

6. Consideration of Alternatives

Introduction

6.1 This Chapter reports the ‘reasonable alternatives’ considered with respect to the Project for Assessment, and the Proposed Scheme.

6.2 Schedule 4, Paragraph 2 of the EIA Regulations¹ states that an ES should include:

“a description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects”.

6.3 Planning Practice Guidance (PPG)² indicates that where “...alternative approaches to development have been considered, the Environmental Statement should include a description of the reasonable alternatives studied which are relevant to the proposed development and its specific characteristics and provide an indication of the main reasons for the choice made, including a comparison of the environmental effects.”.

6.4 As such, in line with the EIA Regulations, if no alternatives have been studied by the Applicant, the EIA does not need to report or assess reasonable alternatives.

6.5 Neither the EIA Regulations, nor PPG identify a specific methodology for the reporting of alternatives, or the criteria to be used to inform the consideration of reasonable alternatives. Therefore, the methodology to be adopted for the purpose of the EIA is based on professional experience of similar projects and an understanding of the Project for Assessment / Proposed Scheme and its characteristics, as well as focus on delivery of a proportionate output, in line with PPG.

6.6 This Chapter therefore reports:

- Consideration of ‘factors’ that constitute reasonable alternatives based on the EIA Regulations (i.e., alternative sites, alternative designs, alternative technologies and the ‘do nothing’ scenario) and justification / discussion of their inclusion / exclusion from further assessment; and
- Qualitative appraisal of the ‘factors’ for which reasonable alternatives have been considered and, where appropriate, a comparison of the environmental effects.

Consideration of Alternatives

6.7 The common ‘factors’ considered with respect to reasonable alternatives, in line with Schedule 4, Paragraph 2 of the EIA Regulations are:

- Alternative sites;
- Alternative design;
- Alternative technology; and

- 'Do Nothing' scenario.

6.8 As stated in Chapter 2 of the EIA Scoping Report (**Appendix 2.1**), the Applicant has not considered 'alternative sites', and 'alternative technologies', and therefore, in line with the PPG, these factors have not been considered further within the EIA process or reported within this Chapter. The remaining factors for consideration are alternative designs; and the 'Do Nothing Scenario'.

Do Nothing Scenario'

6.9 Broadly, it is considered that the 'do nothing' scenario would mean that the likely significant effects identified and reported in this ES do not occur (i.e., no adverse or beneficial effects). The conclusions of the ES are presented in **Chapter 20: Summary – Project for Assessment** and **Chapter 21: Summary – Proposed Scheme**.

6.10 In accordance with the EIA Regulations, each of the **Technical Chapters 7 – 18** report the future baseline scenario under a '*do nothing*' scenario (i.e., the anticipated changes that would occur over time if the Project for Assessment was not brought forward).

6.11 Overall, it is likely that with the absence of the Project for Assessment, the Assessment Boundary would not be developed, meaning that the Assessment Boundary would continue to be used for primarily agricultural purposes and the current management regime would continue. This is with the exception of the below:

- Increase in total employment across the Greater Manchester Combined Authority and the North West region, with a decrease in construction sector, manufacturing, and transport and storage employment;
- Slight increase in transport volumes across the links for assessment considered within **Chapter 8: Transport and Access**;
- Continued decrease in air pollutant concentrations and improvement in air quality;
- Expansion to the areas of Flood Zones 2 and 3 and surface water risk (due to the impacts of climate change), and increased pressure on water availability; and
- Reduction in greenhouse gas emissions (carbon budgets reducing to achieve net zero).

Alternative Design

6.12 The remaining factor identified above is the consideration of alternative design.

6.13 The design of the Project for Assessment / Proposed Scheme has evolved in response to studies, surveys and modelling to take account of the environmental constraints and opportunities. In addition, consultation with stakeholders have also informed the design development process.

6.14 As outlined in **Chapter 2: Approach to EIA**, it should be noted that assumptions on design have been made for the footprint of the Project for Assessment that sits outside of the Application Boundary. These assumptions on design have been necessary to inform the EIA.

6.15 **Table 6.1** below provides an overview of how alternative design options have been discounted in order to avoid, reduce or offset environmental impacts. The final design

options have also formed the primary mitigation which is considered inherent to the Project for Assessment and the Proposed Scheme is described in **Chapter 4: Development Specification – Project for Assessment** and **Chapter 5: Development Specification – Proposed Scheme** respectively, where relevant.

Table 6.1: Consideration of alternative design options

Technical topic	Alternative design options and final solutions
Biodiversity	The primary ecological value within the Project for Assessment are the brook corridors. These are Hollins Brook, Whittle Brook, Castle Brook, Brightly Brook, Pilsworth Clough and an unnamed watercourse. During the design process these Brooks and adjacent habitats were identified to be retained to avoid environmental impacts. Various options were evaluated in terms of the associated widths of the brook corridors, and in particular the widths of the Wildlife Habitat Corridor to ensure that they retained key habitats and functioned successfully. The width of the corridor as defined in Figures 4.1 and 5.1 varies but it was considered that on average a 50m corridor would ensure that the maximum ecological value is retained and continues to function with opportunities for enhancement. It was also necessary to agree that limited intervention would take place within the Wildlife Habitat Corridor, which is limited to structural interventions to enable access across brooks. The final Wildlife Habitat Corridor footprint reduces environmental impacts when compared with narrower corridors or/and a greater level of removal of vegetation.
Built Heritage	Two listed buildings, Brick Farmhouse and Lower Whittle Farm (both grade II listed), are located within the Assessment Boundary but outside of the Application Boundary. Several non-designated heritage assets have been identified within the Assessment and Application Boundaries by the Councils during the pre-application process. As part of the design process, the number of historic farmsteads which were previously proposed/assumed to be demolished are now proposed/assumed to be retained, removing or lessening the environmental impact on these assets given the concerns around the cumulative impact on local non-designated heritage assets. The retention of heritage assets is defined in Figures 4.1 and 5.1. The setting of both designated and non-designated heritage assets were also considered during the design process with setbacks included following evaluation with and without setbacks. These setbacks are defined as 'Heritage Setting Offsets' on Figures 4.3 and 5.3. The setting of heritage assets were also informed by a heights workshop which resulted

Technical topic	Alternative design options and final solutions
	in the reduction and graduation in some maximum heights within Plots as defined in Figures 4.2 and 5.2. In addition, a graduation of height within the Plots allowed for reduced heights when proximate to the listed building. The final design reduces indirect impacts to Brick Farmhouse and Lower Whittle Farmhouse.
Hydrology, flood risk and water quality	The Assessment Boundary is largely within Flood Zone 1, however, the immediate surrounding land of Whittle Brook and Hollins Brook and Brightly Brook (to the west of Pilsworth Fishery) are within Flood Zone 3 and in an area classified as being at ‘high’ probability of flooding. The management of flooding has been a key principle of the design. As outlined above, the brook corridors (as detailed under <i>Biodiversity</i> above) and their retention was evaluated early on. This included the consideration of a number of options in relation to the uses adjacent to the brooks and the width of the corridors. In co-ordination with the biodiversity requirements (as set out above) and the landscape requirements (set out below), two distinct buffers were appraised. The final solution results in a Wildlife Habitat Corridor abutting each brook, and then adjacent to the Wildlife Habitat Corridor, a Landscape Mitigation Area. These are defined in Figures 4.1 and 5.1. The modelled extent of the 0.1% Annual Exceedance Probability (AEP) plus 35% climate change event from Hydraulic Modelling completed by Tetra Tech (see Flood Risk Assessment) is contained within the Wetland Habitat Corridor. Within the Wildlife Habitat Corridor, works will be limited to structural interventions to enable access across the brooks (i.e. bridges). This avoids the requirements for any flood compensation areas. No buildings will be built within the Landscape Mitigation Area, thereby avoiding any risk of flooding to existing and future infrastructure and buildings (and users). The drainage strategy considered a number of options, including larger attenuation facilities and on-Plot attenuation. The final spatial footprint allows for large attenuation facilities within the Landscape Mitigation Area which remains outside of the Wildlife Habitat Corridor (and the extent of the current and future flood zones) but in proximity to the brooks, which hydrologically provides the simplest solution with the least engineering requirements.

Technical topic	Alternative design options and final solutions
Air Quality^a	All sources of flood risk and associated environmental impacts have been avoided and the mitigation required is defined within Figures 4.1 and 5.1 .
	Residential development is assumed outside of the Application Boundary within Assessment Plot FF. It was considered that future residents may be impacted by pollutant concentrations associated with the nearby M66. Through the design and as part of the development of buffers between Plots, a number of spatial options were considered. Provisional modelling was undertaken using baseline air quality data, with a view of supporting the buffer options. The modelling confirmed the relevant air quality standards across Assessment Plot FF were not exceeded and the buffers driven by other environmental impacts accommodated the requirements for air quality in order to avoid environmental impacts.
Noise	Residential development is assumed outside of the Application Boundary within Assessment Plot FF. Future residents are likely to be impacted by the nearby M66. There are various measures that could be incorporated into the design of the proposed residential development which would inter-relate to control / reduce noise and as such a specific stand-off distance could not be defined. However, a minimum stand-off distance of 50m between the M66 and residential development within Assessment Plot FF (Figure 4.1) was agreed to accommodate a preliminary degree of separation at this stage, although it was acknowledged that this was based on qualitative appraisal. Due consideration was also given to the compatibility between proposed commercial/industrial noise sources and Assessment Plot FF. There remains uncertainty as to the specific uses that will be accommodated in proximity to Assessment Plot FF, especially as this Plot and adjacent uses fall outside of the Application. However, landscape buffers have been incorporated around existing and proposed residential premises to provide a minimum buffer between proposed employment uses and residential receptors. Whilst specific stand-off distances could not be defined, a stand-off of 20m was advised to at least provide some degree of separation.
Landscape and Visual	The brook corridors (as detailed under <i>Biodiversity</i> above), are a key feature of the existing landscape within the Assessment Boundary. During the design process, these Brooks were identified to be retained to avoid

^a Whilst these effects were considered unlikely to be significant as part of the EIA Scoping Report (**Appendix 2.1**) and subsequently **Chapter 10: Air Quality**, and was therefore not been considered further within the EIA, alternative designs have been considered given its influence on the final layout of the Proposed Scheme.

environmental impacts. Various options were evaluated in terms of the associated widths of the brook corridors, and in particular the widths of the Wildlife Habitat Corridor and adjacent Landscape Mitigation Area. The final width of the total Whittle Brook corridor (circa 130-300m depending on the location) as opposed to narrower corridors was considered to secure the retention of existing trees of greatest value along the brook corridor as a substantial landscape feature north to south, to a degree lessening the impact on landscape character.

At the outset of the design process, peripheral landscape buffers were not proposed. However, following design advice, it was considered essential to maintain a buffer around the Assessment Boundary and ensure that the existing vegetation within was retained. This was to help soften the impact of the development. The Peripheral Landscape Buffer is defined on **Figures 4.1** and **5.1**.

Visual impacts from receptors were also informed by a heights workshop which resulted in the reduction and graduation in some maximum heights within Plots as defined in **Figures 4.2** and **5.2**. This helped with the integration of proposed built form. Following an appraisal of Plot sizes, the option with the lower environmental impact, i.e. small scale Plots within the eastern part of the Assessment Boundary were agreed.

References

¹ The Town and Country Planning Act 1990. Available at:

<http://www.legislation.gov.uk/ukpga/1990/8/contents> [Accessed: 11/03/2025].

² Ministry of Housing, Communities and Local Government (Online Resource). Planning Practice Guidance Environmental Impact Assessment. Available at:

<https://www.gov.uk/guidance/environmental-impact-assessment> [Accessed: 11/03/2025].