading Brook for fluvial flooding. However, flood risk to the Site is indicated as very low for fluvial and coastal sources, to low for groundwater; reservoirs, canals and artificial sources; and drainage and off-site sources, while there remains a low-to-medium indicative risk from surface water (pluvial) flooding, as indicated on EA Surface Water Flood Maps.

5.3.30 As such, the proposals are not likely to have a significant environmental effect in relation to water resources or hydrology and therefore this has been scoped out of the EIA.

5.3.31 A Flood Risk assessment has been prepared by ARUP and accompanies the hybrid planning application.

Noise

5.3.32 Noise impacts from construction will be managed through the implementation of a CEMP which will mitigate noise impacts on nearby noise sensitive receptors.

5.3.33 A noise assessment has been prepared by Cundall's and accompanies the hybrid planning application which found that the predicted effects comply with the operational noise limits in line

with the Hillingdon Council requirements and therefore are not considered to have a negative impact on the Noise Sensitive Reports (NSRs).

5.3.34 As such the Proposed Development is not likely to have a significant environmental effect in relation to noise the context of EIA and has therefore been scoped out of the EIA.

Major accidents and disasters

5.3.35 In the absence of recognised guidance on this subject in the context of EIA, a range of sources providing guidance related to the topic has been reviewed, including:

- Cabinet Office National Risk Register (NRR) of Civil Emergencies 2017 Edition[1];
- UK Government Emergency Response & Recovery Guidance[2]; and
- International Federation of Red Cross & Red Crescent Societies Disaster and Crisis Management Guidance[3].

5.3.36 A disaster can be defined as "*a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins*".[4] An accident can be defined as "*an unfortunate incident that happens unexpectedly and unintentionally, typically resulting in damage or injury*".

5.3.37 The Site's location within the UK is such that natural disasters are not considered to represent a likely risk to the Proposed Development. For example, it is considered that the likelihood of an earthquake with a magnitude sufficient to cause damage to buildings and/or loss of life occurring and impacting the site is extremely low. Furthermore, the topography of the Site is not considered to be sufficiently steep such that a major mass movement disaster could arise.

5.3.38 It is therefore considered that whilst there is always a potential risk that an accident, fire or natural disaster could result in a significant environmental impact, this risk can be appropriately mitigated through embedded design measures and through compliance with statutory design guidelines. As such, significant effects related to Health and Safety and as a result of major accidents and/or disasters associated with the Proposed Development are not considered likely.

5.3.39 The EIA therefore does not include major accidents and disasters as a specific chapter.

Waste and resources

5.3.40 Developments result in both construction and operational (municipal & commercial) waste arisings. Waste Disposal Authorities are responsible for ensuring that the Waste Local Plan provides for sufficient facilities to exist to manage anticipated waste arisings (this includes

[1] Cabinet Office. (2017) National Risk Register of Civil Emergencies. [Online]. https://www.gov.uk/government/publications/national-risk-register-of-civil-emergencies-2017-edition.

[2] International Federation of Red Cross and Red Crescent Societies, "The Red Cross Red Crescent approach to disaster and crisis management: Position paper," http://www.ifrc.org/PageFiles/91314/1209600-DM-Position-Paper-EN.pdf 2011.

[3] International Federation of Red Cross and Red Crescent Societies, "What is a disaster?," http://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/ 2017.

[4] Oxford English Dictionary. 2022. [Online]. https://en.oxforddictionaries.com/definition/accident.

ensuring that sufficient sites exist for merchant facilities for the management of construction and commercial waste). Waste Collection Authorities are responsible for ensuring that sufficient infrastructure exists for the collection of anticipated municipal waste arisings.

5.3.41 Therefore, the management of waste arisings from an urban development project should be considered as a policy issue and not a development specific environmental issue. It is envisaged that waste arising during this phase will be suitably controlled through a CEMP.

5.3.42 Therefore, a specific waste chapter has not been incorporated into the ES. However, in accordance with the EIA Regulations, the Proposed Development description, upon which the EIA for each application has been based, includes estimated volumes of waste associated with construction activities (Construction, Demolition and Excavation waste) and the operational phase of the Proposed Development (Municipal Solid Waste, Commercial Waste).

Wind microclimate, daylight and overshadowing

5.3.43 The building heights of the Proposed Development are up to a maximum height of 56m. Therefore, no significant effects are envisaged as a result of the Proposed Development in regard to wind microclimate. A Microclimate and Wind Assessment has been undertaken by Cundall's which accompanies the hybrid planning application.

5.3.44 A Daylight and Sunlight assessment has been prepared for the hybrid planning application by EB7. The results of these tests demonstrate a good compliance with the BRE guidelines with the majority of the neighbours remaining unaffected or experiencing a very limited degree of impact as a result of the Proposed Development. Whilst there will be some reductions to individual windows along Uxbridge Road, these are all considered minor shifts below the BRE targets and in most cases exacerbated by the windows being located below an overhanging canopy.

5.3.45 As such, the proposals are not likely to have a significant environmental effect in the context of EIA and has therefore these topics have been scoped out of the EIA.

EIA Scope

5.3.46 Following the internal scoping exercise and through consultation with the LPA, the scope of the EIA comprises of the following technical chapters:

- Chapter 6 – Air Quality
- Chapter 7 – Climate Change

5.3.47 In line with best practice, this is considered to be proportionate to the likely significant effects of the Proposed Development.

5.3.48 The scope of the technical assessments is further set out within Chapters 6 and 7.

5.4 EIA Methodology

5.4.1 This section explains the methodology used to prepare the technical chapters of this ES and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the Proposed Development.

EIA Strategy

5.4.2 Given the nature of the application the assessment has been based upon both outline parameters and detail designs (as set out in Chapter 3).

5.4.3 The overarching objective is to ensure that the Local Planning Authority has the information it requires in order to make a reasoned conclusion on the likely significant environmental effects of the Proposed Development when reaching a decision.

5.4.4 The following scenarios have been assessed:

1) Baseline/Future Baseline

2) Baseline/Future Baseline + Proposed Development

3) Baseline/Future Baseline + Proposed Development + Other Committed Development

5.4.5 The above scenarios are necessary to demonstrate the impacts, effects and necessary mitigation required to deliver the Proposed Development.

EIA Method

5.4.6 The assessments presented in the ES consider the potential for significant environmental impacts to affect the baseline conditions as a direct/ indirect result of the Proposed Development.

5.4.7 A description of the aspects of the environment likely to be significantly affected by the Proposed Development is a requirement of the 2017 Regulations. The baseline conditions are defined as the current state of the environment (within schedule 4, section 3 of the 2017 Regulations) and how it may develop in the future in the absence of the proposals and with certain committed developments included. In order to forecast potential future effects it is necessary to make predictions. To ensure that predictions are as accurate as possible, a description of the methods used to assess the effects of the Proposed Development is also required by the 2017 Regulations.

5.4.8 Unless specifically stated otherwise, the assessments have been undertaken in accordance with best practice guidelines published by the relevant professional bodies. Each technical chapter in this report provides full details of the baseline and assessment methodology employed for that topic area alongside terminology used in the context of that technical discipline.

5.4.9 Where there is no topic specific guidance available, a generic framework of assessment criteria and terminology has been developed to enable the prediction of potential effects and their subsequent presentation. The development of this framework has drawn upon the experience of Savills and project team of undertaking EIA.

5.4.10 The EIA for the outline elements has been based upon the outline parameters. Where illustrative details have been referred to in order to present a meaningful assessment, this is clearly stated within the technical chapters.

Study area and temporal scope

5.4.11 Each assessment topic defines its study area geographically and indicates the timescales over which the environmental effects have been considered. The temporal scope considers the demolition and construction phase, and thereafter when the development is completed and operational (referred to as the ‘operational’ phase).

Generic Assessment Framework

5.4.12 Each technical chapter of the ES details the methodology used for its assessment. Unless otherwise specified in the specific technical chapter the ES generally follows the generic assessment framework detailed below.

Receptor Sensitivity and Impact Magnitude

5.4.13 'Receptors' are those aspects of the environment sensitive to changes in baseline conditions. The sensitivity of a particular receptor depends upon the extent to which it is susceptible to such changes.

5.4.14 'Impact magnitude' is determined by predicting the scale of any potential change in the baseline conditions. Where possible, magnitude is quantified however where this is not possible a fully defined qualitative assessment is undertaken. The assessment of magnitude is carried out taking account of any inherent design mitigation in the proposal that forms part of the development description.

Table 5.1 Receptor Sensitivity

Sensitivity of Receptor	Typical Description
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution.
Low	Low or medium importance and rarity, local scale.
Negligible	Very low importance and rarity, local scale.

Table 5.2 Magnitude of impact and typical descriptions

Magnitude of Impact		Typical Description
High	**Adverse**	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements.
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality.
Medium	**Adverse**	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality.
Low	**Adverse**	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring.

Magnitude of Impact		Typical Description
Negligible	**Adverse**	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements.
No Change		No loss or alteration of characteristics, features or elements; no observable impact in either direction.

Level of effect

5.4.15 As shown in the table below, the effect is determined by combining the predicted magnitude of impact with the assigned sensitivity of the receptor.

Table 5.3 Framework for identifying environmental effects

		Magnitude of Impact			
		High	**Medium**	**Low**	**Negligible**
Sensitivity	**High**	**Substantial**	**Major**	**Moderate**	Negligible
	Medium	**Major**	**Moderate**	Minor	Negligible
	Low	**Moderate**	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

5.4.16 As required by EIA Regulation 6, the likely significant effects of the Proposed Development are described as:

- Adverse or beneficial
- Direct or indirect
- Temporary or permanent
- Reversible or irreversible
- Cumulative

5.4.17 Adverse effects are undesirable and result from negative impacts. Beneficial effects are desirable and result from positive impacts.

5.4.18 Each effect has a source originating from the Proposed Development, a pathway and a receptor. Effects which operate in this direct way are regarded as direct effects. Effects on other receptors via subsequent pathways are regarded as indirect effects.

5.4.19 The definition of the level of significance at which a significant impact arises is provided within the topic method section of each chapter of the ES. Unless stated otherwise, effects of moderate significance or above are considered to be significant in EIA terms.

Initial and Residual Effects

5.4.20 As stated previously, the EIA process enables the likely significant effects of a proposed development to be identified so that, where possible, adverse effects predicted to arise as a

result of the proposal can be avoided or mitigated through the adoption of suitable measures. Additionally, enhancement measures can be incorporated to maximise the beneficial effects of the development. The adoption of mitigation and enhancement measures results in initial and residual effects. These can be defined as:

- Initial Effects: Effects occurring as a result of the Proposed Development prior to the adoption of any additional mitigation or enhancement measures.
- Residual Effects: Effects occurring as a result of the Proposed Development taking into account the adoption of identified additional mitigation or enhancement measures.

5.4.21 Additional mitigation and enhancement is defined as a measure that is additional to the Proposed Development as initially proposed. Measures that design out significant effects that form an inherent part of the Proposed Development as proposed, known as inherent mitigation, are considered in the initial impact.

5.4.22 For example many environmental constraints, such as flood risk, must be designed out of a project for it to be viable and it would be impractical to consider the Proposed Development without such measures in place.

5.5 Cumulative assessment

5.5.1 The requirement for cumulative effects assessment is set out in Schedule 4 of the EIA Regulations. At Schedule 4(5), the EIA Regulations require '*A description of the likely significant effects of the development on the environment resulting from, inter alia: …(e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources'*.

5.5.2 Cumulative impact comprises the combined effects of the Proposed Development with other existing and/or approved development. This ES considers the potential for cumulative effects when the construction and operational phases could be concurrent, and where there are sensitive receptors common to other developments. Identified cumulative developments that have been assessed in relation to the Proposed Development are listed below.

5.5.3 For most disciplines, the consideration of cumulative effects is of a qualitative nature. Consideration of the potential for cumulative effects should have regard to specific environmental receptors.

5.5.4 The scope of the committed development has been agreed with the LPA during the pre-application process.

Table 5.5 Cumulative sites

Address	Description	Planning Reference
Land at Tudor Works (Colt Data Centre) (LON04 and LON05)	Data centre campus including: two data centre buildings (Use Class B8); associated energy and electricity infrastructure, buildings, and plant; security gatehouse, systems and enclosures; works to the highway, car parking and cycle parking; hard and soft landscaping; as well as associated infrastructure, ancillary office use, and associated external works.	38421/APP/2021/4045
Land at Bulls Bridge Industrial Estate (Ark Data Centre)	A new data centre (Use Class B8), two MV Energy Centres (including stand-by generation plant and gas storage), a HV Sub-Station, a visitor reception centre, plant, the creation of a new footpath and cycleway link to the canal towpath, works to the highway, car parking, cycle parking, associated infrastructure, enclosures and necessary physical security systems, hard and soft landscaping (including works to the River Crane) and ancillary uses, as well as associated external works. 24-06-20 Approval	75111/APP/2020/1955
Former Nestle Factory (Segro Data Centre)	Demolition of existing factory buildings and associated structures, and redevelopment to provide 1,386 dwellings (Use Class C3). office, retail, community and leisure uses (Use Class A1/A3/A4/B1/B8/D1/D2), 22,663sq.m (GEA) of commercial floorspace (Use Classes B1c/B2/B8 and Data Centre (sui generis)), amenity and playspace, landscaping, allotments, access, service yards, associated car parking and other engineering works. 23-05-17 Approval	1331/APP/2017/1883
151 Clayton Road	Installation of 2 external chillers, new transformer enclosure, external plant compound for storage of electrical equipment, new fencing to side boundary involving alterations to elevations and demolition of brick store	61500/APP/2015/331
15-17 UXBRIDGE ROAD HAYES MIDDLESEX UB4 OJN	Erection of a ground, mezzanine and 12 upper floors plus roof top plant and basement apart-hotel (Use Class C1) building to provide guest rooms and associated ancillary facilities, and associated landscaping/public realm works	69827/APP/2021/1565

5.6 Limitations

5.6.1 The following key assumptions have been made in preparing the ES:

- Each of the baseline reviews were based on information readily available at the time of the assessment, the published documents referenced and the site visits undertaken.
- The assessment of effects prior to the adoption of mitigation measures will assume that the Proposed Development will be constructed in accordance with industry standard techniques. Such techniques will therefore not be considered as mitigation.
- Where further assumptions have been made for individual topic assessments these have been identified within the relevant topic chapters.
- Any limitations or uncertainties associated with impact prediction or the sensitivity of receptors due to the absence of data or other factors will give rise to uncertainty in the assessment. Any such limitations have been referred to in the relevant technical chapters of the ES.