

# A14

## Cambridge to Huntingdon improvement scheme

### Development Consent Order Application Response to the First Written Questions

HE/A14/EX/35

TR010018

**HE/A14/EX/35**  
**Development Consent Order Application Response to the First Written Questions**  
**Report 8: Environmental Impact Assessment**

June 2015

The Infrastructure Planning (Examination Procedure) Rules 2010



## **A14 Cambridge to Huntingdon improvement scheme**

Development Consent Order Application  
Response to the First Written Questions  
(Report 8: Environmental Impact Assessment)

## Contents

8	Category 8: Environmental Impact Assessment .....	3
	Question 1.8.1.....	3
	Response.....	3
	Question 1.8.2.....	12
	Response.....	12
	Question 1.8.3.....	13
	Response.....	13
	Question 1.8.4.....	15
	Response.....	15
	Question 1.8.5.....	19
	Response.....	19
	Question 1.8.6.....	20
	Response.....	20

## Tables and Figures

### Tables

Table 8.1: Other development considered in A14 Cambridge to Huntingdon improvement scheme cumulative effects assessment.....	6
--	---

## 8 Category 8: Environmental Impact Assessment

### Question 1.8.1

**Discussions have taken place with CCC, HDC and SCDC about the developments to be included in the cumulative impact assessment. Was agreement reached on what is a reasonably foreseeable development and what are the developments that have been taken into account in the cumulative assessment? If agreement has not been reached, what are those areas of disagreement?**

### Response

1. Highways England consulted Cambridgeshire County Council, Huntingdonshire District Council, South Cambridgeshire District Council, and Cambridge City Council (“the Local Authorities”) regarding developments to include in the traffic model as well as through the environmental impact assessment (EIA) scoping exercise.
2. Highways England agreed with the Local Authorities which developments to include in the traffic model to account for increases in background traffic from planned housing and employment growth. Representatives of each of the Local Authorities had previously been asked by WSP1 to designate which housing and employment sites should be considered for the background traffic included in the Cambridgeshire Sub Regional Model (CSRM). During April 2014, Highways England requested that this information was updated to take account of any changes in local policy designations and representatives of Cambridge City Council (CCC), South Cambridgeshire District Council (SCDC) and Huntingdonshire District Council (HDC) provided an updated list of housing and employment sites. The application traffic model was based upon this updated list of developments.

---

<sup>1</sup> WSP is responsible for running the Cambridgeshire Sub Regional Model (CSRM) on which the application traffic model is based

3. The list of proposed housing and employment developments provided by the Local Authorities is included in Table 8.1 below. The developments put forward for the model include both planning applications, as well as development allocations in adopted and emerging local development plans. The predicted traffic growth from these developments was included in the traffic model, which has underpinned the traffic-related environmental effects reported in the Environmental Statement (document reference 6.1) (ES), namely air quality, noise, driver stress and water quality. These topics are reported in Chapters 8, 14, 15 and 17 of the ES respectively. Since the effects for these topics are cumulative by their nature, they were not reported again in Chapter 18: Cumulative effects and impact interactions, in order to avoid duplication. Chapter 18 instead focused on non-traffic related cumulative effects.
4. The Local Authorities were consulted on the approach to the cumulative effects assessment through the EIA scoping process. Highways England's proposed approach in regard to the identification of developments for cumulative assessment is set out in paragraphs 16.2.4 to 16.2.5 of the 'A14 Cambridge to Huntingdon Improvement Environmental Impact Assessment Scoping Report, 11 March 2014' ("the Scoping Report").
5. The Scoping Report proposed that developments would be included in the cumulative effects assessment if the development were considered reasonably foreseeable. The Scoping Report defined reasonably foreseeable developments as those where a planning application had been submitted and that permission had been granted or was pending a decision. The Scoping Report did not propose to include sites allocated in local planning policy.
6. However, SCDC provided a detailed response in its scoping comments dated 6 June 2014, in which it noted the Planning Inspectorate's advice note on cumulative impacts as set out in Advice Note 9: Rochdale Envelope and advised that "It is important to take account of Local Plan allocations".
7. Highways England took note of SCDC's comments and agreed to consider major site allocations in adopted and emerging development plan documents. This is noted in paragraph 18.3.5 of the Environmental Statement (document reference 6.1), which sets out the revised criteria for reasonably foreseeable development to be included in the assessment.

8. On 12 June 2014, Highways England requested details of planning applications that met the criteria (as set out in paragraph 18.3.5 of the ES) for inclusion in the cumulative effects assessment from Cambridgeshire County Council, Huntingdonshire District Council (HDC), Cambridge City Council (CCC) and SCDC. Details of planning applications to include for the cumulative effects assessment were provided by CCC and SCDC on 13 June 2014 and by HDC on 23 July 2014. Highways England reviewed adopted and emerging local development plan documents and identified major development allocations. Table 18.1, in Chapter 18 Cumulative effects and impact interactions of the ES, sets out the sources of information from which Highways England obtained the list of reasonably foreseeable developments.
9. The developments identified through this process for the non-traffic related cumulative effects assessment as set out in Chapter 18 of the ES are provided in Table 8.1 at the end of this question response.
10. Once the list of reasonably foreseeable developments had been developed for the consideration of non-traffic related cumulative effects, it was reviewed by Highways England against the list of developments put forward in the traffic model to check for consistency. There are fewer developments considered for non-traffic related cumulative effects on account of the smaller study area (approximately 5km from the A14 scheme boundary) and the scale of developments considered (major applications). On the other hand, the projects considered for the non-traffic related cumulative effects assessment considered other types of development such as wind farms, which would not generate significant traffic, but which have other potential impacts that were investigated through the EIA.
11. The following consistencies were apparent between the sets of developments identified for traffic and non-traffic related cumulative effects:
  - The major employment and housing allocations considered for the non-traffic related cumulative effects assessment were also within the list of developments that were included in the traffic model.
  - All of the planning applications for housing or employment projects put forward by the LPAs for the non-traffic related cumulative effects assessment were also within the long list of developments that were included in the traffic model.
12. In summary, the developments that were included in the cumulative effects assessment were agreed with HDC, SCDC and CCC, including sites allocated within development plan documents and planning applications as described.

Table 8.1: Other development considered in A14 Cambridge to Huntingdon improvement scheme cumulative effects assessment

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
<b>Cambridge City Council</b>			
100 - 108 Shelford Road	x		
115 - 119 Perne Road	x		
141 Ditton Walk, Cambridge	x		
149 Cherry Hinton Road	x		
16 Mill Lane	x		
169 - 173 High Street Chesterton	x		
18-19 Regent Terrace	x		
190 - 192 Histon Road	x		
295 Histon Road	x		
30 - 31 Occupation Road	x		
315 - 349 Mill Road & Brookfields	x		
379 - 381 Milton Road	x		
636 - 656 Newmarket Road	x		
64 - 66 Peverel Road	x		
71 - 73 New Street	x		
82 - 90 Hills Road and 57 - 63 Bateman Street	x		
89a Cherry Hinton Road	x		
9-15 Harvest Way	x		
Addenbrooke's		x	
ARM / Capita Park (City)		x	
Bell School	x		
Betjemen House, Hills Road	x		
British Telecom, Cromwell Road	x		
British Telecom, Long Road	x		
Brunswick Site	x		
Cambridge City Football Ground, Milton Road	x		
Cambridge Professional Development Centre, Padget Road	x		
Cambridge University	x		x
Camfields Resource Centre and Oil Depot	x		
Clay Farm & Showground	x		
Clifton Road Industrial Estate	x		
CUP Site, Clarendon Road	x		
Glebe Farm	x		
Glebe Farm2	x		
Henry Giles House, Chesterton Road	x		
Homerton College, Hills Road (07/1093)	x		

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
Horzon Resource Centre	x		
Junction of Cherry Hinton Road and Hills Road	x		
Land north of Coldhams Lane	x		
Land north of Newmarket Road	x		x
Land north of Teversham Drift	x		
Land north of Worts Causeway	x		
Land south of Worts Causeway	x		
Michael Young Centre, Purbeck Road	x		
Mill Road Depot	x		
Milton Infant and Junior School, Milton Road	x		
Mount Pleasant House	x		
Neath Farm business Park, Church End	x		
NIAB Frontage	x		x
NIAB Main	x		x
Northern Fringe (land between the A14, Milton Road, Nuffield Road and the railway line)		x	x
Police Station, Parkside (remainder of site)	x		
Ridgeons, Cavendish Road	x		
Ridgeons, Cromwell Road	x		
Romans Court	x		
Sandy lane	x		
Seymour Court, Seymour Street (11/0970)	x		
Station Area	x		x
The Paddocks Trading Estate, Cherry Hinton Road	x		
TM (Monsanto)	x		
Travis Perkins, Devonshire Road	x		
West Cambridge (land off Madingley Road between M11 and Clerk Maxwell Road) & North West Cambridge (fields between Madingley Road and Huntingdon Road)		x	x
Wider City Centre (city centre plus extension to the north up Castle Street and along A1134 plus extension to the south to include offices around Hills Road/Station Road)		x	
Willowcroft, Histon Road	x		
<b>South Cambridgeshire District Council</b>			
Babraham		x	

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
Back Road, Linton	x		
Bourn Airfield New Village	x	x	x
Brickhills, Willingham	x		
Buckingway Business Park, Swavesey		x	
Cambourne	x	x	
Cambourne West	x		
Cambridge East (including land north of Newmarket Road)	x		x
Cambridge Road, Fowlmere	x		
Cambridge Road, Fulbourn	x		
Cambridge Road, Linton	x		
Capital Park, Fulbourn		x	
Church Street, Great Eversden	x		
Dales Manor Business Park, Sawston	x		
Dixon Industrial Group Ltd, Brewery Road, Pampisford		x	
East of Rockmill End, Willingham	x		
Former Bayer Crop Science	x		
Former EDF Energy Depot & Training Centre, Ely Road, Milton	x		
Fulbourn & Ida Darwin Hospitals	x		
Granta Park		x	
Green End Industrial Estate, Gamlingay	x		
Green Street, Willingham	x		
Gretton Court, High Street, Girton	x		
High Street, Melbourn	x		
Hinxton		x	
Ickleton Road, Duxford		x	
Iconix, London road, Pampisford		x	
Junction of Long Drove & Beech Road, Cottenham	x		
Junction of Nelson Crescent & High Street, Longstanton	x		
Land at Bancroft Farm, Church Lane, Little Abington	x		
Land at Bennell Farm, West Street, Comberton	x		
Land at junction of High Street & Pampisford Road, Great Abington	x		
Land at Linton Road, Great Abington	x		
Land at Manor Farm, High Street / Papworth Road, Graveley	x		
Land at Moores Farm, Foxton	x		

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
Land at Toseland Road, Graveley	x		
Land between Huntingdon Road, Histon Road & A14 (NIAB 2)	x		x
Land north of Babraham Road, Sawston	x		
Land north of Impington Lane, Impington	x		
Land west of Longstanton (Home Farm)	x		
Land west of New Road, Melbourn	x		
Landbeach		x	
London Road, Great Shelford & Granta Terrace, Stapleford	x		
MacFarlane Grieve House, Papworth	x		
Mays Avenue, Balsham	x		
Meldreth Road, Shepreth	x		
Mill Farm, Swavesey		x	
NIAB 3	x		x
Norman Way Industrial Estate, Over		x	
North of Over Road, Longstanton (phase 3b)	x		
Northern Fringe (land between the A14, Milton Road, Nuffield Road and the railway line)		x	x
Northstowe - phase 1	x	x	x
North-West Cambridge Area Action Plan area (including University Site)	x		x
Old School Site, Former John Falkner Infants School, The Baulks, Sawston	x		
Orchard Park	x		x
Papworth West-Central	x		
r/o Blacksmith's Close, High Street, Babraham	x		
Robson Court, Waterbeach	x		
Sandy Park, Chesterton Fen Road, Milton	x		
SCA Packaging, Histon	x		
Spicers Ltd Sawston		x	
Station Road, Gamlingay	x		
The Blue Lion, Fen Ditton	x		
The Moor, Melbourn	x		
The Railway Tavern, Great Shelford	x		
Trafalgar Way, Bar Hill		x	
Trumpington Meadows (Cambridge Southern Fringe)	x		
Waterbeach New Town	x	x	x

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
West Cambridge (land off Madingley Road between M11 and Clerk Maxwell Road) & North West Cambridge (fields between Madingley Road and Huntingdon Road)		x	x
West of Ermine Street South, Papworth Everard	x		
West Road, Gamlingay	x		
West View Park, Chesterton Fen Road, Milton	x		
Whitecroft Road, Meldreth	x		
Windmill Estate, Fulbourn (phase 2b)	x		
Woodside, Longstanton	x		
<b>Huntingdonshire District Council</b>			
Alconbury Weald	x	x	x
Askew's Lane	x		
Bearscroft Farm	x	x	x
California Road	x		
Cambridge Road, west of bridge over A14, Fenstanton	x	x	
Chequers Court	x	x	
Common Barn Wind Farm, Southoe			x
Constabulary Land	x	x	
Cromwell Road Car Park	x		
Cromwell Road North	x		
East of Glebe Farm	x		
East of Silver Street	x		
Eastern Expansion, St Neots	x	x	
Eaton Court	x		
Field Road, Ramsey	x		
Forensic Science Laboratory	x	x	
Former Car Showroom, London Rd		x	
Former Dairy Crest Factory, Fenstanton	x	x	
Former Youth Centre, Priory Rd	x		
Gas Depot, Mill Common	x		
George St/Ermine St (within Huntingdon West Area Action Plan)	x	x	
Giffords Farm, St Ives		x	
Hinchingbrooke Country Park (within Huntingdon West Area Action Plan)	x	x	
Hinchingbrooke Hospital, Huntingdon (within Huntingdon West Area Action Plan)	x	x	
Huntingdon St	x	x	

	Planning applications and land allocations put forward for background traffic growth		Reasonably foreseeable development identified for non-traffic related Cumulative Effects Assessment (5km study area)
	Housing sites	Employment sites	
Ivy Nursery	x		
Land adjacent Bicton Industrial Estate, Kimbolton		x	
Land inc Snowcap Mushrooms	x		
Loves Farm Reserved Site	x	x	
Main Street, Hartford	x		
Manor Farm Barns, Warboys	x		
Newlands	x	x	
North of Clyde Farm	x		
North of the Bank	x		
Park View Garage		x	
RAF Brampton	x	x	x
RAF Upwood & Upwood Hill House	x	x	
Ramsey Gateway	x		
Ramsey Gateway (High Lode)	x		
Rear of 64 High Street, Warboys	x		
RGE Engineering, Godmanchester	x		
Somersham Town Football Ground and Pond Closes, Somersham	x		
South of Farriers Way	x		
South of Fern Court	x		
St Ives Football Club	x		
St Ives West	x	x	
St Mary's Urban Village	x	x	
The Pasture, Somersham	x		
Tyrell's Marina	x		
West of Railway	x	x	
West of Ramsey Road, Warboys	x		
West of St Andrews Way	x		
West of Station Rd	x		
West of Station Road, Warboys	x		
Whytefield Rd	x		
Wigmore Farm Buildings	x		
Woolley Hill Wind Farm, Ellington			x
Yax Pak		x	
<b>Other (from other plans and programmes)</b>			
Network Rail Level Crossing Closure Programme			x
Highways Agency A14 Junction 31 to 32 Eastbound Improvements			x

## Question 1.8.2

**How have the implications of the limits of deviation been taken into account in assessing the impact on heritage assets?**

### Response

13. As stated in section 9.2.10, chapter 9, of the *Environmental Statement (ES)* (document reference 6.1) and in accordance with the *Design Manual for Roads and Bridges (DMRB)*<sup>2</sup>, the study areas, for the assessment of impacts on cultural heritage, were defined as a 200m buffer zone around the horizontal boundaries of the limits of deviation of the mainline section of the scheme (mainline study area), and a 200m buffer zone around the horizontal boundaries of the limits of deviation of the improvements in Huntingdon (Huntingdon study area); as shown on figure 9.01 of the *Environmental Statement Figures* (document reference 6.2).
14. The assessment of effects on heritage assets was based upon the maximum horizontal limits of deviation, and as a result the implications of the realistic worst case in this respect have been assessed in the Environmental Statement.
15. The vertical limit of deviation included in the draft DCO is (i) up to a maximum of 0.5m in either direction; or (ii) up to maximum of 0.5m downwards but to any amount upwards up to ground level in respect of the excavation of the borrow pits or flood compensation areas, from the levels shown on the engineering drawings and sections (document reference 2.9) and the horizontal deviation is within the relevant limits as shown on the works plans (document reference 2.4).
16. The vertical limit of deviation was assessed as the maximum extent of the vertical limits of deviation. For the majority of heritage assets the vertical limit of deviation does not materially affect the impact assessment because the change in height is limited and the impact of the new, or upgraded, infrastructure would be largely the same.

---

<sup>2</sup> Vol. 11, Sec. 3, Prt 2, HA208/07.

### Question 1.8.3

**The ES indicates that the urbanisation of the landscape character through the interaction of noise, lighting and visual intrusion from new infrastructure would be a major cumulative effect. Para 18.72 indicates that mitigation to reduce the cumulative effect on landscape character could not be identified and the mitigation for each effect would not fully mitigate the overall impacts. Has the mitigation of cumulative impacts been discussed with local authorities and Parish councils and if so what was the outcome. If this has not been discussed, why not?**

### Response

17. The question refers to paragraph 18.7.2, as follows:

18. *'Mitigation to reduce the cumulative effect on landscape character from noise, lighting and visual intrusion could not be identified. Each development includes mitigation proposals to reduce these effects, as agreed through planning. The mitigation proposed for each development's impacts upon these features would reduce the individual project effects but would be unable to fully mitigate for the additive nature of the number of developments within the study area, which would inevitably have an urbanising effect upon landscape character, regardless of mitigation.'*

19. There have been extensive discussions with local authorities and parish councils in relation to mitigation of the potential environmental effects of the scheme. Whilst there have been discussions on discrete issues relating to cumulative impacts with Huntingdonshire District Council, there have not been discussions specifically in relation to the mitigation of the cumulative effect on landscape character with other stakeholders. Highways England has facilitated many discussions and opportunities for such discussions with local authorities and Parish councils.

20. The landscape assessment reported in Chapter 10 of the *Environmental Statement* (ES), (document reference 6.1) takes into account the in-combination effects of noise, visual intrusion, and lighting, caused by the scheme, on landscape character. Chapter 10 of the ES sets out proposed mitigation for integrating the scheme within the landscape. An iterative design process was undertaken, which has reduced landscape and visual effects by virtue of the overall configuration of the horizontal and vertical alignment. In addition, mitigation is proposed in the form of planting and ground shaping to reduce remaining impacts.

21. The landscape impacts assessment, as reported in Chapter 10 of the ES, has regard to potential cumulative effects, derived from the interaction of scheme impacts ('in-combination effects'), together with potential effects of other reasonably foreseeable developments on landscape character. It notes that scale of development pressure in Cambridgeshire is leading to incremental change of the landscape character. Paragraph 18.7.2 (see text extract above) refers to the mitigation being applied through the planning process at the level of each development. However, the ES concludes that the scheme, taking account of the proposed mitigation, would contribute to this existing trend of incremental change and there would be a residual significant adverse effect on landscape character. Para 18.5.10 of Chapter 18 of the ES states:
22. *'Overall it is predicted that there would be a major significant cumulative effect on landscape as a result of the scheme in combination with other major development within the Cambridge to Huntingdon study area.'*
23. The relationship of the scheme with other developments has been discussed with Cambridgeshire County Council, Cambridge City Council, South Cambridgeshire District Council and Huntingdonshire District Council. Meetings were held in October and December 2014, and in January and February 2015.
24. The draft Environmental Statement (ES) was shared with the Local Authorities and other key stakeholders prior to submission of the Development Consent Order application. Highways England gave a presentation on 20 October 2014 on the draft ES to stakeholders, Cambridge County Council, Huntingdonshire District Council, South Cambridgeshire District Council, Cambridge City Council, Environment Agency, English Heritage and Natural England. Following this presentation, a copy of the draft ES was provided to stakeholders (as listed above) for review on 22 October 2014.

## Question 1.8.4

**The EA is concerned to ensure that new pathways of contamination or new contaminants linkages to controlled waters should not be introduced as a result of the proposed scheme. Please explain how risks will be assessed and provide an explanation as to why sites have not been taken forward for detailed assessment following initial assessments.**

## Response

25. This question reflects similar questions that have been raised in the relevant representations from the Environment Agency, and these matters are under discussion with the Environment Agency, as detailed within the Statement of Common Ground currently in preparation.

26. This answer includes a description of the general approach as to how risks from existing contamination have been assessed. The answer also includes a description of the measures which have been included in the *Code of Construction Practice (Appendix 20.2, Environmental Statement Appendices, document reference 6.3)* and *Register of Environmental Actions and Commitments (Appendix 20.1, Environmental Statement Appendices)* to mitigate the risk of new contaminant linkages being created as a result of construction or operation of the scheme,

### **How risks have been and are being assessed**

#### **General approach**

27. *Contaminated Land Report 11 (CLR11) Model Procedures for the Management of Land Contamination* (Environment Agency, 2004) has been adopted as the overarching guidance for assessing the risks posed by contamination. This approach included undertaking a preliminary risk assessment to identify potential contamination sources, receptors and pathways. As outlined within chapter 12 (Geology and Soils) of the *Environmental Statement (document reference 6.1)* this included a mixture of desk top study including a review of historical ordnance survey mapping, current land use mapping, published geological / hydrogeological mapping and environmental records such as pollution incidents. In addition Highways England undertook site walkovers of areas of concern and a review of findings from previous intrusive ground investigations (2008-2009), which had been undertaken for previous iterations of the scheme.

#### **Approach to site walkovers**

28. A site walkover was undertaken as part of this assessment. It was not practicable to walk over the entire study area comprising of the physical works boundary and limits of deviation due to accessibility restrictions, health and safety considerations and the scale of the area involved. An assessment was made of areas of potential concern with potential to be significant contamination sources, taking into account current and historic use, environmental setting, proximity to the scheme and the nature of the scheme in that area. A walkover was undertaken of these areas. For example, the Huntingdon Life Sciences complex was visited, and the nature of facilities in the vicinity of the road were viewed; no areas of concern were identified and this is recorded in Appendix 12.1, Table 12.4 of the *Environmental Statement Appendices*.

### **Preliminary Risk Assessment**

29. The assessment undertaken identified that the majority of the scheme is primarily located within greenfield land or land that was identified as having only limited contaminative potential. The determination of contaminative potential was undertaken by assessing what levels of contamination would be expected (e.g. by qualitatively identifying likely contaminative source potential) and how any existing contamination, if present, might interact with the proposed scheme. Data from previous intrusive ground investigations including chemical testing of soil and groundwater was used to inform and validate the assessment, where available. Using the source-pathway-receptor model risks are only present where potential pollutant linkages exist.

30. By adopting this approach, the majority of the scheme was determined as unlikely to be significantly impacted by contamination; this is reflective of the limited potentially contaminative land uses that were identified within the study area, and the fact that for the majority of the scheme viable receptor-pathway linkages are not considered likely.

31. Much of the scheme is underlain by geological strata, which have been assessed by the Environment Agency as non-productive strata in terms of their aquifer status. Accordingly they are considered as neither sensitive to receiving contamination nor likely to act as pathways for contamination to migrate to more sensitive strata. Some areas of the scheme are underlain by aquifers of greater sensitivity including, the River Terrace Deposits and alluvium (both Secondary A aquifers) and Woburn Sands Formation (Principal Aquifer). This has been taken into consideration when undertaking the risk assessment as these will be more sensitive to contamination and in the case of the River Terrace Deposits and alluvium, may act as pathways of contamination to surface water receptors or other sensitive groundwater bodies.

32. Table 4.1 within Appendix 12.1 (Geology and soils: land contamination - additional information) of the *Environmental Statement Appendices* details every potentially contaminative land use site identified from the preliminary risk assessment process and includes details of underlying geology, findings from previous intrusive investigation and testing (where available) and distance from the scheme. It also includes comments outlining why the majority of sites are not considered to represent a significant risk to the scheme.

#### **Additional Ground Investigation**

33. To supplement previous ground investigation data, further ground investigation has been completed in late 2014 to early 2015 (and gas and groundwater quality monitoring of the new installations is on-going). This has included locations targeted at areas of specific concern and also general non-targeted testing in an effort to reduce uncertainty within the conceptual site model developed for the site. The findings will inform the detailed design of the scheme and enable site-specific quantitative risk assessment to be undertaken. This will allow the determination of areas that require remediation and the production of 'suitable for use criteria' for the re-use of excavated materials during the earthworks. Where unacceptable risks are identified a remediation strategy will be produced. Regulatory consultation and review will form part of this detailed design process.

#### **Mitigation if suspected contamination is encountered during the works**

34. It is acknowledged that the scheme may encounter contamination (either known or unknown) during the works and without careful management the scheme could mobilise this contamination and create new pathways for it to migrate to receptors. Appendix 20.2 (*Code of Construction Practice*) of the *Environmental Statement Appendices* (document reference 6.3) requires the contractor to undertake risk assessments as appropriate for activities which may result in a risk to human health or controlled waters as a result of the presence of land contamination and provides guidance on how the construction works will be managed by the main contractor to mitigate the risks from existing contamination. It also outlines that the main contractor will be responsible for investigating any areas of new and encountered contamination during the works. This will include seeking regulatory approval for remediation works required and for undertaking monitoring (gas and groundwater/surface water quality) during the works to ensure that unacceptable risks are not occurring.

#### **Mitigation to prevent introduction of new contamination during the works**

35. The *Code of Construction Practice* also requires contractor risk assessment for activities which may introduce new contamination to the area - including adopting guidance such as Pollution Prevention Guidelines (PPG) and CIRIA (Construction Industry Research and Information Association) publications. During operation of the scheme, mitigation (to be confirmed during the detailed design stage) will include treatment ponds, interceptors and cut-off valves to isolate flows in the event of accidental spillage - as outlined within Appendix 20.1 (Register of Environmental Commitments) of the *Environmental Statement Appendices*.

**Requirements for management of land contamination in the draft DCO**

36. Further protection is provided by paragraph 5 of Schedule 2 to the draft DCO, , which requires that:

37. *"In the event that contaminated land, including groundwater, is found at any time when carrying out the authorised development which was not previously identified in the environmental statement, it must be reported as soon as reasonably practicable to the relevant planning authority or the Environment Agency (as appropriate) and the undertaker must complete a risk assessment of the contamination."*

## Question 1.8.5

**The EA has requested a role in assessing any remediation activity associated with land affected by contamination. Can the applicant comment?**

## Response

38. See also response to Question 1.6.26.
39. Paragraph 5 of Schedule 2 to the draft Development Consent Order requires that previously unidentified contamination of land or groundwater is reported to the relevant planning authority or Environment Agency as appropriate. A risk assessment would be undertaken and, where Highways England determines that remediation is necessary, any remediation would be undertaken in accordance with a scheme approved by the Secretary of State having consulted with the relevant planning authority or Environment Agency as appropriate.
40. The requirement has been drafted in this way to reflect the respective statutory functions of the Environment Agency and local authorities in relation to different types of contamination. The 'as appropriate' wording is included to highlight the fact that there is often overlap between local authorities' and the Environment Agency's functions.
41. Highways England considers that this wording is appropriate and does include an active role for the Environment Agency (or the local authority) should any contamination be identified. This role is in the process of being defined within the Statement of Common Ground. It will be notified of the contamination (where appropriate) and, in reality, be involved in any risk assessment. Usual practice is for dialogue between a developer and the Environment Agency to be on-going in such circumstances. Whilst it is for Highways England to 'determine' whether remediation is required and, as such it will be voluntary, they will be in receipt of the views of the Environment Agency and the local planning authority as to what action might be required. Further, the Environment Agency and the local planning authority have a consultation role in the approval of any remediation scheme of works.
42. Highways England is in on-going discussions with the Environment Agency on a number of issues and is happy to discuss any concerns or requested amendments to the DCO that are raised.

### Question 1.8.6

**According to Chapter 9 of the ES, construction of the scheme would result in a number of adverse impacts on known archaeological remains, historic buildings and historic landscapes. What agreement, if any has been reached between the applicant, English Heritage and Cambridgeshire County Council regarding mitigation during construction and how is it proposed to secure this through the draft DCO with particular reference to Requirements 3 and 7? If agreement has not been reached, what are the outstanding matters?**

### Response

43. Highways England consulted the following Heritage stakeholders whilst undertaking the assessment of impacts on heritage assets as recorded in paragraphs 9.2.8 and 9.2.9 of Chapter 9, Cultural Heritage, of the Environmental Statement (ES) (document reference 6.1):

- Historic England (formerly English Heritage);
- Cambridgeshire County Council Historic Environment Team (CCC);
- Huntingdon District Council's Conservation Officer (HDC); and
- South Cambridgeshire District Council's Conservation Officer (SCDC).

44. As part of the consultation, mitigation measures were discussed and agreed in principle; these are presented in section 9.6 of Chapter 9 of the ES. The heritage stakeholders have commented on aspects of the mitigation that they hold responsibility for. Historic England has commented on the proposed mitigation affecting designated heritage assets and CCC has commented on the proposed archaeological mitigation affecting non-designated heritage assets.
45. Paragraph 3 of Schedule 2 to the *draft Development Consent Order* (document reference 3.1), specifies the requirement that the “*development must be carried out in accordance with the provisions of the code of construction practice*”. The requirements of archaeological mitigation during the construction programme are presented in Section 7 Cultural Heritage of the *Code of Construction Practice* (Appendix 20.2 of the *Environmental Statement Appendices*, document reference 6.3).
46. Paragraph 7 of Schedule 2 to the *draft Development Consent Order* states that ‘*No authorised development must commence until a written scheme for the investigation of areas of archaeological interest, reflecting the mitigation measures included in the environmental statement, has been submitted to and approved in writing by the Secretary of State*’. It also states that the ‘*relevant planning authority must be consulted*’ on the content of the written scheme of investigation. To this end three written schemes of investigation (method statements) have been produced to cover the proposed elements of the mitigation. These are listed below:
- A14 Cambridge to Huntingdon improvement scheme - Method Statement for Historic Building Recording;
  - A14 Cambridge to Huntingdon improvement scheme - Method Statement for the Protection, Removal, Storage and Reinstatement of Historical Milestone and Mileposts; and
  - A14 Cambridge to Huntingdon Improvement - Written Scheme of Investigation: Archaeological Mitigation.

47. The documents were issued for comment to both Historic England and CCC on 21 April 2015. Comments were received on 01 May 2015 and the documents are being revised in light of these; this includes identifying research themes presented in *Research and Archaeology Revisited: a revised framework for the East of England* (M Meldycott (ed) 2011). Once complete they will be issued to the Secretary of State for written approval.
48. Paragraphs 7.2.6 to 7.2.9 of the *Code of Construction Practice* (Appendix 20.2 of the *ES Appendices*) note the need for a scheme-wide written scheme of investigation, referred to above, and site-specific written schemes of investigation for areas of archaeological investigation. The latter are to be completed during the detailed design phase, prior to construction. They are produced to provide specific information on each area of archaeological mitigation, such as specific research aims tied into the regional research framework. All will follow the methods presented in the main project written scheme of investigation approved by the Secretary of State.
49. Historic England has agreed to the proposed mitigation as presented in section 9.6 of Chapter 9 of the *Environmental Statement*. This agreement is presented in the Statement of Common Ground between Highways England and Historic England, which will be submitted to the ExA at Deadline 3, 26<sup>th</sup> June 2015. In summary, the proposed mitigation is:
- to investigate the extent of the Scheduled Monument on Mill Common on removal of the existing embankment;
  - to remove, conserve and reinstate a number of milestones, or measures to provide protection to three heritage assets during the construction phase of the project; and
  - there has been a recent request to provide protection to a Second World War Royal Observer Core Post (a proposal to list the structure has been issued to Historic England).

50. CCC has also agreed to the proposed mitigation of preservation by record, as presented in section 9.6 of Chapter 9 of the *Environmental Statement*. The agreement is presented in Section 7 Cultural Heritage of the Statement of Common Ground between Highways England and Cambridgeshire County Council, which will be submitted to the Examining Authority at Deadline 3. It is recognised that no heritage assets of national importance have been identified in the proposed scheme footprint and that preservation by record (archaeological excavation) is an acceptable form of mitigation.
51. Section 7 Cultural Heritage of the *Code of Construction Practice* (Appendix 20.2 of the ES Appendices) provides for contingency work should unexpected buried archaeological remains be discovered during the construction works. The written scheme of investigation includes information on the scope of an archaeological watching brief and any excavation associated with this.
52. The outstanding matter of agreement with CCC is the detailed mitigation strategy for archaeological mitigation. Highways England has agreed with CCC that the overarching Written Scheme of Investigation for archaeological investigation would include further detail including research aims tied into *Research and Archaeology Revisited: A revised framework for the East of England* (Medlicott, M (ed) 2011). It would also include a section on the requirement for outreach during the archaeological investigations; this is an outline statement to be developed. This will be issued to CCC by Friday 27 June 2015.
53. As per industry best practice, a detailed mitigation strategy will be produced during the detailed design in consultation with both CCC and Historic England.