# 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 1.26ha which is below the 5ha threshold. However, when considered in combination permitted development of UB1, UB2 and UB3, the total area of both developments exceeds this. It was agreed with the LPA in pre-application discussions that the Applicant would voluntarily prepare an ES to support the application.

## 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 supporting documentation which has been submitted as part of this planning application shows that the Site is suitable for its proposed use, taking into account ground conditions and any risks arising from land instability and conditions.

5.3.4 This is to be expected given that the application site is directly adjacent to a site where the same use has previously been permitted and where construction is at an advanced stage.

5.3.5 Conditions attached to both the Original Planning Permission and the Slot-In Planning Permission require the submission and approval of a site investigation and remediation strategy prior to the commencement of development and a remediation strategy prior to occupation. It follows, and Ark would accept, similar planning conditions for this application.

### Townscape and Visual

5.3.6 As previously discussed, the whole of the Site comprises previously developed land within an area historically associated with industrial and commercial development now used as a construction hub for the wider construction project. The character and appearance of the area has changed in recent years as a result of the introduction of residential typologies at the Hayes Village site and more modern employment buildings as Ark's Union Park campus has been delivered as already permitted. UP4 would be of a similar scale and appearance to the previously consented data blocks, forming an extension to the Union Park campus. It would not, therefore, markedly alter the character and appearance of the canal corridor in this location.

### Heritage and Archaeology

5.3.7 A Heritage Assessment is submitted as part of the planning application.

5.3.8 This confirms that the Site does not include any listed buildings or conservation areas and is not within the setting of any designated heritage assets. Instead, the site forms a part of the wider industrial setting of the identified assets that has gone, and continues to go through, substantial change.

5.3.9 On that basis, the impacts of the proposed development on heritage grounds is assessed through a Heritage Statement with the conclusion reached that it is acceptable on heritage grounds.

### Biodiversity

5.3.10 In terms of the ecological baseline, the Ecology Assessment prepared by Ecology Solutions confirms that the site is not subject to any statutory or non-statutory ecological designations with the nearest statutory site being the Yeading Meadows LNR, located approximately 2.5km north of the Site and the nearest non-statutory site being the London Canals Site of Importance for Nature Conservation (SINC) located immediately adjacent to the Site's southern boundary and comprising of the woodland between the security fence and towpath. Overall, the Site is of low ecological value, comprising in the main of buildings and hardstanding. Of greatest

importance is the woodland located in the northwest of the Site, extending southwards to the Grand Union Canal. The Biodiversity Net Gain Assessment submitted as part of the application demonstrates that a biodiversity net gain of 83.92% can be achieved.

5.3.11 Given the low ecological baseline of the site and the enhancements that the scheme delivers, it is considered that ecological matters can be assessed through the standard planning application consideration process.

### Transport

5.3.12 The planning application is supported by a Transport Assessment and Travel Plan, both prepared by HDR. The Transport Assessment considers the impact of the proposed development on the local highways network, concluding a betterment compared to the existing baseline whilst also demonstrating that the quantum of car parking aligns with the expectations of the London Plan and is appropriate for the type and quantum of development proposed.

### Hydrology

5.3.13 A Flood Risk Assessment and Drainage Strategy (ref. HDR-0474-XX-XX-REP-C-00002) has been submitted as part of this application, and concludes that the site has low risk of flooding from fluvial, pluvial, artificial watercourses, canals, groundwater, public sewers, or public sewers.

5.3.14 On that basis, it is considered that there is no reason why matters relating to hydrology need to be scoped into the EIA with them instead able to be considered through the usual planning application process.

### Noise

5.3.15 The main generator of noise on the Site will be associated with plant equipment required for the operation of the data centre. This is to operate continuously without pause. There is also noise associated with the operation of the back-up generators which will be used in the case of grid failures and subject to regular but infrequent testing.

5.3.16 Planning conditions are used to control noise levels for the already permitted data centre campus that Ark is delivering and documentation is submitted in support of the planning application which demonstrates that these conditions can be complied with when the proposed development becomes operational.

### Major accidents and disasters

5.3.17 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

[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.

- International Federation of Red Cross & Red Crescent Societies Disaster and Crisis Management Guidance[3].

5.3.18 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*".

5.3.19 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.

5.3.20 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.

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

### Waste and resources

5.3.22 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 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.

5.3.23 Planning permission is granted for a residential development proposal on the basis that it is, for example, in accordance with the development plan or necessary to meet a housing need. On this basis, the waste arisings of a proposed development are either anticipated because they are already planned for or should be anticipated as the need for additional housing comes out of predictable (and calculated) scenarios that the Waste Collection / Disposal Authorities should have already taken into account in their forward plans.

5.3.24 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.

5.3.25 Therefore, a specific waste chapter has not been incorporated into the ES.

### EIA Scope

[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.

5.3.26 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

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

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

## 5.4 EIA Methodology

5.4.1 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.

5.4.2 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.

5.4.3 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.

5.4.4 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.

### Generic Assessment Framework

5.4.5 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*

5.4.6 '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.

5.4.7 '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. |
| 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***

5.4.8 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** |
| | **High** | **Substantial** | **Major** | **Moderate** | Negligible |

| | | | | | |
|---|---|---|---|---|---|
| **Sensitivity** | **Medium** | **Major** | **Moderate** | Minor | Negligible |
| | **Low** | **Moderate** | Minor | Minor | Negligible |
| | **Negligible** | Negligible | Negligible | Negligible | Negligible |

5.4.9 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

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

5.4.11 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.

5.4.12 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***

5.4.13 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.

5.4.14 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.

5.4.15 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. The approach to cumulative effects on climate change is specific to this assessment, as explained in Chapter 7.

5.5.4 Given the scale of the Proposed Development and its location, it is only considered necessary to consider the cumulative effect of the extant planning permission for UB2 and UB3 (UB1 is now constructed and operational so forms part of the baseline environment).

**Table 5.5 Cumulative Development**

| Site Address | Application Reference | Description |
|---|---|---|
| UB1,UB2 and UB3: Land at Bulls Bridge Industrial Estate | 75111/APP/2020/1955 | 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 |

## 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.