1 Introduction

1.1 This report summarises the results of the scoping consultation undertaken by Terence O’Rourke Ltd on the proposed park for AgriTech, Hinxton. A scoping report was submitted to South Cambridgeshire District Council and a number of other organisations (table 1) on 2 February 2017.

1.2 This scoping consultation response document presents the key issues raised by the consultees and provides responses to each of the comments. Where applicable, cross references are made to where the issues have been addressed in the environmental statement (ES). The scoping report is included in appendix 1 and copies of the consultees’ responses are included in appendix 2.

Table 1: Organisations consulted as part of the scoping process

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact name</th>
<th>Position / department</th>
<th>Response received</th>
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</thead>
<tbody>
<tr>
<td>South Cambridgeshire District Council</td>
<td>Katie Christodoulides</td>
<td>Senior Planning Officer</td>
<td>07.04.17</td>
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<tr>
<td></td>
<td>Claire Sproats</td>
<td>Contaminated Land Officer</td>
<td>13.03.17</td>
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<td></td>
<td>Edward Davis</td>
<td>Environmental Health Officer</td>
<td>19.03.17</td>
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<td></td>
<td>Sarah Dale</td>
<td>Ecology Officer</td>
<td>14.03.17</td>
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<td></td>
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<td>Trees Officer</td>
<td>15.03.17</td>
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<td></td>
<td>--</td>
<td>Planning Policy Officer</td>
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<td>Conservation Officer</td>
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<tr>
<td>Cambridgeshire County Council</td>
<td>Sass Pledger</td>
<td>Head of Service, Growth and Economy</td>
<td>20.03.17</td>
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<td></td>
<td>--</td>
<td>Highways Officer</td>
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<td>Archaeology Officer</td>
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<td>Public Rights of Way Officer</td>
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<tr>
<td>Natural England</td>
<td>Dawn Kinrade</td>
<td>Consultations Team</td>
<td>20.03.17</td>
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<tr>
<td>Environment Agency</td>
<td>T.G. Waddams</td>
<td>Planning Liaison</td>
<td>13.03.17</td>
</tr>
<tr>
<td>Historic England</td>
<td>Janine Dykes</td>
<td>Inspector of Historic Buildings and Areas</td>
<td>20.03.17</td>
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<td>Highways England</td>
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<tr>
<td>Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire</td>
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<tr>
<td>Cambridge Past, Present and Future</td>
<td>Stacey Weiser</td>
<td>Head of Planning and Conservation</td>
<td>22.02.17</td>
</tr>
<tr>
<td>Anglian Water</td>
<td>Hannah Wilson</td>
<td>Planning Liaison Manager</td>
<td>06.03.17</td>
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<tr>
<td>Cambridge Water Company</td>
<td>Mike Sloan</td>
<td>Network Development Manager</td>
<td>05.04.17</td>
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<td>National Grid</td>
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<td>UK Power Networks</td>
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<td>Health and Safety Executive</td>
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2 Scoping consultation responses

South Cambridgeshire District Council (SCDC)

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<tr>
<td><strong>Scoping opinion</strong>(1)</td>
<td><strong>Response</strong></td>
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<tr>
<td>If the application is submitted prior to the adoption of the City Council and South Cambridgeshire Local Plan, reference should be made to relevant adopted Core Strategy and Development Management DPD policies, supplementary planning documents and any other approved policy documents. The status of the local plan should be acknowledged and taken into consideration in both the ES and other documentation.</td>
<td>The ES topic chapters (4 to 13) include a brief consideration of relevant adopted and emerging planning policy. Full consideration of planning policy is provided in the planning statement submitted in support of the application.</td>
</tr>
<tr>
<td>The approach taken in section 1 of the scoping report is supported.</td>
<td>Noted.</td>
</tr>
<tr>
<td>The EIA should provide a full detailed description of the site, including any particular features of note, designated or sensitive areas, such as Sawston Hall Meadows Site of Special Scientific Interest (SSSI). A number of listed buildings, such as Hinxton Grange and the Chapel of the Hospital of St John the Baptist, also a scheduled monument, and listed buildings and conservation areas within Hinxton, Whittlesford, Duxford and Pampisford Hall should be assessed as part of the wider impact.</td>
<td>A detailed description of the site is provided in chapter 2 of the ES and figure 2.1 shows sensitive receptors in the vicinity of the site. The potential for effects on heritage assets in the vicinity of the site is examined in chapter 6.</td>
</tr>
<tr>
<td>The development proposals should reference the full range of uses and infrastructure to be provided, to include community and recreational facilities and public art.</td>
<td>Details of the proposed development, including community facilities and public open space, are provided in chapter 2 of the ES.</td>
</tr>
<tr>
<td>It is recognised that the accepted principles of good practice in EIA will be applied throughout the process and this is to be welcomed. The EIA process should provide sufficient, reliable and usable information in order to assess the impact of the proposal and to inform the decision making process.</td>
<td>Noted. Information on the proposed development is provided in chapter 2 of the ES and baseline information used in the assessments is provided in chapters 4 to 13.</td>
</tr>
<tr>
<td>ESSs are required to include an outline of the main alternatives studied by the developer and an indication of the main reasons for the developer’s choice, taking into account the environmental effects. The national planning practice guidance proposes that “Where alternative approaches to development have been considered, the Environmental Statement should include an outline of the main alternatives studied and the main reasons for the choice made, taking into account the environmental effects.” On this basis, if alternative locations or design layouts for the development have been considered then these should be included as part of the assessment. A full explanation as to the locational need for the proposal at this site</td>
<td>Details of the alternatives considered, including alternative sites and layouts, are provided in chapter 2 of the ES. The full reasons for locating the proposal at the application site are set out in the planning statement submitted in support of the application.</td>
</tr>
</tbody>
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1 Note that where the council’s scoping opinion repeats responses from other consultees, these are set out in the tables relating to each individual consultee and not repeated in this response table to avoid duplication.
<table>
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<tr>
<th>Comment</th>
<th>Response</th>
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<tbody>
<tr>
<td>A park for AgriTech, Hinxton Scoping Response Report</td>
<td>SmithsonHill</td>
</tr>
<tr>
<td>The proposed air quality scope and methodology is mostly agreed. It is agreed that dust during site preparation and construction activities and emissions from post-construction road traffic associated with the proposed development have the potential to be significant.</td>
<td>Noted. These issues are assessed in chapter 4 of the ES and technical appendix B.</td>
</tr>
<tr>
<td>The applicant is advised that odour generation post-construction and effects on the CO₂ budget may have an adverse impact on local air quality. There will be a need to achieve 10% provision of energy from renewable energy and confirmation is needed that this would not affect air quality, e.g. biomass boilers may have a negative effect on air quality and therefore would need to be included in the EIA.</td>
<td>The potential for odour effects associated with the management of wastewater is examined in chapter 4 of the ES and technical appendix B. As set out in the energy and carbon reduction statement submitted in support of the application, the proposed renewable energy solutions will be a mix of photovoltaics and solar thermal, which will not have the potential to lead to negative air quality effects.</td>
</tr>
<tr>
<td>These impacts require evaluation in the context of air quality objectives and existing air quality and an air quality assessment is required.</td>
<td>The air quality assessment set out in technical appendix B and summarised in ES chapter 4 considers existing air quality and relevant objectives.</td>
</tr>
<tr>
<td>It should be noted that the council’s District Design Guide SPD under air quality requires consideration of the implementation of a low emissions strategy to mitigate any transport-related impact. There should be a general commitment to reduce transport-related emissions, such as a low emissions strategy for both the development and operational phases, considering factors such as low plant / dust / travel to work plan / charging points for electric vehicles or any other suggestions that would be appropriate in this instance to encourage the uptake of low emission vehicles.</td>
<td>As discussed in chapter 2 of the ES, the proposed development includes a range of measures to reduce transport emissions. A low emissions strategy will be prepared under a planning condition in due course.</td>
</tr>
<tr>
<td>The preferred option, as per SCDC’s Health Impact SPD, is for the applicant to produce a combined HIA and EIA. However, the scoping report states that a HIA will be submitted as a supporting document. While this is not the preferred approach, it is acceptable as long as there is clear cross-referencing between the two documents and that both have equal standing within the application.</td>
<td>The community, social and economic effects assessment in chapter 5 of the ES includes consideration of health issues from the HIA. The HIA took the findings of the EIA into account and includes cross references as appropriate.</td>
</tr>
<tr>
<td>The community, social and economic section should explore the impact of the development and potential increase in demand for local services and facilities, with social infrastructure in terms of community facilities, public art and recreation facilities being addressed.</td>
<td>The community, social and economic assessment in chapter 5 of the ES assesses the potential for effects on recreation and other community facilities. Public art is discussed in the design and access statement submitted in support of the planning application.</td>
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<tr>
<td>The EIA should consider the impact of the proposal and health impacts and links to housing and traffic.</td>
<td>The community, social and economic assessment in chapter 5 of the ES includes information on health. Traffic impacts associated with the proposed development are examined in ES chapter 12. As set out in the economic impact assessment in chapter 5 and technical appendix C, employees of the proposed development are expected to be drawn from a relatively wide area. The proposed development is therefore not expected to increase demand for housing locally, although any development of housing in the local area would offer an opportunity for employees to move closer to their workplace.</td>
</tr>
<tr>
<td>Opportunities for walking and cycling should make reference to the Transport and Health Joint Strategic Needs Assessment as a starting point.</td>
<td>Details of the proposed walking and cycling facilities are provided in ES chapter 2 and impacts associated with these are examined in chapter 5 in relation to health and chapter 12 in relation to infrastructure.</td>
</tr>
<tr>
<td>The economic benefits and costs on the wider regional economy should be considered.</td>
<td>The potential economic effects are assessed in ES chapter 5 and technical appendix C.</td>
</tr>
<tr>
<td>The proposed application boundary would divide the formal garden area of the grade II listed Hinxton Grange. The proposal would therefore likely result in significant harm to the setting of the historic garden and listed property. This is a significant effect that needs to be fully examined.</td>
<td>The potential for effects on the setting of Hinxton Grange and its gardens and parkland is examined in chapter 6 of the ES, although it should be noted that the final application boundary corresponds to the boundaries of the garden.</td>
</tr>
<tr>
<td>The location of the proposed transport interchange would be in close proximity to the grade II listed Red Lion Hotel and grade II* and scheduled monument Chapel of the Hospital of St John the Baptist, which requires assessment.</td>
<td>The potential for effects on these heritage assets is assessed in ES chapter 6.</td>
</tr>
<tr>
<td>Consideration should be given to the potential for the proposal to affect the Brent Ditch scheduled monument, which forms one of a series of linear boundaries in Cambridgeshire (including Devil’s Dyke, Fleam Dyke and Bran Ditch).</td>
<td>The potential for effects on the setting of the Brent Ditch scheduled monument is examined in ES chapter 6.</td>
</tr>
<tr>
<td>It will be necessary to assess both the direct impact of development on any historic assets within the site and indirect impact on the setting of historic assets nearby. Further guidance on assessing the impact on setting is contained within The setting of heritage assets: English Heritage guidance. It is recommended</td>
<td>The cultural heritage assessment in chapter 6 of the ES examines both direct and indirect impacts and includes both designated and undesignated assets.</td>
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<tr>
<td>that a section for both designated and undesignated assets be included in the assessment.</td>
<td>heritage assets.</td>
</tr>
<tr>
<td>The report recognises that the proposal is located in a landscape of high archaeological potential and the broad approach detailed is welcomed. Full mitigation measures should be included within the EIA and, where appropriate, preservation of archaeological remains should remain in situ.</td>
<td>Noted. Details of proposed mitigation measures are provided in chapter 6 of the ES.</td>
</tr>
<tr>
<td>Although the site consists of agricultural land, there is the potential for land contamination from present agricultural use in terms of pesticides and fuel storage. The scope of work appears to be acceptable.</td>
<td>Noted. The potential for risks from land contamination is examined in chapter 7 of the ES and technical appendix E1.</td>
</tr>
<tr>
<td>The scoping request is for a proposal that does not appear to affect any nationally designated geological sites.</td>
<td>Noted.</td>
</tr>
<tr>
<td>The assessment and inclusion of agricultural land classification and impacts in terms of the loss of agricultural land is welcomed. Impacts from the development should be considered in light of the government’s policy for the protection of the best and most versatile agricultural land, as set out in paragraph 112 of the NPPF.</td>
<td>Noted. The loss of agricultural land is assessed in chapter 8 of the ES and technical appendix F.</td>
</tr>
<tr>
<td>The site lies within the Cambridgeshire Chalkland Landscape Character Area and is characterised by large open fields, low hedges and small copses. The development location contains two important landscape features: Hinxton Grange and Pampisford Hall. Pampisford Hall should also be included in the list of visual receptors.</td>
<td>The potential for effects on the landscape character of the site and surrounding area, and on views from Hinxton Grange and Pampisford Hall, is examined in chapter 9 of the ES.</td>
</tr>
<tr>
<td>The objective of the landscape and visual assessment must be to identify all potential impacts of the development on the nearby sensitive receptors and address how the design process would mitigate the built impact of the development through the consideration of effective mitigation measures. Attention should be paid to the visual impact and impact on the landscape from the development.</td>
<td>Potential landscape and visual impacts and details of mitigation measures incorporated into the design process are set out in ES chapter 9.</td>
</tr>
<tr>
<td>Artificial lighting has the potential to have wider significant visual impact. The effects of lighting need to be considered in terms of obtrusive light spill / glare and sky glow.</td>
<td>The assessment of potential impacts in chapter 9 of the ES includes a consideration of impacts at night.</td>
</tr>
<tr>
<td>Details of local landscape character areas should be mapped at a scale appropriate to the development site, as well as any relevant management plans or strategies pertaining to the area.</td>
<td>County landscape character areas are shown on figure 9.10. There are no management plans or strategies pertaining to the area.</td>
</tr>
<tr>
<td>The green belt lies where the bus and cycle interchange is proposed to be sited, with the main site lying to the south and east of this. Assessment in terms of green belt impact and effect on the setting of the green belt would be required.</td>
<td>The green belt is a planning designation, rather than an environmental one, and it is therefore not considered appropriate to address green belt issues in the EIA. The potential for effects on the green belt and its setting is examined in the planning statement submitted in support of the application.</td>
</tr>
<tr>
<td>The assessment should refer to the relevant national character areas.</td>
<td>Chapter 9 of the ES considers both national and...</td>
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<tr>
<td>The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area.</td>
<td>local landscape character areas. National character areas are shown on figure 9.9.</td>
</tr>
<tr>
<td>The scoping report states that the closest SSSI lies 2.2 km north of the main site and 1.3 km north of the interchange. As a result of these distances, the report states that no further consideration will be given in the scoping process. The proposal may lead to significant effects arising at a greater distance than the buffers for designated sites, so this should be considered.</td>
<td>All the ES topic chapters (4 to 13) include an assessment of the potential for cumulative effects.</td>
</tr>
<tr>
<td>The suggested content of the noise and vibration chapter appears acceptable. It is recommended that consideration is given to the prevention of nuisance that may be caused.</td>
<td>Noted. The potential for noise effects is assessed in chapter 11 of the ES and technical appendix I.</td>
</tr>
<tr>
<td>The potential impacts on existing residential properties at Hinxton village will need to be assessed.</td>
<td>Residential properties in Hinxton are included in the sensitive receptors assessed in chapter 11 and technical appendix I.</td>
</tr>
<tr>
<td>The surrounding highway network already experiences high levels of demand and regularly suffers delays and congestion. The proposal will increase delays and congestion on the local highway network during and post-construction. The proposal will include new site access junctions and highway improvements.</td>
<td>Details of the proposed access junctions and highway improvements are provided in chapter 2 of the ES. The potential traffic and transport effects are assessed in chapter 12 and technical appendix J.</td>
</tr>
<tr>
<td>The transport assessment (TA) that will inform the EIA will require consideration of the A505 Study or a significant transport study to ensure traffic and transport effects have been sufficiently considered. The highway authority has serious concerns in relation to the proposed development and impact on the highway and traffic.</td>
<td>The TA in technical appendix J was scoped in consultation with both Highways England and the highways authority. It includes the findings of traffic counts and assesses all potential traffic and transport effects.</td>
</tr>
<tr>
<td>Where other impacts such as noise, air quality and ecology are related to changes in traffic levels, it is important that the relevant baseline data and quantified predictions are provided in the EIA.</td>
<td>Full details of the baseline data and modelling predictions in relation to air quality and noise effects are provided in technical appendices B and I and the findings of the assessments are summarised in ES chapters 4 and 11.</td>
</tr>
<tr>
<td>It is noted that waste implications of the development will not be considered through the EIA or ES, but will be addressed through a waste statement report. However, even if it is a separate document, it should still</td>
<td>Waste effects are assessed in chapter 13 of the ES and technical appendix K.</td>
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<tr>
<td>Form part of the EIA as waste management on a site of this extent and nature gives rise to strategic waste management issues that should be assessed and impacts addressed.</td>
<td>The proposed construction waste storage and management measures are summarised in chapter 13 of the ES and set out in detail in the waste and resource management statement in technical appendix K.</td>
</tr>
<tr>
<td>In addition to the above, policy CS28 requires strategic development to have a temporary waste management recycling facility for construction / inert waste to be in place throughout the construction phases, in order to maximise the re-use, recycling and recovery of inert waste streams from construction and demolition operations. This should be reflected in the proposed waste management strategy.</td>
<td></td>
</tr>
<tr>
<td>The site is underlain by a chalk principal aquifer and secondary aquifers in superficial deposits. Hinxton Grange Pumping Station lies immediately adjacent to the site to the north. The site overlies groundwater source protection zones (SPZ1 and SPZ2). The site is environmentally sensitive to controlled waters. Cambridge Water Company has concerns regarding the proposal and impact on the SPZs and risk to groundwater.</td>
<td>The application boundary has changed since the scoping exercise and the pumping station is no longer adjacent to the site. The potential for effects on groundwater below the site and on surface water is assessed in chapter 7 of the ES and mitigation measures are proposed.</td>
</tr>
<tr>
<td>Part of the site proposed for the bus and cycle interchange lies within flood zones 2 and 3. A flood risk assessment (FRA) will be required to be submitted in support of the planning application and will be used to inform the assessment in terms of flood risk and drainage. Consideration will also be given to the findings of the ecological studies and the ground conditions and contamination study.</td>
<td>The FRA is included in technical appendix E2 and its findings are summarised in ES chapter 7. The contamination reports are included in technical appendix E1 and summarised in ES chapter 7. Potential ecological effects are assessed in ES chapter 10.</td>
</tr>
<tr>
<td>The implementation of sustainable drainage systems (SuDS) should be carefully considered for both sites. These techniques can provide a method for reducing runoff that could otherwise lead to flooding. Reference should be given to the potential effects of the construction process and surface water runoff for the proposed bus and cycle interchange on the waterbody quality status of the River Cam, given the requirements of the Water Framework Directive. It is important that the development does not have a detrimental impact on the waterbody quality status of the river.</td>
<td>The proposed SuDS measures are outlined in chapter 2 of the ES, with more detail provided in the FRA in technical appendix E2. Potential effects on surface water, including the River Cam, are assessed in ES chapter 7.</td>
</tr>
<tr>
<td>In accordance with the NPPF Planning Practice Guidance, new development should be connected to the public mains (with prior written approval of the statutory undertaker) where possible.</td>
<td>The proposed options for managing the development’s wastewater are set out in chapter 2 of the ES.</td>
</tr>
<tr>
<td>Whether significant cumulative effects are or are not likely to arise from a particular development will vary from topic to topic. It is unlikely that all disciplines will identify cumulative effects and indeed some of the environmental issues to be addressed will be site or study area specific only. Therefore, consideration of cumulative effects should be undertaken within each relevant chapter, as appropriate, where significant cumulative effects are considered likely.</td>
<td>The ES topic chapters (4 to 13) include consideration of the potential for cumulative effects.</td>
</tr>
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</table>
This should also seek to identify and evaluate the effects likely to result from the proposal in combination with other projects and activities that have or will be carried out. The scoping report identifies a number of schemes. This should also include consideration of Moorfield Road, Duxford (application reference S/1726/12/FL).

It is clear from the scoping report that an energy statement is to be submitted rather than being part of the EIA. This document should detail all the sustainable design and construction methods to be included in the development, along with any climate adaptation features to be included.

**Ecology**

Overall, the proposed scope of the ecological receptors that are being considered and the surveys to inform the ES is acceptable. The cumulative impacts of nearby extant consents and proposals will need to be considered, for example where impacts on important flight lines for bat species and disturbance or displacement of nesting birds of conservation concern may occur.

It is stated that baseline surveys were undertaken in 2014. Surveys will need to be up-to-date, ideally to within two years of the submission to inform an application and the ES for the site. This is of most importance for species such as badger, as disused setts are likely to vary in activity over time.

The River Cam has not been identified in the ES scoping report as a county wildlife site (CWS). Retention and protection of all designated wildlife sites will need to be demonstrated to meet LDF policies NE/6 and NE/7. This needs to include protection from indirect impacts such as noise, vibration and pollution. The recommendation for a construction environmental management plan (CEMP) is welcomed. However, sufficient information will need to be provided before determination to demonstrate how impacts on CWSs will be avoided. Therefore, it may be prudent to provide a CEMP or equivalent with the application. Would object to any application that did not demonstrate sufficient protection for CWSs.

The red line area includes land immediately adjacent to and crossing the River Cam. An otter and water vole survey would be needed to inform the application if riparian habitat will be impacted by the proposals.

Potential impacts on the Sawston Hall Meadows SSSI will need to be considered and a detailed assessment set out in the ES. The proposals meet Natural England’s criteria for consultation based on...
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<td>their Impact Risk Assessment Zones. This states for the area of the site east of Whittlesford that potential impacts in relation to water supply need to be considered for large infrastructure such as warehousing / industry where total additional gross internal floorspace following development is 1,000 m² or more.</td>
<td>Information on habitat loss and creation is provided in chapter 10 of the ES.</td>
</tr>
<tr>
<td>Details of retention of (in the first instance) and / or compensation for the loss of (as a final resort) important habitats, such as native hedgerows, will be required to meet LDF policy NE/6. Sufficient information will need to be provided to demonstrate that there will be no net loss of biodiversity and that compensation, where proposed, is achievable.</td>
<td>Chapter 10 of the ES includes information on proposed mitigation and compensation measures.</td>
</tr>
<tr>
<td>Avoidance, mitigation and compensation measures will need to state what will or must, rather than what should, happen. Sufficient compensation for significant effects, e.g. to farmland bird populations, will need to be considered.</td>
<td>Information on proposed biodiversity enhancement measures is provided in ES chapter 10.</td>
</tr>
<tr>
<td>Aside from the ES and impact assessment, a scheme of biodiversity enhancement consistent with SCDC’s Biodiversity SPD will need to be provided.</td>
<td>Information on proposed biodiversity enhancement measures is provided in ES chapter 10.</td>
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**Environmental health – contaminated land**

Satisfied with the proposals to include a section on ground conditions, as the land in question is likely to include some constraints in relation to contamination. Section 11 of the scoping report makes note of a completed phase 1 desk study and a phase 2 site investigation that is currently in progress. These reports should be submitted with any application so that the information within can be properly assessed.

**Environmental health – noise**

It will be essential if any permission is to be granted that a full construction management plan is submitted, including control measures for dust, noise, vibration, lighting, delivery locations, restriction of hours of work and all associated activities audible beyond the site boundary to 08:00 to 18:00 Mondays to Fridays and 08:00 to 13:00 on Saturdays.

An assessment should also be submitted to assess the effects of any external plant on amenity.

**Trees**

Principal concern is the effect on mature, ancient and veteran trees within the parkland landscape to Hinxton Grange, including those trees in parkland, avenues and hedgerows.

These assets may be considered in the landscape and visual effects and natural heritage assessments. Neither of these sections of the scoping report mention trees specifically. Trees are necessarily discrete elements that are intrinsic to the historic landscape and habitat. The proposed methods of assessment for

**The assessment of effects on landscape character in chapter 9 of the ES includes specific consideration of tree loss and cross references to**
### Comment

**landscape and visual effects do not seem to capture trees specifically. While 'flora' is captured, large mature, ancient and veteran trees have wider importance, which is why they should be captured as discrete elements.**

**Consider it appropriate for scoping to include a specific methodology for the consideration of ancient and veteran trees set within the environs and historic context of Hinxton Grange.**

### Response

**the arboricultural impact assessment submitted in support of the planning application. The natural heritage assessment in ES chapter 10 also examines effects associated with the limited loss of trees on site.**

**Noted. These issues are addressed in the ES, as set out above.**

### Cambridgeshire County Council

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<th>Response</th>
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<tbody>
<tr>
<td>Have reviewed the scoping report and can confirm it addresses the council’s requirements in respect of surface water drainage.</td>
<td>Noted.</td>
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### Natural England

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<tr>
<td>Expect the final ES to include all necessary information as outlined in schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.</td>
<td>Chapter 1 of the ES includes signposting to where this information is provided in the ES.</td>
</tr>
<tr>
<td>It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the ‘in combination’ effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.</td>
<td>The ES topic chapters (4 to 13) include consideration of the potential for cumulative effects. The assessments have included all the infrastructure required to support the development, details of which are provided in ES chapter 2.</td>
</tr>
<tr>
<td>The potential impact of the proposal on features of nature conservation interest and opportunities for habitat creation / enhancement should be included in this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EcIA) have been developed by the Chartered Institute of Ecology and Environmental Management.</td>
<td>The natural heritage assessment in chapter 10 of the ES has been carried out in accordance with relevant guidelines and includes details of proposed habitat creation and enhancement.</td>
</tr>
<tr>
<td>EcIA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other</td>
<td>The natural heritage assessment in ES chapter 10 has incorporated EcIA principles.</td>
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<td>forms of environmental assessment or appraisal.</td>
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<tr>
<td>The NPPF sets out guidance in section 118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.</td>
<td>The natural heritage assessment has taken account of the requirements of the NPPF.</td>
</tr>
<tr>
<td>Natural England undertakes an initial assessment of all development consultations by determining whether the location to which they relate falls within geographical “buffer” areas within which development is likely to affect designated sites. The proposal is located outside these buffer areas and therefore appears unlikely to affect an internationally or nationally designated site. However, it should be recognised that the specific nature of a proposal may have the potential to lead to significant impacts arising at a greater distance than is encompassed by Natural England’s buffers for designated sites. The ES should therefore thoroughly assess the potential for the proposal to affect designated sites, including special areas of conservation, special protection areas, Ramsar sites and sites of special scientific interest. Should the proposal result in an emission to air or discharge to the ground or surface water catchment of a designated site, then the potential effects and impact of this would need to be considered in the ES.</td>
<td>The potential for effects on designated sites is examined in chapter 10 of the ES.</td>
</tr>
<tr>
<td>Local planning authorities, as competent authorities under the provisions of the Conservation of Habitats and Species Regulations 2010 should have regard to the Habitats Regulations Assessment (HRA) process set out in Regulation 61 of the Habitats Regulations in their determination of a planning application. Should a likely significant effect on a European / internationally designated site be identified or be uncertain, the competent authority (in this case the local planning authority) may need to prepare an appropriate assessment, in addition to consideration of impacts through the EIA process.</td>
<td>There are no internationally designated sites within 10 km of the application site, so it is considered that there is no potential for effects on internationally designated sites.</td>
</tr>
<tr>
<td>The ES should assess the impact of all phases of the proposal on protected species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site, for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.</td>
<td>Protected species records were sought from organisations including Cambridgeshire and Peterborough Environmental Records Centre and Essex Ecological Services Limited. The assessment of potential effects on protected species is set out in chapter 10 of the ES.</td>
</tr>
<tr>
<td>The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.</td>
<td>A range of surveys have been carried out on site. The full survey reports are included in technical appendix H and their findings are summarised in ES chapter 10, together with the impact assessment and mitigation measures.</td>
</tr>
<tr>
<td>Natural England has adopted standing advice for protected species. It provides a consistent level of basic advice that can be applied to any planning application that could affect protected species. It also includes links to guidance on survey and mitigation.</td>
<td>Noted.</td>
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<tr>
<td>The ES should thoroughly assess the impact of the proposals on non-statutory sites, for example local wildlife sites, local nature reserves and regionally important geological and geomorphological sites (RIGS). The appropriate local biological records centres, nature conservation organisations, local planning authority and local RIGS group should be contacted with respect to this matter.</td>
<td>There are no local nature reserves or RIGS in the vicinity of the site. The potential for effects on CWSs and local wildlife sites is examined in chapter 10 of the ES.</td>
</tr>
<tr>
<td>The ES should thoroughly assess the impact of the proposals on habitats and / or species listed in the UK Biodiversity Action Plan (BAP). These priority habitats and species are listed as ‘habitats and species of principal importance’ within the England Biodiversity List. Section 40 of the National Environment and Rural Communities Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available in the Defra publication Guidance for Local Authorities on Implementing the Biodiversity Duty.</td>
<td>The natural heritage assessment in ES chapter 10 includes consideration of priority habitats and species.</td>
</tr>
<tr>
<td>Government Circular 06/2005 states that BAP species and habitats are capable of being a material consideration in the making of planning decisions. Natural England therefore advises that survey, impact assessment and mitigation proposals for habitats and species of principal importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant local BAP.</td>
<td>The natural heritage assessment in ES chapter 10 includes consideration of priority and local BAP habitats and species.</td>
</tr>
<tr>
<td>The consideration of landscape impacts should reflect the approach set out in the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and the Institute of Environmental Management and Assessment, 2013), the Landscape Character Assessment Guidance for England and Scotland (Scottish Natural Heritage and The Countryside Agency, 2002) and good practice. The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context, Natural England would expect the cumulative impact assessment to include those proposals currently at scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at scoping stage would be likely to be a material consideration at the time of determination of the planning application.</td>
<td>The landscape and visual impact assessment in chapter 9 of the ES has been carried in accordance with relevant guidance and includes consideration of the potential for cumulative effects.</td>
</tr>
<tr>
<td>The assessment should refer to the relevant national character areas and landscape character assessment at a local level.</td>
<td>The landscape and visual impact assessment in ES chapter 9 includes reference to both national and local landscape character areas.</td>
</tr>
<tr>
<td>The ES should include a thorough assessment of the development’s effects on public rights of way and access to the countryside and its enjoyment through recreation. With this in mind, and in addition to consideration of public rights of way, the landscape and visual effects on open access land, whether direct or indirect, should be included in the ES.</td>
<td>The potential for effects on views from public rights of way in the vicinity of the site is assessed in ES chapter 10, while ES chapter 5 includes consideration of wider effects on amenity. There is no open access land in the vicinity of the site.</td>
</tr>
<tr>
<td>Natural England would also expect to see consideration of opportunities for improved or new public access</td>
<td>The proposed new public open space and footpath</td>
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Comment | Response
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provision on the site, to include linking existing public rights of way and / or providing new circular routes and interpretation. Natural England also recommends reference to the relevant right of way improvement plans to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced. | / cycleway provision is described in chapter 2 of the ES.

Impacts from the development should be considered in light of the government’s policy for the protection of the best and most versatile agricultural land, as set out in paragraph 112 of the NPPF. Natural England also recommends that soils should be considered under a more general heading of sustainable use of land and the valuing of the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF. | The assessment of effects on agricultural land and soils is set out in chapter 8 of the ES and technical appendix F.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society; for instance, as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. The Natural Environment White Paper *The Natural Choice: securing the value of nature* (Defra, 2011) emphasises the importance of natural resource protection, including the conservation and sustainable management of soils and the protection of best and most versatile agricultural land. | The assessment of effects on agricultural land and soils, including proposed mitigation measures, is set out in chapter 8 of the ES and technical appendix F.

Development of buildings and infrastructure prevents alternative uses for those soils that are permanently covered, and also often results in degradation of soils around the development as a result of construction activities. This affects their functionality as wildlife habitat, and reduces their ability to support landscape works and green infrastructure. Sealing and compaction can also contribute to increased surface runoff, ponding of water and localised erosion, flooding and pollution. | The assessment of effects on soils, including proposed mitigation measures, is set out in ES chapter 8 and technical appendix F.

Defra published a *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* (2009). The purpose of the code of practice is to provide a practical guide to assist anyone involved in the construction industry to protect the soil resources with which they work. | The mitigation measures set out in ES chapter 8 include reference to the Defra guidance.

As identified in the NPPF, new sites or extensions to new sites for peat extraction should not be granted permission by local planning authorities or proposed in development plans. | No peat extraction is proposed on site.

General advice on the agricultural aspects of site working and reclamation can be found in the Defra Guidance for successful reclamation of mineral and waste sites. | Noted.

Air quality in the UK has improved over recent decades, but air pollution remains a significant issue. A priority action in the *England Biodiversity Strategy* is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments that may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant effect on the quality of air, water and land. The assessment should take account of the risks of air pollution and how | Potential air quality effects are assessed in ES chapter 4 and technical appendix B.
**Comment**

these can be managed or reduced.

The *England Biodiversity Strategy* published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development’s effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment by establishing coherent ecological networks that are more resilient to current and future pressures (paragraph 109), which should be demonstrated through the ES.

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<td>Chapter 10 of the ES examines the potential for effects on the site’s ecology as a result of habitat fragmentation and sets out mitigation and enhancement measures that will be put in place to ensure that ecological networks are maintained.</td>
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**Environment Agency**

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<td>The site is underlain by a chalk principal aquifer, as well as secondary aquifers in the superficial deposits, associated with a Water Framework Directive Drinking Water Protected Area. Principal aquifers are geological strata that exhibit high permeability and provide a high level of water storage. They support water supply and river base flow on a strategic scale. The site also overlies a groundwater source protection zone (SPZ1 inner protection zone), with a potable water abstraction licence for a location adjacent to the northern site boundary. Although groundwater is expected to be at depth on the east part of the site, based on the topography it is anticipated to be shallow on the west part of the site (closer to the River Cam). The Agency considers the site to be environmentally sensitive with respect to controlled waters.</td>
</tr>
<tr>
<td>The potential for effects on surface water and groundwater quality and hydrology is assessed in chapter 7 of the ES.</td>
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<td>The full intrusive site investigation report is included in technical appendix E1 and its findings are summarised in ES chapter 7. The potential for effects on the quality of controlled waters is assessed in chapter 7.</td>
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<td>Understand from the scoping report and a previous desk study report that, although the majority of the site was previously used for agricultural activities, potentially contaminative activities have previously been undertaken at the site. Therefore, the Agency requires lines of evidence to provide assurance that the risks to controlled waters are fully understood and can be addressed through appropriate measures. These should consider the risks to controlled waters from past, present and future uses. Understand that an intrusive site investigation is currently being undertaken and look forward to reviewing the report with its findings.</td>
</tr>
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<td>Piling or other ground improvement methods could have an adverse impact on the groundwater quality beneath the site or provide preferential pathways for contaminant migration to the aquifer during construction and after the completion of the development. As such, potential contamination should be given due consideration, together with any impacts of the development on the quality of controlled waters during construction and operation prior to the granting of a planning permission.</td>
</tr>
<tr>
<td>The potential for effects on controlled waters from the mobilisation of contamination is assessed in chapter 7 of the ES and technical appendix E1.</td>
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<tr>
<td>It is understood that SuDS, in the form of soakaways, are proposed for surface water drainage. The implications and impact of potentially contaminated surface water drainage on the quality of controlled waters in the vicinity of the site should be considered.</td>
</tr>
<tr>
<td>Any SuDS greater than 2.0 m below ground level are considered to be a deep system and are generally not acceptable. All infiltration SuDS require a minimum of 1.2 m clearance between the base of infiltration SuDS and peak seasonal groundwater levels. Soakaways must not be constructed in contaminated ground where they could remobilise any pre-existing contamination and result in pollution of groundwater. Soakaways and other infiltration SuDS need to meet the criteria in the Agency’s Groundwater Protection: Principles and Practice (GP3) position statements G1 and G9 to G13. Only clean water from roofs can be directly discharged to any soakaway or watercourse. Systems for the discharge of surface water from associated hardstanding, roads and impermeable vehicle parking areas shall incorporate appropriate pollution prevention measures and a suitable number of SuDS treatment train components.</td>
</tr>
<tr>
<td>Recommend that developers should refer to the GP3 documents, the risk management framework provided in CLR11 Model Procedures for the Management of Land Contamination, Guiding Principles for Land Contamination, Verification of Remediation of Land Contamination, the CL:AIRE Definition of Waste: Development Industry Code of Practice and related Position Statement on the Definition of Waste, British Standards BS5930:2015 and BS10175:2011 and the Agency’s Technical Aspects of Site Investigations technical reports, Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination, Good Practice for Decommissioning Boreholes and Wells and the Agency’s website.</td>
</tr>
<tr>
<td>As the site is over 1 ha, a FRA must be submitted to support a planning application. This should assess the risk of flooding to the site from all sources and demonstrate that the development will be safe for its lifetime and not increase risk elsewhere. The majority of the site falls within flood zone 1. Therefore, there should be no built footprint or surface water attenuation proposed within flood zone 3. Provided that this is adhered to, the Agency is unlikely to have any flood risk concerns.</td>
</tr>
<tr>
<td>The scoping opinion has considered many aspects of waste management. The inclusion of a site waste management plan should establish good waste management practices with an adherence to the waste hierarchy. The management of hazardous waste arising on the development will be addressed, as will the re-use and disposal of all waste in accordance with UK and European legislation. It is important that all waste re-used, recycled or disposed of is carried out by licensed contractors and appropriate permitted waste sites and that records of the same are maintained. Suitable recycled material that has attained the appropriate standards should be used. All wastes should be managed so as not to cause any environmental harm.</td>
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<tr>
<td>The scoping opinion states that waste will be covered in the waste statement that will be submitted in</td>
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<tr>
<td>Support of the planning application. This should be adhered to. Wider consideration should also be given to local capacity for managing the waste streams associated with development and occupancy thereafter. The policies contained in the Waste Core Strategy and National Waste Plan should be used as a clear reference point, to ensure waste is managed sustainably and legally. It would be useful to give even basic consideration to waste storage and collection systems once the site is developed (e.g. the environment in which containers are placed, internal storage, ease of access, participation), especially given the new regulatory requirements for separate collection of specific waste types from households and commercial premises.</td>
</tr>
<tr>
<td>Refer the applicant to the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. There is further guidance on sustainable construction available on the Waste and Resources Action Programme website.</td>
</tr>
<tr>
<td>Development should not be committed ahead of secure water supplies. The development lies within the area traditionally supplied by Anglian Water Services Ltd. It is assumed that water will be supplied using existing sources and under existing abstraction licence permissions. The planners should seek advice from the water company to find out whether this is the case, or whether a new source needs to be developed or a new abstraction licence is sought. The Agency may not be able to recommend a new or increased abstraction licence where water resources are fully committed to existing abstraction and the environment.</td>
</tr>
<tr>
<td>The location of development should take into consideration the relative availability of existing developed water resources. The timing and cost of infrastructure improvements will be a consideration. This issue should be discussed with the water company.</td>
</tr>
<tr>
<td>Every opportunity should be taken to build water efficiency into new developments, and innovative approaches should be encouraged. The Agency supports all initiatives aimed at reducing water use. The extent of water efficiency measures adopted will affect the demand for water for the development and the Agency expects that this will be taken into consideration. It is assumed that new houses will be constructed with water meters fitted. Other water saving measures that should be incorporated include low flush toilets, low flow showerheads, water butts for gardens etc. The Agency also supports the idea of greywater recycling, as it has the potential to reduce water consumption in the average household by up to 35%. This must, however, be achieved in a safe and hygienic manner.</td>
</tr>
<tr>
<td>It is the responsibility of the applicant to ensure that no local water features (including streams, ponds, lakes, ditches or drains) are detrimentally affected. This includes both licensed and unlicensed abstractions.</td>
</tr>
<tr>
<td>The scoping report identifies that there is limited available capacity in relation to water supply and foul sewerage. Subsequent discussion elaborates further with regard to water supply, but there is very little information regarding foul water drainage. The report’s conclusion that both of these factors are significant</td>
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A park for AgriTech, Hinxton Scoping Response Report

is correct, but the Agency would expect the EIA to include evidence to show that Anglian Water has been consulted via a pre-application enquiry and that suitable upgrades / mitigation is available and has been planned to avoid the development creating a deterioration in environmental water quality.  

Drainage is fundamental to any development and especially so on the scale of this proposal. The respective authorities will need to be confident that any proposal brought forward as a formal planning proposal is robust and deliverable within the proposed development timeframe.  

### Historic England*

**Comment**  |  **Response**  
---|---
Historic England is concerned that there may be a negative impact on the historic environment, in particular the Hinxton conservation area and several of the grade II* listed buildings in Hinxton, including Hinxton Hall, The Old Manor House, The Church of St Mary and St John, and The Oak House. In addition, there is the potential for a negative impact on the grade I listed Church of St Peter, Duxford. There are a number of designated assets within 1.5 km of the site, including six conservation areas, five scheduled monuments, 12 grade I and II* listed buildings, a grade II* registered park and garden and 100 grade II listed buildings.  

Would expect that the EIA examines the potential impacts on all heritage assets likely to be affected, including designated heritage assets and their settings, together with potential impacts on non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This covers buildings, historic open spaces, historic features and the wider historic landscape, including below-ground archaeology.  

The local authority’s conservation and archaeology advisors should be closely involved throughout the preparation of the ES. They are best placed to advise on local historic environment issues and priorities (including access to data held in the Historic Environment Record), how the proposal can be tailored to minimise potential adverse impacts on the historic environment, the nature and design of any required mitigation measures, and opportunities for securing wider benefits for the future conservation and management of heritage assets.  

*It should be noted that Historic England submitted a screening response, rather than a scoping response. Only elements that related to the identification of potentially significant effects to be examined in the EIA have been extracted here.*
# Cambridge Past, Present and Future

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<tr>
<td>Would like to register serious concerns about the merits of the proposal in this particular location.</td>
<td>Noted.</td>
</tr>
<tr>
<td>It is clear that several clusters or sectors of business have formed over time in and around Cambridge, namely the Science Park, Bio-Medical Campus, West Cambridge and NW Cambridge sites, ARM, Granta Park, the Babraham Campus, Hinxton Campus etc. However, there is no evidence that companies are seeking to be located in this specific part of the city and would query the need for this location to be developed and what alternative locations have been assessed and potentially discounted.</td>
<td>While chapter 2 of the ES includes consideration of alternative sites, it is not the role of the ES to provide evidence on need. Information on need and alternative sites can be found in the planning statement submitted in support of the planning application.</td>
</tr>
<tr>
<td>Feel that the inclusion of a bus / cycle interchange and other offers of highway improvements are merely a ruse to garner favour due to the fact that proposals for development on this site have been highly controversial in the past.</td>
<td>Full details of the rationale behind the proposed bus / cycle interchange and other highway improvements are provided in the TA in technical appendix J.</td>
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## Anglian Water

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<td>Anglian Water is the sewerage undertaker for the area only. Cambridge Water Company supplies the water for the area.</td>
<td>Noted. Both Anglian Water and Cambridge Water Company have been consulted.</td>
</tr>
<tr>
<td>Support section 18.1 of the scoping report – examination of the proposed drainage system and increase in demand for wastewater drainage.</td>
<td>The potential effects on demand for wastewater drainage are examined in chapter 7 of the ES.</td>
</tr>
<tr>
<td>Encourage early engagement with the developer in order to address foul water infrastructure issues. Anglian Water provides a pre-planning service for used water to identify feasible drainage solutions.</td>
<td>Details of the consultation undertaken with Anglian Water are set out in the FRA in technical appendix E2.</td>
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Cambridge Water Company

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<td>Proposal causes concern because the Hinxton Grange Pumping Station is situated immediately adjacent to the site. Any development likely to affect groundwater within SPZ1 would automatically be opposed by the Environment Agency. Development likely to affect groundwater within SPZ2 would be opposed by Cambridge Water Company.</td>
<td>The application boundary has changed since the scoping exercise and the pumping station is no longer adjacent to the site. The potential for effects on groundwater below the site is assessed in chapter 7 of the ES and mitigation measures are proposed.</td>
</tr>
<tr>
<td>As the development is likely to impact the SPZs, more detailed discussions will be required so Cambridge Water Company can understand the proposal and assess the risks of it detrimentally affecting the groundwater.</td>
<td>Details of the consultation undertaken with Cambridge Water Company are set out in the utilities statement submitted in support of the application.</td>
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1 Introduction

Purpose of the scoping report

1.1 SmithsonHill is developing proposals for a park for AgriTech on land east of the A1301 and south of the A505 at Hinxton in South Cambridgeshire (see figure 1). The scheme will also include provision of a bus / cycle interchange on land west of the A1301 and north of the A505 to the east of Whittlesford parkway station. It is intended that an application for outline planning permission may be submitted later this year.

1.2 The proposed development falls within schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) (hereafter the EIA Regulations) and SmithsonHill considers that the location, scale and nature of the development proposals may lead to potential significant effects on the environment. The proposed development is therefore considered to be an environmental impact assessment (EIA) development, as defined by the EIA Regulations, and the planning application will be accompanied by an environmental statement (ES) prepared in accordance with these regulations. SmithsonHill therefore submits this report as a request to South Cambridgeshire District Council (SCDC) for an EIA scoping opinion under the EIA Regulations.

1.3 This report presents information to assist the council in the process of scoping the EIA and outlines SmithsonHill’s view as to the potentially significant effects that the EIA would need to examine and the preliminary scope of the information that would need to be provided in the ES. To assist the council in meeting its regulatory requirements to engage with the consultation bodies and SmithsonHill ahead of issuing its scoping opinion, a suggested list of consultees is included in appendix A.

Report structure

1.4 This report is broadly structured as follows:

- Site description (chapter 2)
- Proposed development (chapter 3)
- An overview of EIA and scoping (chapters 4 and 5)
- The preliminary scoping process undertaken by SmithsonHill (chapters 6 and 7)
- The results of SmithsonHill’s scoping exercise (chapters 8 to 19)
- Conclusion with SmithsonHill’s view as to the information to be provided in the ES and its proposed structure (chapter 20)
2 Site description

2.1 The 116 ha proposed development site includes two main elements, the park for AgriTech to the north east of the village of Hinxton (from here on referred to as the ‘main site’) and a bus / cycle interchange to the east of Whittlesford Parkway station, immediately adjacent to the A505 / A1301 roundabout (referred to as the ‘interchange’).

2.2 The main site is currently used for farming. It comprises predominantly arable fields used to grow crops, with areas of hedgerows, woodland, scattered trees and short perennial. It has an avenue of trees running from west to east which lead to Hinxton Grange Grade II listed building and associated parkland, which is a strong feature in the local landscape. The parkland is within the EIA scoping boundary and the listed building is outside, but immediately adjacent.

2.3 The main site slopes gently from 48 m AOD in the east to 27 m AOD in the west. There are no public rights of way running through the site. The closest footpaths are approximately 1.5 km away to the north east and 1.4 km to the east. There is a permissive path for the Parish of Hinxton along Tichbaulk Road to the south of the site.

2.4 The A1301 forms the western site boundary of the main site, beyond which lies farmland and the village of Duxford. The site is bordered to the north by farmland, beyond which lies the A505 and the villages of Sawston and Pampisford. To the north east is farmland, the A11, Granta Park and Abington. To the east the site is bordered by four private residences, Hinxton Grange, Mighton Products (a sash window business) and beyond these farmland and the A11. To the south the site is bordered by farmland and a small, unnamed road but known locally as Tichbaulk Road. To the south west is the village of Hinxton, home to the Wellcome Trust Genome Campus and to the north east, beyond the A11, is Granta Park.

2.5 The generally flat interchange site is also currently used for farming (arable crops), with hedgerow and scattered trees along its east, west and southern boundaries. The site is bordered to the east by the A1301, the south by the A505 and to the west by the River Cam, with farmland, a small industrial estate and Whittlesford Parkway train station and railway line beyond. The northern boundary of the site is bordered by Mill Farm Lane and a small cluster of dwellings beyond.

2.6 Cambridge City Centre is approximately 12 km north of the main site. There are a number of scheduled monuments in the vicinity of the main site (Brent Ditch approximately 1.2 km to the north east, a Romano British settlement 0.8 km to the south west and the moated site of St Peter’s Church 1.3 km to the west). The nearest listed building is Hinxton Grange, immediately adjacent to the main site boundary. The nearest listed building / scheduled monument to the interchange is the Chapel of the Hospital of St John the Baptist which is approximately 150 m to the west. The nearest designated conservation site is Sawston Hall Meadows Site of Special Scientific Interest (SSSI) 2.2 km north of the main site and 1.3 km north of the interchange.

2.7 Figure 2 shows the location of key local features in relation to the proposed development site.
Figure 2: Key local features

Hinxton
SmithsonHill

02 February 2017

Dwg no/

Revision

Scale: 1:30,000 @A3


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3 Proposed development

3.1 At this stage the proposed development is envisaged to include:

- Approximately 112,000 sqm of commercial floorspace (gross) for AgriTech and associated life sciences (e.g. FoodTech and CleanTech), comprising primarily B1 (office, labs, light industry), with potential for some, primarily ancillary B2 (general industrial) / B8 (storage) uses and including a mixed use centre (approx. 10% of total floorspace) for B1, A3 (e.g. café), D1 (crèche / day nursery) and D2 (gym) facilities. This will accommodate up to 4,000 employees (~28sqm GFA / employee)

- Approximately 2,000 parking spaces (based on a working assumption parking rate of 0.5 per employee) and additional spaces for operational and visitor requirements

- A new primary site access from the A1301 with associated improvement to local footways and footpaths

- Secondary site access from the A1301 via the existing access to Hinxton Grange, to accommodate emergency vehicle and potential bus access

- Additional emergency vehicle access via the existing lane along the southern edge of the site (known locally as Tichbaulk Road)

- Landscaping to integrate the site into the environment to mitigate visual impacts

- A new electricity sub-station on land adjacent to the A11

- A new water supply pumping station

- Surface water attenuation areas

- Servicing, utilities and general infrastructure works

- A direct, high quality route from the main site to Whittlesford Parkway Station for walking, cycling and possible shuttle service vehicles

- Highway improvement works including to the A1301 / A505 roundabout, with new pedestrian / cycle bridge

- Bus / cycle interchange with potential new vehicular access from A505 and pedestrian / cycle link to A1301
4 Environmental impact assessment – an overview

4.1 The EIA Regulations require that planning applications for a specified range of projects, termed EIA developments, need to be accompanied by an ES that reports the findings of an EIA of the development’s significant environmental effects.

4.2 The environmental information gathered to undertake this assessment and its outcomes are reported in a document referred to as the ES. The ES then accompanies the planning application for the proposed EIA development as part of the suite of supporting documents.

4.3 There is no standard format for an ES. The EIA Regulations require that an ES at least contains the information specified in Part II of schedule 4 of the regulations, and such of the relevant information in Part I as is reasonably required to assess the effects of the proposed development and that the developer can, having regard to current knowledge and methods of assessment, reasonably be required to compile. Schedule 4 of the EIA Regulations is set out in appendix B of this report for information.
5 Scoping an environmental impact assessment

Background

5.1 The purpose of an ES is to report the findings of the EIA. The EIA process examines the significant effects of an EIA development on its receiving environment. This is encapsulated in the online advice given in the DCLG Planning Practice Guidance on EIA (under the section ‘What Information should the Environmental Statement contain?’):

“Whilst every Environmental Statement should provide a full factual description of the development, the emphasis of Schedule 4 is on the “main” or “significant” environmental effects to which a development is likely to give rise. The Environmental Statement should be proportionate and not be any longer than is necessary to assess properly those effects. Where, for example, only one environmental factor is likely to be significantly affected, the assessment should focus on that issue only. Impacts which have little or no significance for the particular development in question will need only very brief treatment to indicate that their possible relevance has been considered.”

5.2 This approach is reinforced by case law from UK and European courts. Judgements have stated that, even in relation to the minimum requirements for an ES, not every possible effect has to be considered. The focus should be on the main effects and remedying the significant adverse effects. The Milne judgement (R v Rochdale MBC ex parte Milne) states that “the environmental statement does not have to describe every environmental effect, however minor, but only the main effects or likely significant effects”. The Tew judgement (R v Rochdale MBC ex parte Tew) noted that the underlying objective of EIA is that decisions be taken “in full knowledge” of a project’s likely significant effects and stated:

“that is not to suggest that full knowledge requires an environmental statement to contain every conceivable scrap of environmental information about a particular project. The directive and the Assessment Regulations require the likely significant effects to be assessed. It will be for the local planning authority to decide whether a particular effect is significant”.

5.3 There is no formal definition of main or significant effects in the regulations, although guidance provided by the European Union(1) advises that:

“Those responsible for scoping often find difficulties in defining what is ‘significant’. A useful simple check is to ask whether the effect is one that ought to be considered and to have an influence on the development consent decision”.

5.4 Therefore, while scoping is an important early stage in EIA, as it sets the context for the remainder of the process, it needs to be approached with the above points in mind.

---

The purpose of scoping

5.5 A comprehensive and focused scoping process, culminating in a constructive scoping opinion that identifies the likely significant effects and any EIA methodologies that SCDC wishes to see employed, will enable the production of an ES that provides a concise and objective analysis that deals with the significant areas of impact and highlights the key issues relevant to the decision-making process.

5.6 The planning authority’s scoping opinion represents its opinion on the information that needs to be presented in the ES that will accompany the planning application for EIA development. SmithsonHill considers that this information can be grouped under the following areas, which this scoping report has focused on:

1. The identification of the aspects of the environment that may be affected by the development and consideration of whether any of these will be significantly affected.
2. A description of the EIA methodologies that will be used to determine the degree of significance to be attached to the significant effects.

5.7 If the required information is defined too narrowly, some critical area of uncertainty or a significant adverse effect may emerge late in the process, with consequences for the design of the proposals and timetables for development. If the required information is too loosely defined, much time, expense and effort may be wasted on pursuing unnecessary detail. Therefore, SmithsonHill considers point 1 above to be the primary focus of this scoping report.

5.8 When addressing point 1, careful consideration has to be afforded to the scale and nature of the proposed EIA development, in the context of site specific and local environmental baseline conditions and, where relevant, the potential cumulative implications with other schemes either operational, approved or for which planning consent is currently being sought.

5.9 The aim of point 1 is to ‘scope in’ only those aspects considered to have significant effects. Where a particular environmental feature or component of it has not been included within the proposed scope of the EIA, this is not to suggest that there will be no associated effects; rather that these are not considered to be among the significant effects. In line with DCLG’s EIA guidance (as highlighted above), these effects have been given “very brief treatment [during scoping] to indicate that their possible relevance has been considered”, but no detailed assessment work has been proposed for the EIA.

5.10 It is also recognised that scoping is an iterative process that will continue throughout the EIA of the development proposals. SmithsonHill will amend the scope of the EIA as required and, in the event of a significant change to the proposals or the baseline conditions, it may approach SCDC for a further scoping opinion.
6 Scoping methodology

Introduction

6.1 The scoping methodology used by Terence O’Rourke Ltd has two stages, which are explained in this chapter. Chapter 7 then sets out the results of the first stage of scoping for this project. The subsequent chapters address the second stage of the scoping process, summarise the findings of both stages and therefore identify those matters to be included in the EIA for each topic heading, before setting out the proposed assessment methodology for each topic heading. The concluding chapter summarises all of the matters that SmithsonHill considers should be addressed in the EIA.

6.2 Stage 1 uses a checklist of environmental features and their components to identify:

I. Those environmental features, or components of them, that clearly have the potential to be subjected to effects arising from the EIA development, and that these clearly have the potential to be significant or main effects (and therefore should be included in the EIA).

II. Those environmental features, or components of them, that may be subjected to effects arising from the EIA development, but it is not clear whether these effects have the potential to be significant or main effects (and therefore further consideration is required to determine whether these should be included in the EIA).

III. Those environmental features, or components of them, that are either of no relevance to the EIA development, or will clearly not be subjected to the EIA development’s main effects (and therefore should not be included in the EIA).

6.3 This checklist is based on the features of the environment referred to in the EIA Regulations and:

- Guidance on EIA Scoping (European Commission, 2001)
- Guidelines for environmental impact assessment (The Institute of Environmental Management and Assessment, 2004)

6.4 The completed checklist is shown in table 7.1.

Stage 2

6.5 As well as summarising the effects that clearly have the potential to be significant (i.e. those that fall within paragraph 6.2(i) above), stage 2 of the scoping process involves a more detailed examination of the potential effects that fall within paragraph 6.2(ii) above to assess, where possible, if any of these effects are likely to be significant and should be included within the EIA.

6.6 To determine whether these remaining effects are likely to be significant, the relative importance of the potential receptors (classified as high, medium, low or negligible) is compared to the magnitude of the envisaged changes (classified...
as large, medium, small or negligible) to which they would be subjected, using the matrix in figure 3 below.

6.7 Where an effect falls within the orange shaded area of the matrix, it is considered likely to be significant and should be included within the scope of the EIA. Effects falling within the green areas on the matrix are considered to have no likelihood of being significant and should not be included within the scope of the EIA. Where an effect falls within the yellow area on the matrix, the uncertainty may be such that it cannot be confirmed at the scoping stage whether it is likely to be a significant effect or not. Such effects warrant further consideration through the EIA process and so these effects will be included in the scope of the EIA.

Figure 3: The scoping matrix

<table>
<thead>
<tr>
<th>Predicted scale or magnitude of effect</th>
<th>Importance / sensitivity of receptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negligible</td>
<td>High</td>
</tr>
<tr>
<td>Small</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td></td>
</tr>
</tbody>
</table>

- Likely to be significant
- Possibly significant
- Not significant
7 Stage 1: Identification of main / significant effects

7.1 The stage 1 process was undertaken using the methodology set out in chapter 6. This was based on the currently available details of the project, the currently available baseline data and the judgement of experienced EIA practitioners.

7.2 The stage 1 process examined a large group of potential effects, as set out in table 7.1. Where potential effects were identified, a distinction was drawn between those effects that clearly have the potential to be significant (highlighted purple in the table) and those effects that could be significant but require more detailed analysis in stage 2 of the scoping process (highlighted blue in the table).

<table>
<thead>
<tr>
<th>Environmental aspect</th>
<th>Component</th>
<th>Possible construction effect envisaged?</th>
<th>Possible operational effect envisaged?</th>
<th>Likely main effect to be included in stage 2 scoping?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR AND CLIMATE</td>
<td>Local air quality (criteria pollutants)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased road traffic emissions during and post-construction. Increased emissions post construction from equipment used on site</td>
</tr>
<tr>
<td></td>
<td>Dust</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Generation of dust during construction and from activities on site post construction</td>
</tr>
<tr>
<td></td>
<td>Odour</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Activities on the site post-construction could be a source of odour, depending on final occupiers</td>
</tr>
<tr>
<td></td>
<td>Local climatic effects</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The nature of the proposed development suggests that there will be no localised effects on temperature or the moisture content of air</td>
</tr>
<tr>
<td></td>
<td>Trans-boundary air quality</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The location and nature of the proposed development suggest that there is no potential for significant trans-boundary effects</td>
</tr>
<tr>
<td></td>
<td>Global climate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The nature and scale of the proposed development suggest that there is no potential for significant global climate effects</td>
</tr>
<tr>
<td></td>
<td>Carbon dioxide budget / emissions</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Emissions from traffic during and post-construction, use of materials in construction, energy use in buildings and other on site activities post-construction</td>
</tr>
<tr>
<td>COMMUNITY, SOCIAL AND ECONOMIC</td>
<td>Population profile and density</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>As there is no residential development provided the population profile and density is unlikely to change</td>
</tr>
<tr>
<td></td>
<td>Demography</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>There will be no residential development provided</td>
</tr>
<tr>
<td></td>
<td>Housing supply</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>There will be no residential development provided</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Creation of employment during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Economy</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Potentially significant contribution to the local and regional, economies through increased job creation and expenditure on goods and services There is also a potentially significant impact on the economy at the national / multi-regional level as the proposal aims to contribute to the growth of a priority national sector</td>
</tr>
<tr>
<td></td>
<td>Lifestyle / standard of living</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The nature of the proposed development means it will not affect local standards of living</td>
</tr>
<tr>
<td></td>
<td>Education, health and local services</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>The increase in population during working hours has the potential to lead to a corresponding increase in demand for various facilities</td>
</tr>
<tr>
<td>Environmental aspect</td>
<td>Component</td>
<td>Possible construction effect envisaged?</td>
<td>Possible operational effect envisaged?</td>
<td>Likely main effect to be included in stage 2 scoping?</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>---------------------------------------</td>
<td>--------------------------------------</td>
<td>------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Public health and safety</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
<td>Potential risk to public safety during construction</td>
</tr>
<tr>
<td>Social inclusion / exclusion</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The nature of the proposed development suggests it will not affect social inclusion</td>
</tr>
<tr>
<td>Local environmental amenity</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Construction works may affect the amenity of local residents The development of the transport hub site may affect the amenity of local residents during and post construction</td>
</tr>
<tr>
<td>Electromagnetism / radiation</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The proposed development will not affect electromagnetism or radiation</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The proposed development will not affect telecommunications</td>
</tr>
<tr>
<td>Microclimate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The scale of the proposed development limits the potential for microclimate effects</td>
</tr>
<tr>
<td>Tourism</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The nature and location of the proposed development mean that there will be no effects on tourism</td>
</tr>
<tr>
<td>Archaeology / monuments</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Disturbance of archaeological remains on site during construction. Potential for setting effects on the scheduled monument to the north east of the site during and post construction</td>
</tr>
<tr>
<td>Architecture / buildings / structures</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Potential for changes to settings of nearby listed buildings (i.e. Hinxton Grange) during and post-construction</td>
</tr>
<tr>
<td>Historic parks and gardens</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Potential effects on the setting of historic parks and gardens within 5km of the site</td>
</tr>
<tr>
<td>Other historic interest</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Changes to the historic landscape of the northern part of the main site</td>
</tr>
<tr>
<td>Geology and geomorphology</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The nature of the development means that effects on geology are unlikely</td>
</tr>
<tr>
<td>Ground contamination</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>It is possible that there may be localised hotspots of contamination associated with the use and storage of fuels / agricultural chemicals which could be disturbed during and post construction</td>
</tr>
<tr>
<td>Mineral resources</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The site is not used or allocated for commercial minerals extraction</td>
</tr>
<tr>
<td>Soils / agricultural land</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Loss of agricultural land during construction. Use of agricultural land for research into agriculture post construction</td>
</tr>
<tr>
<td>Agriculture / horticulture</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Loss of agricultural land during construction. Use of agricultural land for research into agriculture post construction</td>
</tr>
<tr>
<td>Forestry</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>There is no commercial forestry on site or proposed</td>
</tr>
<tr>
<td>Recreation / open space / rights of way</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Provision of new public open space and rights of way land use on site post construction</td>
</tr>
<tr>
<td>Mineral extraction</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>No minerals extraction on site or proposed</td>
</tr>
<tr>
<td>Industrial / commercial / retail</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Provision of new commercial land use on site post construction</td>
</tr>
<tr>
<td>Residential</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>No new residential land use proposed at the site</td>
</tr>
<tr>
<td>Health / social / education</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Provision of public open space on the site</td>
</tr>
<tr>
<td>Waste disposal</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
<td>The site will not be used for commercial waste disposal</td>
</tr>
<tr>
<td>Environmental aspect</td>
<td>Component</td>
<td>Possible construction effect envisaged?</td>
<td>Possible operational effect envisaged?</td>
<td>Likely main effect to be included in stage 2 scoping?</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>----------------------------------------</td>
<td>---------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Landscape and visual effects</td>
<td>Landform / topography</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>There is large scale re-profiling of the land proposed during construction</td>
</tr>
<tr>
<td></td>
<td>Land cover</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Change of some agricultural land to buildings and open space</td>
</tr>
<tr>
<td></td>
<td>Landscape character</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Character will change from predominantly arable to a mixture of arable and commercial</td>
</tr>
<tr>
<td></td>
<td>Protected landscapes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Potential for changes to views from Hinxton and Pampisford conservation areas</td>
</tr>
<tr>
<td></td>
<td>Sensitive views</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Changes to views from residential properties, public rights of way and the wider countryside</td>
</tr>
<tr>
<td></td>
<td>Wilderness</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The site and surrounding area are not classified as wilderness</td>
</tr>
<tr>
<td>Natural Heritage</td>
<td>Habitat types</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Loss of on site habitats and creation of new habitats during and post construction</td>
</tr>
<tr>
<td></td>
<td>Plant communities</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>The proposed development will change the site’s flora</td>
</tr>
<tr>
<td></td>
<td>Faunal communities</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>The proposed development could change the way the site is used by faunal groups. Potential impacts on the River Cam and resident fauna could also be affected</td>
</tr>
<tr>
<td></td>
<td>Individual / protected species</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>There is the potential for a range of protected species on site and in close proximity (e.g. using the River Cam) – potential for disturbance and habitat loss effects during and post construction</td>
</tr>
<tr>
<td></td>
<td>Ecosystem integrity</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The nature of habitats in the vicinity suggests overall integrity will not be affected</td>
</tr>
<tr>
<td></td>
<td>Wildlife conservation</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Potential for effects on locally designated nature conservation sites from dust deposition or pollution infiltrating through to the groundwater during construction</td>
</tr>
<tr>
<td></td>
<td>Resource management</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The management of natural resources will not be affected</td>
</tr>
<tr>
<td></td>
<td>Natural processes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No changes are predicted to natural processes</td>
</tr>
<tr>
<td>Noise and vibration</td>
<td>Noise</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Generation of noise during construction works, increased traffic noise during and post-construction. Generation of noise from activities post-construction</td>
</tr>
<tr>
<td></td>
<td>Vibration</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Generation of vibration during construction and from activities post-construction</td>
</tr>
<tr>
<td>Traffic and transport</td>
<td>Infrastructure</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Construction of new access junctions</td>
</tr>
<tr>
<td></td>
<td>Traffic flows</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased traffic during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Pedestrians and cyclists</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Creation of new links</td>
</tr>
<tr>
<td></td>
<td>Public transport</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased use of bus services and change to existing routes to serve the site.</td>
</tr>
<tr>
<td></td>
<td>Air traffic</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>There is no potential for effects on air traffic</td>
</tr>
<tr>
<td></td>
<td>Water traffic</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>There is no potential for effects on water traffic</td>
</tr>
<tr>
<td>WASTE</td>
<td>Demolition waste</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No demolition is required</td>
</tr>
<tr>
<td></td>
<td>Waste management</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Generation of waste during and post-construction will require management</td>
</tr>
<tr>
<td>Water Environment</td>
<td>Component</td>
<td>Possible construction effect envisaged?</td>
<td>Possible operational effect envisaged?</td>
<td>Likely main effect to be included in stage 2 scoping?</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Surface water quality</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Pollution during construction and runoff from activities and roads post-construction may affect surface water quality</td>
</tr>
<tr>
<td></td>
<td>Surface water hydrology</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased runoff rates as a result of the increased impermeable area</td>
</tr>
<tr>
<td></td>
<td>Surface water temperature</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No processes are proposed that could change surface water temperature</td>
</tr>
<tr>
<td></td>
<td>Groundwater quality</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Pollution during construction and runoff from activities and roads post-construction may affect groundwater quality</td>
</tr>
<tr>
<td></td>
<td>Groundwater hydrology / recharge</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Reduced groundwater recharge post construction as a result of the increased impermeable area</td>
</tr>
<tr>
<td></td>
<td>Groundwater temperature</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No processes are proposed that could change groundwater temperature</td>
</tr>
<tr>
<td></td>
<td>Coastal / oceanic water quality</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The site is not near the coast</td>
</tr>
<tr>
<td></td>
<td>Coastal water temperature</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The site is not near the coast</td>
</tr>
<tr>
<td></td>
<td>Coastal processes / hydrodynamics</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The site is not near the coast</td>
</tr>
<tr>
<td></td>
<td>Flood risk</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased flood risk as a result of the increased impermeable area</td>
</tr>
<tr>
<td></td>
<td>Availability of utility services</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Increased demand for wastewater treatment and potable water supply</td>
</tr>
</tbody>
</table>

Table 7.1: Stage 1 scoping checklist

7.3 The stage 1 process set out in table 7.1 has identified those effects that will be considered in the stage 2 process (effects that either clearly have the potential to be significant or could be significant but require further analysis) and those that will not be included within the EIA. The following chapters summarise the effects that clearly have the potential to be significant, and examine the possible effects to assess if any are likely to be significant and therefore should be included in the EIA. As discussed above, where uncertainty remains at the end of the stage 2 processes, these effects will also be included in the EIA. The concluding chapter sets out all of the matters that will be addressed in the EIA.
8 Air quality

Introduction

8.1 The key pollutants affecting human health are nitrogen dioxide (NO₂) and particulate matter of less than 10 microns (PM₁₀). The concentrations of these pollutants at sensitive receptors in the vicinity of the site and along the local road network should be examined and compared with UK air quality objectives.

8.2 The proposed development has the potential to give rise to changes in the air quality at sensitive receptors in the vicinity of the site. This could be as a result of fugitive dust emissions associated with site preparation and construction work and through emissions to air from traffic associated with the proposed development. There is also the potential for the proposed development to generate odour, depending on the final occupiers. The generation of carbon dioxide (CO₂) from traffic, energy use in the proposed buildings and the use of materials during construction, have the potential to affect the CO₂ budget.

Currently known baseline


8.4 SCDC has not declared any air quality management areas (AQMAs) in the vicinity of the site. The closest AQMAs are in the centre of Cambridge, approximately 13km away and in the town of Saffron Walden approximately 9km away (within the control of Uttlesford District Council). The nearest air quality monitoring location to the site (a suburban NO₂ diffusion tube monitoring station) is at Church Lane, Little Abington approximately 3.4km to the north east. The mean annual NO₂ concentration at this location in 2014 was 12.5µg/m³, well below the objective limit of 40µg/m³.

Potential significant effects

8.5 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on air quality. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Mobilisation of dust during site preparation and construction activities – subject to the nature of the ground conditions, site preparation, construction activities and meteorological conditions, construction sites have the potential to mobilise dust that can then be deposited on surrounding areas. The significance of dust deposition tends to decrease with increasing distance from the source. Therefore dust deposition, which could lead to nuisance, is only likely to be significant within 100m of the dust generation
source. As there are residential properties within 100m of the site boundary, it is considered that dust nuisance has the potential to be significant

- Emissions from vehicles during the construction phase – the movement of materials, personnel and waste to and from a construction site will have associated vehicle emissions. However, the majority of construction vehicles are likely to access the sites via the M11, A11 and A1301 and the proportional change in traffic is likely to be below the level that would lead to a significant change in emissions, so this issue is not scoped into the EIA

- Emissions from post-construction road traffic associated with the proposed development – background NO2 concentrations in the vicinity of the site are relatively low. Nevertheless, given the scale of the proposed development, it is considered that increased traffic-related emissions of NO2 and PM10 should be scoped into the EIA

- Generation of odour from post construction – the precise nature of activities post construction will depend on the occupiers at the site but given the existing use of the site for agricultural purposes, significant odour generation is unlikely and therefore this issue has been scoped out of the EIA

- Effects on CO2 budget – traffic and energy use associated with the proposed development will generate CO2 emissions, as will the development’s construction. However, given the scale of the proposed development, these changes are not considered likely to be significant to the UK’s carbon budget. It is therefore proposed that CO2 emissions are examined qualitatively in the Sustainability Statement and Energy Statement that will also be submitted as part of the planning application rather than in the ES

**Air quality effects summary**

8.6 The findings of stages 1 and 2 of the scoping process in relation to air quality are summarised in table 8.1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulates and dust generation during construction</td>
<td>X</td>
<td>High (Neighbouring population)</td>
<td>Small Short term</td>
</tr>
<tr>
<td>Road vehicle emissions during construction</td>
<td>X</td>
<td>High (Neighbouring population)</td>
<td>Negligible Short term</td>
</tr>
<tr>
<td>Road vehicle emissions post-construction</td>
<td>X</td>
<td>High (Neighbouring population)</td>
<td>Small Long term</td>
</tr>
<tr>
<td>Generation of odour post-construction</td>
<td>X</td>
<td>High (Neighbouring population)</td>
<td>Negligible Long term</td>
</tr>
<tr>
<td>Effects on CO2 budget</td>
<td>X</td>
<td>High (UK CO2 emissions)</td>
<td>Negligible Long term</td>
</tr>
</tbody>
</table>

**Table 8.1: Air quality effects summary**

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)
Proposed assessment methodology

8.7 The air quality baseline will be examined using historic empirical data, DEFRA background pollutant concentration maps and current monitoring data from the local councils’ diffusion tube networks. SCDC’s environmental health officer will be contacted regarding the provision of air quality monitoring data and assessment reports and to agree the approach and methodology to be used for the assessment. Additional air quality monitoring will be undertaken if this is considered necessary.

8.8 Construction phase effects are considered to be temporary effects that can be controlled by implementation of standard mitigation measures frequently used during the construction of new development. The assessment of the potential effects associated with the construction phase will be qualitative and based on the Institute of Air Quality Management’s Guidance on the Assessment of Dust from Demolition and Construction v1.1 (2014).

8.9 The traffic-related air quality assessment will appraise the impact of post-construction traffic movements. Air pollutant concentration predictions for NO$_2$ and PM$_{10}$ will be sought using the detailed dispersion model Breeze Roads, with detailed local annual meteorological data. The modelling will be undertaken at relevant receptor locations representative of the sensitive areas of the development site, as well as existing sensitive receptors. The modelling would determine whether the site would exceed the National Air Quality Objectives for the proposed first occupation date. Predictions would be undertaken for NO$_2$ and PM$_{10}$ which are the two principal pollutants of concern with respect to traffic; The assessment will be undertaken using the best practice methodology published jointly by Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) in Land-Use Planning & Development Control for Planning and Air Quality (2017).
9 Community, social and economic effects

Introduction

9.1 The proposed development has the potential to cause a range of community, social and economic effects. These include the generation of employment, and effects on public health and safety.

Currently known baseline

9.2 The site is located in ‘The Abingtons’ ward, which had a population of 2,308 at the time of the 2011 Census. Unemployment within the ward and the district is below the county and national averages (www.nomisweb.co.uk). In 2011, the largest employment sector in The Abingtons ward was ‘professional, scientific and technical activities’. The ward had a higher proportion of people employed in this sector than the district, regional and national averages. The Abingtons also has a larger proportion of people employed in the agriculture, forestry and fishing sector than the district, regional and national averages. The site lies within the London-Stansted-Cambridge Corridor and Cambridge to Oxford Arc which both support internationally important high tech clusters.

9.3 The council’s Recreation and Open Space Study (2013) identifies a need for additional formal and informal play space and outdoor sports provision within the village of Hinxton.

Potential significant effects

9.4 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development is likely to have the following community, social and economic effects that clearly have the potential to be significant:

- Generation of employment during and post-construction
- Contribution to the local and regional economies through job creation and increased expenditure on goods and services
- Contribution to the national / multi-regional economy as the proposal aims to contribute to the growth of a priority national sector

9.5 Stage 1 of the scoping process also identified that the proposed development has the potential for a number of other community, social and economic effects. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Increase in demand for local facilities and provision of new facilities – the increase in population during working hours has the potential to lead to a corresponding increase in demand for various facilities. Given the proximity to existing receptors in Hinxton and the current deficit in open space within Hinxton it is considered that these effects have the potential to be significant
- Public health and safety during construction – there is the potential for construction works to pose a risk to public health. However, as the
construction site will be securely fenced, it is considered that there is no potential for a significant effect

- Effects on amenity during construction – there is the potential for construction works to lead to reduction in local amenity. Given the proximity to existing receptors in Hinxton and Sawston it is considered that these effects have the potential to be significant
- Effects on amenity post-construction – there is potential for development of the interchange to lead to a reduction in local amenity. Given the proximity to existing receptors to the north of the site it is considered that these effects have the potential to be significant

**Community, social and economic effects summary**

9.6 The findings of stages 1 and 2 of the scoping process in relation to community, social and economic effects are summarised in table 9.1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation of employment during and post-construction</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Contribution to the local and regional economies through job creation and increased expenditure on goods and services</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Contribution to the national / multi-regional economy as the proposal aims to contribute to the growth of a priority national sector</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Increased demand for and provision of local facilities</td>
<td>X</td>
<td>Medium (Local facilities)</td>
<td>Medium Long term</td>
</tr>
<tr>
<td>Effect on public health and safety during construction</td>
<td>X</td>
<td>High (Local population)</td>
<td>Negligible</td>
</tr>
<tr>
<td>Effect on local amenity during construction</td>
<td>X</td>
<td>High (Local population)</td>
<td>Small Short term</td>
</tr>
<tr>
<td>Effect on local amenity post-construction</td>
<td>X</td>
<td>High (Local population)</td>
<td>Medium Long term</td>
</tr>
</tbody>
</table>

*Table 9.1: Community, social and economic effects summary*

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

**Proposed assessment methodology**

9.7 The existing community, social and economic baseline conditions will be established in detail through a desk-based study, which will obtain data from a range of sources, including South Cambridgeshire District Council, Cambridgeshire County Council and the Office for National Statistics.
9.8 Gross impacts in terms of job creation and contribution to the local and regional economies will be estimated and then converted to net impacts by taking account of deadweight (impacts that would have occurred anyway), leakage (the proportion of jobs that benefit individuals beyond the immediate area of impact), displacement (economic activity on site that will be diverted from other businesses in the area) and multipliers (indirect and induced effects arising from direct expenditure in the local economy).

9.9 Given the nature of the development there is the potential for significant effects at the national or multi-regional level, as the proposal will contribute to the growth of a priority national sector. Impact assessments are conducted every five years for agritech type research centres by RCUK. These assessments look at the impact that the science generated by the research centres has on UK and global agricultural productivity. A review of the latest assessments will be undertaken as part of the economic impact assessment work.

9.10 The significance of effects will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change, using a matrix. Potential effects will be considered at the ward, village, district, regional and national level as appropriate.

9.11 In line with SCDC planning application requirements, a health impact assessment will be undertaken and submitted as a supporting document to the application.
10 Cultural heritage

Introduction

10.1 New development can affect cultural heritage assets, including buried archaeology, the historic landscape and built heritage features. A development can directly impact on features of interest, such as through the loss of buried archaeology, and can also have indirect effects, such as altering the setting of listed structures and monuments. A development necessitating archaeological investigations can be beneficial by improving understanding of an area’s history or providing a better understanding of the local archaeological record.

Currently known baseline

10.2 The study area assessed contains a rich cultural heritage resource of archaeological evidence, extant buildings and intact areas of historic landscape. Irrespective of the form or quantum, future development proposals would all involve some level of disturbance across the site area, which on the whole has not been the subject of previous historical impact, other than that associated with agricultural activity. Within the land proposed for development are eight non designated sites or features listed in the historic environment record (HER) provided by Cambridgeshire County Council, including an extant WWII pillbox and several cropmarks shown on aerial photographs and indicative of former settlement sites. The nationally designated heritage assets immediately adjacent to the AgriTech Park site boundary are the group of listed buildings at Hinxton Grange.

10.3 Within the study area there have been archaeological finds and features relating to the prehistoric, Romano-British and medieval periods. The degree of preservation of buried archaeological remains within the study area has been shown through numerous investigations to be good and have survived centuries of ploughing. The present day study area has had a number of new buildings located mainly towards the centre, while the rest of the site has been landscaped in the 19th century, thus preserving any buried remains from modern agricultural practices and destructive development impact. Based upon the archaeological evidence known and recorded in the HER and suspected on the site from aerial photography coverage identifying complexes of sites as yet unevaluated, it is considered that the non designated archaeological resource is of high-medium value.

10.4 The Grade II listed building of Hinxton Grange and its associated buildings lie immediately adjacent to the main site. Hinxton Grange is considered to be of high value. Otherwise the historic landscape character contribution of the site area is weak. There are few remaining field boundaries, only the long established structural divisions of the landscape defining the south and north of the site that were retained at enclosure from the earlier open fields (particularly the northern one that is also the parish boundary). The interchange is part of a single large field parcel and is bounded by major highways and development including the industrial estates on the south side of Sawston and contains no known heritage sites/features.

10.5 Each of the old villages within the 1km study area is designated a conservation area and the listed buildings are concentrated within the village centres. There
is potential for impact on Hinxton conservation area as a result of possible development opposite the northern part of the village and entrance to the conservation area. There is limited potential for effects on the other conservation areas or on the registered parks because of the effects of distance and significant intervening development.

10.6 Where recent development has taken place in the study area, multi-period archaeological remains have been uncovered that have added greatly to the local record. There are a number of scheduled monuments surrounding the site. The closest are the Romano British settlement site approximately 800 m to the south west of the main site and the Chapel of the Hospital of St John at Whittlesford Bridge, 150 m west of the interchange.

10.7 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on cultural heritage. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Impacts on buried archaeological remains during construction – there is the potential for destruction of any below-ground archaeological remains in the previously undisturbed areas of the site, which has the potential to be significant
- Impact on the setting of the scheduled monument to the north east of the main site – given the distance of the scheduled monument from the main site, and the fact that the A11 runs close by and already affects the setting of the monument, it is considered that there is no potential for significant setting effects during or post-construction
- Impact on setting of conservation areas – given the partial views of the site from Hinxton and Pampisford there is a possibility that this will lead to significant effects
- Impact on setting of registered park and gardens – given the proximity of Pampisford Hall (Grade II*) from the site there is potential for significant effects
- Impact on the settings of nationally listed buildings during and post-construction – it is considered that there is the potential for significant effects on the settings of listed buildings adjacent to the site as a result of the proposed development
- Change to the historic landscape character of the site – the development of the site will lead to the partial loss of its remaining historic agricultural landscape character, it is considered that there is the potential for this to be a significant effect

10.8 The findings of stages 1 and 2 of the scoping process in relation to cultural heritage effects are summarised in table 10.1.
<table>
<thead>
<tr>
<th>Effect</th>
<th>Clearly significant?</th>
<th>Receptor importance / sensitivity(1)</th>
<th>Magnitude or scale of effect(2)</th>
<th>Likely significant?</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on archaeological remains on site during construction</td>
<td>X</td>
<td>Uncertain (Archaeological remains on site)</td>
<td>Large Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to setting of scheduled monument</td>
<td>X</td>
<td>High (Scheduled monument)</td>
<td>Negligible Short and long term</td>
<td>X</td>
<td>No</td>
</tr>
<tr>
<td>Impact on setting of conservation areas</td>
<td>X</td>
<td>Medium (Conservation area)</td>
<td>Small to Medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Impact on setting of registered park and gardens</td>
<td>X</td>
<td>Medium (Registered park and garden)</td>
<td>Small to medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to settings of listed buildings</td>
<td>X</td>
<td>High (Listed buildings in vicinity of site)</td>
<td>Small to medium Short and long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Loss of site’s historic landscape character</td>
<td>X</td>
<td>Low (Site’s historic landscape)</td>
<td>Medium to large Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 10.1: Cultural heritage effects summary
Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

Proposed assessment methodology

10.9 An assessment of designated and undesignated heritage assets will be undertaken in accordance with paragraphs 126 to 141 of the National Planning Policy Framework (2012) and The Setting of Heritage Assets: English Heritage Guidance (2011). A desk-based assessment will be undertaken, which will be used to determine the need for site investigations, such as geophysical surveys and / or trial trenching, in consultation with the Cambridgeshire County Council archaeologist.

10.10 The assessment will be supported by an analysis of viewpoints to and from key historic locations, including selected listed buildings, which we will seek to agree with SCDC’s conservation officer. The assessment will cross reference with the landscape and visual assessment as appropriate.

10.11 The significance of effects will be determined by combining the importance of identified receptors with the predicted magnitude of change, using a matrix.
11 Ground conditions

Introduction

11.1 The existing ground conditions of a site can be of concern due to the potential for mobilisation of existing contaminants during construction, or exposure of sensitive receptors such as construction workers, groundwater, surface water and future residents / site occupiers to such material. The potential for the proposed development to alter the ground conditions of the site post-construction is limited.

Currently known baseline

11.2 A desk based study of ground conditions at the site and immediate surrounds has been undertaken. The main site largely comprises open fields with some woodland and agricultural structures, with Hinxton Grange and further dwellings situated immediately adjacent to the site boundary. The railway embankment, also adjacent to the south east corner of the main site is disused (and is thought to have only been in short operational use, or indeed, never fully commissioned). A groundwater pumping station, constructed in 1989, is present approximately 420 m to the north of the site.

11.3 The extreme south western corner of the interchange contained the former alignment of the A505 leading to Whittlesford Bridge, which was re-routed to its present alignment in the 1970s.

11.4 With regard to geology, the main site is underlain by Holywell Nodular Chalk formation and New Pit Chalk Formation. Made ground is also expected locally across the site. The interchange comprises a thin ribbon of Alluvium, with River Terrace Deposits. This part of the site is underlain by the solid Holywell Nodular Chalk Formation.

11.5 The Holywell Nodular Chalk Formation and the New Pit Chalk Formation are classified by the Environment Agency as principal aquifers, with the overlying superficial Alluvium and River Terrace deposits classified as secondary A aquifers. The main site is partially situated within a groundwater source protection zone (SPZ) 1, which relates to the potable water abstraction well mentioned previously.

11.6 The primary drainage feature in the area is the River Cam, which is adjacent to the western boundary of the proposed interchange area and is situated approximately 1 km to the west of the main site. The site is not located within a flood zone, with the exception of a small area of the interchange, which is in flood zones 2 and 3. There is negligible risk of groundwater flooding for the main site, but with a small area to the west of the interchange indicated as low risk due to its proximity to the River Cam.

11.7 A specialist explosive ordnance desk top study has also been undertaken which concludes that the risk from unexploded ordnance is low.

11.8 Given the agricultural use of the site, no significant contamination is predicted. However, it is possible that there may be localised hotspots of contamination associated with the use and storage of fuels / agricultural chemicals, made
ground, spoil heaps, fly tipped materials, demolition of former buildings / structures. Furthermore, there is possibly elevated ground gas concentrations arising biodegradable matter in the made ground.

11.9 An intrusive investigation (including trial pits, boreholes, geotechnical and chemical analyses, soil infiltration rate testing, gas and groundwater monitoring, etc.) to confirm ground conditions and actual geotechnical and geo-environmental risks is currently being undertaken.

**Potential significant effects**

11.10 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on land use. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Potential for ground contamination on site during construction - it is possible that there may be localised hotspots of contamination associated with the use and storage of fuels / agricultural chemicals. Although the risk is small, the receiving groundwater environment is highly sensitive and therefore ground conditions have been scoped into the ES
- Potential for ground contamination on site post construction – there is the potential for new activities on site post construction to give rise to contamination, although the risk is small, the receiving groundwater environment is highly sensitive and therefore ground conditions have been scoped into the ES

11.11 The potential for effects as a result of the loss of agricultural land is examined in the land use section that follows.

**Ground conditions effects summary**

11.12 The findings of stages 1 and 2 of the scoping process in relation to ground conditions effects are summarised in Table 11.1.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>Clearly significant?</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Potential for ground contamination on site during construction</td>
<td>X</td>
</tr>
<tr>
<td>Potential for ground contamination on site post construction</td>
<td>X</td>
</tr>
</tbody>
</table>

**Table 11.1: Ground conditions effects summary**

Notes:  
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)  
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)
Proposed assessment methodology

11.13 A desk-top phase 1 study considering geology, information from a Landmark Envirocheck report and existing and past land uses has already been undertaken to identify potential for contamination, pathways and receptors. This study has then been used to inform the scope of intrusive site investigations, which are being undertaken in accordance with BS10175:2011 Code of Practice for Investigation of Potentially Contaminated Sites. The investigations include soil sampling to confirm the site’s geology and determine contamination levels, groundwater sampling to identify groundwater depths and determine contamination levels, and ground gas monitoring.

11.14 The potential for activities associated with the construction or post construction phases of the development to result in the migration of historic contaminants will be assessed. A conceptual model will be used to identify if there is the potential for any link between a source of contamination and a sensitive receptor to result in a significant adverse effect. A suitable mitigation / remediation strategy will then be devised, setting out proposed measures to remediate contamination, minimise off site disposal of contaminated spoil and facilitate retention of inert material on site. Statutory regulators, including SCDC and the Environment Agency, will be consulted on all contamination matters.
12 Land use

Introduction

12.1 Proposed developments can have an effect on the local area through the introduction of a new land use, which can complement, co-exist or conflict with the existing land uses, and through the loss of existing uses on the site.

Currently known baseline

12.2 Both the main and interchange areas are currently used for agriculture (including crop trials). A study undertaken in January 2016 outlined the agricultural land classification of the two areas (please note this covered a larger study area) this is outlined below:

- Grade 2 (very good): 38.9 hectares 15.7%
- Grade 3a (good): 43.8 hectares 17.3%
- Grade 3b (moderate): 134.5 hectares 53.1%
- Grade 4 (poor): 15.6 hectares 6.1%
- Non agricultural: 19.7 hectares 7.8%

12.3 There are a number of buildings (both residential and commercial) within the general study area and the Cambridge Water Company Hinxton Grange Pumping Station (potable water extraction) lies to the north of the main site. There are no public rights of way running through the site, the closest public footpath is to the north east (footpath 3/7) and there is a permissive path for the Parish of Hinxton along Tichbaulk Road to the south of the site.

Potential significant effects

12.4 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on land use. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Loss of agricultural land – the site comprises land in grades 2, 3a, 3b and 4. The proposed development will lead to the loss of agricultural land on site. It is anticipated that development will, wherever possible, be focussed away from the land of very good quality, however given the varied quality of the soils, there is the potential for the loss of agricultural land to be significant

- Improvements within the agricultural industry - the proposed development will have access to arable test fields in the immediate vicinity, thereby enabling improvements within the agricultural industry which could lead to improving production both in the UK and global food chains. This has the potential to be significant

- Provision of new public open space – given the deficit of public open space in Hinxton, it is likely that the provision of new open space and increased public access to the site will lead to a significant effect
Land use effects summary

12.5 The findings of stages 1 and 2 of the scoping process in relation to land use effects are summarised in table 12.1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Clearly significant?</th>
<th>Receptor importance / sensitivity$^1$</th>
<th>Magnitude or scale of effect$^2$</th>
<th>Likely significant?</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of agricultural land on site</td>
<td>X</td>
<td>Medium (Agricultural land on site)</td>
<td>Medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Introduction of new commercial land use</td>
<td>X</td>
<td>Medium (Land use on site)</td>
<td>Medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Introduction of new public open space land use</td>
<td>X</td>
<td>Medium (Land use on site)</td>
<td>Medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 12.1: Land use effects summary

Notes:
$^1$ Categories = high, medium, low, negligible (takes into account geographical level of importance)
$^2$ Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

Proposed assessment methodology

12.6 The existing land use conditions will be established through both existing information (such as the agricultural land classification work) and a desk-based study in order to evaluate the potential land use effects of the proposals. Consideration will be given to existing and possible future land uses during both construction and post construction. Potential effects on adjacent land uses will also be considered.

12.7 It is anticipated that some of the land use effects will overlap with other environmental topics, such as landscape and visual effects, natural heritage and cultural heritage. These other effects will be examined in detail in their respective assessments, but will be cross-referenced where relevant.

12.8 The significance of effects will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change, using a matrix.
13 Landscape and visual effects

Introduction

13.1 Effects on the landscape can arise from a development giving rise to direct changes to the physical elements of the receiving landscape, which may affect its features, character and quality; or from indirect effects on the character and quality of the surrounding landscape. Visual effects can result if the development changes the character and quality of people’s views. Landscape and visual effects are linked, but have different attributes, so are considered as two elements.

Currently known baseline

13.2 The site is classified as within the South Cambridgeshire Landscape Character Assessment as part of the Chalklands Character Area, the key characteristics of which include the smooth rolling chalkland hills dissected by two gentle valleys of the Granta and the Rhee which converge to form the River Cam, just south of Cambridge. The majority of the character area is utilised for arable cultivation over large fields bounded by low hedgerows and trees. Longer distance views are possible with localised enclosure and dissection of views resulting from the numerous tree belts and copses distributed through the landscape.

13.3 Views into the main site are partially restricted from several areas by vegetation at lower elevations within the river valleys and the undulating landform. Settlements are broadly distributed along the river valley, at lower elevations and contained by denser areas of trees and woodland, and so share limited intervisibility with the site. Views from Pampisford village and Hinxton Grange (listed building) adjacent to the site will be effected by the proposed development. Views from elevated locations and highways adjacent to the site including the A1301 and A505 will also be affected within 1.5km of the site. More distant views are largely absent.

13.4 The following list of visual receptors will be assessed in the landscape and visual chapter.

- A1301
- A505
- Hinxton Grange
- Duxford Road (part of National Cycle Route 11)
- Development edge of Pampisford conservation area (town Lane/Glebe Crescent)
- Development edge of Hinxton conservation area

13.5 Two registered park and gardens (Pampisford Hall and Sawston Hall) are located within the 2.5km study area, to the north of the main site. There are also a number of conservation areas covering many of the historic settlements within the Cam or Granta river valley to the south, west and north of the site.
Potential significant effects

13.6 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development is likely to have the following landscape and visual effects that clearly have the potential to be significant:

- Re-profiling of land
- Change to views from sensitive visual receptors into the site, including from residential properties and public rights of way, and including changes to night time views as a result of increased lighting

13.7 Stage 1 of the scoping process also identified that the proposed development has the potential for a number of other landscape and visual effects. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Change to the land cover of the site from predominantly arable to built development – as the land cover of parts of the site will change, it is considered that this effect has the potential to be significant
- Change to the landscape character of the site to areas of urban development, which has the potential to be significant
- Changes to views from protected landscapes – there is potential for views from the conservation areas of Hinxton and Pampisford. Although these are relatively well screened there is potential for significant effects

Landscape and visual effects summary

13.8 The findings of stages 1 and 2 of the scoping process in relation to landscape and visual effects are summarised in table 13.1.
<table>
<thead>
<tr>
<th>Effect</th>
<th>Clearly significant</th>
<th>Receptor importance / sensitivity(^{(1)})</th>
<th>Magnitude or scale of effect(^{(2)})</th>
<th>Likely significant?</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reprofiling of land</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to other sensitive views into site</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to landscape character of the site</td>
<td>X</td>
<td>Low to medium</td>
<td>Medium to large Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to views from conservation areas</td>
<td>X</td>
<td>Medium (Hinxton and Pampisford conservation areas)</td>
<td>Small to medium Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Change to land cover of the site</td>
<td>X</td>
<td>Low to medium</td>
<td>Medium to large Long term</td>
<td>✓</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 13.1: Landscape and visual effects summary

Notes:
1. Categories = high, medium, low, negligible (takes into account geographical level of importance)
2. Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

Proposed assessment methodology

13.9 The methodology we propose to use is detailed in Appendix C and we seek agreement with SCDC that this methodology is acceptable.

13.10 The Countryside Agency’s Landscape Character Assessment Guidance for England and Scotland (2002) and the Guidelines for Landscape and Visual Impact Assessment 3rd Edition (2013) produced by the Landscape Institute and the Institute for Environmental Management and Assessment will be used to guide the assessment of the main site, highway works and interchange and surrounding areas.

13.11 The landscape and visual assessment will include determination of the landscape character of the site and surrounding areas, the quality of the landscape, the existing land cover and existing topography. This will be undertaken through a desk study and site visits. A detailed study of the visual setting of the site and the potential visual receptors that may be affected by the development proposals will be undertaken. This will include mapping of the zone of theoretical visual influence (ZTV), which will inform the extent of the study area. In defining the ZTV, the screening effects of existing woodland will be considered.

13.12 We seek to agree representative viewpoint visual receptors with SCDC Landscape Officer as indicated in paragraph 13.4. Photographs will be taken at each viewpoint and used to create a panorama of the view. The precise locations (Ordnance Survey grid reference), date, time of day and weather conditions will be described for each viewpoint taken. An arboricultural survey is being undertaken to assess the condition of any trees at the site.

13.13 The significance of the effects on landscape and visual receptors will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change.
14 Natural heritage

Introduction

14.1 Potential natural heritage effects that could arise from a development such as that proposed include habitat loss, disturbance of animals during and post-construction, loss of or modification to breeding and foraging habitat and effects on designated nature conservation sites.

Currently known baseline

14.2 There are no internationally or nationally designated nature conservation sites within the site boundary. The closest is Sawston Hall Meadows Site of Special Scientific Interest (SSSI) approximately 2.2 km north of the main site and 1.3 km north of the interchange. Given the distances from the site and the nature of the proposed development, nationally and internationally designated nature conservation sites are not considered further in the scoping process.

14.3 There is a County Wildlife Site (CWS) on the A11 verge located to the south east of the main site.

14.4 A phase 1 habitat survey of the site and surrounding area was undertaken in July 2014. The survey area comprised predominantly arable fields used to grow crops, with areas of hedgerows, woodland, scattered trees, semi-improved grassland, amenity grassland and short perennial vegetation. The River Cam borders the proposed interchange. Protected species surveys were also undertaken for badgers, great crested newts, bats, otter, water vole and reptiles. Wintering and breeding birds were also undertaken. The study found the following:

- Three disused badger setts
- Low numbers of grass snake and common lizard across the site
- Bat roosts in six buildings around Hinxton Grange and suitable bat foraging habitats (seven species of bat including common and soprano pipistrelle, possible Nathusius’ pipistrelle, noctule, serotine, Natterer’s, Daubenton’s and Myotis were recorded foraging throughout the site and surrounding area)
- No otters or water vole were found on site, however, they are present on the River Cam
- An assemblage of breeding and winter bird species of local importance, with several species of notable conservation status
- Great crested newts are not considered to be present on site

Potential significant effects

14.5 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development is likely to have the following natural heritage effects that clearly have the potential to be significant:

- Loss of existing habitats and creation of new habitats
• Changes in the composition of on site vegetation communities
• Effects on the use of the site by fauna due to habitat loss and fragmentation
• Disturbance of protected species both during and after construction
• Potential for indirect effects on species outside the red line (otter and water voles on River Cam, bat roosts, disturbance to wintering birds)
• Hydrological impacts on the River Cam potentially affecting fauna

14.6 Stage 1 of the scoping process also identified that the proposed development has the potential for other natural heritage effects. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-heading has been examined further in stage 2 of the scoping process:

• Effects on locally designated nature conservation sites – due to construction there is the potential for dust deposition or pollution infiltrating through to the groundwater during construction. A Construction Environmental Management Plan (CEMP) will be prepared including details of silt and sediment and overland flow management during construction. Such measures will effectively mitigate any possible effects and therefore no significant effects are envisaged. It is anticipated that a planning condition will ensure the completion of the CEMP.

Natural heritage effects summary

14.7 The findings of stages 1 and 2 of the scoping process in relation to natural heritage effects are summarised in table 14.1.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>Clearly significant?</td>
<td>Receptor importance / sensitivity(1)</td>
</tr>
<tr>
<td>Loss of existing habitats and creation of new habitats</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Changes in the composition of on site vegetation communities</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Effects on the use of the site by fauna due to habitat loss and fragmentation</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Disturbance of protected species during and post-construction</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Potential for indirect effects on species outside the red line</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Hydrological impacts on the River Cam potentially affecting fauna</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Dust deposition or pollution infiltrating through to the groundwater during construction affecting A11 CWS</td>
<td>X</td>
<td>Medium (A11 verge CWS)</td>
</tr>
</tbody>
</table>

Table 14.1: Natural heritage effects summary

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)
Proposed assessment methodology

14.8 In addition to the desk study, phase 1 habitat survey and wintering birds survey that have already been undertaken, surveys for breeding birds, badgers, great crested newts, otters, bats, reptiles habitat suitability appraisal and water voles are being carried out on site. The assessment will be undertaken with regard to the Institute of Ecology and Environmental Management’s *Guidelines for Ecological Impact Assessment in the United Kingdom* (updated in January 2016) and, where appropriate, other best practice guidelines for specific species and faunal groups. In order to facilitate consistency of assessment methodology throughout the ES, the method will be adapted to include consideration of the significance of effects by combining the importance of the identified receptors with the predicted magnitude of change, using a matrix.
15 Noise and vibration

Introduction

15.1 The proposed development has the potential to generate noise and vibration during site preparation and construction activities. Additional road traffic has the potential to increase noise levels during and post-construction and there is the potential for post-construction noise associated with the new development.

Currently known baseline

15.2 There are currently no major sources of noise or vibration within the main site. There is limited infrequent noise from deliveries at Mighton Products Ltd and noise levels may elevate slightly during harvest activities. Three roads pass relatively close to the main site, the A11 to the east, A1301 to the west and the A505 to the north. The A11 is the busiest of the three. The interchange is bordered by the A505 to the south and the A1301 to the east.

15.3 The northern part of the main site is mostly affected by distant road traffic noise from the A1301 and A505. The topography of this part of the site screens noise from the A11. There is also the hum of the electrical components of the pumping station to the north. To the east the most dominant noise source is road traffic from the A11. In the south west of the site the noise is dominated by traffic from the A1301. Other noise sources on site include that of aeroplanes and helicopters due to the close proximity of the Duxford Aerodrome lying approximately 2.8 km to the west, train movements including occasional horn blasts, bird song, bird scarers and emergency sirens.

15.4 The interchange site is dominated by noise from the A505 and A1301, with secondary noise sources similar to those of the main site.

Potential significant effects

15.5 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on noise and vibration. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Generation of noise during site preparation and construction works – the receptors at Hinxton Grange are situated immediately adjacent to the main site. There are also receptors that lie to the north of the proposed interchange. It is therefore considered that there is the potential for significant noise effects during construction
- Increased traffic noise during construction – as the majority of construction traffic is likely to access the main site via the M11, A11 and A1301 rather than passing through Hinxton or other small villages surrounding the site, it is considered that there is unlikely to be a significant effect on road traffic noise levels during construction
- Increased traffic noise post-construction - given the scale of the proposed development it is considered that increased traffic has the potential to lead
to a significant effect on noise levels at receptors adjacent to the local road network especially adjacent to the proposed interchange

- Generation of plant and activity noise post-construction – there is the potential for fixed plant associated with the proposed employment area to generate noise (e.g. primary sub-station). Due to the proximity of dwellings to the main site there is the possibility this would cause a significant effect

- Generation of vibration during construction – there is the potential for increased vibration during the construction phase if piling of foundations is required. Due to the proximity of dwellings to the main site there is the possibility this would cause a significant effect

### Noise and vibration effects summary

15.6 The findings of stages 1 and 2 of the scoping process in relation to noise and vibration effects are summarised in table 15.1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Likely significant?</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation of noise during site preparation and construction</td>
<td>X</td>
<td>Medium to high (Receptors enclosed by the site)</td>
<td>Small to medium Short term ✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased traffic noise during construction</td>
<td>X</td>
<td>Medium to high (Receptors adjacent to local road network)</td>
<td>Negligible Short term X</td>
<td>No</td>
</tr>
<tr>
<td>Increased traffic noise post-construction</td>
<td>X</td>
<td>Medium to high (Receptors adjacent to local road network)</td>
<td>Small to medium Long term ✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Generation of plant and activity noise post-construction</td>
<td>X</td>
<td>Medium to high (Receptors enclosed by the site)</td>
<td>Small to medium Long term ✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Generation of vibration during construction</td>
<td>X</td>
<td>High (Buildings adjacent to site)</td>
<td>Uncertain Short term ✓</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Table 15.1: Noise and vibration effects summary**

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

### Proposed assessment methodology

15.7 Input and agreement will be sought from SCDC’s environmental health officer on the need for any further baseline noise monitoring, the proposed monitoring locations and the assessment methodology.

15.8 The potential for increases in noise and vibration during construction will be assessed in accordance with the guidance set out in **BS 5228:2009 +A1:2014 Noise and vibration control on construction and open spaces Part 1 Noise and Part 2 Vibration**, with assumptions made regarding construction plant and piling methods where required. It is envisaged that post-construction traffic noise increases will be predicted using the methodology set out in **The Calculation of**
Road Traffic Noise (Department of Transport, 1988). Plant and activity noise will be assessed using BS 4142:2014 *Methods for rating and assessing industrial and commercial sound*.

15.9 The significance of noise effects on sensitive receptors will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change, using a matrix.
16 Traffic and transport

Introduction

16.1 The proposed development will lead to increased traffic on the local road network during and post-construction. There will also be an effect on local road infrastructure as the proposals will include new site access junctions on the A1301 and highway improvements on the A1301 / A505 roundabout, including a new pedestrian / cycle bridge or underpass crossing. New pedestrian and cycleways will be proposed across the main site, which will link to the surrounding area and existing bus services may be diverted to serve the site.

16.2 The interchange site will also facilitate a better, more accessible bus service and shuttle service between the main site, the interchange and Whittlesford Parkway railway station.

Currently known baseline

16.3 The main site lies in the vicinity of three busy roads, the A11 to the east, A1301 to the west and the A505 to the north. The M11 is situated 2.6km to the west of the site. The proposed interchange is bordered by the A505 to the south and the A1301 to the east. The highway network surrounding the site is heavily congested at peak hours.

16.4 The nearest bus stops to the main site are at the Sawston bypass, to the north west (served by the Citi 7 Cambridge City Centre to Duxford / Saffron Walden) and Church Green, High Street, Hinxton, to the south west (served by the 7a service from Sawston to Hinxton).

16.5 Whittlesford Parkway railway station lies approximately 240m to the west of the proposed interchange. The station provides links between Whittlesford and Cambridge City Centre (7 minutes), Stansted Airport (20 minutes) and London Liverpool Street (1 hour 10 minutes).

Potential significant effects

16.6 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on traffic and transport. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Increased traffic flows during construction – there will be an increase in traffic flows on local roads during construction, including a temporary increase in HGV movements, much of which is likely to access the site via the M11, A11 and A1301. Given the existing capacity issues on the surrounding road network, it is considered that this effect has the potential to be significant.

- Increased traffic flows post-construction – there will be an increase in traffic flows on the surrounding road network post-construction, and an associated potential for increased pedestrian severance, driver stress and delay and accident rates. Given the scale of the proposed development,
and the existing capacity issues on the road network, it is considered that this effect has the potential to be significant

- Alterations to local road infrastructure – the proposed development will introduce a new junction onto the A1301 and A505 and it is considered that this has the potential to have a significant effect on local road infrastructure

- Creation of new pedestrian and cycle links – the proposed development will create new pedestrian and cycle links within the site which link to surrounding towns and villages. It is considered however that these are unlikely to produce a significant effect

- Increased use of public transport – there is the potential for increased use of existing public transport services, both trains and buses, the latter of which may be diverted to access the site, and it is considered that this has the potential to be a significant effect

Traffic and transport effects summary

16.7 The findings of stages 1 and 2 of the scoping process in relation to traffic and transport effects are summarised in table 16.1.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>Clearly significant?</td>
<td>Receptor importance / sensitivity(1)</td>
<td>Magnitude or scale of effect(2)</td>
</tr>
<tr>
<td>Increased traffic during construction</td>
<td>X</td>
<td>High (Local road network and users)</td>
<td>Small Short term</td>
</tr>
<tr>
<td>Increased traffic post-construction</td>
<td>X</td>
<td>High (Local road network and users)</td>
<td>Small to medium Long term</td>
</tr>
<tr>
<td>Changes to local road infrastructure</td>
<td>X</td>
<td>High (Local road infrastructure)</td>
<td>Small Long term</td>
</tr>
<tr>
<td>Provision of new pedestrian and cycle links</td>
<td>X</td>
<td>High (Users of local pedestrian and cycle network)</td>
<td>Negligible Long term</td>
</tr>
<tr>
<td>Increased use of public transport and potential for diversion of existing services</td>
<td>X</td>
<td>High (Local public transport services and users)</td>
<td>Small Long term</td>
</tr>
</tbody>
</table>

Table 16.1: Traffic and transport effects summary

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)

Proposed assessment methodology

16.8 A transport assessment (TA) has been scoped with both Cambridgeshire County Council and Highways England and will be submitted in support of the planning application that will assess the impact of the proposed development on the capacity of highway infrastructure. The EIA will summarise the findings of this, but will focus on environmental issues associated with potential increases in traffic flows and any consequent effects on the local community, such as
severance, driver delay or an increased accident rate.

16.9 The assessment will take account of paragraphs 32 to 36 of the National Planning Policy Framework (2012) and the Institute of Environmental Management and Assessment’s Guidelines for the Environmental Assessment of Road Traffic (1993). Close on-going consultation will be undertaken with key stakeholders, such as Highways England and Cambridgeshire County Council.

16.10 A desk study and site visits are being undertaken to identify key features of the existing road and pedestrian / cycle networks in the vicinity of the site, obtain data on existing accident rates and identify existing public transport services. Traffic surveys are being undertaken at key junctions and links surrounding the site. Trip generation will be estimated for the proposed development using sources such as the TRICS database and surveyed traffic flows and predicted traffic flows and junction capacities will be modelled using appropriate software. The significance of traffic and transport effects on sensitive receptors will be determined by combining the sensitivity of identified receptors with the predicted magnitude of change, using a matrix.
17 Waste

Introduction

17.1 Proposals for development should ensure that waste is reduced as much as possible and that during the construction and post-construction phases of the development waste arisings are either re-used or recycled where feasible. During construction, waste should be correctly segregated to maximise re-use and recycling. Where any contaminated or hazardous arisings cannot be treated on site during remediation works, suitable disposal options should be identified as part of the environmental assessment process.

Currently known baseline

17.2 The only source and type of waste generated at the site is agricultural waste.

Potential significant effects

17.3 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on waste generation and management. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

• Generation of waste during construction – waste arising from site preparation and construction processes will require management. Information on site waste management will be prepared as part of the Waste Statement that will be submitted in support of the planning application to ensure that construction waste is minimised, re-used and recycled wherever possible. This will ensure that there will be no significant effects on the capacity of local waste management infrastructure as a result of this phase of the proposed development. In addition, there is limited likelihood of contamination on site and the generation of significant quantities of contaminated waste requiring management and / or disposal is considered to be unlikely

• Generation of waste post-construction – the proposed development will lead to the generation of increased amounts of commercial / industrial waste post-construction. As the quantities involved are likely to be insignificant in relation to existing waste generation and management in Cambridgeshire it is proposed that this issue also be examined qualitatively in the Waste Statement as referenced above

17.4 It is therefore proposed that waste is not scoped into the EIA or considered in the ES, but instead be covered in the Waste Statement that will be submitted in support of the planning application.

Waste effects summary

17.5 The findings of stages 1 and 2 of the scoping process in relation to waste effects are summarised in table 17.1.
<table>
<thead>
<tr>
<th>Effect</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation of construction waste that requires management / disposal</td>
<td>X</td>
<td>Negligible Short term</td>
<td>X</td>
</tr>
<tr>
<td>Generation of municipal and commercial / industrial waste that requires management / disposal</td>
<td>X</td>
<td>Small Long term</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 17.1: Waste effects summary

Notes:
(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)
(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)
18 Water environment

Introduction

18.1 The water environment assessment will focus on effects associated with the potential increase in runoff from the site, reduced groundwater recharge rates and any effects on surface water and groundwater quality. The assessment will also examine the proposed drainage system and consider the increase in demand for wastewater drainage and drinking water supply.

Currently known baseline

18.2 There are no watercourses running through the main site. The Holywell Nodular Chalk Formation and the New Pit Chalk Formation are classified by the Environment Agency as Principal aquifers with the overlying superficial Alluvium and River Terrace Deposits classified as Secondary A aquifers.

18.3 The main site is partially situated within a groundwater Source Protection Zone (SPZ) 1 relating to a potable water abstraction well situated to the north of the main site. Surrounding the SPZ1 area is an SPZ2 and SPZ3.

18.4 The primary natural drainage feature present within the general area is the River Cam, which runs close to the western boundary of the proposed interchange. Numerous un-named secondary and tertiary tributaries to the River Cam are also present locally.

18.5 The site is mostly within flood zone 1 (area of least flood risk). To the west of the proposed interchange is an area in flood zones 2 and 3 associated with the River Cam, however this will be avoided. There is also a negligible risk of groundwater flooding for the site. There are known areas of localised off-site flooding, such as at the bottom of Tichbaulk Road (on the A1301) and adjacent to the A505 / A1301 roundabout, however, the proposals will be designed to ensure these are not exacerbated.

18.6 The council’s draft *Infrastructure Delivery Study* (2012) states that there is limited available capacity in relation to both water supply and sewerage. Therefore infrastructure upgrades to both water and sewerage infrastructure will be required to support new development within the district.

Potential significant effects

18.7 Following the methodology identified in section 6 of this report, stage 1 of the scoping process identified that the proposed development has the potential to lead to effects on the water environment. In order to determine whether these effects are likely to be significant and therefore should be included within the EIA scope, the following sub-headings have been examined further in stage 2 of the scoping process:

- Surface water quality – there is the potential for effects on the quality of the watercourses adjacent to the site as a result of leaks / spills and sedimentation during construction, and contaminated road runoff post-construction and it is considered that these effects could be significant.
• Surface water hydrology and associated flood risk – the increased impermeable area associated with the development of the site has the potential to lead to increased runoff rates and increased risk of flooding, which could be significant

• Groundwater quality – there is the potential for effects on the quality of groundwater beneath the site from leaks / spills during construction and contaminated road runoff post-construction, which could be significant

• Groundwater hydrology – the increased impermeable area on site could reduce groundwater recharge rates. Given the size of the main site it is considered that this effect has the potential to be significant

• Demand for wastewater treatment and potable water supply – the proposed development will increase demand on the area’s wastewater treatment and potable water supply networks. Given that the site is within a known water stress part of the country the EIA will consider a hierarchical approach to water use within the site to ensure potable water demands are minimised as far as possible. Given the sensitivity of the potable water supply network, it is considered that this effect could be significant

**Water environment effects summary**

18.8 The findings of stages 1 and 2 of the scoping process in relation to water environment effects are summarised in table 18.1.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>To be included in the EIA?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect</td>
<td>Clearly significant?</td>
<td>Receptor importance / sensitivity(^{(1)})</td>
</tr>
<tr>
<td>Pollution of surface water during and post-construction</td>
<td>X</td>
<td>Medium (The River Cam)</td>
</tr>
<tr>
<td>Increased surface water runoff post-construction and associated increase in flood risk</td>
<td>X</td>
<td>Medium to high (The River Cam and associated floodplains)</td>
</tr>
<tr>
<td>Pollution of groundwater during and post-construction</td>
<td>X</td>
<td>High (Groundwater beneath site)</td>
</tr>
<tr>
<td>Reduced groundwater recharge post-construction</td>
<td>X</td>
<td>High (Groundwater beneath site)</td>
</tr>
<tr>
<td>Increased demand for wastewater treatment and potable water supply</td>
<td>X</td>
<td>Medium to high (Area’s wastewater treatment and potable water supply networks)</td>
</tr>
</tbody>
</table>

Table 18.1: Water environment effects summary

Notes:

(1) Categories = high, medium, low, negligible (takes into account geographical level of importance)

(2) Categories = large, medium, small, negligible (takes into account whether effect is short or long term)
**Proposed assessment methodology**

18.9 A desk study will be undertaken to determine the existing water environment on and in the vicinity of the site and to identify potential sensitive receptors. Proposals to address surface water runoff will be considered and sustainable drainage systems will be incorporated into the proposals where possible. Soakaway testing will be undertaken to inform this process and outline drainage strategies will be prepared.

18.10 A flood risk assessment will be undertaken in accordance with the *Technical Guidance to the National Planning Policy Framework* (2012) and the results will be summarised in the ES chapter. The assessment methodology and findings will be discussed with Cambridgeshire County Council as Lead Local Flood Authority.

18.11 The significance of effects on the water environment will be determined by combining the sensitivity of the identified receptors with the predicted magnitude of change, using a matrix.
19 Cumulative effects and alternatives

Cumulative effects

19.1 The effects of this EIA development proposal in combination with other major schemes that are under construction, consented or for which planning permissions are currently being sought, will be assessed within the EIA where appropriate. Cumulative effects will be considered on an issue-by-issue basis and the scope of the EIA will be expanded, if necessary, to include any cumulative issues that arise in the future. The potential for cumulative effects to arise through the interaction of two or more impacts on the same receptor will also be examined where applicable.

19.2 The cumulative effects of other developments will be considered only when sufficient information is available, i.e. when a project is within the planning domain and there is adequate information publicly available. Consultees are requested to suggest projects that should be covered in the cumulative effects assessment. To-date the following schemes have been identified for inclusion:

- Provision of an electricity supply connection from the main site to the existing sub-station at Fulbourn, which will be carried out by the statutory undertaker under licence
- Wellcome Trust Genome Campus (App Ref: S/1099/14/RM)
- Former Spicer Site (App Ref: S/2091/14/FL)
- 8 Greenacres Duxford (App Ref: S/0276/15/OL)
- Babraham research campus (App Ref: S/1676/14/OL)
- Granta Park (App Ref: S/1110/15/OL)
- Site 6 Granta Park (App Ref: S/2254/15)
- Chesterford Research Park
- Lion Works, Whittlesford (App Ref: S/0746/15)
- Cambridge City Football Stadium, land north of Sawston (App Ref: S/2239/13/FL)

Alternatives

19.3 The ES will include details of alternatives considered by SmithsonHill and will set out the reasons for the selections made.
20 Summary

20.1 From this scoping exercise, it has been possible to reach a preliminary view on the environmental features that are likely to be significantly affected by the proposed development and should be included within the EIA.

20.2 All the identified effects that are likely to be significant are listed in table 20.1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Effects that are likely to be significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality</td>
<td>Generation of particulates and dust during construction</td>
</tr>
<tr>
<td></td>
<td>Road vehicle emissions post-construction</td>
</tr>
<tr>
<td>Community, social and economic effects</td>
<td>Generation of employment during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Contribution to the local and regional economies through job creation and increased expenditure on goods and services</td>
</tr>
<tr>
<td></td>
<td>Contribution to the national / multi-regional economy as the proposal aims to contribute to the growth of a priority national sector</td>
</tr>
<tr>
<td></td>
<td>Increased demand for and provision of local facilities</td>
</tr>
<tr>
<td></td>
<td>Effect on local amenity during and post-construction</td>
</tr>
<tr>
<td>Cultural heritage</td>
<td>Impact on archaeological remains on site during construction</td>
</tr>
<tr>
<td></td>
<td>Change to settings of listed buildings during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Loss of site’s historic landscape character</td>
</tr>
<tr>
<td></td>
<td>Impact on the setting of Hinxton’s conservation area</td>
</tr>
<tr>
<td></td>
<td>Impact on the setting of registered parks and gardens</td>
</tr>
<tr>
<td>Ground conditions</td>
<td>Potential for ground contamination during and post construction</td>
</tr>
<tr>
<td>Land use</td>
<td>Loss of agricultural land on site</td>
</tr>
<tr>
<td></td>
<td>Introduction of new commercial land use</td>
</tr>
<tr>
<td></td>
<td>Introduction of new public open space land uses</td>
</tr>
<tr>
<td>Landscape and visual effects</td>
<td>Change to landform / topography of the site as a result of re-profiling</td>
</tr>
<tr>
<td></td>
<td>Change to the land cover of the site</td>
</tr>
<tr>
<td></td>
<td>Change to the landscape character of the site</td>
</tr>
<tr>
<td></td>
<td>Change to sensitive views into the site, including from conservation areas</td>
</tr>
<tr>
<td>Natural heritage</td>
<td>Loss of existing habitats and creation of new habitats on site</td>
</tr>
<tr>
<td></td>
<td>Changes in the composition of on site vegetation communities</td>
</tr>
<tr>
<td></td>
<td>Effects on the use of the site by fauna due to habitat loss and fragmentation</td>
</tr>
<tr>
<td></td>
<td>Disturbance of protected species during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Potential for indirect effects on species outside the red line</td>
</tr>
<tr>
<td></td>
<td>Hydrological impacts on the River Cam potentially affecting fauna</td>
</tr>
<tr>
<td>Noise and vibration</td>
<td>Generation of noise during site preparation and construction</td>
</tr>
<tr>
<td></td>
<td>Increased traffic noise post-construction</td>
</tr>
<tr>
<td></td>
<td>Generation of plant and activity noise post construction</td>
</tr>
<tr>
<td></td>
<td>Generation of vibration during construction</td>
</tr>
<tr>
<td>Traffic and transport</td>
<td>Increased traffic during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Changes to local road infrastructure</td>
</tr>
<tr>
<td></td>
<td>Increased use of public transport and potential for diversion of existing services</td>
</tr>
<tr>
<td>Water environment</td>
<td>Pollution of surface water during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Increased surface water runoff post-construction and associated increase in flood risk</td>
</tr>
<tr>
<td></td>
<td>Pollution of groundwater during and post-construction</td>
</tr>
<tr>
<td></td>
<td>Reduced groundwater recharge post-construction</td>
</tr>
<tr>
<td></td>
<td>Increased demand for wastewater treatment and potable water supply post-construction</td>
</tr>
</tbody>
</table>

Table 20.1: Effects that are likely to be significant

20.3 Although the environmental features are described here under separate headings, the EIA will pay close attention to the interrelationships of the various factors in order to assemble a holistic picture of the likely significant effects and mitigation measures. It should also be noted that EIA is an iterative process,
enabling matters not recognised at a preliminary stage to be addressed subsequently.

20.4 Based on the preliminary scope determined within this report, the provisional ES chapters are envisaged to be as follows:

Non-technical summary
1. Introduction
2. Site description and development proposals (including alternatives considered)
3. Environmental issues and methodology
4. Air quality
5. Community, social and economic effects
6. Cultural heritage
7. Ground conditions and the water environment
8. Land use
9. Landscape and visual effects
10. Natural heritage
11. Noise
12. Traffic and transport
13. Summary tables
14. Glossary

20.5 Each ES chapter will follow a similar format, including sections on guidance and legislation, methodologies, reporting the baseline conditions, discussion of the future baseline, impact assessment during and post-construction, mitigation, residual effects and cumulative effects (where relevant). The ES will include appropriate visual presentation material (maps, diagrams and photographs) and will be supported by technical documents that will be supplied as appendices.

20.6 The consideration of the potential significant effects in this scoping report is preliminary. SCDC and consultees are invited to comment on the intended scope of the EIA and to highlight any likely significant environmental issues that they consider should be included in the EIA.
Appendix A – Suggested consultees

South Cambridgeshire District Council
- Planning
- Environmental health
- Conservation
- Ecology
- Landscape
- Economic development

Cambridgeshire County Council
- Highways
- Archaeology
- Public rights of way
- Lead local flood authority

Natural England

Environment Agency

Highways England

Historic England

Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire

Babraham Parish Council*
Duxford Parish Council*
Great Abington Parish Council*
Great Chesterford Parish Council*
Hinxton Parish Council*
Ickleton Parish Council*
Pampisford Parish Council*
Sawston Parish Council*
Whittlesford Parish Council*
Elmdon Parish Council*
Cambridge Past, Present and Future

Anglian Water

Cambridge Water

National Grid

UK Power Networks

Health and Safety Executive
BT
Network Rail
Cambridge Wildlife Trust
National Express
Stagecoach
British Horse Society
Sustrans
Buglife
RSPB
Cambridge Cycling Campaign
Cambridgeshire Constabulary
Cambridgeshire Fire and Rescue

* Please note the parish councils have been sent a copy of the EIA scoping consultation report directly
Appendix B – Schedule 4 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended): information for inclusion in ESs

PART I
1. Description of the development, including in particular:

(a) a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;
(b) a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;
(c) an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.

2. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choices made, taking into account the environmental effects.

3. A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

4. A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:

(a) the existence of the development;
(b) the use of natural resources;
(c) the emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the applicant or appellant of the forecasting methods used to assess the effects on the environment.

5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

6. A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.

7. An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant or appellant in compiling the required information.

PART II
1. A description of the development comprising information on the site, design and size of the development.

2. A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.

3. The data required to identify and assess the main effects which the development is likely to have on the environment.

4. An outline of the main alternatives studied by the applicant or appellant and an indication of the main reasons for the choices made, taking into account the environmental effects.

5. A non-technical summary of the information provided under paragraphs 1 to 4 of this Part.
Appendix C – Proposed methodology for the landscape and visual impact assessment

To be read with reference to figures 1 to 6 appended to this appendix.

Introduction

C1.1 The following paragraphs set out the methodology that has been followed in the baseline study of the existing landscape, townscape and visual amenity and the subsequent assessment of the effects of the proposals.

LVIA Guidelines

C1.2 The Landscape and Visual Impact Assessment (LVIA) has been carried out in accordance with the following best practice guidelines:

- An Approach to Landscape Character Assessment, Natural England (October 2014)
- SNH Visual Representation of Wind Farms guidance, version 2.1 December 2014
- Landscape Institute Advice Note 01/11, Photography and Photomontage in Landscape and Visual Assessments.

Role of the LVIA

C1.3 Paragraph 2.21 of the GLVIA states that there are two distinct components of the LVIA:

“Assessment of landscape effects: assessing effects on the landscape as a resource in its own right;

Assessment of visual effects: assessing the effects on specific views and on the general visual amenity experienced by people.”

Definition of landscape

C1.4 In describing landscape, paragraph 2.19 of the GLVIA states that:

“Landscape results from the interplay of the physical, natural and cultural components of our surroundings. Different combinations of these elements and their spatial distribution create the distinctive character of landscapes in different places, allowing different landscapes to be mapped, analysed and described. Character is not just about the physical elements and features that make up a landscape, but also embraces the aesthetic, perceptual and experiential aspects of the landscape that make different places distinctive.”

Definition of visual amenity

C1.5 In the GVLIA glossary defines the meaning of visual amenity as:
“The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.”

C1.6 The methodology for assessing both the landscape and visual effects are outlined in paragraphs C1.34 to C1.67.

Assessment process

C1.7 The process of landscape and visual assessment (LVIA) includes the following stages:

- **Project description** – Describes the proposed development, identifying the main features of the proposals, and establishes parameters such as maximum extents of the development or sizes of the elements.
- **Baseline studies** – Establishes the existing nature of the landscape and visual environment in the study area, including any relevant changes likely to occur independently of the development proposal. Includes information on the value attached to the different environmental resources.
- **Identification and description of effects** – Systematically identifies and describes the effects that are likely to occur, including whether they are adverse or beneficial.
- **Assessing the significant of effects** – Systematically and transparently assesses the likely significance of the effects identified.
- **Mitigation** – Makes proposals for measures designed to avoid / prevent, reduce or offset (or compensate for) any significant negative (adverse) effects.

Professional judgement

C1.8 Professional judgement is an important consideration in the determination of the overall landscape and visual effects and even with qualified and experienced professionals there can be differences in the judgements made.

C1.9 Paragraph 2.23 of the GLVIA states that:

“While there is some scope for quantitative measurement of some relatively objective matters, for example the number of trees lost to construction of a new mine, much of the assessment must rely on qualitative judgements, for example about what effect the introduction of a new development or land use change may have on visual amenity or about the significance of change in the character of the landscape and whether it is positive or negative.”

C1.10 Paragraph 2.24 of the GLVIA states that:

“In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others.”

Baseline assessment

C1.11 The landscape and visual baseline conditions were established by:
Landscape | Visual
--- | ---
Identify elements and features | Identify extent of possible visibility (ZTV)
Identify landscape character and key characteristics | Identify visual receptors (people) who may be affected
Consider value attached to landscape | Identify and select representative, illustrative and specific viewpoints
Identify landscape receptors | 

Site familiarisation

C1.12 The site and surrounding area were visited in [INSERT] and [INSERT] to obtain familiarity with the landscape. Field studies and desk studies of photographs, aerial photographs, map information, landscape character assessments and statutory and emerging planning policy documents have enabled the recording of landscape elements such as topography, drainage, land use, development, vegetation and other features.

Defining the study area

C1.13 The study area defines the scope of the assessment. The study area includes the site itself and the wider area around it, within which the proposed development may have a significant influence. The extent of the study area has been established using a zone of theoretical visibility (ZTV) of the proposed development in combination with observations made on site. During the assessment process the study area may change as a result of fieldwork studies or changes to the proposals.

C1.14 A 2.5 km study area was chosen and agreed with the local planning authority, as the visibility beyond this distance will become limited and the proposed development is unlikely to have any significant effects.

Identifying landscape character, elements and features

C1.15 Published and adopted landscape character assessments (LCA) prepared by relevant authorities at varying levels, from national through to local assessments, have been referred to in order to identify the baseline landscape character, resources and associated value. These established assessments have been reviewed in terms of their status, scale and level of detail provided and therefore suitability for use within the LVIA. This review also took account of the date in which the assessments where carried out and how relevant the content is in relation to the current landscape characteristics.

C1.16 National and county level LCA generally give a broad scale assessment which often provides an overview of the landscape context and setting but does not necessarily represent the local landscape characteristic of the site and surrounding area. Local LCA provide more detail on the types of landscape that occur in the study area. They are therefore considered appropriate as a basis for describing the key characteristics and are used to inform the description of the landscapes that may be affected by the proposals.

C1.17 Detailed fieldwork carried out within the site and immediate surroundings is used to check the applicability of the landscape character assessments throughout the study area, and where variations in the landscape are identified
since the LCA was adopted, modifications to or supplementary information is provided in the baseline assessment.

C1.18 ZTV analysis and field studies have been carried out to determine which landscape character areas will be physically or perceptually affected by the proposals.

**Identifying possible extent of visibility (ZTV)**

C1.19 Computer generated mapping has been used in combination with fieldwork, to assess the potential visibility of the proposals. The extent of visibility over which the proposed development may theoretically be seen, Zone of Theoretical Visibility (ZTV), is provided in figure [INSERT].

C1.20 The ZTV has been derived from a Digital Surface Modelling. The DSM used was based on a 2 m grid provided by Bluesky. This uses photogrammetrically derived information during summer that provides a highly detailed three-dimensional model of the landscape and townscape. Topographic features including landform, woodland, settlements, individual buildings, isolated trees, copses, hedgerows, embankments and other minor topographic features, out to a distance of 2.5 km from the application boundary, are all modelled. The accuracy of the DSM falls within acceptable limits; however, there are potential discrepancies between the DSM and the actual landform where there are minor topographic features that are too small to be picked up. The Bluesky data can pick up the majority of the woodland and buildings, although areas can be missed between the 2 m grid.

C1.21 For this project, the ZTV has been generated using the DSM and the following proposed building height parameters:

- INSERT
- INSERT
- INSERT

C1.22 The height from which the proposed development would be seen was set at 1.6 m (mid way between the average heights for men and women given in the GLVIA). A professional judgement has been made for this assessment that approximately 2.5 km is the distance beyond which proposals of this scale, nature and context would not have a significant effect on either landscape / townscape character or views. The resulting ZTV, figure [INSERT], illustrates the extent to which any part of the proposals (large or small) is potentially visible from the surrounding area.

C1.23 During fieldwork, any significant discrepancies in the visual envelope and ZTV are recorded and later amended. Fieldwork was confined to accessible parts of the site, public rights of way, transport routes and other publicly accessible areas.

**Identifying visual receptors**

C1.24 The baseline study will have determined the individuals and/or defined groups of people who have the potential to be affected by the proposals. These are referred to as visual receptors.
Paragraph 6.13 of the GVLIA states that visual receptors may include:

“...people living in the area, people who work there, people passing through the landscape on road, rail or other forms of transport, people visiting promoted landscapes or attractions, and people engaged in recreation of different types”.

**Identifying viewpoints**

Following analysis of the ZTV and fieldwork, a series of viewpoints from which the proposals will be seen by the individual or groups of visual receptors were identified and agreed with South Cambridgeshire District Council. To illustrate all potential viewpoints from which the proposals will be seen by the different visual receptors within the study area is not practical and is unnecessary for the purposes of the EIA. Therefore viewpoints selected for inclusion in the LVIA broadly fall into three groups:

- **Representative** viewpoints (represent the experience of different types of visual receptors). For example, certain points may be chosen to represent the views of users from a particular public right of way.
- **Specific** viewpoints (a particular view from a key or promoted viewpoint). For example, viewpoints with a particular cultural landscape associations.
- **Illustrative** viewpoints to demonstrate a particular effect/issue. For example, the restricted visibility at a certain location.

Generally viewpoints are selected from publicly accessible land and/or the transport routes. Representative or specific viewpoints from these areas can take into consideration that similar views may be afforded from receptors of residential properties.

**Future baseline**

In describing potential effects, account must also be taken of ongoing changes to the area surrounding the site, which is described as future baseline. Those schemes that are under construction or have planning consent, which it can be reasonably assumed will be constructed, are to be included in the assessment’s baseline. Understanding and describing how the proposals will be experienced in the immediate context of existing and future developments is important to reaching accurate and realistic conclusions on the overall effects.

Chapter (INSERT) of this ES describes the future baseline schemes. Those schemes that are not visible in the immediate context of the proposed development have not been considered as part of the future baseline. The baseline schemes that have been taken into consideration are described within the assessment under paragraphs (INSERT) and (INSERT).

**Description of proposals**

The planning application drawings and design and access statement provide a description of the proposals. In this ES the proposals are described in chapter (INSERT), while this chapter summarises the elements that are likely to give rise to landscape or visual effects. The effects on landform and on existing
landscape features such as vegetation are also described. Proposals for landscape measures such as new planting are set out.

**Mitigation measures**

C1.31 The GLVIA describes three forms of mitigation measures. These are:

- “Primary measures, developed through the iterative design process, which have become integrated or embedded into the project design;
- Standard construction and operational management practices for avoiding and reducing environmental effects;
- Secondary measures, designed to address any residual adverse effects remaining after primary measures and standard construction practices have been incorporated into the scheme.”

C1.32 The first two forms are referred to as primary mitigation, while the last is referred to as secondary mitigation. At all stages of the iterative design development, the purpose has been to prevent/avoid, reduce and where possible offset or remedy potential adverse effects by including primary mitigation measures and standard construction and operational management practices. The plans illustrated in the proposals chapter (INSERT) figures (INSERT) incorporating these primary measures are used to assess predicted potential effects.

C1.33 Secondary mitigation measures are those that have not been designed into the proposals that form part of this application. Potential secondary mitigation measures are described and considered in the assessment. Where significant adverse effects remain after secondary mitigation, these are referred to as residual effects.

**Landscape assessment**

C1.34 The landscape assessment judges the potential effects of the proposals on the landscape receptors that have been identified. The significance of a landscape effect is determined by consideration of the sensitivity of the landscape receptors and the magnitude of the landscape effect as a result of the proposals. These are defined in the following paragraphs.

**Criteria for assessing potential significance of landscape effects**

*Sensitivity of landscape receptor*

C1.35 The sensitivity of the landscape is assessed by combining the considerations of two factors:

- **Value**
- **Susceptibility to specific change**

C1.36 The value of the landscape receptor is defined in the GLVIA (paragraph 5.19) as:
The relative value that is attached to different landscapes by society, bearing in mind that a landscape may be valued by different stakeholders for a whole variety of reasons.

C1.37 The value of the landscape receptor is established at the baseline stage and considers two key categories as highlighted in paragraph 5.44 of the GLVIA:

- The value of the landscape character types or areas based on review of any designations at both national and local levels, and, where there are no designations, judgements based on criteria that can be used to establish landscape value;
- The value of individual contributors to landscape character, especially the key characteristics, which may include individual elements of the landscape, particular landscape features, notable aesthetic, perceptual or experiential qualities, and combinations of the contributors.

C1.38 Landscape designations should not be over relied upon to signify the value of the landscape receptors. Other factors that can help in the identification of valued landscapes include:

- Landscape quality (condition)
- Scenic quality
- Rarity
- Representativeness
- Conservation interests
- Recreational value
- Perceptual aspects including wildness and/or tranquillity
- Associations

C1.39 In the absence of a formal landscape designation or landscape character area, judgement on the value of a landscape is based on the criteria set out in paragraph C2.41.

C1.40 The landscape receptors susceptibility to specific change is defined in the GLVIA (paragraph 5.40) as follows:

“The ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or achievement of landscape planning policy and strategies.”

C1.41 Paragraph 5.42 of the GLVIA also states that:

“Since landscape effects in LVIA are particular to both the specific landscape in question and the specific nature of the proposed development, the assessment of susceptibility must be tailored to the project.”

C1.42 Factors for judging susceptibility to change include:

- Vulnerability or robustness of elements of the landscape
• The tolerance, i.e. the extent to which elements of the landscape can be replaced, restored or may be altered
• The level or role elements of the landscape have in defining the character of the landscape
• The landscape sensitivity to the specific type of development proposed.

C1.43 The guidance set out in figure 1 has been used in this assessment to arrive at an overall evaluation of landscape sensitivity. Both susceptibility to change and value are judged as high, medium, low or negligible based on the criteria shown. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of susceptibility and value produces an overall evaluation of landscape sensitivity, which is ultimately a matter of professional judgement, and is defined in this chapter as high, medium, low or negligible.

Magnitude of landscape effect

C1.44 The magnitude of effect is assessed in terms of:

• Size/scale
• Geographical extent
• Duration
• Reversibility

C1.45 The size or scale of an effect is assessed by determining the degree of change that would arise from the proposals. The effect of both loss and addition of new features is judged as major, partial, minor or very minor based on the criteria set out in figure 1. The judgements may take into account:

• The extent of existing landscape elements that will be lost (this may be quantified)
• The degree to which aesthetic or perceptual aspects of the landscape are altered through the loss of or addition of landscape resources / elements. For example removal of hedges may change a small-scale intimate landscape into a large scale, open one.
• Whether the effect changes any of the key characteristics which are distinctive to the landscape character.

C1.46 The geographical extent of effects is assessed by determining the area over which the landscape effects will be felt. The effect is considered across varying scales of wide, intermediate, localised or limited based on the criteria set out in figure 3. In general, the effects will vary according to the nature of the project and may not be relevant on every occasion.

C1.47 The duration of effects is assessed by the period of time over which the degree of change to the landscape would arise from the development. Duration is judged as long term, medium term or short term based on the criteria set out in figure 2.

C1.48 The reversibility of an effect assesses the prospects or practicality of the effect being reversed. The effect is judged as reversible, partially reversible or permanent as set out in figure 2.
C1.49 Duration and reversibility can be considered together so that a temporary or partially reversible effect is linked to definition of how long that effect may last.

C1.50 The guidance notes and criteria set out in figure 2 have been used to make a judgement on the magnitude of landscape effect for this assessment. The magnitude of landscape effect is determined by combining the judgements of the four individual factors of size/scale, geographical extent, duration and reversibility. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of all four factors produces an overall evaluation of magnitude of landscape effect, which is ultimately a matter of professional judgement, and is defined in this chapter as large, medium, small or negligible.

"Judging the overall significance of landscape effect"

C1.51 The degree of the effects on the landscape resources is considered from a sequentially combined evaluation of the landscape sensitivity and the magnitude of effect. The matrix in figure 3 has been used to guide this judgement. The definitions used are included in that figure. They are applied to both potential effects, and to residual effects. If the degree of effect is moderate or above then the effect is considered to be significant.

C1.52 The GLVIA guidance also states that thought must be given to whether the likely significant landscape effects are judged to be positive (beneficial) or negative (adverse). The GLVIA (paragraph 5.37) suggests that when judging the effects to be adverse or beneficial the factors to be considered should include, but not be restricted to the following:

- "The degree to which the proposal fits within the existing landscape character"
- "The contribution to the landscape that the development may make in its own right, usually by virtue of good design, even if it is in contrast to existing character."

"Visual assessment"

C1.53 The visual assessment judges the potential effects of the proposals on the visual receptors that have been identified. The significance of a visual effect is determined by consideration of the sensitivity of the visual receptors and the magnitude of the visual effect on visual amenity. These are defined in the following paragraphs.

"Criteria for assessing potential significance of visual effects"

"Sensitivity of visual receptors"

C1.54 A visual receptor is a particular person or group of people who would be experiencing the view or are likely to be affected at a specific viewpoint.

C1.55 The sensitivity of the visual receptor is assessed by combining the judgements of two factors:

- Value attached to views
Sustainability of visual receptors to change

The GLVIA suggests that when judging the value attached to the views experienced (paragraph 6.37), account should be taken of:

- “recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations;
- indicators of the value attached to views by visitors, for example through appearances in guidebooks or on tourist maps, provision of facilities for their enjoyment and references to them in literature or art”

The value attached to the views experienced is established at the baseline stage and considers these two key categories:

- The quality of the view/visual experience i.e. attractive unspoilt landscape
- The associations which contribute to the visual experience i.e. cultural/historical/ecological interests and planning designations

The visual receptors’ susceptibility to change is defined in the GLVIA (paragraph 6.32) as follows:

- “the occupation or activity of people experiencing the view at particular locations; and
- the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.”

The guidance set out in figure 4 has been used in this assessment to arrive at an overall evaluation of the sensitivity of the visual receptors. Both susceptibility to change and value are judged as high, medium, low or negligible based on the criteria shown. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of susceptibility and value produces an overall evaluation of visual receptor sensitivity, which is ultimately a matter of professional judgement, and is defined in this chapter as high, medium, low or negligible.

Magnitude of visual effect

The magnitude of visual effect is assessed in terms of:

- Size/scale
- Geographical extent
- Duration
- Reversibility

The size or scale of a visual effect is assessed by determining the degree of change that would arise from the proposals. The effect of loss, addition or change to the composition of the view through the introduction of development is judged as major, partial, minor or very minor based on the criteria set out in figure 5. The GLVIA (paragraph 6.39) suggests that when judging the visual effects the following be taken account of:
• “the scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the proposed development;
• the degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture;
• the nature of the view of the proposed development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.”

C1.62 The geographical extent of visual effects is assessed by determining the area over which the visual effects will be seen. The visual effect is considered across varying scales of wide, intermediate, localised or limited based on the criteria set out in figure 5. The GLVIA (paragraph 6.40) suggests that extent is likely to reflect:

• “the angle of view in relation to the main activity of the receptor;
• the distance of the viewpoint from the proposed development;
• the extent of the area over which the changes would be visible.”

C1.63 The duration of effects is assessed by the period of time over which the degree of change to the visual receptor would arise from the development. Duration is judged as long term, medium term or short term based on the criteria set out in figure 5.

C1.64 The reversibility of an effect assesses the prospects and the practicality of the effect being reversed. The effect is judged as reversible, partially reversible or permanent as set out in figure 5.

C1.65 The guidance notes and criteria set out in figure 5 have been used to make a judgement on the magnitude of visual effect for this assessment. The magnitude of visual effect is determined by combining the judgements of the four individual factors of size/scale, geographical extent, duration and reversibility. There may be circumstances where the weighting given to some criteria may be greater than others. The combination of all four factors produces an overall evaluation of magnitude of visual effect, which is ultimately a matter of professional judgement, and is defined in this chapter as large, medium, small or negligible.

Judging the overall significance of visual effects

C1.66 The degree of the effects on the visual receptor is considered from a sequentially combined evaluation of the visual receptor sensitivity and the magnitude of effect. The matrix in figure 6 has been used to guide this judgement. The definitions used are included in that figure. They are applied to both potential effects and to residual effects. If the degree of effect is moderate or above then the effect is considered to be significant.

C1.67 The GLVIA guidance also states that thought must be given to whether the likely significant visual effects are judged to be positive (beneficial) or negative (adverse). This is based on professional judgement as to whether the effects will affect the quality of the visual experience for those people who will see the
proposed development, given the nature of the existing views. The GLVIA (paragraph 6.44) suggests that when judging the effects to be adverse or beneficial the factors to be considered should include but not be restricted to the following:

- “Effects on people who are particularly sensitive to changes in views and visual amenity are more likely to be significant
- Effects on people at recognised and important viewpoints or from recognised scenic routes are more likely to be significant
- Large-scale changes which introduce new, non-characteristic or discordant or intrusive elements into the view are more likely to be significant than small changes or changes involving features already present within the view.”

Taking account of effects throughout the life of the project

C1.68 The degree of landscape and visual effects can vary considerably during the life cycle of the project. Within the assessment a description of the development is provided at each stage in the life cycle of the project to assist in understanding the scheme and the predicted landscape and visual effects of the development. The description of effects considers the following project stages:

- During construction
- At completion (post construction - year 0) including seasonal variation and night time
- Year 15 of operation

Photographic survey

C1.69 The aim is to recreate as closely as possible what the human eye can see. 50 mm is a traditionally agreed focal length for matching a photograph to the actual view seen, but a range between 45 mm to 55 mm is often used.

C1.70 For this assessment, a Canon EOS 6D camera was used in conjunction with a 50mm prime lens. The EOS 6D employs a sensor of similar size to a traditional SLR therefore the 50mm lens used results in a focal length of 50mm as no modification factor is applied. This methodology is in accordance with the LI Advice note 01/11, Photography and photomontage in landscape and visual impact assessment.

C1.71 In this assessment, the photographs are taken at approximately 1.6 m above ground level using a tripod.

C1.72 GPS is used to provide a six-figure National Grid reference for the view. The accuracy of this device can vary (depending on factors such as satellite coverage, proximity of buildings, tree coverage etc.) so these figures are then checked on detailed OS survey plans to give a more accurate reference.

C1.73 For panoramic photographs an overlap of between 35% and 50% of each frame is used to allow the creation of a seamless panoramic, using Photoshop.
Sensitivity of the receptor - Landscape

<table>
<thead>
<tr>
<th>Value</th>
<th>Susceptibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internationally/nationally designated landscape / townscape e.g world heritage sites, areas of outstanding natural beauty and national parks / national scenic areas (Scotland)</td>
<td>Landscape / townscape can not accommodate any change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics</td>
</tr>
<tr>
<td>A very distinctive landscape / townscape with strong, widespread and defining characteristics. High quality with no detracting features. Contains features that could be described as unique or are nationally scarce. Considerable conservation and / or recreational / heritage interest. Very strong sense of place.</td>
<td></td>
</tr>
<tr>
<td>Locally designated e.g public open space</td>
<td>Landscape / Townscape is able to accommodate a small change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics</td>
</tr>
<tr>
<td>Reasonably distinctive landscape / townscape or with some strong contributing characteristics. Average quality with features that are locally commonplace which may exhibit some detracting features. Intermediate conservation and/or recreational / heritage interest. A strong sense of place.</td>
<td></td>
</tr>
<tr>
<td>Not designated.</td>
<td>Landscape / Townscape is able to accommodate a medium change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics</td>
</tr>
<tr>
<td>Relatively bland or commonplace landscape / townscape or with limited positive characteristics. Features that make little contribution to local distinctiveness. Some detracting features. Limited conservation and/or recreational / heritage interest. Poor sense of place.</td>
<td></td>
</tr>
<tr>
<td>Not designated.</td>
<td>Landscape is able to accommodate a large change related to the proposed development without undue consequences arising on the condition or quality of its defining characteristics</td>
</tr>
<tr>
<td>A degraded or featureless landscape with little or no characteristics of quality or interest. No sense of place.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1 Receptor sensitivity (landscape effects)
Magnitude of landscape effects

The magnitude of effects is assessed by combining the judgments on the size or scale and the geographical extent of the landscape effect resulting from the proposals. The table provides an overall profile of these criteria for each factor. In determining the magnitude of effects during the construction phase and at completion, further consideration is also given to the duration and reversibility of the landscape effect.

Duration

Duration is a material consideration when determining the magnitude of effect and, where relevant, will be qualified in the data sheets contained within this report.

Where the construction or life of the project is proposed to be in excess of 25 years it is, although temporary, considered to be a substantial length of time and so is assigned a magnitude of effect equivalent to a permanent development.

Where the construction or operational phase is less than 25 years, the period over which the effects will be experienced is judged as short (less than 5 years), medium (5-10 years) or long (10-25 years) term.

Reversibility

The reversibility of an effect defines the prospects or practicality of the effect being reversed. Reversibility is judged as fully, partially or unable to reinstate/restore the original baseline situation.
Determination of significance matrix – Landscape

In some cases, the judgement of sensitivity or magnitude of change may fall somewhere between two descriptions, for instance a magnitude of change may be considered to be greater than small but less than medium and in these cases it is acceptable to describe these instances as lying between the two, in this instance, small-medium. It is also acceptable to describe effects in the same way, if it is considered that the effect lies between two effect descriptions.

Degrees of effect

**Very substantial:**
Large change to a landscape of high sensitivity.

**Substantial:**
Medium-large change to a landscape of medium-high sensitivity, medium change to a landscape of high sensitivity or large change to a landscape of medium sensitivity.

**Moderate:**
Medium change to a landscape of medium sensitivity, large change to a landscape of low sensitivity or small change to a landscape of high sensitivity.

**Slight:**
Medium or small change to a landscape of low sensitivity or small change to a landscape of medium sensitivity.

**Negligible:**
Negligible, small, medium or large change to a landscape of negligible sensitivity or negligible change to a landscape of low, medium or high sensitivity.

Significance

If the degree of effect is moderate or above, then the effect is considered to be significant.
# Sensitivity of the receptor - Visual

<table>
<thead>
<tr>
<th>Value</th>
<th>Susceptibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Occupiers of residential properties or users of long distance recreation routes / National Trail whose primary focus is on the landscape / townscape</td>
</tr>
<tr>
<td></td>
<td>Visitors to heritage assets or other attractions where the landscape setting is an important contributor to the experience</td>
</tr>
<tr>
<td>Medium</td>
<td>Views from public rights of way, rural roads, tourist routes or railway users with secondary focus on the landscape / townscape</td>
</tr>
<tr>
<td></td>
<td>Users of urban roads, railways and footways whose attention is unlikely to be on the landscape / townscape</td>
</tr>
<tr>
<td>Low</td>
<td>People engaged in outdoor sporting activities which does not depend upon appreciation of views</td>
</tr>
<tr>
<td></td>
<td>People at places of work, educational or social venues who have very limited focus on the landscape / townscape</td>
</tr>
<tr>
<td>Negligible</td>
<td>People driving along motorways.</td>
</tr>
</tbody>
</table>

## Table

<table>
<thead>
<tr>
<th>Value</th>
<th>Susceptibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>High / Medium</td>
</tr>
<tr>
<td>High / Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Medium</td>
<td>Medium / Low</td>
</tr>
<tr>
<td>Medium / Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Magnitude of visual effects

The magnitude of effects is assessed by combining the judgments on the size or scale and the geographical extent of the visual effect resulting from the proposals. The table provides an overall profile of these criteria for each factor. In determining the magnitude of effects during the construction phase and at completion, further consideration is also given to the duration and reversibility of the visual effect.

Duration
Duration is a material consideration when determining the magnitude of effect and, where relevant, will be qualified in the data sheets contained within this report.

Where the construction or life of the project is proposed to be in excess of 25 years it is, although temporary, considered to be a substantial length of time and so is assigned a magnitude of effect equivalent to a permanent development.

Where the construction or operational phase is less than 25 years, the period over which the effects will be experienced is judged as short (less than 5 years), medium (5-10 years) or long (10-25 years) term.

Reversibility
The reversibility of an effect defines the prospects or practicality of the effect being reversed. Reversibility is judged as fully, partially or unable to reinstate/restore the original baseline situation.
Determination of significance matrix – Visual

In some cases, the judgement of sensitivity or magnitude of change may fall somewhere between two descriptions, for instance a magnitude of change may be considered to be greater than small but less than medium and in these cases it is acceptable to describe these instances as lying between the two, in this instance, small-medium. It is also acceptable to describe effects in the same way, if it is considered that the effect lies between two effect descriptions.

Degrees of effect

**Very substantial:**
Large change to a landscape of high sensitivity.

**Substantial:**
Medium-large change to a landscape of medium-high sensitivity, medium change to a landscape of high sensitivity or large change to a landscape of medium sensitivity.

**Moderate:**
Medium change to a landscape of medium sensitivity, large change to a landscape of low sensitivity or small change to a landscape of high sensitivity.

**Slight:**
Medium or small change to a landscape of low sensitivity or small change to a landscape of medium sensitivity.

**Negligible:** Negligible, small, medium or large change to a landscape of negligible sensitivity or negligible change to a landscape of low, medium or high sensitivity.

Significance

If the degree of effect is moderate or above, then the effect is considered to be significant.
Appendix 2 – Scoping consultation responses
Dear Ms Robinson,

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (ENGLAND AND WALES) REGULATIONS 2011 (AS AMENDED BY THE 2015 REGULATIONS) EIA SCOPING REQUEST:

PROPOSED PARK FOR AGRITECH ON LAND EAST OF THE A1301 AND SOUTH OF A505 AT HINXTON, AND A BUS AND CYCLE INTERCHANGE ON LAND WEST OF THE A1301 AND NORTH OF THE A505 TO THE EAST OF WHITTLESFORD PARKWAY STATION.

Thank you for your request for a Screening Opinion received on 6 February 2017. In my email to you, I requested an extension of time until 7 April 2017 to enable sufficient time for all internal and external consultees to respond.

The Council’s formal Scoping Opinion is attached as an Appendix to this letter. The opinion relates to the Scoping Report dated 2nd February 2017 from Terence O'Rourke (Document Reference 235701D). The document is considered in terms of its headings, the issues and areas of information to provide a sound basis upon which to consider the potential environmental impacts of the development. Appendix 1 highlights the areas where further work is required, Appendix 2 details the list of consultees and Appendix 3 includes all the consultee responses. For your information all personal details have been redacted. Please note that not all consultees have responded to date. If further responses are received, these will be forwarded to you.

In accordance with the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011, a copy of this scoping opinion will be placed on Part 1 of the Planning Register. It should be noted that this opinion does not preclude the Council from requesting further information at a later stage by way of a Regulation 22 request should it need to do so.
This response is given on a without prejudice basis to the advice given above in relation to the Scoping Opinion request and is intended to help with your application.

Yours sincerely

Katie Christodoulides
Senior Planning Officer

Attached:

Appendix 1- EIA Scoping Response-Summary of issues to be addressed
Appendix 2- List of consultees
Appendix 3-Consultee responses
APPENDIX 1- EIA Scoping Response- Summary of issues to be addressed

Introduction:

Thank you for your scoping report of February 2017, which relates to the following development, comprising:

- Approximately 112,000 sqm of commercial floorspace (gross) for AgriTech and associated life sciences (e.g. FoodTech and CleanTech), comprising primarily B1 (office, labs, light industry), with potential for some, primarily ancillary B2 (general industrial) / B8 (storage) uses and including a mixed use centre (approx. 10% of total floor space) for B1, A3 (eg café), D1 (crèche / day nursery) and D2 (gym) facilities. This will accommodate up to 4,000 employees (~28sqm GFA / employee)

- Approximately 2,000 parking spaces (based on a working assumption parking rate of 0.5 per employee) and additional spaces for operational and visitor requirements

- A new primary site access from the A1301 with associated improvement to local footways and footpaths

- Secondary site access from the A1301 via the existing access to Hinxton Grange, to accommodate emergency vehicle and potential bus access

- Additional emergency vehicle access via the existing lane along the southern edge of the site (known locally as Tichbaulk Road)

- Landscaping to integrate the site into the environment to mitigate visual Impacts

- A new electricity sub-station on land adjacent to the A11

- A new water supply pumping station

- Surface water attenuation areas

- Servicing, utilities and general infrastructure works

- A direct, high quality route from the main site to Whittlesford Parkway Station for walking, cycling and possible shuttle service vehicles

- Highway improvement works including to the A1301 / A505 roundabout, with new pedestrian / cycle bridge

- Bus / cycle interchange with potential new vehicular access from A505 and pedestrian / cycle link to A1301

From the responses that have been received your initial Scoping Report is considered to have identified most of the potential impacts of the proposed development. Below is a list of what the Council considers to be the main issues for you to consider in the preparation of the Environmental Impact Assessment (EIA) that will be detailed in your Environmental Statement (ES). The list cannot be considered exhaustive and only highlights the main points. For ease of reference the comments below will refer to the preparation of the ES, though obviously they include the EIA that will underpin it. You should also refer to the responses that are contained in Appendix 3, which contain more detail about each topic area.

**Planning Policy**

If the application is submitted prior to the adoption of the City Council and South Cambridgeshire Local Plan, reference should be made to relevant adopted Core Strategy and Development Management DPD policies, Supplementary Planning Documents and any other approved policy documents. The status of the Local Plan should be acknowledged and taken into consideration in both the ES and other documentation.

1. **Introduction-Purpose of the scoping report**

   The approach taken in this section of the report is supported.

2. **Site Description**

   The EIA should provide a full detailed description of the site, including any particular features of note, designated or sensitive areas such as Sawston Hall Meadows SSSI. A number of listed buildings such as Hinxton Grange, and the Chapel of the Hospital of St John the Baptist also a ancient scheduled monuments, and listed buildings and Conservation Areas within Hinxton, Whittlesford, Duxford and Pampisford Hall should be assessed as part of the wider impact.

3. **Proposed Development**

   The development proposals should reference the full range of uses and infrastructure to be provided, to include community and recreational facilities and public art.

4- **EIA An Overview, 5 Scoping an EIA, 6 Scoping Methodology & 7 Identification of main/ significant effects**

   It is recognised that the accepted principles of good practice in EIA will be applied throughout the process and this is to be welcomed. The EIA process should provide sufficient, reliable and usable information in order to assess the impact of the proposal and to inform the decision making process.

   Environmental Statements are now required to include “an outline of the main alternatives studied by the developer and an indication of the main reasons for the developer’s choice, taking into account the environmental effects”. The National Planning Practice Guidance proposes that “Where alternative approaches to development have been considered, the Environmental Statement should include an outline of the main alternatives studied and the main reasons for the choice made, taking into account the environmental effects”.


On this basis if alternative locations or design layouts for the development have been considered then these should be included as part of the assessment. A full explanation as to the locational need for the proposal at this site will be required.

8. Air Quality

The proposed air quality scope and methodology as proposed is mostly agreed. It is agreed that dust during site preparation and construction activities and emissions from post construction road traffic associated with the proposed development has the potential to be significant. The applicant is advised that odour generation from post construction and effects on CO₂ budget may have an adverse impact on local air quality. There will be a need for achieving 10% provision of energy from renewable energy, and confirmation is needed that this would not affect air quality eg: biomass boilers may have a negative effect on air quality and therefore would need to be included in the EIA/ES.

These impacts require evaluation in the context of air quality objectives and existing air quality and an Air Quality Assessment is required.

It should also be noted that the Council’s District Design Guide SPD under Air Quality requires consideration of the implementation of a Low Emissions Strategy (Transport Related) to mitigate any transport related impact. There should be a general commitment to reduce transport related emissions such as a low emissions strategy for both the development phases and operational phases considering factors low plant/dust/travel to work plan/ and charging points for electric vehicles or any other suggestions that would be appropriate in this instance to encourage the uptake of low emission vehicles. The aforementioned SPD is downloadable from https://www.scambs.gov.uk/content/district-design-guide-spd

Please see Natural England’s response regarding Air Quality within Appendix 3.

I will forward on any consultation comments received from the District Council’s Environmental Health team.

9. Community, social and economic effects

The preferred option, as per South Cambridgeshire District Council Health Impact SPD, is for the applicant to produce a combined HIA and EIA, however page 21 states that a health impact assessment will be submitted as a supporting document. Whilst this is not the preferred approach it is acceptable as long as there is clear cross-referencing between the two documents and that both have equal standing within the application.

The community, social and economic section should explore the impact of the development and potential increase in demand for local services and facilities, with social infrastructure in terms of community facilities, public art and recreation facilities being addressed.

The EIA should consider the impact of the proposal and health impacts and links to housing and traffic.

Transport – opportunities for walking and cycling should make reference to the Transport and Health Joint Strategic Needs Assessment (JSNA) as a starting point.
The economic benefits and costs on the wider regional economy should be considered.

**10. Cultural heritage**

**Historic Assets**

The Listed Building Officer has commented that the proposed site red outline would divide the formal garden area of the Grade II listed building Hinxton Grange. The proposal would therefore likely to result in significant harm to the setting of the historic garden and listed property. This is a significant impact which needs to be fully examined.

The Listed Building Officer also commented that the location of the proposed transport interchange would be sited in close proximity to the Grade II listed building The Red Lion Hotel and the Grade II* and scheduled ancient monument the Chapel of the Hospital of St John the Baptist which requires assessment.

Consideration should be given to the potential for the proposal to affect the ancient scheduled monument Brent Ditch which forms one of a series of linear boundaries in Cambridgeshire including Devil’s Dyke, Fleam Dyke and Bran Ditch.

It will be necessary to assess both the direct impact of development on any historic assets within the site and indirect impact on the setting of historic assets nearby. Further guidance on assessing the impact on setting is contained within ‘The setting of heritage assets: English Heritage guidance’ which is available to download from their website. It is recommended that a section for both designated and undesignated assets be included in the assessment.

Please see Historic England’s response regarding heritage impact within Appendix 3.

**Archaeology**

The report recognises that the proposal is located in a landscape of high archaeological potential and the broad approach detailed is welcomed. Full mitigation measures should be included within the EIA and where appropriate preservation of archaeological remains should remain in-situ.

I will forward on any consultation comments from County Archaeology Officer.

**11. Ground Conditions**

Although the site consists of agricultural land, there is the potential for land contamination from present agricultural use in terms of pesticides and fuel storage. The scope of work appears to be acceptable.

The Contaminated Land Officer has advised that a Phase 1 Desk Study and Phase 2 Site Investigation should be submitted with any application to ensure a thorough assessment.

The scoping request is for a proposal that does not appear from the information provided or records to affect any nationally designated geological sites.

**12. Land Use**

The assessment and inclusion of agricultural land classification and impacts in terms of the loss of agricultural land is welcomed. Impacts from the development should be considered
in light of the Government’s policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the NPPF.

Please see Natural England’s response regarding land use and soils in Appendix 3.

13. Landscape and Visual Effects

The site lies within the Cambridgeshire Chalkland Landscape Character Area, and is characterised by large open fields, low hedges and small copses. The development location contains two important landscape features Hinxton Grange and Pampisford Hall. Pampisford Hall should also be included in the list of visual receptors.

The objective of the Landscape and Visual Assessment must be to identify all potential impacts of the development on the nearby sensitive receptors and address how the design process would mitigate the built impact of the development through the consideration of effective mitigation measures. Attention should be paid to the visual impact and impact on the landscape from the development.

Artifical lighting has the potential to have wider significant visual impact. The effects of lighting need to be considered in terms of obtrusive light spill/glare and sky glow.

Details of local landscape character areas should be mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area.

The Green Belt lies where the bus and cycle interchange is proposed to be sited, with the main site lying to the south and east of this. Assessment in terms of Green Belt impact and effect on the setting of the Green Belt would be required.

The assessment should refer to the relevant National Character Areas which can be found on Natural England’s website. Links for Landscape Character Assessment at a local level are also available on the same page.

The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area.

Please see Natural England’s response regarding landscape, access and recreation in Appendix 3.

14. Natural Heritage

Under Section 14.2 it is stated that given the distances from the site, the closest SSSI lies 2.2km north of the main site and 1.3km north of the interchange. As a result of the distances, the report states that no further consideration will be done in the scoping process. The proposal may lead to significant impacts arising at a greater distance than the buffers for designated sites and therefore this should be considered.

Please see Natural England’s and the District Council’s Ecology Officers comments in Appendix 3.

15. Noise and Vibration

The suggested content of the chapter appears acceptable, it is recommended that consideration is given towards the prevention of nuisance that may be caused.
The potential impacts on existing residential properties at Hinxton village will need to be assessed.

16. Traffic and Transport

The surrounding highway network already experiences high levels of demand and regularly suffers delays and congestion. The proposal will increase delays and congestion on the local highway network during and post construction. The proposal will include new site access junctions and highway improvements.

The Transport Assessment which will inform the EIA will require consideration of the A505 Study or a significant transport study to ensure traffic and transport effects have been sufficiently considered. The Highway Authority has serious concerns in relation to the proposed development and impact on the highway and traffic.

Where other impacts such as noise, air quality and ecology are related to changes in traffic levels, it is important that the relevant baseline data and quantified predictions are provided within the EIA.

17. Waste

It is noted that waste implications of the development will not be considered through the EIA or ES, but will be addressed through a Waste Statement report. However, even if it is a separate document, it should still form part of the EIA as waste management on a site of this extent and nature gives rise to strategic waste management issues which should be assessed and impacts addressed.

In addition to the above, Policy CS28 requires strategic development to have a temporary waste management recycling facility for construction / inert waste to be in place throughout the construction phases, in order to maximise the reuse, recycling and recovery of inert waste streams construction and demolition operations. This should be reflected in the proposed Waste Management Strategy.

18. Water Environment

The site is underlain by a chalk principal aquifier and secondary aquifers in superficial deposits. Hinxton Grange Pumping Station lies immediately adjacent to the site to the north. The site overlies source groundwater course protection zones (SPZ1 & 2). The site is environmentally sensitive to controlled waters. Cambridge Water have concerns regarding the proposal and impact on the SPZ’s and risk to ground water.

Part of the site proposed for the bus and cycle interchange lies within Flood Zones 2 and 3. A Flood Risk Assessment will be required to be submitted in support of the planning application and will be used to inform the assessment in terms of flood risk and drainage. Consideration will also be given to the findings of the ecological studies and the ground conditions and contamination study.

Surface Water
The implementation of Sustainable Drainage Systems (SuDS) should be carefully considered for both sites. These techniques can provide a method for reducing runoff that could otherwise lead to flooding. Reference should be given to the potential effects of the construction process and surface water run-off for the proposed bus and cycle interchange on the waterbody quality status of the River Cam given the requirements of the Water Framework Directive. It is important that the development does not have a detrimental impact on the waterbody quality status of the river.

**Foul Drainage/Wastewater Network**

In accordance with the NPPF Planning Practice Guidance, new development should be connected to the public mains (with prior written approval of the statutory undertaker) where possible. Please see Anglian Water’s response regarding sewerage and foul water infrastructure for the area in Appendix 3.

**19. Cumulative Effects**

Whether significant cumulative effects are or are not likely to arise from a particular development will vary from topic to topic. It is unlikely that all disciplines will identify cumulative effects and indeed some of the environmental issues to be addressed will be site or study area specific only. Therefore consideration of cumulative effects should be undertaken within each relevant chapter, as appropriate where significant cumulative effects are considered likely.

This should also seek to identify, and evaluate the effects likely to result from the proposal in combination with other projects and activities that have or will be carried out. As Part of section 19.2 you have identified a number of schemes. I would advise that this also includes consideration of Moorfield Road, Duxford (App Ref: S/1726/12/FL).

**20. Summary/Conclusion**

The above points, when read in conjunction with your report, represent the impacts and issues that the ES should address and identifies where more work is required. If you have any questions on any of the above comments please do not hesitate to contact either myself or the relevant consultee directly for clarity or confirmation.

**22. Additional information that is required**

**Energy and Utilities**

It is clear from the report that an Energy Statement is to be submitted rather than being part of the EIA. This document should detail all the sustainable design and construction methods to be included in the development along with any climate adaption features to be included.
Appendix 2- List of Consultees

In accordance with Regulation 15 of the 2011 EIA Regulations (as amended), the following statutory consultees were notified of the Scoping Request:

Environment Agency
Natural England

In addition, consultations were also requested from the following:

South Cambridgeshire District Council:
Planning Policy Officer
Environmental Health Officer
Contaminated Land Officer
Ecology Officer
Landscape Officer
Conservation Officer

Cambridge County Council:
Highways Officer
Archaeology Officer
Public Rights of Way Officer
Lead Local Flood Authority Officer

Highways England
Historc England
Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire
Cambridge Past, Present and Future
Anglian Water
Cambridge Water
National Grid
UK Power Networks
Health and Safety Executive
Appendix 3 – Consultee Responses
Hello Karen,

Having taken a read of the scoping report I can that noise and vibration has been considered as a potential issue for environmental impacts. It will be essential that if any permission is to be granted that a full construction management plan is submitted and details shall include control measures for dust, noise, vibration, lighting, delivery locations, restriction of hours of work and all associated activities audible beyond the site boundary to 0800-1800hrs Mondays to Fridays and 0800-1300hrs on Saturdays.

An assessment should also be submitted to assess the effects of any external plant the amenity.

I would envisage these details be submitted with any full application in the future.

Regards

Edward
Dear Karen

RE: S/0625/17/E2
Agritech, Cambridge Road, Hinxton, Saffron Walden, Cambridgeshire, CB10 1RG, Scoping opinion

Cambridge Past, Present & Future has reviewed the above referenced application and have the following comments in response. We highly recommend that this site be subject to an Environmental Impact Assessment and are therefore supportive of the scoping opinion application.

Whilst we cannot prejudge any pending planning application for the full proposal, we would like to register serious concerns about the merits of the proposal in this particular location.

It is clear that several clusters or sectors of business have formed over time in and around Cambridge—namely the Science Park, Bio-Medical Campus, West Cambridge and NW Cambridge sites, ARM, Granta Park, the Babraham Campus, Hinxton Campus, etc. However, there is no evidence that companies are seeking to be located in this specific part of the city and we would query the need for this location to be developed and what alternative locations have been assessed and potentially discounted.

We also feel that the inclusion of a bus/cycle interchange and other offers of highway improvements are merely a rouse to garner favour due to the fact that proposals for development on this site have been highly controversial in the past.

As a result, CambridgePPF request to be included in any future consultations related to this site and this proposal.

Kind regards

Stacey Weiser, IHBC
Head of Planning and Conservation
On behalf of the CambridgePPF Planning Committee
My principle concern is the effect / impact upon the following components of the site:

- Mature, ancient and veteran trees within the parkland landscape to Hinxton Grange, including those trees in parkland, avenues and hedgerows.

Having read through the submitted report, there are two areas for consideration impacts where such assets may be considered:

- Landscape & visual effects
- Natural heritage

In neither of these are trees specifically mentioned, which are necessarily discrete elements that are intrinsic to the historic landscape and habitat. Furthermore, the proposed methods of assessment for Landscape and Visual Effects and Natural Heritage do not seem to capture trees specifically. Whilst ‘flora’ is captured, large mature and ancient and veteran trees have wider importance and is why they should be captured as discrete elements.

I consider it appropriate for scoping to include a specific methodology for the consideration of ancient and veteran trees set within the environs and historic context of Hinxton Grange.

Should my comments be clearly contrary to the advice of other officers of the Consultancy team, please resolve any such matters prior to the publication of a delegation report or report to Planning Committee etc.

15 March 2017
Mimocast Attachment Protection has created safe copies of your attachments.

Katie

The proposal causes us concern because our Hinxton Grange Pumping Station is situated immediately adjacent to the site, as shown on the attached plan. You will note the shaded areas on the plan, the pink area is the source protection zone 1 (SPZ 1) and any development likely to affect groundwater within this zone would automatically opposed by the Environment Agency who are statutory consultees. The area shaded green denotes SPZ 2, and development likely to affect ground water in this area would be opposed by Cambridge Water. As the development is likely to impact on the SPZs more detailed discussions will be required so that we can understand the proposal and assess the risk of it detrimentally affecting the groundwater.

I trust the above provides sufficient at this stage, clearly if the proposal goes forward we will want to be consulted further to ensure that the source protection zones for our public water supply source works are not detrimentally effected.

Regards

Mike

From: Christodoulides Katie [mailto:Katie.Christodoulides@scambs.gov.uk]
Sent: 03 April 2017 09:59
To: Mike Sloan
Cc: Mike Sloan
Subject: AgriTech

Mike,

Following our conversation here is the website link to the plans and documents.
http://plan.scambs.gov.uk/swiftrg/apas/run/WPHAPPCRITERIA

I have also attached the document as well.

Regards

Katie Christodoulides BSc (Hons), MSc, MRPI | Senior Planning Officer

South Cambridgeshire District Council

South Cambridgeshire Hall | Cambourne Business Park | Cambourne | Cambridge | CB23 6EA

t: 01954 713314 | e: katie.christodoulides@scambs.gov.uk
Dear Sir/Madam

SCOPING OPINION TO INCLUDE B1, B2, B8, A3, D1, D2 DEVELOPMENT. AGRITECH, CAMBRIDGE ROAD, HINXTON, SAFFRON WALDEN, CAMBRIDGESHIRE, CB10 1RG.

We have reviewed the Terence O'Rourke Environmental Impact Assessment Scoping Report for A Park for Agritech Hinxton dated February 2017.

Environment Agency Position.
Whilst the Agency is unlikely to have any objection in principle to the proposed development we wish to offer the following comments and informatives.

We are reliant on the accuracy and completeness of the reports in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.

The site covers a large area and is a significant development. We would like to be consulted on this proposal in future.

Groundwater and Contaminated land issues (GW&CL).
Site Specific Comments.
As discussed in the EIA Scoping Report, the site is underlain by a chalk principal aquifer, as well as secondary aquifers in the superficial deposits, associated with an EU Water Framework Directive Drinking Water Protected Area. Principal aquifers are geological strata that exhibit high permeability and provide a high level of water storage. They support water supply and river base flow on a strategic scale. The site also overlies a groundwater source protection zone (SPZ), namely SPZ1 (inner protection zone) with a potable water abstraction licence for a location adjacent to the northern site boundary. Although groundwater is expected to be at depth on the east part of the site, based on the site topography, we anticipate it to be shallow on the west part of the site (closer to the River Carn).

We consider the site to be environmentally sensitive with respect to controlled waters.

Land Contamination.

Environment Agency
Bromholme Lane, Brampton, Huntingdon, Cambridgeshire, PE28 4NE.
Customer services line: 03708 506 506
www.gov.uk/environment-agency
Cont/d..
We understand from the EIA Scoping Report and a previous report which we have previously reviewed (Hydrock, Ground Conditions Desk Study, Hydrock Ref: R/151760/002, December 2015) that although the majority of the site was previously used for agricultural activities, potentially contaminative activities have previously been undertaken at the site. Therefore for the purposes of a submission of a planning application, we require lines of evidence to provide assurance that the risks to controlled waters are fully understood and can be addressed through appropriate measures. These should consider the risks to controlled waters from past, present and future uses. We understand that an intrusive site investigation is currently being undertaken and look forward to reviewing the report with its findings.

Piling or other ground improvement methods could have an adverse impact on the groundwater quality beneath the site or provide preferential pathways for contaminant migration to the aquifer during construction and after the completion of the development. As such, potential contamination should be given due consideration together with any impacts of the development on the quality of controlled waters during construction and operation prior to the granting of a planning permission.

Surface Water Drainage.
It is understood that infiltration Sustainable Drainage Systems (SuDS), in the form of soakaways, are proposed for surface water drainage. The implications and impact of potentially contaminated surface water drainage on the quality of controlled waters in the vicinity of the site should be considered.

The Lead Local Flood Authority (LLFA) is responsible for approving the design of proposed drainage systems in new developments and redevelopments.

With regard to the protection of groundwater quality, we would offer the following general advice:

We consider any SuDS greater than 2.0 m below ground level to be a deep system and are generally not acceptable. All infiltration SuDS require a minimum of 1.2 m clearance between the base of infiltration SuDS and peak seasonal groundwater levels. Soakaways must not be constructed in contaminated ground where they could re-mobilise any pre-existing contamination and result in pollution of groundwater. Soakaways and other infiltration SuDS need to meet the criteria in our Groundwater Protection: Principles and Practice (GP3) position statements G1 and G9 to G13. Only clean water from roofs can be directly discharged to any soakaway or watercourse. Systems for the discharge of surface water from associated hard-standing, roads and impermeable vehicle parking areas shall incorporate appropriate pollution prevention measures and a suitable number of SuDS treatment train components.

General Comment.
The decision to include the above in the Environmental Impact Assessment (EIA) process, or as separate technical reports, lies with the Local Authority.

GW&CL Appendix: General Advice to Applicant.
We recommend that developers should refer to:

1. Our “Groundwater Protection: Principles and Practice (GP3)” documents:

Cont/d..
2. The risk management framework provided in CLR11, "Model Procedures for the Management of Land Contamination", when dealing with land affected by contamination:

3. Our "Guiding Principles for Land Contamination" for the type of information that we require in order to assess risks to controlled waters from the site:
   http://www.claire.co.uk/useful-government-legislation-and-guidance-by-country/76-key-documents/192-guiding-principles-for-land-contamination-gplc. The Local Authority can advise on risk to other receptors, for example human health);

4. Our "Verification of Remediation of Land Contamination" report:

5. The CL:AIRE "Definition of Waste: Development Industry Code of Practice" (version 2) and our related "Position Statement on the Definition of Waste: Development Industry Code of Practice":
   http://www.claire.co.uk/component/phocadownload/category/8-initiatives?download=212:definition-of-waste-development-industry-code-of-practice and


7. Our "Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination" National Groundwater & Contaminated Land Centre Project NC/99/73:

8. Our "Good Practice for Decommissioning Boreholes and Wells":


Floodrisk issues.
As this site is over 1 ha, a Flood Risk Assessment must be submitted to support a planning application. This should assess the risk of flooding to the site from all sources and demonstrate that the development will be safe for its lifetime and not increase risk elsewhere.
The majority of the site falls within Flood Zone 1. Therefore, there should be no built footprint or surface water attenuation proposed within Flood Zone 3. Provided that this is adhered to, the Environment Agency is unlikely to have any flood risk concerns.

Environmental Planning Issues.
Waste Planning response.
The Scoping Opinion has considered many aspects of waste management. The inclusion of a Site Waste Management Plan should establish good waste management practices with an adherence to the waste hierarchy. The management of hazardous waste arising on the development will be addressed. Also addressed will be the reuse and disposal of all waste in accordance with UK and European legislation. It is important that all waste reused, recycled or disposed of is carried out by licensed contractors and appropriate permitted waste sites and that records of same are maintained. The use of suitable recycled material that has attained the appropriate standards should be utilised. All wastes should be managed so as not to cause any environmental harm.

From the scoping Opinion - "It is proposed that waste is not scoped into the EIA or considered in the ES, but instead be covered in the Waste Statement that will be submitted in support of the planning application." This should be adhered too. Wider consideration should also be given to local capacity for managing the waste streams associated with development and occupancy thereafter. The policies contained in the Waste Core Strategy and National Waste Plan should be used as a clear reference point, to ensure waste is managed sustainably and legally. It would be useful to give even basic consideration to waste storage and collection systems once the site is developed (e.g. the environment in which containers are placed, internal storage, ease of access, participation), especially given the new regulatory requirements for separate collection of specific waste types from households and commercial premises.


There is further guidance on sustainable construction available on the Waste and Resources Action Programme website: www.wrap.org.uk

Standard Water Resources Comments.
The interaction of development planning and water resource management is a key issue for this region, and there are three key elements to consider. (These feature in Section 7.8 of the Regional Water Resources Strategy published in 2001). Our comments are made under these key aspects.

DEVELOPMENT SHOULD NOT BE COMMITTED AHEAD OF SECURE WATER SUPPLIES
The development lies within the area traditionally supplied by Anglian Water Services Ltd. It is assumed that water will be supplied using existing sources and under existing abstraction licence permissions. The planners should seek advice from the water company to find out whether this is the case, or whether a new source needs to be developed or a new abstraction licence is sought. The Agency may not be able to recommend a new or increased abstraction licence where water resources are fully committed to existing abstraction and the environment.

Cont/d..
THE LOCATION OF DEVELOPMENT SHOULD TAKE INTO CONSIDERATION THE RELATIVE AVAILABILITY OF EXISTING DEVELOPED WATER RESOURCES. The timing and cost of infrastructure improvements will be a consideration. This issue should be discussed with the water company.

EVERY OPPORTUNITY SHOULD BE TAKEN TO BUILD WATER EFFICIENCY INTO NEW DEVELOPMENTS, AND INNOVATIVE APPROACHES SHOULD BE ENCOURAGED.

The Environment Agency supports all initiatives aimed at reducing water use. The extent of water efficiency measures adopted will affect the demand for water for the development and I would expect that this will be taken into consideration. It is assumed that new houses will be constructed with water meters fitted. Other water saving measures that we wish to see incorporated include low flush toilets, low flow showerheads, water butts for gardens etc. The Environment Agency also supports the idea of Greywater recycling as it has the potential to reduce water consumption in the average household by up to 35%. This must, however, be achieved in a safe and hygienic manner.

It is the responsibility of the applicant to ensure that no local water features (including streams, ponds, lakes, ditches or drains) are detrimentally affected, this includes both licensed and unlicensed abstractions.

If the proposal requires an abstraction licence, it is recommended that the applicant contact the local Environment Agency Office. Depending on water resources availability a licence may not be able to be granted.

Water Quality.

The Environmental Impact Assessment Scoping Report Chapter 18 identifies that there is limited available capacity in relation to water supply and (foul) sewerage (18.6). Subsequent discussion elaborates further with regard to water supply, but there is very little information regarding foul water drainage.

The report's conclusion that both of these factors are significant is correct, but I would expect the EIA to include evidence to show that Anglian Water have been consulted via a pre-application enquiry and that suitable upgrades/mitigation is available and has been planned to avoid the development creating a deterioration in environmental water quality.

Drainage is fundamental to any development and especially so on the scale of this proposal. Our respective authorities will need to be confident that any proposal brought forward as a formal planning proposal is robust and deliverable within the proposed development timeframe.

Yours faithfully

Mr. T.G. Waddams
Planning Liaison

Direct e-mail planning_liaison.anglian_central@environment-agency.gov.uk

End 5
ENVIRONMENTAL HEALTH DEPARTMENT

MEMORANDUM

TO: Planning & New Communities – Karen Pell-Coggins S/0625/17/E2

FROM: Environmental Health – Contaminated Land Officer

13/03/2017

AGRITECH, CAMBRIDGE ROAD, HINXTON, SAFFRON WALDEN, CAMBRIDGESHIRE, CB10 1RG-

SCOPING OPINION

I wish to confirm that I have received a copy of the above application for a scoping opinion.

I am satisfied with their proposals to include a section on Ground Conditions as the land in question is likely to include some constraints in relation to contamination. Section 11 of the scoping report (Ground Conditions) makes note of a completed Phase 1 Desk study and a Phase 2 Site investigation which is currently in progress. These reports should be submitted with any application so that the information within can be properly assessed.

CLAIRE SPROWATS
SCIENTIFIC OFFICER (CONTAMINATED LAND)
Consultancy Unit
Consultation Response Form

THIS CONSULTATION IS NOW COMPLETE

<table>
<thead>
<tr>
<th>Reference Number:</th>
<th>S/0825/17/E2</th>
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<tr>
<td>Proposal:</td>
<td>EIA Scoping Opinion</td>
</tr>
<tr>
<td>Site Address:</td>
<td>Agritech, Cambridge Road, Hinxton, CB10 1RG</td>
</tr>
<tr>
<td>Case Officer:</td>
<td>Karen Pell-Coggins</td>
</tr>
<tr>
<td>Comments due:</td>
<td>14/3/2017</td>
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</tbody>
</table>

- Urban Design
- Landscape
- Historic Buildings
- Ecology

Urban Design

Landscape

Historic Buildings

Ecology

Overall, the proposed scope of the ecological receptors which are being considered and the surveys to inform the Environmental Statement is acceptable. The cumulative impacts of nearby extant consents and proposals will need to be considered; for example, where impacts on important flightlines for bat species and disturbance or displacement of nesting birds of conservation concern may occur.

Points to note are:

- It is stated that baseline surveys were undertaken in 2014. Surveys will need to be up-to-date, ideally to within two years of the submission to inform an application and the ES for the site. This is of most importance for species such as badger as disused setts are likely to vary in activity over time.

- The River Cam has not been identified in the ES scoping report as a County Wildlife Site (CWS). Retention and protection of all designated wildlife sites will need to be demonstrated to meet LDF Policies NE/6 and NE/7. This needs to include protection from indirect impacts such as noise, vibration and pollution. The recommendation for a CEMP is welcomed. However, sufficient information will need to be provided before determination to demonstrate how impacts on CWSs will be avoided. Therefore, it may be prudent to provide a CEMP or equivalent with the application. I would object to any application which did not demonstrate sufficient protection for CWSs.

- The red line area includes land immediately adjacent to and crossing the River Cam. An otter and water vole survey would be needed to inform the application if riparian habitat will be impacted by the proposals.

- Potential impacts on the Sawston Hall Meadows Site of Special Scientific Interest (SSSI) will need to be considered and a detailed assessment set out in the ES. The proposals meet Natural England’s criteria for consultation based on their Impact Risk Assessment Zones. This states for...
the area of the site east of Whittlesford, that potential impacts in relation to water supply need to be considered for large infrastructure such as warehousing/industry where total additional gross internal floorspace following development in 1000m² or more. The applicant may wish to engage in discussions with Natural England before any application is submitted.

- Details of retention of (in the first instance) and/or compensation for (as a final resort) the loss of important habitats such as native hedgerows will be required to meet Local Development Framework Policy NE/6. Sufficient information will need to be provided to demonstrate that there will be no net loss of biodiversity and that compensation, where proposed is achievable.

- Avoidance, mitigation and compensation measures will need to state what will or must rather than what should happen. Sufficient compensation for significant impacts, e.g. to farmland bird populations, will need to be considered.

Aside from the ES and impact assessment, a scheme of biodiversity enhancement consistent with SCDC’s Biodiversity SPD will need to be provided.

Sarah Dale
14/3/2017
PROPOSAL: Scoping opinion

Agritech, Cambridge Road, Hinxton, Saffron Walden, Cambridgeshire, CB10 1RG

Dear Madam,

Thank you for your consultation.

We have reviewed the Environment Impact Assessment – Scoping Report dated February 2017 and can confirm it addresses our requirements in respect of surface water drainage.

Yours faithfully,

Sass Pledger

Head of Service
Growth and Economy

If you have any queries regarding this application please contact the relevant Case Officer (contact details are above).
Dear Karen Pell-Coggins

Thank you for consulting Anglian Water on Scoping Opinion S/0625/17/E2, please find our comments below.

Anglian Water is the sewerage undertaker for the area only, Cambridge Water supply the water for the area and the developer should be in discussion with them.

Anglian Water supports 18.1 - examination of the proposed drainage system and increase in demand for wastewater drainage.

Anglian Water would encourage early engagement with the developer in order to address foul water infrastructure issues. We provide a pre-planning service for used water to identify feasible drainage solutions. Further details of the service provided by Anglian Water is available to view at the following address: http://www.anglianwater.co.uk/developers/pre-planning-service-.aspx

If you wish to discuss any aspect of this response please do not hesitate to contact me.

Kind regards
Hannah Wilson
Planning Liaison Manager
Dear Ms Pegg-Coggins

Thank you for your letter of 26th February 2017 inviting Historic England to comment on the screening request submitted in respect of the above site.

It is up the Local Planning Authority to determine whether or not an Environmental Impact Assessment is required for a particular development. However, from the information given, Historic England is concerned that there may be a negative impact on the historic environment. In particular the Hinxton Conservation Area and several the grade II* listed buildings in Hinxton including; Hinxton Hall, The Old Manor House, The Church of St Mary and St John, The Oak House. In addition to this there is potential to have a negative impact on the grade I listed Church of St Peter, Duxford. There are a number of designated assets within 1.5km of the site, these include; 6 Conservation Areas, 5 Scheduled Monuments, 12 grade I and II* listed buildings, a grade II* Registered Park and Garden and 100 grade II listed buildings. Historic England therefore considers that the local authority requests the applicant to carry out a full EIA in relation to the historic environment.

We would expect that the EIA examines the potential impacts upon all heritage assets likely to be affected, including designated heritage assets1 and their settings together with potential impacts on non-designated features of historic, architectural, archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This covers buildings, historic open spaces, historic features and the wider historic landscape including below-ground archaeology.

Historic England advises that the local authority’s conservation and archaeology advisers are closely involved throughout the preparation of the Environmental Statement. They are best placed to advise on: local historic environment issues and priorities (including access to data held in the Historic Environment Record); how the proposal can be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management.
of heritage assets.

Irrespective of whether an EIA is to be prepared, Historic England would expect any application for this site to include an assessment of the impact of the proposal on the Historic Environment, as required under paragraph 128 of the NPPF. In the event that an EIA is to be prepared, we would expect that impact to be assessed within a Cultural Heritage chapter of the Environmental Statement.

Given the number of important designated heritage assets within the area, we would welcome early discussions with you in order to agree the key sites and setting issues which will need to be addressed within the EIA. We would expect a scoping report to be prepared to facilitate these discussions.

If you have any queries about the above or would like to discuss anything further, please do not hesitate to contact me.

Yours sincerely,

Janine Dykes
Inspector of Historic Buildings and Areas
janine.dykes@HistoricEngland.org.uk

cc:
Dear Ms Pell-Coggins,

Environmental Impact Assessment Scoping consultation (Regulation 15 (3) (i) of the EIA Regulations 2011 as amended): EIA scoping opinion Commercial floorspace, parking, access, elec substation etc.
Location: Agritech, Cambridge Road, Hinxtion, Saffron Walden

Thank you for your consultation dated and received by Natural England on 28 February 2017.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

The scoping request is for a proposal that does not appear, from the information provided, to affect any nationally designated geological or ecological sites (Ramsar, SPA, SAC, SSSI, NNR) or landscapes (National Parks, AONB’s, Heritage Coasts, National Trails), or have significant impacts on the protection of soils (particularly of sites over 20ha of best or most versatile land), nor is the development for a mineral or waste site of over 5ha.

At present therefore it is not a priority for Natural England to advise on the detail of this EIA. We would, however, like to draw your attention to some key points of advice, presented in annex to this letter, and we would expect the final Environmental Statement (ES) to include all necessary Information as outlined in Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011. If you believe that the development does affect one of the features listed in paragraph 3 above, please contact Natural England at consultations@naturalengland.org.uk, and we may be able to provide further information.

Yours sincerely,
Dawn Kinrade
Consultations Team
Annex A – Advice related to EIA Scoping Requirements

1. General Principles
Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended), sets out the necessary information to assess impacts on the natural environment to be included in an ES, specifically:

- A description of the development – including physical characteristics and the full land use requirements of the site during construction and operational phases.
- Expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed development.
- An assessment of alternatives and clear reasoning as to why the preferred option has been chosen.
- A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of the likely significant effects of the development on the environment – this should cover direct effects but also any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects. Effects should relate to the existence of the development, the use of natural resources and the emissions from pollutants. This should also include a description of the forecasting methods to predict the likely effects on the environment.
- A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.
- A non-technical summary of the information.
- An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

It will be important for any assessment to consider the potential cumulative effects of this proposal, including all supporting infrastructure, with other similar proposals and a thorough assessment of the 'in combination' effects of the proposed development with any existing developments and current applications. A full consideration of the implications of the whole scheme should be included in the ES. All supporting infrastructure should be included within the assessment.

2. Biodiversity and Geology
2.1. Ecological Aspects of an Environmental Statement
Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters. Guidelines for Ecological Impact Assessment (EcIA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EcIA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EcIA may be carried out as part of the EIA process or to support other forms of environmental assessment or appraisal.

The National Planning Policy Framework (NPPF) sets out guidance in S.118 on how to take account of biodiversity interests in planning decisions and the framework that local authorities should provide to assist developers.

2.2. Internationally and Nationally Designated Sites
Natural England undertakes an initial assessment of all development consultations, by determining whether the location to which they relate falls within geographical 'buffer' areas within which development is likely to affect designated sites. The proposal is located outside these buffer areas and therefore appears unlikely to affect an Internationally or Nationally designated site. However, it should be recognised that the specific nature of a proposal may have the potential to lead to significant impacts arising at a greater distance than is encompassed by Natural England’s buffers for designated...
sites. The ES should therefore thoroughly assess the potential for the proposal to affect designated sites, including Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites and Sites of Special Scientific Interest (SSSI). Should the proposal result in an emission to air or discharge to the ground or surface water catchment of a designated site then the potential effects and impact of this would need to be considered in the Environmental Statement.

Local Planning Authorities, as competent authorities under the provisions of the Conservation of Habitats and Species Regulations 2010 (the ‘Habitats Regulations’), should have regard to the Habitats Regulations Assessment process set out in Regulation 61 of the Habitats Regulations in their determination of a planning application. Should a Likely Significant Effect on a European/Internationally designated site be identified or be uncertain, the competent authority (in this case the Local Planning Authority) may need to prepare an Appropriate Assessment, in addition to consideration of impacts through the EIA process.

Statutory site locations can be found at www.magic.gov.uk. Further information concerning particular statutory sites can be found on the Natural England website.

2.3. Protected Species
The ES should assess the impact of all phases of the proposal on protected species. Records of protected species should be sought from appropriate local biological record centres, nature conservation organisations, groups and individuals; and consideration should be given to the wider context of the site for example in terms of habitat linkages and protected species populations in the wider area, to assist in the impact assessment.

The conservation of species protected by law is explained in Part IV and Annex A of Government Circular 06/2005 Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System. The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the ES.

Natural England has adopted standing advice for protected species. It provides a consistent level of basic advice which can be applied to any planning application that could affect protected species. It also includes links to guidance on survey and mitigation.

Natural England does not hold comprehensive information regarding the locations of species protected by law, but advises on the procedures and legislation relevant to such species.

2.4. Regionally and Locally Important Sites
The ES should thoroughly assess the impact of the proposals on non-statutory sites, for example Local Wildlife Sites (LoWS), Local Nature Reserves (LNR) and Regionally Important Geological and Geomorphological Sites (RIGS). Natural England does not hold comprehensive information on these sites. We therefore advise that the appropriate local biological record centres, nature conservation organisations, Local Planning Authority and local RIGS group should be contacted with respect to this matter.

2.5. Biodiversity Action Plan Habitats and Species
The ES should thoroughly assess the impact of the proposals on habitats and/or species listed in the UK Biodiversity Action Plan (BAP). These Priority Habitats and Species are listed as ‘Habitats and Species of Principal Importance’ within the England Biodiversity List, recently published under the requirements of S14 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities, including local planning authorities, to conserve and enhance biodiversity. Further information on this duty is available in the Defra publication ‘Guidance for Local Authorities on Implementing the Biodiversity Duty’.

Government Circular 06/2005 states that BAP species and habitats, ‘are capable of being a material consideration...in the making of planning decisions’. Natural England therefore advises that survey,
impact assessment and mitigation proposals for Habitats and Species of Principal Importance should be included in the ES. Consideration should also be given to those species and habitats included in the relevant Local BAP.

The record centre for the relevant Local Authorities should be able to provide the relevant information on the location and type of BAP habitat for the area under consideration.

3. Landscape, Access and Recreation
   3.1. Landscape and Visual Impacts

The consideration of landscape impacts should reflect the approach set out in the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and the Institute of Environmental Assessment and Management, 2013, 3rd edition), the Landscape Character Assessment Guidance for England and Scotland (Scottish Natural Heritage and The Countryside Agency, 2002) and good practice. The assessment should also include the cumulative effect of the development with other relevant existing or proposed developments in the area. In this context Natural England would expect the cumulative impact assessment to include those proposals currently at Scoping stage. Due to the overlapping timescale of their progress through the planning system, cumulative impact of the proposed development with those proposals currently at Scoping stage would be likely to be a material consideration at the time of determination of the planning application.

The assessment should refer to the relevant National Character Areas which can be found on our website. Links for Landscape Character Assessment at a local level are also available on the same page.

3.2. Access and Recreation

The ES should include a thorough assessment of the development’s effects upon public rights of way and access to the countryside and its enjoyment through recreation. With this in mind and in addition to consideration of public rights of way, the landscape and visual effects on Open Access land, whether direct or indirect, should be included in the ES.

Natural England would also expect to see consideration of opportunities for improved or new public access provision on the site, to include linking existing public rights of way and/or providing new circular routes and interpretation. We also recommend reference to relevant Right of Way Improvement Plans (ROWIP) to identify public rights of way within or adjacent to the proposed site that should be maintained or enhanced.

4. Land use and soils

Impacts from the development should be considered in light of the Government’s policy for the protection of the best and most versatile (BMV) agricultural land as set out in paragraph 112 of the NPPF. We also recommend that soils should be considered under a more general heading of sustainable use of land and the valuing of the ecosystem services they provide as a natural resource in line with paragraph 109 of the NPPF.

Soil is a finite resource that fulfils many important functions and services (ecosystem services) for society; for instance as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution. It is therefore important that the soil resources are protected and used sustainably. The Natural Environment White Paper (NEWP) ‘The Natural Choice: securing the value of nature’ (Defra, June 2011), emphasises the importance of natural resource protection, including the conservation and sustainable management of soils and the protection of BMV agricultural land.

Development of buildings and infrastructure prevents alternative uses for those soils that are permanently covered, and also often results in degradation of soils around the development as result of construction activities. This affects their functionality as wildlife habitat, and reduces their ability to support landscape works and green infrastructure. Sealing and compaction can also contribute to increased surface run-off, ponding of water and localised erosion, flooding and pollution.

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Please send consultations via email to: consultations@naturalengland.org.uk
Defra published a Construction Code of Practice for the sustainable use of soils on construction sites (2009). The purpose of the Code of Practice is to provide a practical guide to assist anyone involved in the construction industry to protect the soil resources with which they work.

As identified in the NPPF new sites or extensions to new sites for Peat extraction should not be granted permission by Local Planning Authorities or proposed in development plans.

General advice on the agricultural aspects of site working and reclamation can be found in the Defra Guidance for successful reclamation of mineral and waste sites.

5. Air Quality
Air quality in the UK has improved over recent decades but air pollution remains a significant issue; for example over 97% of sensitive habitat area in England is predicted to exceed the critical loads for ecosystem protection from atmospheric nitrogen deposition (England Biodiversity Strategy, Defra 2011). A priority action in the England Biodiversity Strategy is to reduce air pollution impacts on biodiversity. The planning system plays a key role in determining the location of developments which may give rise to pollution, either directly or from traffic generation, and hence planning decisions can have a significant impact on the quality of air, water and land. The assessment should take account of the risks of air pollution and how these can be managed or reduced. Further information on air pollution impacts and the sensitivity of different habitats/designated sites can be found on the Air Pollution Information System (www.apis.ac.uk). Further Information on air pollution modelling and assessment can be found on the Environment Agency website.

6. Climate Change Adaptation
The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development’s effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The NPPF requires that the planning system should contribute to the enhancement of the natural environment “by establishing coherent ecological networks that are more resilient to current and future pressures” (NPPF Para 109), which should be demonstrated through the ES.