

Great Yarmouth Third River Crossing

Application for Development Consent Order

Document 6.7: EIA Scoping Opinion

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (“APFP”)

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SCOPING OPINION:

Proposed Great Yarmouth Third River Crossing

Case Reference: TR010043

Adopted by the Planning Inspectorate (on behalf of the Secretary of State for Housing, Communities and Local Government) pursuant to Regulation 10 of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

May 2018

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1. INTRODUCTION

1.1 Background

- 1.1.1 On 05 April 2018, the Planning Inspectorate (the Inspectorate) on behalf of the Secretary of State (SoS) received a scoping request from Norfolk County Council (the Applicant) under Regulation 10 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) for the proposed Great Yarmouth Third River Crossing (the Proposed Development).
- 1.1.2 In accordance with Regulation 10 of the EIA Regulations, an Applicant may ask the SoS to state in writing its opinion *'as to the scope, and level of detail, of the information to be provided in the environmental statement'*.
- 1.1.3 This document is the Scoping Opinion (the Opinion) provided by the Inspectorate on behalf of the SoS in respect of the Proposed Development. It is made on the basis of the information provided in the Applicant's report entitled Great Yarmouth Third River Crossing: Environmental Impact Assessment Scoping Report (the Scoping Report). This Opinion can only reflect the proposals as currently described by the Applicant. The Scoping Opinion should be read in conjunction with the Applicant's Scoping Report.
- 1.1.4 The Applicant has notified the SoS under Regulation 8(1)(b) of the EIA Regulations that they propose to provide an Environmental Statement (ES) in respect of the Proposed Development. Therefore, in accordance with Regulation 6(2)(a) of the EIA Regulations, the Proposed Development is EIA development.
- 1.1.5 Regulation 10(9) of the EIA Regulations requires that before adopting a scoping opinion the Inspectorate must take into account:
- (a) *any information provided about the proposed development;*
 - (b) *the specific characteristics of the development;*
 - (c) *the likely significant effects of the development on the environment; and*
 - (d) *in the case of a subsequent application, the environmental statement submitted with the original application.*
- 1.1.6 This Opinion has taken into account the requirements of the EIA Regulations as well as current best practice towards preparation of an ES.
- 1.1.7 The Inspectorate has consulted on the Applicant's Scoping Report and the responses received from the consultation bodies have been taken into account in adopting this Opinion (see Appendix 2).
- 1.1.8 The points addressed by the Applicant in the Scoping Report have been carefully considered and use has been made of professional judgement

and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Inspectorate will take account of relevant legislation and guidelines. The Inspectorate will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with the application for a Development Consent Order (DCO).

- 1.1.9 This Opinion should not be construed as implying that the Inspectorate agrees with the information or comments provided by the Applicant in their request for an opinion from the Inspectorate. In particular, comments from the Inspectorate in this Opinion are without prejudice to any later decisions taken (eg on submission of the application) that any development identified by the Applicant is necessarily to be treated as part of a Nationally Significant Infrastructure Project (NSIP) or Associated Development or development that does not require development consent.
- 1.1.10 Regulation 10(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) *a plan sufficient to identify the land;*
 - (b) *a description of the proposed development, including its location and technical capacity;*
 - (c) *an explanation of the likely significant effects of the development on the environment; and*
 - (d) *such other information or representations as the person making the request may wish to provide or make.*
- 1.1.11 The Inspectorate considers that this has been provided in the Applicant's Scoping Report. The Inspectorate is satisfied that the Scoping Report encompasses the relevant aspects identified in the EIA Regulations.
- 1.1.12 In accordance with Regulation 14(3)(a), where a scoping opinion has been issued in accordance with Regulation 10 an ES accompanying an application for an order granting development consent should be based on '*the most recent scoping opinion adopted (so far as the proposed development remains materially the same as the proposed development which was subject to that opinion)*'.
- 1.1.13 The Inspectorate notes the potential need to carry out an assessment under The Conservation of Habitats and Species Regulations 2017 and/or The Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Habitats Regulations). This assessment must be co-ordinated with the EIA in accordance with Regulation 26 of the EIA Regulations. The Applicant's ES should therefore be co-ordinated with any assessment made under the Habitats Regulations.

1.2 The Planning Inspectorate's Consultation

- 1.2.1 In accordance with Regulation 10(6) of the EIA Regulations the Inspectorate has consulted the consultation bodies before adopting a

scoping opinion. A list of the consultation bodies formally consulted by the Inspectorate is provided at Appendix 1. The consultation bodies have been notified under Regulation 11(1)(a) of the duty imposed on them by Regulation 11(3) of the EIA Regulations to make information available to the Applicant relevant to the preparation of the ES. The Applicant should note that whilst the list can inform their consultation, it should not be relied upon for that purpose.

- 1.2.2 Due to an administrative error Essex and Suffolk Water was not identified as a consultation body for the purposes of Regulation 10(6). However, on 11 May 2018, Essex and Suffolk Water were notified of their duties under Regulation 11(3) to make available to the Applicant any information which is considered relevant to the preparation of the ES.
- 1.2.3 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided, along with copies of their comments, at Appendix 2, to which the Applicant should refer in preparing their ES.
- 1.2.4 The ES submitted by the Applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.2.5 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the Applicant and will be made available on the Inspectorate's website. The Applicant should also give due consideration to those comments in preparing their ES.

1.3 Article 50 of the Treaty on European Union

- 1.3.1 On 23 June 2016, the United Kingdom (UK) held a referendum and voted to leave the European Union (EU). On 29 March 2017 the Prime Minister triggered Article 50 of the Treaty on European Union, which commenced a two year period of negotiations regarding the UK's exit from the EU. There is no immediate change to legislation or policy affecting national infrastructure. Relevant EU Directives have been transposed into UK law and those are unchanged until amended by Parliament.

2. THE PROPOSED DEVELOPMENT

2.1 Introduction

2.1.1 The following is a summary of the information on the Proposed Development and its site and surroundings prepared by the Applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the Proposed Development and the potential receptors/ resources.

2.2 Description of the Proposed Development

2.2.1 The Applicant's description of the Proposed Development, its location and technical capacity (where relevant) is provided in the Scoping Report at Section 2.

2.2.2 The Proposed Development is to provide a third crossing of the River Yare, which bisects Great Yarmouth. The third crossing will create a direct road linking the port and employment areas in the southern part of the South Denes Peninsula to the strategic road network via the A47 Hafrey's roundabout.

2.2.3 The Proposed Development will comprise a new dual carriageway on a bridge over the River Yare. The bridge design is yet to be determined; however, a bascule bridge is currently being considered as the preferred option. An alternative option being considered for the bridge is that of a swing bridge design. The preferred bascule bridge design will include an upward lifting single span, double leaf trunnion bascule, and other elements such as piers, fenders, plant rooms, and a control tower. The Proposed Development will also include a new roundabout, existing road realignments and widening, a flyover crossing Southtown road, traffic controls, and a new footway and cycleway.

2.2.4 The proposed application site is located in Great Yarmouth, Norfolk. The Proposed Development will link the A47 at Hafrey's roundabout west of the River Yare with South Denes Road to the east of the River Yare. Figure 2 in Appendix B to the Scoping Report identifies the location of the Proposed Development in the context of the wider area. Appendix B also includes Drawing 62240375-GYTRC-Scoping Report Boundary-20180219 showing the location of the proposed application site boundary and Drawing 70041951-WSP-HAW-GYTRC-DR-D-0001-P01-1 showing the Proposed Development layout in detail.

2.2.5 The area in which the Proposed Development is situated comprises a combination of existing hardstanding, major and minor roads, residential properties, commercial/industrial properties, oil and gas storage facilities, docks and port facilities, public open space, allotments and areas of grassland, woodland, scrub and landscaping. A number of environmental constraints have been identified within 2km of the Proposed Development. These are shown on Figure 3 to Appendix B. The Proposed

Development is located within/over the Outer Thames Estuary Special Protection Area (SPA).

2.3 The Planning Inspectorate's Comments

Description of the Proposed Development

- 2.3.1 A description of the Proposed Development has been provided in Section 2 of the Scoping Report, supported by drawings and figures. The Inspectorate notes that the site boundary shown on Figures 2 to 5 in Appendix B is slightly different to the Scoping Report Boundary presented on drawing 62240375-GYTRC-Scoping Report Boundary-20180219. The Applicant should ensure the DCO application boundary for the Proposed Development is consistent on all drawings and figures that present this information in the ES, and ensure that the impact assessments have considered the full extent of the final DCO application.
- 2.3.2 The description of the Proposed Development provided in the Scoping Report is brief and limited to the likely main components of the scheme, based on the current preferred option for the bridge design. The Inspectorate expects more detail to be presented within the ES, including detailed descriptions of all works for which development consent is sought, supported by clear figures. Details of components such as signage, gantries, lighting, drainage features, landscaping and environmental mitigation features have not been specified in the Scoping Report and this information should be provided in the ES. The nature and quantity of materials and natural resources used (including water, land, soil and biodiversity features) should be identified and an assessment made of the anticipated impacts where significant effects are likely to occur.
- 2.3.3 No description has been provided relating to the construction of the Proposed Development, and as such, it is unclear if construction has been fully considered within the Scoping Report. The Inspectorate expects details of the construction phase of the Proposed Development to be provided and assessed within the ES, including but not limited to:
- the description of the construction period;
 - construction methods (e.g. piling method);
 - staging/phasing of the Proposed Development;
 - location of construction activities, including a clear description of all works within and adjacent to the River Yare;
 - location of any temporary structures or areas required (such as construction compounds and temporary closures of Public Rights of Way (PRoW)), including likely dimensions and duration of use; and
 - description of the construction traffic route.

- 2.3.4 A draft/outline Construction Traffic Management Plan (CTMP) should also be provided with the DCO application and agreed with relevant consultation bodies.
- 2.3.5 The Scoping Report presents limited information relevant to proposed works in the marine environment. It is also unclear whether there is a need for dredging and disposal of marine sediment as part of the Proposed Development. The ES should clearly identify any proposed works in the marine environment and assess the impacts of such works, where the potential for likely significant effects exists. In particular, the Inspectorate is concerned with potential effects associated with dredging and changes to marine navigation and also effects on sensitive nature conservation receptors. The Applicant's attention is drawn to the comments of the Marine Management Organisation (MMO) at Appendix 2 with regard to licensing under the Marine and Coastal Access Act 2009. It is recommended that consultation is undertaken with the MMO early in the development of the DCO application regarding the need (or otherwise) for a marine licence(s).
- 2.3.6 The Scoping Report identifies that the Proposed Development will be located over/in the proposed extension to the Outer Thames Estuary SPA (also referred to as the River Yare potential SPA (pSPA) in the Scoping Report). The Inspectorate is aware that this pSPA has been formally designated as the Outer Thames Estuary SPA as of 31 October 2017 and was notified to Europe on 14 November 2017. The ES should consider the most up-to-date status of this European site.
- 2.3.7 Section 1.5 of the Scoping Report outlines the current design uncertainty of the Proposed Development. In addition to the bridge design, the land use requirements for the Proposed Development have yet to be determined, together with any areas required for ecological mitigation. The Inspectorate expects the land use and area of land required for both construction and operation of the Proposed Development to be outlined within the ES and supported by clear figures. The ES should also identify any temporary land take (eg for construction compounds, demolition works, access routes, spoil handling), as well as the operational land take (including drainage features and mitigation areas). Where relevant, the likely significant effects arising from both temporary and permanent land take should be assessed in the applicable aspect chapters of the ES. The Applicant should note that the DCO application site boundary must allow for the land take associated with all works and project elements proposed as part of the application (both temporary and permanent), including requisite demolition works, drainage features, and areas of land used for mitigation purposes.
- 2.3.8 It is understood from Section 6.9 of the Scoping Report that demolition of buildings and allotment land will be required to facilitate the Proposed Development; however, detailed information on proposed demolition activities has not been included in the description of the Proposed Development. The ES should provide full details of the necessary demolition works. It should also be made clear at what point in the

construction programme this would occur. Where relevant, the Applicant should ensure that the aspect chapters of the ES assess the likely significant effects resulting from the demolition activities.

- 2.3.9 The Scoping Report does not explain whether the Proposed Development or particular elements of the Proposed Development have a design life and whether it is anticipated that the Proposed Development or elements will be decommissioned at the end of their design life. It is noted that the Climate Change section of the Scoping Report proposes to scope out the end of life stage on the basis that the expected timescales for decommissioning are so far into the future; however, no timescales for decommissioning or its life stage are stated. The Inspectorate considers that the ES should clearly state the design life of the Proposed Development and whether it will be decommissioned at the end of the design life. Any decommissioning associated with dismantling and replacing particular elements of the Proposed Development once they reach the end of their design life should be assessed, if significant effects are likely to occur.
- 2.3.10 Maintenance of certain elements of the operational Proposed Development (eg pavements, lighting and bridge parts) are briefly referred to in Sections 6.8 (Climate Change) and 6.11 (Materials) of the Scoping Report, but are not included in the description of the Proposed Development. The ES should include an assessment of impacts associated with any operation and maintenance activities that have the potential to result in likely significant effects.

Alternatives

- 2.3.11 The EIA Regulations require that the Applicant provide '*A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects*'
- 2.3.12 The Inspectorate acknowledges the assessment of alternatives carried out by the Applicant to date, which is summarised in Section 3 of the Scoping Report. The Scoping Report indicates that the option assessment undertaken to date has considered matters of economics and feasibility. It is not clear whether the assessment of alternatives presented at this stage has taken into consideration the effects of the Proposed Development on the environment. The Inspectorate notes and welcomes the intention to include a discrete chapter for alternatives in the ES, as stated in Section 7.2 of the Scoping Report. This chapter should provide details of the reasonable alternatives studied and the reasoning for the selection of the chosen option(s), including a comparison of the environmental effects.

Flexibility

- 2.3.13 The Scoping Report states at Section 1.5 that the scheme design for the Proposed Development is continuing to be refined, and that matters such as land requirements, bridge design, and areas for ecological mitigation are yet to be fully determined. The Inspectorate notes from paragraph 2.3.3 of the Scoping Report that the bridge design is expected to be decided in summer 2018. It is not clear from the Scoping Report whether the Applicant intends to include flexibility in any application made for development consent. Should this be the case, the Applicant's attention is drawn to the Inspectorate's Advice Note Nine 'Using the 'Rochdale Envelope'¹, which provides details on the recommended approach to follow when incorporating flexibility into a draft DCO (dDCO).
- 2.3.14 The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to be clearly defined in the dDCO and in the accompanying ES. Where flexibility is sought, the ES should set out the parameters that would apply for all components of the Proposed Development, where applicable, setting out clearly any proposed limits of deviation. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.
- 2.3.15 The Inspectorate notes the statement at paragraph 1.5.2 of the Scoping Report that it is considered unlikely that refinements to the proposed scheme, in light of further work, will result in a materially different scheme. It should be noted that if the Proposed Development materially changes prior to submission of the DCO application, the Applicant may wish to consider requesting a new scoping opinion.

¹ Advice Note nine: Using the Rochdale Envelope. 2012. Available at:
<https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3. ES APPROACH

3.1 Introduction

- 3.1.1 This section contains the Inspectorate's specific comments on the scope and level of detail of information to be provided in the Applicant's ES. General advice on the presentation of an ES is provided in the Inspectorate's Advice Note Seven 'Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements'² and associated appendices.
- 3.1.2 Aspects/matters (as defined in Advice Note Seven) are not scoped out unless specifically addressed and justified by the Applicant, and confirmed as being scoped out by the Inspectorate. The ES should be based on the Scoping Opinion in so far as the Proposed Development remains materially the same as the Proposed Development described in the Applicant's Scoping Report.
- 3.1.3 The Inspectorate has set out in this Opinion where it has/has not agreed to scope out certain aspects/matters on the basis of the information available at this time. The Inspectorate is content that the receipt of a Scoping Opinion should not prevent the Applicant from subsequently agreeing with the relevant consultation bodies to scope such aspects/matters out of the ES, where further evidence has been provided to justify this approach. However, in order to demonstrate that the aspects/matters have been appropriately addressed, the ES should explain the reasoning for scoping them out and justify the approach taken.
- 3.1.4 Where relevant, the ES should provide reference to how the delivery of measures proposed to prevent/ minimise adverse effects is secured through DCO requirements (or other suitably robust methods) and whether relevant consultees agree on the adequacy of the measures proposed.

3.2 Relevant National Policy Statements (NPSs)

- 3.2.1 Sector-specific NPSs are produced by the relevant Government Departments and set out national policy for NSIPs. They provide the framework within which the Examining Authority (ExA) will make their recommendation to the SoS and include the Government's objectives for the development of NSIPs. The NPSs may include environmental requirements for NSIPs, which Applicants should address within their ES.

² Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements and annex. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

3.2.2 Having regards to the characteristics of the Proposed Development, it appears that the NPS for National Networks (NPSNN) may be relevant. The Inspectorate notes that the Scoping Report also identifies the NPSNN and the planning guidance within it as being relevant to the Proposed Development. The Applicant may also wish to consider the applicability of the NPS for Ports, which may also have relevance for the Proposed Development.

3.3 Scope of Assessment

General

3.3.1 The Inspectorate recommends that in order to assist the decision-making process, the Applicant uses tables:

- to demonstrate how the assessment has taken account of this Opinion;
- to identify and collate the residual effects after mitigation for each of the aspect chapters, including the relevant interrelationships and cumulative effects;
- to set out the proposed mitigation and/or monitoring measures including cross-reference to the means of securing such measures (eg a dDCO requirement);
- to describe any remedial measures that are identified as being necessary following monitoring; and
- to identify where details are contained in the Habitats Regulations Assessment (HRA report) (where relevant), such as descriptions of European sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

3.3.2 The Inspectorate considers that where a DCO application includes works described as 'Associated Development', that could themselves be defined as an improvement of a highway, the Applicant should ensure that the ES accompanying that application distinguishes between effects that primarily derive from the integral works which form the proposed (or part of the proposed) NSIP and those that primarily derive from the works described as Associated Development. This could be presented in a suitably compiled summary table. This will have the benefit of giving greater confidence to the Inspectorate that what is proposed is not in fact an additional NSIP defined in accordance with s22 of the PA2008.

3.3.3 Study areas are not clearly defined in a number of aspect sections within the Scoping Report. The Applicant is advised to clearly define the study areas adopted for each aspect/matter assessment in the ES. The presentation of study areas on figures would also aid understanding and should be including in the ES, where appropriate.

3.3.4 Some of the text in the Scoping Report, such as the drawing numbers on the figures in Appendix B, is small scale and difficult to read both on the paper and electronic copies. The Applicant is reminded that the ES should

be clear and accessible to readers, and figure references should be short, clear and easy to cross-reference.

Baseline Scenario

- 3.3.5 The ES should include a description of the baseline scenario with and without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.
- 3.3.6 The Scoping Report makes reference to 'new developments', projects and committed developments, particularly at Section 6.13 Traffic and Transport and Section 6.14 Cumulative Effects. The Scoping Report does not indicate the stage of development these developments are likely to be at the point of the DCO application. The Applicant should clearly state in the ES which developments will be assumed to be under construction or operational as part of the future baseline.

Forecasting Methods or Evidence

- 3.3.7 The ES should contain the timescales upon which the surveys that underpin the technical assessments have been based. For clarity, this information should be provided either in the introductory chapters of the ES (with confirmation that these timescales apply to all chapters), or in each aspect chapter.
- 3.3.8 The Scoping Report includes at Section 5 a description of the proposed assessment methodology for the impact assessment. Paragraph 5.1.8 of the Scoping Report states that '*the methodology and criteria proposed used for the EIA will be based upon the approach published in Volume 11, Section 2, Part 5 of the DMRB (HA 205/08), updated as necessary to take account of the 2017 EIA Regulations*'. It also states that '*where individual topics depart from this approach, the alternative methodologies and terminology will be provided within the relevant chapter*.' The Inspectorate notes from Table 53 of the Scoping Report (Proposed Chapter Content for the ES) that whilst there is a proposed 'Environmental Impact Assessment Approach' chapter, the subheadings do not indicate that a description of an overarching impact assessment methodology will be included. It is therefore unclear if an overarching impact assessment methodology is to be provided in the ES or whether each aspect chapter will contain a description of the assessment methodology. The Inspectorate expects the ES to include a chapter setting out the overarching methodology for the assessment where this is to be applied. Any departure from that methodology should be described in individual aspect chapters in an assessment methodology sub-section.
- 3.3.9 The Inspectorate notes the matrix approach to identifying impacts, as presented in Tables 1 to 4 in Section 5 of the Scoping Report, and as reproduced from the Design Manual for Roads and Bridges (DMRB). The Applicant is however reminded to clearly identify in the ES which effects are considered to be significant, in line with the EIA Regulations. The use

of the terminology 'very large', 'large', 'moderate', 'slight', or 'neutral' in the matrix approach does not conclusively state whether effects are significant or not significant, particularly if a combination of significance values are ultimately used (eg 'moderate or slight'). If the Applicant intends that a certain level of significance and above is deemed to be significant for the purposes of satisfying the EIA Regulations (eg moderate and above), this must be stated in the assessment methodology. Where aspect chapters deviate from this approach this must be clearly stated in the ES.

- 3.3.10 The aspect sections of the Scoping Report inconsistently describe the significance of effect categories. For example Tables 3, 47 and 50 use the terms 'major', 'very high risk' and 'very large', respectively) to categorise the same scale of effects. The Inspectorate expects the ES to use consistent terminology when addressing significance of effects to aid ease of understanding.
- 3.3.11 Paragraph 5.1.7 states that professional judgement will be used to determine significance of effects in the ES. The Inspectorate considers that it should be clear within the ES where professional judgement has been applied.
- 3.3.12 The ES should include details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.

Residues and Emissions

- 3.3.13 The EIA Regulations require an estimate, by type and quantity, of expected residues and emissions. Specific reference should be made to water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation and quantities and types of waste produced during the construction and operation phases, where relevant. This information should be provided in a clear and consistent fashion and may be integrated into the relevant aspect assessments.
- 3.3.14 The ES should provide details of the nature and quantity of materials used and waste generated, including justification of any key assumptions made. The likely impacts should be assessed. The Applicant is referred to Table 4.10 of this Scoping Opinion in this regard.

Mitigation

- 3.3.15 Any mitigation relied upon for the purposes of the assessment should be explained in detail within the ES. The likely efficacy of the mitigation proposed should be explained with reference to residual effects. The ES should also address how any mitigation proposed is secured, with reference to specific DCO requirements or other legally binding agreements.
- 3.3.16 The Inspectorate notes that a Construction Environmental Management Plan (CEMP), CTMP, Site Waste Management Plan (SWMP), and Materials

Management Plan (MMP) are to be produced. Where the ES relies upon mitigation measures which would be secured through management plans, it should be demonstrated (with clear cross-referencing) where each measure is set out in the management plan. The Applicant should provide draft copies of this document appended to the ES and/or demonstrate how it will be secured.

Risks of Major Accidents and/or Disasters

- 3.3.17 The ES should include a description and assessment (where relevant) of the likely significant effects resulting from accidents and disasters applicable to the Proposed Development. The Applicant's attention is drawn to the comments of the HSE in Appendix 2 to the Opinion with regards to two major accident hazard installations in the vicinity of the Proposed Development. The Applicant should make use of appropriate guidance (e.g. that referenced in the Health and Safety Executives (HSE) Annex to Advice Note 11) to better understand the likelihood of an occurrence and the Proposed Development's susceptibility to potential major accidents and hazards. The description and assessment should consider the vulnerability of the Proposed Development to a potential accident or disaster and also the Proposed Development's potential to cause an accident or disaster. The assessment should specifically assess significant effects resulting from the risks to human health, cultural heritage or the environment. Any measures that will be employed to prevent and control significant effects should be presented in the ES.
- 3.3.18 Relevant information available and obtained through risk assessments pursuant to European Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council or Council Directive 2009/71/Euratom or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.

Climate and Climate Change

- 3.3.19 The Inspectorate notes the intention to include a discrete aspect chapter in the ES addressing the effects of climate change. The ES should include a description and assessment (where relevant) of the likely significant effects the Proposed Development has on climate (for example having regard to the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. Where relevant, the ES should describe and assess the adaptive capacity that has been incorporated into the design of the Proposed Development. This may include, for example, alternative measures such as changes in the use of materials or construction and design techniques that will be more resilient to risks from climate change. The Inspectorate's comments on the Applicant's proposed assessment of climate change are presented in Table 4.7 to the Opinion.

Transboundary Effects

- 3.3.20 Schedule 4 Part 5 of the EIA Regulations requires a description of the likely significant transboundary effects to be provided in an ES. The Scoping Report has not indicated whether the Proposed Development is likely to have significant impacts on another European Economic Area (EEA) State; however, the Inspectorate notes that paragraph 5.1.5 of the Scoping Report indicates that transboundary effects will be assessed. As this is the only reference to transboundary in the Scoping Report, it is not clear where transboundary effects (if relevant) are to be presented and assessed in the ES.
- 3.3.21 Regulation 32 of the EIA Regulations inter alia requires the Inspectorate to publicise a DCO application on behalf of the SoS if it is of the view that the proposal is likely to have significant effects on the environment of another EEA state, and where relevant, to consult with the EEA state affected.
- 3.3.22 The Inspectorate considers that where Regulation 32 applies, this is likely to have implications for the examination of a DCO application. The Inspectorate recommends that the ES should identify whether the Proposed Development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

A Reference List

- 3.3.23 A reference list detailing the sources used for the descriptions and assessments must be included in the ES.

3.4 Confidential Information

- 3.4.1 In some circumstances it will be appropriate for information to be kept confidential. In particular, this may relate to information about the presence and locations of rare or sensitive species such as badgers, rare birds, and plants where disturbance, damage, persecution, or commercial exploitation may result from publication of the information. Where documents are intended to remain confidential the Applicant should provide these as separate paper and electronic documents with their confidential nature clearly indicated in the title, and watermarked as such on each page. The information should not be incorporated within other documents that are intended for publication or which the Inspectorate would be required to disclose under the Environmental Information Regulations 2014.

4. ASPECT BASED SCOPING TABLES

4.1 Air Quality

(Scoping Report section 6.2)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Para	Other points	Inspectorate's comments
2	6.2.8	Baseline	The Scoping Report states that background concentrations of pollutants (NO ₂ , NO _x , PM ₁₀ and PM _{2.5}) were obtained for the 1x1km grid squares relative to the Proposed Development and surrounding area. These should be shown on a figure or plan within the ES or associated Technical Appendix to the ES.
3	6.2.10	Study area	The study area for air quality is not explicitly set out in the Scoping Report. Paragraph 6.2.10 of the Scoping Report states that an initial desk based review of potentially sensitive receptors to changes in the air quality was undertaken, yet Figure 3 (Environmental Constraints Plan) shows a 2km study area for air quality and noise. Table 8 identifies sensitive receptors within 200m of the likely affected road network. Paragraph 6.2.8 states that background pollutant information was obtained for 1x1km grid squares. The ES should clearly set out the study area for air quality and use plans or figures to show the study area.

ID	Para	Other points	Inspectorate's comments
4	6.2.10 and 6.2.11	Designated ecological sites	The Applicant should note that the River Yare pSPA has been formally designated as the Outer Thames Estuary SPA. Table 8 of the Scoping Report states that there are no designated sites within 200m of the proposed scheme alignment; however, the Inspectorate notes that the bridge will be located over/in the Outer Thames Estuary SPA. It is important that inter-related effects across aspects are addressed in the ES. Accordingly the assessment of air quality should take into account relevant information contained in aspect chapters elsewhere in the ES, including Nature Conservation.
5	N/A	Construction compounds	It is not clear whether a construction compound(s) will be required and if so where it would be located. The ES should assess whether the location of any compound(s) may impact on any receptors sensitive to air quality.
6	6.2.24	CEMP	The Scoping Report states that mitigation measures will be secured through the CEMP. The mitigation measures and CEMP should be detailed in the ES and be suitable secured.
7	6.2.29	Methodology	The Scoping Report states that a detailed local air quality assessment for the operational scheme will be undertaken. The scope, methodology and results of this should be fully reported in the ES and should be accompanied by relevant plans and figures.
8	6.2.34	Methodology	Forty sites have been identified where diffusion tube monitoring will be undertaken for a six month period. The Scoping Report states that the location of the tubes has been agreed with Great Yarmouth Borough Council (GYBC). The ES should contain a plan which shows the locations of the diffusion tube monitoring.

ID	Para	Other points	Inspectorate's comments
9	6.2.37	Methodology	<p>The Scoping Report states that in the absence of specific PM_{2.5} monitoring, the PM₁₀ verification factor will be applied for this fraction of fine particulate matter. Efforts should be made to agree the approach, including any verification factor, with relevant consultation bodies, including the Environmental Health Officer(s) at GYBC. The approach should also be fully explained and justified within the ES.</p>

4.2 Acoustics

(Scoping Report section 6.3)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Para	Other points	Inspectorate's comments
2	6.3.2	Study area	The study area is stated to be a boundary of 300m from the carriageway edge of the Proposed Development. However, Figure 3 (Environmental Constraints Plan) of the Scoping Report shows a 2km boundary for the study area for air quality and noise. The ES should clearly describe the extent of the study area and it should be shown on a plan within the ES.
3	6.3.1	Baseline	The results of the completed surveys regarding the existing noise climate should be fully reported in the ES and/or in an associated Technical Appendix.
4	6.3.4	Receptors	The River Yare pSPA is identified in this aspect section as a potentially sensitive receptor. The Applicant should note that the River Yare pSPA has been formally designated as the Outer Thames Estuary SPA. It is important that inter-related effects across aspects are addressed in the ES. Accordingly the assessment of acoustics should take into account relevant information contained in aspect chapters elsewhere in the ES, including Nature Conservation.

ID	Para	Other points	Inspectorate's comments
5	6.3.5	Sensitive receptors	The Scoping Report has identified sensitive receptors within 300m of the Proposed Development. The Applicant should ensure that the study area is sufficient to encompass all sensitive receptors which may experience significant effects from the Proposed Development, including sensitive ecological receptors (see also the Inspectorate's comments at point 12 below on this matter). The Applicant should also ensure that the study area is appropriate for the assessment of impacts resulting from the proposed bridge construction (eg potential impact of piling on sensitive ecological receptors in the River Yare).
6	N/A	Baseline	The Scoping Report does not state whether any baseline noise monitoring has been undertaken by the Local Planning Authority (LPA). The ES should set out whether such information exists and whether it has been taken into account in the ES.
7	N/A	Baseline	The working hours for construction, including any out of hours or night time working, should be clearly stated and taken into account within the assessment of noise impacts.
8	N/A	Methodology	<p>The Scoping Report states that various methodologies will be used to undertake the acoustic impact assessment both during construction and operation. The Applicant intends to reconcile any differences by undertaking each of these individually and considering the results in combination to make an overall assessment. The ES should clearly explain the methodology adopted for the assessment along with the method used to identify the receptors and study areas, ensuring that a robust assessment is carried out.</p> <p>The Applicant should seek to obtain agreement with relevant consultation bodies, including Norfolk County Council (NCC) and</p>

ID	Para	Other points	Inspectorate's comments
			GYBC, in respect of the assessment methodology.
9	6.3.21	Methodology	If predicted noise levels are modified following the results of surveys, this should be fully justified and explained in the ES.
10	6.3.48	Monitoring locations	The noise monitoring locations to be agreed in consultation with NCC and GYBC should be identified on a plan contained within the ES.
11	N/A	Vibration assessment	Although piling is listed in paragraph 6.3.15 as a typical activity associated with bridge construction, the Scoping Report does not provide any detailed information regarding the type of construction activities for the Proposed Development which may produce vibration. It also does not set out detailed methodology for the assessment of vibration. The ES should describe activities which may result in vibration and the methodology applied to identify and assess significant impacts of vibration on sensitive receptors, including human and ecological receptors (the latter including both terrestrial and aquatic receptors), where significant effects are likely to occur.
12	N/A	An assessment of airborne and underwater noise and vibration impacts on sensitive ecological receptors	<p>The Inspectorate recommends an assessment of noise and vibration on ecological receptors, including sensitive aquatic receptors and receptors associated with the Outer Thames Estuary SPA (where relevant), be included in the ES. The assessment should consider both airborne and underwater noise and vibration impacts.</p> <p>The Inspectorate recommends that the assessment of noise and vibration on ecological receptors be presented in the Nature Conservation aspect chapter of the ES, with reference to relevant data obtained as part of the acoustic impact assessment. The</p>

ID	Para	Other points	Inspectorate's comments
			<p>Applicant should avoid duplication of assessments in the ES; however, cross-referencing between the two aspect chapters is advised.</p> <p>In addition to consultation with NCC and GYBC, the Applicant should also consult with the MMO in effort to agree the proposed assessment methodology for noise and vibration on aquatic receptors.</p>
13	6.3.22	CEMP	<p>The Scoping Report refers to mitigation measures which should be implemented through a CEMP. Proposed mitigation measures for noise and vibration impacts should be detailed in the ES, including their method of delivery, such as through a CEMP. The CEMP and mitigation measures, as appropriate, must be secured in the dDCO.</p>

4.3 Nature Conservation

(Scoping Report section 6.4)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	Table 19 & Appendix E – 4.3.1	Specific surveys for amphibians and reptiles	<p>Table 19 of the Scoping Report identifies suitable habitat for amphibians and reptiles within close proximity to the scheme, including allotments within the footprint of the Proposed Development, but does not indicate that any further surveys are proposed for these species. The Scoping Report Appendix E: Preliminary Ecological Appraisal states at paragraph 4.3.1 that <i>'overall, amphibians and reptiles are unlikely to be present'</i> and <i>'no further work in respect of amphibians and reptiles is recommended'</i>.</p> <p>The justification provided in the Scoping Report does not demonstrate the information necessary to support the decision to scope this out. The Scoping Report identifies suitable habitat within the footprint for the Proposed Development but information has not been provided to demonstrate an absence of likely significant effects. The Inspectorate considers there could be a potential for effects on such species, if present, including a requirement for mitigation to comply with legislation in respect of reptiles. If significant effects are likely, surveys should be carried out in order to support the assessment. Effort should be made to agree the approach and the need for surveys with relevant consultation bodies.</p> <p>Where mitigation measures are determined necessary, these should be detailed in the ES and appropriately secured.</p>

ID	Para	Other points	Inspectorate's comments
2	6.4.2	Study Area	The Scoping Report defines the study area for nature conservation stating that there are two study areas; however, it is noted that more than two study areas have actually been identified in the Scoping Report. The Inspectorate considers the approach to vary the study area for each ecological receptor to be appropriate; however, the ES should clearly state the study areas applied in the ES and explain why they have been chosen. The study areas should also be identified on clear figures/plans accompanying the ES.
3	6.4.7 to 6.4.9	Designated sites	The Inspectorate welcomes the assessment of Outer Thames Estuary SPA. Reference is also made in the Scoping Report to the Outer Thames Estuary extension pSPA. The extension will include tern species and their foraging habitat, including the River Yare, over and in which the Proposed Development lies. The Applicant should note that the proposed changes to the Outer Thames Estuary SPA were formally accepted and notified to the EU in October/November 2017. The assessments in the ES should therefore consider the most up-to-date status of this designated site.
4	N/A	Figures	The Environmental Constraints Plan (Figure 3) accompanying the Scoping Report identifies designated sites up to 2km from the Proposed Development. The Scoping Report discusses designated sites beyond 2km. The ES must include a clear plan(s) showing all statutory and non-statutory sites of nature conservation, as relevant to the impact assessment.
5	6.4.24	Impact Assessment Guidelines	Given the nature of the receiving environment and the potential for significant effects to marine and coastal receptors, the Applicant should make effort to agree the applicability of

ID	Para	Other points	Inspectorate's comments
			Chartered Institute of Ecology and Environmental Management's 'Guidelines in Ecological Impact Assessment in Britain and Ireland: Marine and Coastal (2010)' to the assessment with relevant consultation bodies.
6	6.4.26 and Appendix F	Surveys	<p>Paragraph 6.4.26 of the Scoping Report identifies that further surveys for water voles, and bat roosts are to be undertaken, together with breeding black redstarts, and aquatic ecology. Appendix F: Protected Species Survey of the Scoping Report contains the results of further surveys for bats and water voles. It is not entirely clear from the Scoping Report as to whether further update surveys for these species are proposed to be undertaken prior to the submission of the ES, or whether they are to inform any mitigation licence application(s) that may be required. Appendix F of the Scoping Report indicates that further surveys for water voles will be undertaken to allow an accurate assessment of impacts and to inform any water vole mitigation licence that may be required (paragraph 5.1.5).</p> <p>The Inspectorate advises that surveys be undertaken in line with relevant best practice guidance prior to the writing of the ES, where there is a need to assign value, assess impacts, and determine relevant mitigation for such species receptors. The results of ecological surveys used to inform the ES should be presented in a Technical Appendix/Technical Appendices to the ES to ensure the information supporting ES Nature Conservation aspect chapter is available for the Examination. Appropriate mitigation strategies should also be detailed in the ES and be appropriately secured.</p>
7	6.4.26	Aquatic ecology	The Inspectorate recommends that the Nature Conservation aspect chapter include clear sub-headings for aquatic ecology

ID	Para	Other points	Inspectorate's comments
			<p>receptors to clearly present the baseline, impact assessment and any mitigation measures for aquatic ecology receptors.</p> <p>The Scoping Report identifies the need for aquatic surveys but gives no further information as to the target species and habitats and also what these surveys would comprise. However, the Inspectorate acknowledges the statement at paragraph 6.4.4 of the Scoping Report that states '<i>discussions with Natural England, the EA and the Marine Management Organisation (MMO) are ongoing in relation to surveys in respect of the marine environment.</i>'</p> <p>The ES should include an assessment of effects on benthic ecology and fish, including migratory fish, in particular those that migrate through the River Yare to access the inland river system. The ES should assess any likely significant effects on protected fish species and species of conservation concern, including European eel, smelt and river lamprey.</p> <p>The ES should also present in the Nature Conservation aspect chapter an assessment of potential impacts of noise and vibration on sensitive aquatic receptors, including benthic ecology and fish receptors, together with an assessment of noise and vibration on sensitive receptors associated with designated sites, where significant effects are likely to occur. The methodology for assessing noise and vibration effects on sensitive ecological receptors, including the methodology for any data collected/surveys undertaken, must be clearly stated in the ES. Appropriate cross-referencing to relevant data and assessments contained in the Acoustic aspect chapter should also be included.</p>
8	6.4.31 to 6.4.33	Assessment methodology – assigning significance	The Inspectorate acknowledges the use of DMRB guidance to assign significance. However, the ES will also need to make clear

ID	Para	Other points	Inspectorate's comments
			<p>in each case whether any residual effect is deemed to be 'significant' or 'not significant'. Where professional judgement has been used to determine significance this should be stated.</p>
9	6.4.34 to 6.4.40	Birds and designated sites	<p>The Scoping Report does not contain detailed information with regard to any proposed surveys or data collection in respect of birds (with the exception of black redstarts) and designated sites, particularly bird species that may be using the River Yare that could be affected by the Proposed Development, including information on the tern species of the Outer Thames SPA.</p> <p>The Applicant should seek to agree the need (or otherwise) for any additional bird surveys and/or desk-based data required to inform an assessment of likely significant effects on bird species and designated sites with relevant consultation bodies, including Natural England and NCC's Ecologist.</p> <p>The Inspectorate acknowledges the intention to provide information in relation to Habitats Regulations Assessment (HRA) separate to the ES but include appropriate cross-referencing. The information in the ES should include an assessment of bird species and designated sites in respect of the EIA Regulations in addition to HRA matters.</p>

4.4 Cultural Heritage

(Scoping Report section 6.5)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Para	Other points	Inspectorate's comments
2	General	Guidance	The Inspectorate notes the potential for impacts on buried archaeological resources. Where relevant, the ES should take into account guidance contained in Historic England's guidance documents 'Preserving Archaeological Remains' ³ . Note also Historic England's revised Good Practice Advice note 3 'The Setting of Heritage Assets' ⁴ .
3	6.5.1 & 6.5.23	Study area	No justification is given for the extent of the study area used to assess the baseline conditions in the Scoping Report. Paragraph 6.5.23 of the Scoping Report explains what factors will be taken into account to derive the study area for the ES; however, no specific extent(s) are proposed in this paragraph. Paragraph 6.5.1 of the Scoping Report and Appendix G (Heritage Desk Study)

³ Preserving Archaeological Remains: Decision taking for sites under development (Historic England, 2016)

⁴ [Good Practice Advice on Planning Note 3 - The Setting of Heritage Assets](#) (Historic England, 2017)

ID	Para	Other points	Inspectorate's comments
			<p>describe two study areas: 500m for non-designated assets and 1km for designated assets. Figure 3 (Environmental Constraints Plan) identifies listed buildings and scheduled monuments within 2km.</p> <p>The ES should provide a robust justification as to why the chosen study area is appropriate and sufficient to capture all heritage assets which could experience impacts, including impacts on setting – taking into account for example, visual intrusion and or increased noise emissions. The chosen study area(s) should also be clearly defined in the ES.</p> <p>Effort should be made to seek agreement with relevant consultation bodies regarding the appropriate study area.</p>
4	6.5.1	Baseline & Appendix G	<p>The baseline data on non-designated heritage assets appears to have been drawn from the Norfolk Heritage Explorer, an online abridged version of the Norfolk Historic Environment Record. This is an incomplete selected dataset and is not suitable for use in the planning process. The Cultural Heritage desk-based assessment to be included within the ES must derive the baseline data from the full and unabridged Norfolk Historic Environment Record.</p>
5	6.5.18 and 6.5.19	Potential impacts	<p>The Cultural Heritage aspect chapter of the ES should identify appropriate heritage-specific viewpoints/receptors and include an assessment of visual impacts on designated heritage assets. Any visualisations required for this assessment but produced as part of the Townscape and Visual Impact assessment should be clearly cross-referenced in the Cultural Heritage aspect chapter. The authors of both aspect chapters should ensure the selected viewpoints and any visualisations are appropriate for the purposes of the impact assessment. Efforts should be made to agree viewpoints with relevant consultation bodies, including GYBC and</p>

ID	Para	Other points	Inspectorate's comments
			<p>NCC's Historic Environment Team.</p> <p>In addition to visual impacts, the Scoping Report acknowledges that there may be adverse effects on settings due to an increase in noise associated with the Proposed Development. However, the ES should also describe and assess other environmental factors arising from the Proposed Development that may affect the settings of cultural heritage assets, for example lighting and traffic. Appropriate cross-referencing to the information and assessments contained in other relevant aspect chapters of the ES should be included in the Cultural Heritage aspect chapter.</p>
6	6.5.24 to 6.5.31	Fieldwork	<p>The Scoping Report does not clearly state whether all fieldwork described will be undertaken to inform the ES, as a number of recommendations/options are included. It is noted that Section 8 of Appendix G to the Scoping Report also includes further recommendations, including fieldwork. The scope and methodology of any archaeological investigations undertaken to inform the impact assessment should be detailed in the ES and/or associated Technical Appendix. The Applicant should also seek agreement with Norfolk Historic Environment Team regarding any intrusive archaeological surveys.</p>
7	Table 25	Assessment methodology – significance	<p>The Inspectorate acknowledges the use of DMRB guidance to assign significance as per Table 25 of the Scoping Report. However, the ES must make clear in each case whether any residual effect is deemed to be 'significant' or 'not significant'. Where professional judgement has been used to determine significance this should be stated.</p>

4.5 Townscape and Visual Impacts

(Scoping Report section 6.6)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment

ID	Para	Other points	Inspectorate's comments
2	6.6.16	Study area	The Scoping Report states that the study area will be identified through a combination of 3-D modelling and site work, to be agreed with GYBC. The ES should explain how the consultation with GYBC and the studies have informed the decisions taken with regards to the assessment. It should be clear how the study area has been defined with reference to the desk studies and site visits, and how the visual envelope has been used to identify sensitive receptors for inclusion in the assessment.
3	6.6.1 – 6.6.10	Baseline	The Inspectorate notes that the character areas of North East Norfolk and Flegg, Suffolk Coast and Heaths, and The Broads have been identified on the Environmental Constraints Plan (Figure 3, Appendix B) of the Scoping Report. However, in the townscape section there is no mention of these character areas in the description of baseline conditions within the Scoping Report (paragraphs 6.6.1 to 6.1.10). The ES should make clear whether National Character Areas have been considered in the ES baseline and assessment of impacts, where they are deemed relevant to the Proposed Development.

ID	Para	Other points	Inspectorate's comments
4	6.6.12 – 6.6.14	Potential effects	The Scoping Report refers to ' <i>a new prominent feature</i> '. It is not clear whether this statement is referring to the proposed bridge structure or the entirety of the Proposed Development. The ES should assess the all impacts of the Proposed Development that are likely to give rise to significant effects. Effects should be assessed during both the operational and construction phases of the development. Consideration should also be given to likely significant effects at the point of opening and effects in the longer term. Where relevant, the ES should include both positive and negative effects.
5	6.6.15 onwards	Methodology	The Inspectorate notes from Paragraph 6.6.15 of the Scoping Report that a methodology for townscape character and visual amenity is to be prepared and agreed with GYBC and that the Scoping Report only identifies key components of the methodology likely to be adopted. The ES and/or accompanying appendices must include a detailed description of the methodology applied to the assessment. The Applicant is reminded to ensure that the Townscape and Visual Impact aspect chapter makes clear in each case whether any residual effect is deemed to be 'significant' or 'not significant'. Where professional judgement has been used to determine significance this should be stated. The ES should also document agreements reached with GYBC with regards to the assessment methodology and justify the approach taken, should the chosen approach differ.
6	6.6.18 and 6.6.23	Baseline – identification of heritage-specific viewpoints/receptors	With reference to comments made by the Inspectorate in Table 4.4 Cultural Heritage above, the chosen viewpoints for the Proposed Development should include heritage-specific viewpoints/receptors to inform the Cultural Heritage impact assessment. The ES should not duplicate assessments in aspect

ID	Para	Other points	Inspectorate's comments
			<p>chapters and the assessment of visual effects on heritage assets should be presented in the Cultural Heritage aspect chapter; however, the ES should ensure appropriate cross-referencing is provided between the two aspect chapters.</p>
7	6.6.23	Visual receptors - land	<p>The Inspectorate notes the intention to include footpaths and other rights of way as key viewpoints in the assessment of visual impact. The ES should include an assessment of visual effects on users of the Sustrans National Route 517 and the English Coast Path National Trail.</p>
8	N/A	Visualisations	<p>The Scoping Report does not specifically describe what visualisations will be produced in the ES. To support a robust assessment of likely significant effects, the ES should include appropriate visualisations of the Proposed Development, which highlight the specific elements that would impact on townscape character and be visually prominent to visual receptors. Cross sections and photomontages should be included in the ES for this purpose.</p>
9	N/A	Design	<p>The ES should provide details of the design and materials of the new structures. It should be explained how the design and materials have been selected with the aim of minimising the potential adverse and maximising the potential beneficial townscape and visual impacts.</p>
10	6.6.27	Artificial lighting	<p>The Inspectorate welcomes the intention to assess the effects of artificial lighting as stated at paragraph 6.6.27. The ES should describe the lighting scheme for the Proposed Development and assess effects of the proposed lighting on both terrestrial and marine receptors. The proposed isolux contour plans should be</p>

ID	Para	Other points	Inspectorate's comments
			<p>appended to the ES.</p> <p>The inter-relationship between the proposed lighting impacts identified in the Townscape and Visual Impact aspect chapter and receptors for other aspects (eg nature conservation receptors) should be assessed in the ES, where significant effects are likely to occur.</p>

4.6 Water Environment

(Scoping Report section 6.7)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	6.7.42	Loss of standing water	Based on the information provided in the Scoping Report, which states that there are no standing waterbodies present that would be lost to the Proposed Development, the Inspectorate agrees that this matter can be scoped out of the ES. Should the design of the Proposed Development change such that it impacts on a standing waterbody/waterbodies, the ES should assess these impacts if likely significant effects could occur.
2	6.7.42	Loss or change to Groundwater Dependent Terrestrial Ecosystems	Based on the information provided in the Scoping Report, which describes a lack of Groundwater Dependent Terrestrial Ecosystems, the Inspectorate agrees that this matter can be scoped out of the ES.
3	6.7.42	Changes to groundwater level or flows impact due to cuttings and related dewatering	The Inspectorate is content that effects associated with cuttings can be scoped out on the basis that this technique would not be employed. However, the ES should include an assessment of effects on groundwater levels or flows of any other intrusions to the groundwater aquifer, where likely significant effects could occur. In addition to direct loss or change to groundwater aquifers, indirect loss and/or changes to surface water receptors as a result of changes in groundwater flow should also be assessed.

ID	Para	Other points	Inspectorate's comments
4	6.7.4	Study Area	A study area of 1km either side of the route alignment is described here, although it is noted that Appendix B Figure 4 of the Scoping Report identifies water receptors within 2km of the Proposed Development. The ES must clearly define the chosen study area. The Inspectorate acknowledges that the study area within the aspect assessment may vary dependent on the matter being considered.
5	6.7.23	Abstractions baseline	Paragraph 6.7.23 of the Scoping Report details licensed abstractions and discharges. The ES should consider all abstractions whether licensed or unlicensed. Confirmation should be obtained from GYBC regarding the presence of any unlicensed abstractions.
6	6.7.27	Road drainage baseline	<p>The Scoping Report states that <i>'no information is currently available on the road drainage catchment area or discharge location, but it is assumed that the ditches eventually discharge to the River Yare.'</i> The Inspectorate recommends that information be obtained with regard to the road drainage catchment, where it is likely to be affected by the Proposed Development.</p> <p>Waveney Lower Yare & Lothingland Internal Drainage Board (IDB) have identified that the Proposed Development will have an impact on drainage flows within the Burgh Castle drainage district. The IDB have also identified that a water level management plan for the drainage district is available on request. The ES should include an assessment of potential effects on the drainage district and water level management plan.</p>
7	6.7.28	Flooding baseline	Where relevant, the Applicant should make use of Anglian Water's sewer flooding register to inform the assessment of baseline conditions, and note the records of incidences of internal flooding

ID	Para	Other points	Inspectorate's comments
			provided by NCC in their consultation response (Appendix 2).
8	6.7.44	Sediment modelling and sampling	Reference is made in the Scoping Report to sediment transport modelling and sediment sampling in respect of the mobilisation of potentially contaminated sediments during construction. Sediment modelling is also discussed a paragraph 4.7.56 of the Scoping Report in respect of a hydromorphological assessment to be undertaken. It is assumed reference in these paragraphs is to potentially contaminated sediment arising from the terrestrial environment, rather than the marine environment; however, it is acknowledged in the Geology and Soils aspect section of the Scoping Report that contamination sediments are potentially present in the river bed. No detailed information has been provided in the Scoping Report in respect of the proposed modelling and sampling for contaminated sediments. The Inspectorate recommends that the Applicant makes effort to agree the detail of the proposed sampling and modelling with relevant consultation bodies, including the Environment Agency (EA), GYBC, and MMO. A description of the modelling and sampling methodology undertaken should be included in and/or appended to the ES.
9	N/A	Inter-related effects	The Inspectorate expects the ES to assess inter-related impacts occurring between the Water Environment aspect chapter and the Nature Conservation aspect chapter. In particular, the assessment should address impacts on the River Yare and other designated sites for nature conservation that are hydrologically linked to the Proposed Development.
10	6.7.64	Water Framework Directive (WFD)	The Inspectorate notes the identification of WFD surface and groundwater bodies in the Scoping Report and the intention to carry out a WFD assessment. The Applicant's attention is drawn to

ID	Para	Other points	Inspectorate's comments
			PINS Advice Note 18: Water Framework Directive.
11	Table 26	Impact significance	The Inspectorate acknowledges the use of DMRB guidance to assign significance. However, the ES will also need to make clear in each case whether any residual effect is deemed to be 'significant'. Where professional judgement has been used to determine significance this should be stated.
12	6.7.65	Flooding aspect chapter – FRA	The Inspectorate acknowledges the Applicant's proposal to include a standalone aspect chapter on Flooding within the ES, supported by a Flood Risk Assessment (FRA), and is content with this approach. The complete FRA must be included with the DCO application.
13	6.7.67	Flooding aspect chapter – Hydraulic modelling	<p>Paragraph 6.7.67 of the Scoping Report states that the 2D model developed for the FRA '<i>will focus on the River Yare through Great Yarmouth</i>'. The Applicant must ensure that the hydraulic model is representative of the flood risk in the area and covers a sufficient area of the Main Rivers (Yare and Bure) in Great Yarmouth.</p> <p>Consultation bodies have identified that a new Essex, Norfolk and Suffolk 2D tidal coastal model (2017) is being developed. The Applicant should make effort to agree the model for the assessment in the ES with the consultation bodies and clearly describe and justify the model used.</p>
14	6.7.72	Flooding aspect chapter – impact significance	The Inspectorate notes that Table 28 of the Scoping Report presents the approach that is to be applied to determine the ' <i>significance of flood impact</i> '. This determines whether mitigation is required or not. It is not clear from this table what residual impacts are deemed to be significant in terms of the EIA Regulations. The ES should clearly state whether any impacts are

ID	Para	Other points	Inspectorate's comments
			significant or not significant as a result of the assessment.
15	Table 28	Flooding aspect chapter – mitigation	<p>Table 28 of the Scoping Report classes 'More vulnerable' and 'Less vulnerable' development at negligible increased flood risk (up to 0.02m) as requiring no mitigation. The Inspectorate considers that the ES should provide further justification to explain why no mitigation is required in these instances with reference to the specifics of the receptors, and changes in flood depth, extent, frequency and hazard.</p> <p>Table 28 of the Scoping Report also states that if there is a moderate or major magnitude of impact to 'water compatible development' mitigation is not required. The Inspectorate considers that given the variety of developments which constitute 'water compatible development', the basic framework provided by the impact assessment criteria should be supplemented with further justification to explain why a moderate and major magnitude of impact is acceptable for the particular water compatible uses.</p> <p>The Applicant should seek to agree flood risk mitigation requirements with relevant consultation bodies, including the EA, NCC and Anglian Water.</p>

4.7 Climate Change

(Scoping Report section 6.8)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	Table 31	Construction - land use, land use change and forestry	<p>The Inspectorate agrees that effects in relation to forestry can be scoped out of the ES on the basis that no forestry receptors will be affected by the Proposed Development.</p> <p>The Inspectorate also agrees that climate change effects associated with the landtake for the scheme can be scoped out of the assessment on the basis that climate change (and in particular greenhouse gas emissions) associated with construction activities and emissions associated with construction such as materials used and transportation to and from site, are to be assessed in the ES.</p>
2	Table 31	Operation – End-user emissions (regional traffic flows)	<p>Table 31 of the Scoping Report states that end-user emissions during operation will be included within the air quality assessment. The Applicant should avoid duplicating assessments in the ES; however, the ES should ensure that climate change impacts associated with the emissions of end users during operation is described and assessed. It is not currently clear whether the Air Quality aspect chapter will present this assessment or whether it will be included in the Climate Change aspect chapter.</p>
3	Table 31	Operation - Operation and Maintenance activities	<p>The Inspectorate agrees that greenhouse gas emissions associated with the lighting of the operational Proposed Development are unlikely to be significant on the basis that lighting is expected to be efficient LED units providing some reduction in emissions compared to the baseline. Therefore,</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			operation and maintenance of lighting can be scoped out of the impact assessment.
4	Table 31	Operation - Repair, Replacement and Refurbishment activities	<p>The Scoping Report proposes to scope out repair, replacement and refurbishment activities on climate change. The Scoping Report states that the key source of greenhouse gas emissions during repair, replacement and refurbishment of the Proposed Development would be an increase in emissions proportional to the increase in the pavement area.</p> <p>The Inspectorate agrees that greenhouse gas emissions associated with repair, replacement and refurbishment activities during operation can be scoped out of the assessment on the basis that these are likely to be small-scale replacement of components and occasional resurfacing and therefore significant effects are unlikely to occur.</p>
5	6.8.19	Decommissioning	<p>The Scoping Report proposes to scope out decommissioning of the Proposed Development. The justification given is that decommissioning would take place far into the future, and there is uncertainty regarding the decommissioning process and associated emissions.</p> <p>The Inspectorate agrees that decommissioning can be scoped out of the assessment on the basis that decommissioning of the Proposed Development is unlikely to occur in the foreseeable future.</p> <p>The Applicant's attention is, however, directed to the comments in Section 2.3 (paragraph 2.3.9) of this Opinion and the need to provide more information with regards to the design life of the Proposed Development and any need to decommission elements</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			of the Proposed Development, including timescales. Should further detail become available regarding decommissioning to enable an assessment of climate change at this life cycle stage, an assessment should be presented in the ES where significant effects are considered to be likely.

ID	Para	Other points	Inspectorate's comments
6	6.8.6; Table 29	Baseline data - UKCP09 Projections	The assessment of potential impacts of climate change should use the latest UK Climate Projections. This should include the anticipated UKCP18 projections, where available and appropriate.
7	6.8.16	Assessment methodology - Guidance	The Scoping Report states that Transport Analysis Guidance (WebTag) Chapter 4: Greenhouse Gases will be used to inform the greenhouse gas assessment. The Inspectorate notes that this guidance is an 'appraisal methodology' intended for the development of business cases, applicable to highways and public transport interventions and not necessarily for the purposes of undertaking EIA. The Inspectorate acknowledges that the appraisal advocated by this guidance is intended to complement EIA; however, the Applicant should also take care to ensure that the methodology applied is sufficient to identify and assess the likely significant effects from the Proposed Development.
8	6.8.17 and 6.8.21	Assessment methodology - Significance	The Scoping Report states that no specific criteria currently exist to determine significance for the Climate Change aspect chapter. The Scoping Report does not provide a methodology or significance criteria; therefore, the Inspectorate is unable to comment on the suitability of the criteria to be used. The Climate Change aspect chapter should clearly describe the methodology

ID	Para	Other points	Inspectorate's comments
			<p>applied to the Climate Change impact assessment presented in the ES. It should also state how significance has been determined, and where professional judgement has been applied (where applicable).</p>
9	6.8.18 and 6.8.28	Limited Information	<p>The Scoping Report states that at this stage limited information is available to assess greenhouse gas emissions during construction and operation of the Proposed Development.</p> <p>The Applicant must ensure the assessment provided in the ES is informed by relevant baseline information. In particular the baseline should establish the quantities of materials and emissions from the construction process. Any limitations in the process of obtaining baseline information/data should be clearly stated, together with how this may affect the results of the assessment.</p>
10	6.8.20	Highway England Climate Tool	<p>The Scoping Report states that emissions calculations will be completed within Highway England's carbon tool; however, no further details have been provided, so the Inspectorate is unable to provide any comments on its suitability. The ES should clearly explain the calculation tool used for the impact assessment and provide a justification for its selection.</p>
11	6.8.27	Presentation	<p>This Scoping Report acknowledges that other aspect chapters will be including an assessment of climate change matters, such as the assessment of climate resilience related to the proposed drainage system and flooding to be included in the Flooding and Water Environment aspect chapters, and assessment of traffic emissions to air presented in the Air Quality aspect chapter. The Inspectorate does not wish to see duplication of text within numerous chapters but recommends that the Climate Change aspect chapter clearly summarise and cross-refer to the relevant</p>

ID	Para	Other points	Inspectorate's comments
			<p>matters included elsewhere in the ES, to ensure that all necessary climate change matters have been assessed.</p>

4.8 Peoples and Communities

(Scoping Report section 6.9)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	6.9.22	Construction – movement of workers into area, including associated increased demand for local services and on recreational/open space	<p>The Scoping Report proposes to scope out effects from construction employment related to workers moving into the area and placing an increased demand on local services (eg education, healthcare and community facilities) and on recreational/open space. This is on the assumption that construction workers will be resourced from the east of England. However, the Inspectorate notes text included in Appendix H (Health Assessment Matrix) which states that '<i>a proportion of the workers could be from the local area, although this would not be confirmed until the construction contracts are confirmed at a later date</i>'.</p> <p>The Scoping Report contains limited information with regards to distribution and the number of workers likely to be required for the Proposed Development. In the absence of this information and no evidence to support a conclusion of no likely significant effects, the Inspectorate is unable to scope this out of the ES.</p> <p>The ES should assess any likely significant effects associated with the influx of workers during the construction stage.</p>
2	6.9.23	Operation – Local services, accommodation and recreational open space	<p>The Inspectorate agrees that given the nature of the Proposed Development effects on local services, accommodation and recreational open space during operation can be scoped out of the ES.</p>
3	6.9.24	Construction – Crime	<p>The Inspectorate agrees that effects in relation to peoples and communities from crime arising during construction can be scoped</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			out of the ES.
4	6.9.25	Construction – Business severance	<p>The Scoping Report contains limited information with regards to business receptors, the source of effects, and the likely significance of severance on business receptors. In the absence of this information and no evidence to support no likely significant effects, the Inspectorate is unable to scope this out of the ES.</p> <p>The ES should assess any likely significant effects associated with business severance during the construction stage.</p>
5	6.9.26	Operation – Land Use	The Inspectorate agrees that effects to people and communities from land use during operation can be scoped out of the ES.
6	6.9.27	Operation – effects on off-site recreation receptors as a result of sediment and hydromorphological changes to the River Yare and wider Norfolk Coast	<p>The Scoping Report does not provide sufficient justification to support scoping out an assessment of impacts to offsite recreation. Impacts resulting from potential changes to sediment and hydromorphological effects, particularly during operation of the Proposed Development, have not been addressed. The Scoping Report also fails to provide information on the proposed measures to be incorporated into the design to minimise sediment and hydromorphological changes, and also details relating to the potential sensitivity of off-site recreational receptors.</p> <p>The Inspectorate notes from Section 6.7 (Water Environment) of the Scoping Report that sediment transport modelling and a hydromorphological assessment are proposed as part of the ES. The assessment of impacts to off-site recreational receptors during operation should be undertaken in light of the findings from the hydromorphological assessment and the potential for likely significant effects. Where information to inform the assessment in the Peoples and Communities aspect chapter is</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			presented in other relevant aspect chapters, such as the Water Environment aspect chapter, clear cross-referencing should be included in the ES.
7	6.9.28	Quality of Surroundings and Sense of Place	The Inspectorate notes the intention to consider effects in relation to quality of surroundings and sense of place, where appropriate, within other aspect chapters of the ES, namely the Cultural Heritage and Townscape and Visual Impact aspect chapters, and therefore scope this matter out of the Peoples and Communities aspect chapter. The Inspectorate agrees that quality of surroundings and sense of place should be considered as part of landscape character and cultural heritage assessments and can be scoped out of the Peoples and Communities aspect chapter.
8	6.9.29	Health	<p>The Scoping Report states that health effects will be considered within the Acoustics, Air Quality, Water Environment and Geology and Soils aspect chapters. It is noted that paragraph 6.10.19 within the Health aspect of the Scoping Report describes that potential effects on health associated with community severance, loss of property, economic benefits and community facilities will be assessed within the People and Community aspect chapter of the ES.</p> <p>The ES should clearly explain where impacts on health have been considered and assessed within the Peoples and Communities aspect chapter. Cross-referencing to the assessment of relevant health matters on people and the communities, as described elsewhere in the ES, is also recommended to ensure adequate consideration has been given to health matters.</p>
9	6.9.30	Construction – Disturbance,	The Inspectorate agrees that some effects in relation to

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
		disruption and reduction in amenity	<p>disturbance, disruption and reduction in amenity during construction will be assessed within different aspect chapters of the ES; however, as noted at point 8 above, the Scoping Report states elsewhere that community severance, loss of property, economic benefits and community facilities are to be assessed within the Peoples and Communities aspect chapter of the ES.</p> <p>The ES should make clear where an assessment of disturbance, disruption and reduction in amenity has been assessed. The Applicant should avoid duplication of assessments in the ES; however, the ES should include appropriate cross-referencing between the Peoples and Communities aspect chapter and other relevant aspect chapters, to ensure that such effects have been fully considered in the ES.</p>

ID	Para	Other points	Inspectorate's comments
10	6.9.13	Community facilities receptors	<p>The Scoping Report identifies community facilities within 2km of the Proposed Development. It is unclear if the distance of 2km is to be used as the study area for the ES.</p> <p>The Inspectorate notes that DMRB 11, Section 3, Part 8, Paragraph 2.2 states that community facilities 'and their catchment areas' should be addressed by the assessment. The ES should clearly explain the selected study area and justify any deviation from the DMRB methodology.</p>
11	6.9.16	Consultation	<p>The Inspectorate welcomes the intention to consult with local groups to identify water sports receptors that may be affected by the Proposed Development. The Applicant is advised to also contact regional bodies such as the Royal Yachting Association</p>

ID	Para	Other points	Inspectorate's comments
			and The Broads Authority for information regarding water sports in the Zone of Influence (ZOI) for the Proposed Development.
12	6.9.12, 6.9.21, 6.9.33, 6.9.37-38, 6.9.40, 6.9.42, and 6.9.56-57	Marine receptors – study area and receptors	<p>The Scoping Report identifies that the footprint of the Proposed Development also includes a section of the River Yare used for berthing/quayside and also as a navigation channel for Port, commercial, and leisure vessels.</p> <p>Sensitive receptors are identified at paragraph 6.9.21; however, this list is vague and it is unclear, particularly for example, which category of receptor commercial and recreational vessels using the River Yare will be assessed in the ES. The same comment is applicable to port operations. Reference is subsequently made to potential effects on commercial marine activities receptors in paragraphs 6.9.33 to 6.9.35 and 6.9.40 of the Scoping Report, and to recreational activities (including marine) at paragraphs 6.9.37-38 and 6.9.42.</p> <p>The ES should clearly identify and justify the applicable receptors, together with the study area. The presentation of receptors and study areas on figures accompanying the ES should also be provided.</p>
13	6.9.56 to 6.9.57	Marine receptors – vessel simulation modelling and assessment	<p>Reference is made to a qualitative assessment using a 'vessel simulation modelling'. It is not entirely clear if this is an existing model or modelling that is to be undertaken to inform the ES.</p> <p>Where the vessel simulation modelling is being used to inform the assessment of significant effects on Peoples and Communities receptors, the methodology and results should be made available as an appendix to this aspect chapter of the ES. The ES should also clearly describe the baseline data and proposed assessment methodology.</p>

ID	Para	Other points	Inspectorate's comments
14	6.9.56 to 6.9.57	Marine receptors – inter-related effects, assessment and mitigation	<p>The assessment of marine receptors should consider inter-relationships with other aspect chapters eg Geology and Soils or Traffic and Transport. The aspect chapter should include cross-reference to information obtained as part of the Geology and Soils aspect chapter, as relevant, including any information regarding potential changes to sediment depth in the navigational channel as a result of the Proposed Development. Any relevant data/assessment presented in other aspect chapters should be clearly cross-referenced.</p> <p>The MMO, Trinity House, the Maritime & Coastguard Agency (MCA), and the Great Yarmouth Harbour Authority are requesting the Applicant produce a Navigational Risk Assessment in consultation with the Great Yarmouth Harbour Authority (Appendix 2). The Applicant should make effort to agree the approach to the Navigational Risk Assessment with the consultation bodies. If the Navigational Risk Assessment indicates the potential for likely significant effects to environmental receptors this should be assessed in the ES.</p> <p>Any likely significant effects associated with the delivery of mitigation measures, including those relevant to the impacts on navigation, should be assessed in the ES.</p>
15	6.9.52	Assessment Methodology – Employment Opportunities	<p>The Inspectorate expects the figures and calculations used to generate an assessment of employment opportunities to be clearly stated within the ES, together with adequate justification for their use in the methodology section. The ES should clearly describe the types/sectors of jobs and businesses that may be lost or displaced by the Proposed Development, and also those types/sectors that make up the gains in jobs/businesses. Any assumptions made in relation to this assessment should be</p>

ID	Para	Other points	Inspectorate's comments
			explained clearly in the ES.
16	6.9.53-55	Assessment Methodology – Private Land	The ES should clearly describe the methodology used to assess loss of private land in the ES, as the description provided in the Scoping Report appears to focus on business operations.
17	6.9.60 to 6.9.63	Assessment Methodology – changes in accessibility to recreational users	The proposed assessment methodology for recreational receptors summarised in paragraphs 6.9.60 to 6.9.63 focuses on terrestrial recreational receptors, such as cyclists, and does not specify how marine recreational receptors will be assessed. The ES should clearly describe and justify the methodology used to assess effects on marine recreational receptors in the ES.
18	N/A	References	The Applicant is reminded that, as stated in Section 3.3 of this Opinion, references must be provided for sources of information used to inform the assessment. The 'Additionality Guide' is referenced in paragraph 6.9.52 of the Scoping Report; however, there is no reference provided to this guide.
19	N/A	Assessment Criteria	The ES should clearly state the assessment criteria which the effects are to be assessed against, and clearly state the value of receptors identified.

4.9 Health

(Scoping Report section 6.10)

ID	Ref	Applicant's proposed aspect to scope out	Inspectorate's comments
1	6.10.19	Health	<p>The Applicant proposes to scope out a stand-alone Health aspect chapter on the basis that potential effects are either positive, unlikely to be significant, or are already being assessed within other aspect chapters. However, the Scoping Report does not clearly set out which effects are considered unlikely to be significant and which are to be assessed within other aspect chapters. This should be clearly set out within the ES. The ES should also ensure the receptors identified for health impacts in paragraph 6.10.11 of the Scoping Report are assessed, as appropriate, in other aspect chapters.</p> <p>Whilst the Inspectorate agrees that a stand-alone Health aspect chapter is not required, for clarity the ES should contain a table which provides a clear cross-reference to where the relevant information and assessment of human health is located in the ES.</p> <p>In addition, the Applicant should ensure the survey methodologies and study area relevant to health impacts are clearly defined in the relevant aspect chapters.</p>

4.10 Materials

(Scoping Report section 6.11)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	6.11.30 (and Table 43)	Operational phase consumption of material resources and waste generation	<p>The Scoping Report states that operational impacts are anticipated to be negligible and have been scoped out of the assessment of environmental effects. It is noted at Table 43 of the Scoping Report that the ES will include an assessment of the consumption of resources for the first year of operation, where they can be forecast. Although it is also stated in Table 43 that whilst the extent of changes is currently unknown, they are unlikely to result in significant effects.</p> <p>The Inspectorate accepts that material consumption and waste generation during operation is unlikely to generate significant effects and is content that this matter can be scoped out of the assessment.</p>
2	6.11.32	Effects associated with transportation of materials; and issues associated with land contamination	<p>The Inspectorate notes the information within the other aspect chapters listed (Air Quality, Peoples and Communities, Noise, Water Environment, Flooding, and Climate Change aspect chapters with respect to transportation of materials; and the Geology and Soils aspect chapter with respect to contaminated land), and is content that it is appropriate to assess the environmental effects of these two matters as set out in the above aspect chapters. The Inspectorate also understands from Scoping Report Section 6.13 that transportation of materials will be considered in the Traffic and Transport aspect chapter. Therefore, the Inspectorate agrees to scope these matters out of the Materials assessment of the ES. The ES should include clear cross-references in aspects chapters to where relevant matters</p>

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
			have been assessed elsewhere in the ES.

ID	Para	Other points	Inspectorate's comments
3	6.11.10 and 6.11.14	Baseline	The Scoping Report states that the current consumption of material resources within 'the site' (with reference to the scoping boundary provided in Appendix B of the Scoping Report) and the current anticipated site waste arisings are deemed to be negligible. However, the Scoping Report does not provide any more detailed information to support these statements. The ES must include the baseline information on which the assessment is based presented in the ES, with estimated quantities, where available.
4	6.11.17 to 6.11.18	Baseline	The Scoping Report includes contradictory information and the available regional data for transfer, material recovery, and metal recycling rates applied to the baseline. The Scoping Report states that there is currently no regional data available for construction, demolition and excavation production or recovery rates for the East of England. Figure 7 of the Scoping Report shows transfer, material recovery and metal recycling rates for 2016 but is titled both 'East of England' and 'North of England'. It is unclear if the graph relates to rates for the East of England or North of England. The information on which the assessment is based should be clearly presented in the ES. Where data is unavailable and proxy data is applied this should be clearly explained and justified in the ES.
5	6.11.19	Baseline	This paragraph states that data indicates that there is likely to be

ID	Para	Other points	Inspectorate's comments
			<p>regional infrastructure and capacity for the anticipated transfer and recovery of materials associated with the Proposed Development, based on trends in national rates of recovery. However, no information about regional infrastructure is presented. The paragraph also refers the reader to Table 36 of the Scoping Report; however, Table 36 does not correspond to the statement made here.</p> <p>The ES should include information on the availability of regional waste management infrastructure including the available capacity.</p>
6	Table 43, 6.11.41	Construction effects	<p>Table 43 of the Scoping Report makes a commitment to estimate the volume of material resources required for the Proposed Development. The ES should include the estimated quantities of materials and waste and explain how these are derived. The information should be used to inform the assessment of likely significant effects in the ES.</p>
7	Table 43	Construction effects	<p>Table 43 of the Scoping Report states that it is expected that a commitment will be made to reuse and recycle waste arising from the Proposed Development. If this forms part of the proposed mitigation this should be clearly set out in the ES. The ES must demonstrate how any mitigation measures on which the assessment has relied will be secured.</p>
8	N/A	Impacts – marine sediment	<p>It is not clear from the description of the development and Section 6.11 (Materials) of the Scoping Report whether the Proposed Development will require the removal/dredging and disposal of sediment from the marine environment. If this is required, the ES must provide information regarding the likely quantities and method of disposal, together with an assessment of impacts. The ES should make clear whether removal of marine</p>

ID	Para	Other points	Inspectorate's comments
			sediment would be required during construction and/or operation/maintenance.

4.11 Geology and Soils

(Scoping Report section 6.12)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Para	Other points	Inspectorate's comments
2	6.12.1 and 6.12.9	Study area	<p>The Scoping Report indicates a search area for designated sites up to 500m from the 'proposed scheme'. The Scoping Report does not explicitly scope out assessment of impacts on designated sites but states that they are unlikely, given that none were found within the study area. The Inspectorate advises that the study area for the assessment must be based on the potential geographical extent of the anticipated impacts, and justified accordingly.</p> <p>The Scoping Report does not state if the term 'proposed scheme' refers to the area shown on Drawing 62240375-GYTRC-Scoping Report Boundary – 20188219 (provided in Appendix B of the Scoping Report). The ES should clearly set out the study area applied, in relation to the proposed DCO boundary.</p>
3	6.12.4 and noting 6.12.15-16	Baseline (and potential impacts)	<p>The results of the ground investigations should be fully reported in the ES, by way of an appendix if appropriate, where this information has been used to inform the assessment of environmental effects.</p> <p>The proposed ground investigations should also include</p>

ID	Para	Other points	Inspectorate's comments
			<p>consideration of the available minerals resource to determine whether any onsite material extracted as part of the construction of the Proposed Development could be suitable for reuse.</p> <p>Where relevant, cross-reference should be made to the Materials aspect chapter.</p>
4	6.12.10	Potential impacts	<p>The assessment of potential impacts to the River Yare pSPA (NB. this has been formally designated as the Outer Thames Estuary SPA) described in the Geology and Soils aspect chapter is likely to inform the assessment of ecological effects for the Proposed Development, and the ES should take into account inter-relationships between these environmental aspects. Information and assessments contained within the Geology and Soils will also be applicable to the Water Environment chapter. The Inspectorate expects to see cross-referencing between the Geology and Soils and relevant aspect chapters in the ES, as appropriate.</p>
5	6.12.13	Assessment methodology	<p>The Inspectorate acknowledges the statement regarding an absence of specific methods of assessment for the geology and soils impact assessment, and the intention to use assessment procedures contained within BS10175:2011 and CLR11, including CIRIA C552, in a phased approach together with professional judgement.</p> <p>The ES should clearly describe the assessment methodology applied to the aspect chapter. The ES must state whether residual effects are significant. Where professional judgement has been used in the assessment, this should be stated in the ES.</p>
6	6.12.22	Mitigation	<p>The intention to produce a remediation strategy (where contaminant linkages are present) is noted and the Inspectorate advises that the ES should clearly set out where mitigation has</p>

ID	Para	Other points	Inspectorate's comments
			<p>been applied to the assessment and the implications for residual effects. The ES must demonstrate how any mitigation measures on which the assessment has relied will be secured.</p>

4.12 Traffic and Transport

(Scoping Report section 6.13)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	N/A	N/A	No matters have been proposed to be scoped out of the assessment.

ID	Para	Other points	Inspectorate's comments
2	6.13.20 to 6.13.22, and 6.13.31	Potential impacts and assessment methodology - new developments	<p>The Scoping Report contains limited information in respect of the nature, location, and quantum of any new development to be considered in the ES. Any assumptions made in relation to this assessment should be explained clearly in the ES.</p> <p>Inter-related impacts associated with the assumptions made regarding new developments should also be taken into account in other relevant aspect chapter assessments, including Air Quality, Acoustics, and Peoples and Communities.</p>
3	6.13.25; 6.13.32.	Disruption to pedestrians and cyclists during construction	The Scoping Report identifies disruption to pedestrians and cyclists during construction as having a potential significant effect. The Inspectorate notes that change in accessibility to public routes/community severance is proposed for assessment within the Peoples and Communities aspect chapter. The Applicant should avoid duplication of assessment in the ES, and ensure clear cross-reference is provided between the two aspect chapters, where appropriate.
4	6.13.28	Traffic surveys	The Scoping Report states that traffic surveys will be undertaken depending on the availability of data. The ES should contain

ID	Para	Other points	Inspectorate's comments
			<p>details of the traffic surveys (new or existing), including times, dates, weather, locations, and if any factors may have impacted the surveys. Consideration should be given to the age of available data (where used) and whether it will accurately reflect the baseline on which the assessment is to be undertaken.</p>
5	Table 48-50	Significance of Effect	<p>The Significance of Effect matrix provided at Table 50 of the Scoping Report utilises differing terminology to the overall methodology presented in Table 3 and defined in Table 4 of the Scoping Report. The Inspectorate considers that the classification of significance of effects should use consistent terminology throughout the ES for ease of understanding. Where methodology is specific to an aspect chapter, this should be clearly stated in the ES.</p>
6	N/A	Study Area	<p>The ES should clearly state and justify the study area selected for both the construction and operational phase in respect of traffic and transport. The study area for non-motorised users should also be identified and justified. The study area should be shown on a supporting figure and effort should be made to agree the approach with the relevant highways authorities and Highways England.</p>
7	N/A	Mitigation	<p>The Scoping Report does not make reference to any mitigation measures to address impacts from traffic. The ES should contain details of any mitigation measures proposed, including those for construction traffic mitigation. This should include justification for their need and anticipated efficacy of any measures. If plans are relied upon as a form of mitigation there should be sufficient detail provided with the application to give confidence to their efficacy. Any mitigation relied upon for the purposes of the</p>

ID	Para	Other points	Inspectorate's comments
			<p>assessment should be appropriately secured.</p> <p>The Applicant's mitigation proposals should include a Construction Worker Travel Plan. Effort should be made to agree any plans with the relevant local authority and be appropriately secured.</p>
8	N/A	Road closures/diversions	<p>The Scoping Report at paragraph 6.9.36 notes that road blockages and diversions would be required during construction of the Proposed Development.</p> <p>The ES should clearly describe the road blockages/diversions proposed and their duration, supported by figures. The ES should ensure it includes an assessment of potential effects as a result of such diversions.</p> <p>The Applicant's attention is drawn to the comments provided on the Peoples and Communities aspect section of the Scoping Report in respect of business severance. The ES should avoid duplication of assessment but include clear cross-referencing between relevant aspect chapters.</p>

4.13 Cumulative Effects

(Scoping Report section 6.14)

ID	Ref	Applicant's proposed matters to scope out	Inspectorate's comments
1	6.14.12	Flood Risk and Great Yarmouth Tidal Barrier	The Scoping Report states that the Flood Risk Assessment will adopt a worse-case approach by excluding the Great Yarmouth Tidal Barrier from the assessment model. The Inspectorate is content that this would result in a worse-case scenario in terms of flood risk; however, the same cannot be said of other aspects chapters which should rightly include an assessment of the Great Yarmouth Tidal Barrier in the cumulative assessment. The ES should clearly explain any assumptions made in the Cumulative Effects Assessment (CEA) assessment matrix (where produced).

ID	Para	Other points	Inspectorate's comments
2	6.14.12	Traffic	<p>The Scoping Report states that operational phase effects for air quality and noise, and some aspects of the road drainage will include cumulative effects in so far that the traffic data on which they are based includes both future development and natural traffic growth.</p> <p>The cumulative effects assessment should clearly state the other developments that have been included within the traffic data, and provide appropriate cross-reference to other aspect chapters, as applicable.</p>

ID	Para	Other points	Inspectorate's comments
3	6.14.9	Consultation	The Applicant should also consult with GYBC regarding the projects to be included within the cumulative effects assessment.
4	6.14.9	Stage 1 – Zone of Influence	<p>The Scoping Report identifies a total of eight other developments for consideration within the CEA. However, no evidence has been provided for the selection of these projects, such as ZOI analysis or a desk study. In addition, the level of certainty and tier of the projects, as detailed in Table 3 of the Planning Inspectorate's Advice Note 17 has not been provided.</p> <p>Further information regarding the CEA, including the desk study process and ZOI, must be provided in the ES to justify the projects that have been identified for inclusion in and exclusion from the CEA. The Applicant may wish to include a figure(s) in the ES or associated appendices identifying the location of the projects/plans considered in the CEA to aid understanding.</p>
5	6.14.9	Stage 1 – Projects	The Inspectorate notes the identification of the " <i>East Anglia Array Windfarm</i> " in the list of projects. There are several East Anglia windfarms NSIPs proposed or consented. The ES should make clear to which NSIP(s) this relates.

5. INFORMATION SOURCES

5.0.1 The Inspectorate's National Infrastructure Planning website includes links to a range of advice regarding the making of applications and environmental procedures, these include:

- Pre-application prospectus⁵
- Planning Inspectorate advice notes⁶:
 - Advice Note Three: EIA Notification and Consultation;
 - Advice Note Four: Section 52: Obtaining information about interests in land (Planning Act 2008);
 - Advice Note Five: Section 53: Rights of Entry (Planning Act 2008);
 - Advice Note Seven: Environmental Impact Assessment: Process, Preliminary Environmental Information and Environmental Statements;
 - Advice Note Nine: Using the 'Rochdale Envelope';
 - Advice Note Ten: Habitat Regulations Assessment relevant to nationally significant infrastructure projects (includes discussion of Evidence Plan process);
 - Advice Note Twelve: Transboundary Impacts;
 - Advice Note Seventeen: Cumulative Effects Assessment; and
 - Advice Note Eighteen: The Water Framework Directive.

5.0.2 Applicants are also advised to review the list of information required to be submitted within an application for Development as set out in The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (as amended).

⁵ The Planning Inspectorate's pre-application services for applicants. Available from: <https://infrastructure.planninginspectorate.gov.uk/application-process/pre-application-service-for-applicants/>

⁶ The Planning Inspectorate's series of advice notes in relation to the Planning Act 2008 process. Available from: <https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/>

APPENDIX 1: CONSULTATION BODIES FORMALLY CONSULTED

TABLE A1: PRESCRIBED CONSULTATION BODIES⁷

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	NHS Great Yarmouth and Waveney Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	Historic England
The relevant fire and rescue authority	Norfolk Fire and Rescue Service
The relevant police and crime commissioner	Office of the Police and Crime Commissioner for Norfolk
The Environment Agency	The Environment Agency
The Maritime and Coastguard Agency	Maritime & Coastguard Agency
The Maritime and Coastguard Agency - Regional Office	The Maritime and Coastguard Agency
The Marine Management Organisation	Marine Management Organisation (MMO)

⁷ Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (the 'APFP Regulations')

SCHEDULE 1 DESCRIPTION	ORGANISATION
The Civil Aviation Authority	Civil Aviation Authority
The Relevant Highways Authority	Norfolk County Council
The relevant strategic highways company	Highways England
The relevant internal drainage board	Broads Internal Drainage Board
The relevant internal drainage board	Waveney, Lower Yare & Lothingland Internal Drainage Board
Trinity House	Trinity House
Public Health England, an executive agency of the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission
The Secretary of State for Defence	Ministry of Defence

TABLE A2: RELEVANT STATUTORY UNDERTAKERS⁸

STATUTORY UNDERTAKER	ORGANISATION
The relevant Clinical Commissioning Group	NHS Great Yarmouth and Waveney Clinical Commissioning Group
The relevant NHS Trust	East of England Ambulance Service NHS Trust
Railways	Highways England Historical Railways

⁸ 'Statutory Undertaker' is defined in the APFP Regulations as having the same meaning as in Section 127 of the Planning Act 2008 (as amended)

STATUTORY UNDERTAKER	ORGANISATION
	Estate
Canal Or Inland Navigation Authorities	Broads Authority
Dock and Harbour authority	Great Yarmouth Port Authority
Lighthouse	Trinity House
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Homes and Communities Agency	Homes England
The relevant Environment Agency	Environment Agency
The relevant water and sewage undertaker	Anglian Water
The relevant public gas transporter	Cadent Gas Limited
	Energetics Gas Limited
	Energy Assets Pipelines Limited
	ES Pipelines Ltd
	ESP Connections Ltd
	Fulcrum Pipelines Limited
	GTC Pipelines Limited
	Independent Pipelines Limited
	Indigo Pipelines Limited
	Quadrant Pipelines Limited
	National Grid Gas Plc
	Scotland Gas Networks Plc
The relevant electricity distributor with CPO Powers	Energetics Electricity Limited
	Energy Assets Network Limited

STATUTORY UNDERTAKER	ORGANISATION
	Energy Assets Power Networks
	ESP Electricity Limited
	Fulcrum Electricity Assets Limited
	G2 Energy IDNO Limited
	Harlaxton Energy Networks Limited
	Independent Power Networks Limited
	Leep Electricity Networks Limited
	Murphy Power Distribution Limited
	The Electricity Network Company Limited
	UK Power Distribution Limited
	Utility Assets Limited
	Vattenfall Networks Limited
	Utility Distribution Networks Limited
	Eastern Power Networks Plc
	UK Power Networks Limited
The relevant electricity transmitter with CPO Powers	National Grid Electricity Transmission Plc

TABLE A3: SECTION 43 CONSULTEES (FOR THE PURPOSES OF SECTION 42(1)(B))⁹

LOCAL AUTHORITY¹⁰
Great Yarmouth District Council
Norfolk County Council
Broads Authority
Waveney District Council
South Norfolk District Council
Broadland District Council
North Norfolk District Council
Lincolnshire County Council
Cambridgeshire County Council
Suffolk County Council

TABLE A4: NON-PRESCRIBED CONSULTATION BODIES

ORGANISATION
Royal National Lifeboat Institution

⁹ Sections 43 and 42(B) of the PA2008

¹⁰ As defined in Section 43(3) of the PA2008

APPENDIX 2: RESPONDENTS TO CONSULTATION AND COPIES OF REPLIES

Consultation bodies who replied by the statutory deadline:

Anglian Water Services Limited
Environment Agency
ESP Gas Group Limited
Forestry Commission
Fulcrum Pipelines Limited
Great Yarmouth Port Authority
Harlaxton Energy Networks Limited
Health & Safety Executive
Marine Management Organisation
Maritime and Coastguard Agency
National Grid
Natural England
Norfolk County Council
Public Health England
Royal Mail
South Norfolk Council
Trinity House
Waveney Lower Yare & Lothingland Internal Drainage Board



Ms Marie Shoesmith
The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Strategic Planning Team
Water Resources
Anglian Water Services Ltd
Thorpe Wood House,
Thorpe Wood,
Peterborough
PE3 6WT

Tel (0345) 0265 458
www.anglianwater.co.uk

Your ref TR010043_000013

3 May 2018

Dear Ms Shoesmith,

Great Yarmouth Third River Crossing: Environmental Statement Scoping Report

Thank you for the opportunity to comment on the scoping report for the above project. Anglian Water is the sewerage undertaker for the above site. The following response is submitted on behalf of Anglian Water.

Please note that Anglian Water only provide wastewater services to Great Yarmouth. The views of Essex and Suffolk Water who are responsible for potable (clean) water services in the Great Yarmouth area should also be sought on the above project.

General comments

Anglian Water would welcome further discussions with Norfolk County Council prior to the submission of the Draft DCO for examination.

In particular it would be helpful if we could discuss the following issues:

- Wording of the Draft DCO including protective provisions specifically for the benefit of Anglian Water.
- Requirement for wastewater services.
- Impact of development on Anglian Water's assets and the need for mitigation.
- Pre-construction surveys.



Registered Office
Anglian Water Services Ltd
Lancaster House, Lancaster Way,
Ermine Business Park, Huntingdon,
Cambridgeshire. PE29 6YJ
Registered in England
No. 2366656.

an AWG Company

6.7 Water environment

Reference is made to the risks of flooding from the above project from river, tidal, surface water and sewer flooding. Anglian Water is responsible for managing the risks of flooding from surface water, foul water or combined water sewer systems. At this stage it is unclear whether there is a requirement for a connection(s) to the public sewerage network for the above site or as part of the construction phase.

Consideration should be given to all potential sources of flooding including sewer flooding (where relevant) as part of the Environmental Statement and related Flood Risk Assessment.

We would suggest that reference is made to any relevant records in Anglian Water's sewer flooding register as well as the flood risk maps produced by the Environment Agency. This information can be obtained by contacting Anglian Water's Pre-Development Team. The e-mail address for this team is as follows: (planningliaison@anglianwater.co.uk).

Existing water recycling infrastructure

There are existing Anglian Water foul and combined sewers located within the boundary of the site some of which cross the River Yare which potentially be affected by the above development. These assets are critical to enable us to carry out Anglian Water's duty as a statutory water and sewerage undertaker.

We would expect any requests for alteration or removal of sewers to be conducted in accordance with the Water Industry Act 1991. The design of the above scheme is to be refined further by Norfolk County Council. Therefore the extent to which existing sewers would be affected will need to be defined with the assistance of Anglian Water.

In addition a number of sewage pumping stations and outfalls appear to be located within the study area as identified in the Scoping Report. We would welcome further discussions in relation to the implication of the above project for the existing sewers and pumping stations.

It is therefore suggested that the Environmental Statement should include reference to the foul sewerage network and associated pumping stations and outfalls.

Maps of Anglian Water's assets are available to view at the following address:

<http://www.digdat.co.uk/>

Should you have any queries relating to this response please let me know.

Yours sincerely

A solid black rectangular box used to redact the signature of Stewart Patience.

Stewart Patience

Spatial Planning Manager



Ms Marie Shoesmith
Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
BRISTOL
BS1 6PN

Our ref: AE/2018/122731/01-L01
Your ref: TR10043-000013
Date: 03 May 2018

Dear Ms Shoesmith

PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017(THE EIA REGULATIONS) – REGULATIONS 10 AND 11

APPLICATION BY NORFOLK COUNTY COUNCIL FOR AN ORDER GRANTING DEVELOPMENT CONSENT FOR THE GREAT YARMOUTH THIRD RIVER CROSSING (THE PROPOSED DEVELOPMENT)

SCOPING CONSULTATION AND NOTIFICATION OF THE APPLICANT'S CONTACT DETAILS AND DUTY TO MAKE AVAILABLE INFORMATION TO THE APPLICANT IF REQUESTED

Thank you for your EIA Scoping consultation letter dated 6 April 2018 and received in this office by email on the same day.

We have reviewed the Environmental Impact Assessment Scoping Report submitted and whilst it appears to be thorough in most respects, our response highlights areas that we think require particular attention and consideration as the Environmental Statement is developed. We have made comments in respect of flood risk, water quality, contaminated land, nature conservation and the requirements for environmental permits. We note that the Rochdale Envelope approach is being used and therefore, we expect that the environmental impacts of the proposal will continue to be evaluated as designs for the project progresses.

Flood Risk

Our maps show the site lies wholly within tidal Flood Zone 3 defined by the 'Planning Practice Guidance: Flood Risk and Coastal Change' as having a high probability of flooding. A proposal such as this for a significant new bridge crossing can be classed as "essential infrastructure" specifically essential transport infrastructure (including mass

evacuation routes) which has to cross the area at risk. This is defined in [Table 2: Flood Risk Vulnerability Classification](#) of the Planning Practice Guidance. However, it is acknowledged that the final decision on the classification will be made by recommendation of the Planning Inspectorate to the Secretary of State.

To comply with national policy the application is required to pass the Sequential and Exception Tests and be supported by a site specific Flood Risk Assessment (FRA). If this proposal is considered an NSIP the [National Policy Statement for National Networks](#) should be referred to as well as the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) discussed above.

Flood Risk Assessment & Hydraulic Modelling

- Please note that we are currently investigating options to undertake works to the flood defences in Great Yarmouth including the area of the proposed bridge on the west bank. We therefore want to ensure that the proposed development and our works are co-ordinated where possible. This is to ensure that we avoid abortive works and deliver efficiencies where possible. The applicant has engaged in early pre-application discussions with us and we look forward to further consultation as the project progresses.
- We agree with the statement in **section 6.7.65**. which proposes to look at Flooding as a stand-alone chapter within the Environmental Statement.
- As part of considering flood risk, **section 6.7.66**. states that a Flood Risk Assessment (FRA) will be carried out for this development in accordance with the NPPF and PPG. We agree that a flood risk assessment is necessary and will review this assessment once it is complete and provided to us. This section also states that flood risk impact to the scheme site will be considered during construction. The FRA should also consider if the methods used will have an impact off site as well.
- Section 6.7.67. of the scoping report states that a new 2D TuFLOW model will be developed to support the FRA. Please note that as mentioned in our previous response, will shortly have a new Essex, Norfolk and Suffolk 2D tidal coastal model (2017) that may save you the need to create a new 2D model which can be made available for your use. For further information on our flood map products please visit our website at:
www.environment-agency.gov.uk/research/planning/93498.aspx.
- **Section 6.7.67**. states that the 2D model “will focus on the River Yare through Great Yarmouth”, the applicant must ensure that the modelled extent of the model covers a sufficient area of the Main Rivers (Yare & Bure) in Great Yarmouth. This is to ensure the hydraulic model is representative of the flood risk in this area. We are prepared to offer ongoing advice and technical review of any modelling undertaken prior to formal submission as part of our Planning Advice service.
- The return periods that the applicant intends to run as part of this modelling are detailed in **section 6.7.68**. We are satisfied that the following return periods are needed to understand the offsite impacts of this development: 5% (1 in 20),

0.5% (1 in 200) & 0.1% (1 in 1000) in current day and with climate change for the baseline and post development scenarios.

- The climate change approach that will be used for modelling these return periods is stated in **section 6.7.69**. This approach of calculating climate change using the 5 relevant guidance / datasets that are applicable to the development and using the calculation that provides the maximum increase in sea level rise, is acceptable.

Impact Assessment Criteria

Section 6.7.72 sets out how the FRA will consider the impact of the proposed crossing upon flood risk elsewhere. **Table 27** classifies the change in depth of flooding and applies a 'Magnitude of Impact' of no change, negligible, moderate and major. **Table 28** then applies these magnitudes to the development vulnerability classifications within Table 2 of the Planning Practice Guidance to determine where mitigation would be required.

It is understood that where mitigation is identified to be required in **Table 27** it would be designed to produce a negligible effect which equates to a maximum increase in flood depth of 2cm. This was determined based on the tolerance of the hydraulic model. We note that similar increases in flood depth were considered minor within the Lowestoft Cumulative Land raising Study which was undertaken by Scott Wilson on behalf of Waveney District Council dated June 2008. Whilst 2cm may have a minor impact elsewhere, the FRA will still need to identify and quantify any changes in flood depth, extent, frequency and hazard, identifying the consequences of these changes upon the receptors in the area at a site specific level to determine if mitigation is required.

This will be necessary, as **Table 28** classes "More Vulnerable" and "Less Vulnerable" development at negligible increased flood risk (up to 2cm), as requiring "No Mitigation". There will be instances where mitigation is required for more vulnerable and less vulnerable development at negligible increased flood risk (up to 2cm).

We are pleased to see that all mitigation will be decided in consultation with the Environment Agency. **Table 27** suggests that if there is a moderate or major magnitude of impact to water compatible development mitigation is not required. It is agreed that water compatible development by definition can be located in areas at a high risk of flooding and it is often acceptable for this type of land use to flood. Having said this it is important to note that the water compatible classification covers a range of uses. Table 2 of the PPG lists the following:

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.

- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

It may be appropriate for amenity open space to flood to a greater depth or for it to flood where it did not previously, but this may not be the case for essential ancillary sleeping or residential accommodation for staff required by uses identified in the water compatible category, for example. Further justification is required to explain why a moderate and major magnitude of impact is acceptable for water compatible uses. At present we would not agree that it is acceptable to increase flood risk to all water compatible development types. Whilst it is noted that these uses will not all be present in the Great Yarmouth area it should be considered that it may not be appropriate for an increase in flood depth to all water compatible uses.

The impact assessment criteria presented provides a basic framework but we would advise that any increases in flood risk to any vulnerability of development should be investigated to establish the likely consequence upon that specific site/development.

Water Quality

Groundwater

Section 6.7.15. states that the Site Investigation Factual Report (NCC, October 2007) indicated contamination to groundwater within the study area. Contamination must not be mobilised by the works for the proposed development; remediation may be required if contamination is present in the area of the works and any necessary measures must be identified.

Section 6.7.23. details licensed abstractions and discharges. The report should include consideration of all abstractions whether licensed or unlicensed. We can confirm that there aren't any deregulated abstractions in the study area (i.e. those which used to have a licence until deregulation in 2002 on the grounds of an abstraction rate of ≤ 20 m³/d). We do not have a record of any unlicensed abstractions (those which have never had a licence) in the area; whilst the nature of the study area suggests that it's unlikely that any exist the local council should be contacted to confirm whether or not this is the case.

Section 6.7.34. identifies the potential significant impacts. This section should explicitly include indirect loss or change to surface water receptors as a result of changes in groundwater flow (as well as dewatering).

Protection of surface water

We are content that the proposed approach and issues scoped in for the Environmental Statement is adequate, however we would welcome details on how any proposed emergency containment of pollution during an acute incident would be structured.

Contaminated Land

Section 6.1 details the impacts on geology and soils and we agree that this should form part of the assessments within the Environmental Statement

The Contaminated Land Desk Study, by WSP dated July 2017 has highlighted an industrial past on both sides of the River Yare which could potentially have resulted in contamination. Development work at the site, including remediation work and piling

could disturb contamination and open up pollution pathways which could result in pollution of the underlying groundwater. As a result, intrusive investigations and risk assessment will be required (indicated to be underway) to establish the extent of contamination and determine the need/level of remediation required on site to ensure the protection of the water environment.

Section 3.2.1 of the Desk Study sets out the likely contaminants given the previous industries in the area. The report has indicated that gas works were formerly present on both sides of the River Yare. However, not all the contaminants associated with this land use are included in this section of the report. Further information detailing the contaminants that need to be included in a site investigation can be found in the DoE Industry Profile CLAIRE (www.claire.co.uk/useful-government-legislation-and-guidance-by-country/198-doe-industry-profiles).

Protection of surface water

We are content that the proposed approach and issues scoped in for the Environmental Statement is adequate, however we would welcome details on how any proposed emergency containment of pollution during an acute incident would be structured.

Nature Conservation

Section 6.4 – Nature Conservation: All statutory designated sites of European and National Importance and protected species that are likely to be impacted by proposal have been identified, we have no further comment.

Section 6.4.1 – Surveys for Bats – App.1 identifies the need for further re-emergence and re-entry surveys to be completed before the demolition of suitable roosts sites (derelict buildings). We support this.

Surveys for Water Vole – These will need to be carried out prior to work commencing. Water Vole populations will naturally fluctuate with seasonal differences, and the result is that Water vole may be present on a site one year and absent the next. Where any suitable habitat has been identified, or where there are records of water vole historically, a pre-work survey will be required during optimal survey season. Appropriate mitigation can then be put in place based on the results.

Section 6.7.56 – Water Environment – The report identifies the requirement for an aquatic ecological assessment, which has not yet been undertaken. The assessment should include the potential for impact on migratory fish species which use the Yare through Breydon water as the primary attractant flow into the inland river systems. Protected migratory species include European Eel, Smelt and River Lamprey. It may be necessary (depending on the final timing of the work) to consider ‘In combination’ effects on migratory species with the Planned Crossing at Lake Lothing in Lowestoft.

Section 6.7.33. The potential impacts on surface water bodies detailed in this section should be used in the aquatic ecology assessment to establish the likely effects on fish, benthic invertebrates and aquatic ecosystems. The report identifies the need for a WFD assessment to be carried out which we agree with and look forward to the opportunity to review.

Environmental Permits

The Scoping Report does not indicate whether or not the applicant intends to request disapplication of environmental permits but our understanding is that the applicant is considering this. We have included below some advice on permitting and the Cont/d..

information that would be required if disapplication is requested. Environmental Permits are required for water abstraction, discharges to surface water and works in the vicinity of Environment Agency flood defences. Any consideration for disapplication will require sufficient information, assessment or mitigation to demonstrate that the activity will not cause detriment to the water environment or our flood defence assets. It will not be possible to consider this in detail until more details of the design is known. We will welcome ongoing engagement with the developer so that we can continue to review and advise regarding how the proposal can be developed without compromising the integrity of the neighbouring flood defences.

Under the Environmental Permitting Regulations (EPR) for England and Wales (2016) an environmental permit for flood risk activities may be required for temporary or permanent works in, under, over or within 8m of a fluvial main river or flood defence structure or culvert or within 16m of a tidal main river or flood defence structure or culvert. The proposed third crossing will cross the main river known as the River Yare.

The Environmental Permitting Regulations take a risk based approach that enables us to focus regulatory effort towards activities with highest flood or environmental risk. Lower risk activities can be excluded or exempt and only higher risk activities will require a permit. The bridge crossing itself will require a bespoke permit. Any other facilitating works may fall under one or more of the following:

- An Exclusion
- An Exemption
- A Standard Rules Permit
- A Bespoke Permit

Application forms and further information can be found at:

<https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>. If you require further advice please email FDCENS@environment-agency.gov.uk

If the works will include the installation of coffer dams and/or dewatering this will require full assessment using the methodology set out in the link below:

<https://www.gov.uk/government/publications/hydrogeological-impact-appraisal-for-dewatering-abstractions>

This should include the assessment of any saline intrusion risk. Engineering and construction works are no longer exempt from requiring an abstraction licence, unless they are sufficiently small in scale. If dewatering is to be undertaken details of the scheme should be supplied to the Environment Agency so that we can advise on whether or not the proposal would be exempt. If an abstraction licence is required, an application for a Section 32 Groundwater Investigation Consent should be made in the first instance.

I hope that you have found this information helpful.

Yours sincerely



Mrs Barbara Moss-Taylor
Planning Specialist

Direct dial 0208 474 8010

Direct fax 01473 271320

Direct e-mail barbara.moss-taylor@environment-agency.gov.uk

From: [ESP Utilities Group Ltd](#)
To: [Great Yarmouth Third River Crossing](#)
Subject: Your Reference: TR010043_000013. Our Reference: PE135446. Plant Not Affected Notice from ES Pipelines
Date: 11 April 2018 12:01:15

Great Yarmouth Third River Crossing
The Planning Inspectorate

11 April 2018

Reference: TR010043_000013

Dear Sir/Madam,

Thank you for your recent plant enquiry at (TR010043_000013).

I can confirm that ESP Gas Group Ltd has no gas or electricity apparatus in the vicinity of this site address and will not be affected by your proposed works.

ESP are continually laying new gas and electricity networks and this notification is valid for 90 days from the date of this letter. If your proposed works start after this period of time, please re-submit your enquiry.

Important Notice

Please be advised that any enquiries for ESP Connections Ltd, formerly known as British Gas Connections Ltd, should be sent directly to us at the address shown above or alternatively you can email us at: PlantResponses@espipelines.com

Yours faithfully,

Alan Slee
Operations Manager



Bluebird House
Mole Business Park
Leatherhead
KT22 7BA

☎ 01372 587500 📠 01372 377996


<http://www.espug.com>

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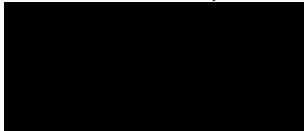
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From: [Meakins, Corinne](#)
To: [Great Yarmouth Third River Crossing](#)
Subject: Forestry Commission response: Attn Marie Shoesmith Gt.Yarmouth third River crossing, scoping consultation
Date: 11 April 2018 11:43:22
Attachments: 

Thank you for consulting the Forestry Commission on this application scoping consultaion. We do not believe that this will impact on any Ancient Woodland in the area and therefore we have no comments to make, this does not imply support or objection to the applications as a government department we can do neither.

Yours sincerely



Corinne Meakins

Local Partnership Advisor
Forestry Commission East and East Midlands
Tel: 0300 067 4583
Mobile; 07900 227 123
Corinne.meakins@forestry.gsi.gov.uk

Have you signed up for the Tree Health Newsletter yet? Link here: [Tree Health Newsletter](#) also check out Twitter **@treehealthnews**

Please report signs of tree pests and diseases using our online Tree Alert form:
<http://www.forestry.gov.uk/trealert>

For up-to-date information follow Steve Scott on Twitter: [@SteveScottFC](#), check out www.facebook.com/MakingWoodlandsWork and [Subscribe](#) to our e-alert to stay up to date on forestry Grants & Regulations

From: [&box_FPL_SupplyPoint_Enquiries](#)
To: [Environmental Services](#); [Great Yarmouth Third River Crossing](#)
Subject: RE: TR010043 – Great Yarmouth Third River Crossing – EIA Scoping Notification and Consultation
Date: 10 April 2018 08:38:56
Attachments: [image001.jpg](#)
[image002.jpg](#)

Hi

Thank you for asking Fulcrum Pipelines Limited to examine your consultation document for the above project.

We can confirm that Fulcrum Pipelines Limited have no comments to make on this scoping report. Please note that we are constantly adding to our underground assets and would strongly advise that you consult us again prior to undertaking any excavations.

Please note that other gas transporters may have plant in this locality which could be affected.

We will always make every effort to help you where we can, but Fulcrum Pipelines Limited will not be held responsible for any incident or accident arising from the use of the information associated with this search. The details provided are given in good faith, but no liability whatsoever can be accepted in respect thereof.

If you need any help or information simply contact Fulcrum on 03330 146 455

Regards

SUE BEESLEY | Asset Coordinator

Direct: 0114 280 4110

Email: Sue.Beesley@fulcrum.co.uk | Web: www.fulcrum.co.uk

Address: Fulcrum Pipelines, 2 Europa View, Sheffield Business Park, Sheffield, S9 1XH. Tel: 03330 146 455

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Fulcrum News:

We're delighted to announce the acquisition of CDS Pipe Services Ltd as we strengthen our direct delivery capabilities. [Read more](#)

Fulcrum creates one of the UK's leading gas and electrical infrastructure services groups with £22m acquisition of Dunamis Group [Read more](#)

From: Environmental Services <environmentalservices@pins.gsi.gov.uk>

Sent: 06 April 2018 12:30

Subject: TR010043 – Great Yarmouth Third River Crossing – EIA Scoping Notification and Consultation

Dear Sir/ Madam

Please see attached correspondence on the proposed Great Yarmouth Third River Crossing.

Please note the deadline for consultation responses is 04 May 2018, and is a statutory requirement that cannot be extended.

Kind Regards

Marie Shoesmith

Senior EIA and Land Rights Advisor

Major Applications & Plans

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Direct line: 0303 444 5092

Helpline: 0303 444 5000

Email: Michael.Breslaw@pins.gsi.gov.uk

Web: infrastructure.planninginspectorate.gov.uk (National Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

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Please view our [Information Charter](#) before sending information to the Planning Inspectorate.

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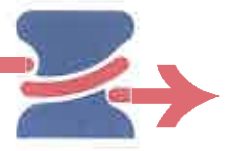
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Vanguard House, South Beach Parade, Great Yarmouth, NR30 3GY
T: 01493 335513 email: clerk2016@gypa.co.uk

4th May 2018

The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN
(GYTRC@pins.gsi.gov.uk)

Dear Sir/Madam,

References:

- A. Your TR010043_000020 dated 16th April 1028
- B. EIA Directive (85/337/EEC) 1985

Thank you for the opportunity to comment as a consultee on the scoping document outlining information that should be considered in an Environmental Statement relating to the proposed development of a third river crossing in Great Yarmouth. As the Statutory Harbour Authority for the Port of Great Yarmouth we can confirm that Great Yarmouth Port Authority (GYPA) should be included as a consultee in future correspondence.

Whilst GYPA acknowledge and welcome the improved connectivity to the peninsular and Outer Harbour the crossing will bring, we do have some concerns over the likely impact the effective 'severance' of the river will have on the considerable commercial activity in the River Yare if the primacy of the Port operation is not acknowledged.

To highlight this concern whilst there is currently a transport section there is little reference in it pertaining to the Port, shipping and navigation arena. Given the importance of both the Outer Harbour and the River Yare to the local economy we would recommend that this be specified in the section so as to clearly capture factors impacting on the Port.

In terms of specifics; in the context of construction and bridge operation it would be prudent to assess the impact the work would have on the sediment depths and the likely effect on the safety of navigation. Consideration also needs to be given to any requirements for *environmental licences for the removal and disposal of materials*. Subsequently, the operation of the bridge needs to consider possible disruption to the upstream commercial activity. Not to do so would potentially place Great Yarmouth at a competitive disadvantage as an operating base, impacting on both current and prospective operations. This analysis could be supported by the inclusion of historical and projected data on river usage, to highlight the likely number of occasions the bridge will need to be opened in a stipulated period.

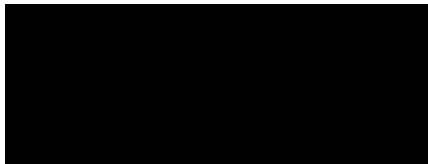
Cont'd..

-2-

Otherwise, the environmental scoping report, as presented, covers the majority of the required documentation that we believe needs to be produced to consider environmental impacts of the project, with most of the concerns discussed similar to those that we would wish to see.

We look forward to seeing the completed report.

Yours faithfully



G L Doyle
Harbour Master
Great Yarmouth Port Authority



The Planning Inspectorate
3D Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

GYTRC@pins.gsi.gov.uk

14th May 2018

Dear Sir/Madam,

Planning Act 2008 (as amended) and The Infrastructure Planning EIA Regulations 2017 (TR010043_000020)

Application by Norfolk Country Council for an Order granting Development Consent for the Great Yarmouth Third River Crossing

Thank you for your letter dated 16th April 2018 in respect of the Environmental Impact Assessment Scoping Report (March 2018) prepared by WSP on behalf of the promoter.


I am responding on behalf of Great Yarmouth Port Company (GYPC) as operators of the Port on behalf of Great Yarmouth Port Authority (GYPA).

In October 2017 we responded to a non-statutory consultation undertaken by Norfolk County Council although note that our response has not been included within Appendix D of the Scoping Report. We believe this to be a serious omission and for completeness attach a copy of our previous response dated 6th October 2017.

Within Appendix A we note the Secretary of State's Direction dated 26th February 2018 and in particular Annex A which confirms the justification for the project as an *Nationally Significant Infrastructure Project* is entirely predicated upon Great Yarmouth Port as an international gateway and given its role in the renewable energy and the offshore gas and oil industry.

We note within the Scoping Report that there are only limited references to the Port and the likely environmental/operational impacts. We would have expected the inclusion of a specific chapter pertaining to the "port, shipping and navigation" taking into account the comments previously submitted in October 2017.

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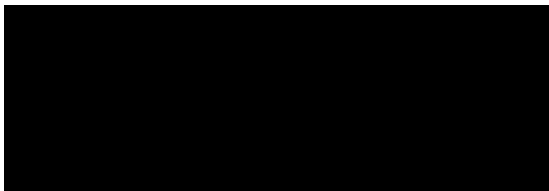


Whilst GYPC acknowledge and welcome the improved road connectivity to the peninsular and Outer Harbour the new crossing will bring, we do have significant concerns over the likely impact upon the considerable commercial activity upon the River Yare. This is because the new crossing will sever our operational landholdings and a number of the tenants/operators. Of particular relevance is the safeguarding of commercial port activity upstream of the proposed crossing.

Our principle requirement is to ensure the continued primacy of the harbour in terms of current and future shipping activity in an unfettered manner. We cannot accept any restrictions upon the opening/closing of the new bridge and any resulting impact upon road traffic needs to be accepted by Norfolk County Council. We note the Scoping Report provides no quantitative assessment of likely bridge openings as this will have a direct impact upon traffic flows and congestion, air quality (from stationary traffic) and driver stress.

Please do not hesitate to make contact should you require any further information or clarification.

Yours faithfully,



Warren Marshall MRTPI CMILT
Group Planning Director

warren.marshall@peelports.com

Cc Richard Goffin – Port Director
Gary Doyle – Group Harbour Master

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Gavin Broad – Major Projects Team
Community and Environmental Services
County Hall
Martineau Lane
Norwich
NR1 2DH

6th October 2017

Dear Mr Broad,

Great Yarmouth Third River Crossing – Stage 2 Consultation


Thank you for your letter dated 14th August 2017 in respect of the above. Whilst the consultation is non-statutory and is a prelude to the statutory procedures applicable to a "Development Consent Order" scheme nonetheless we welcome the opportunity to provide a formal response..

I am responding on behalf of Great Yarmouth Port Company as operators of the Port on behalf of the Great Yarmouth Port Authority. I am aware that your team have already held a number of meetings and exchanged information with my marine colleagues particularly in relation to vessel activity upon the River Yare and in respect of safeguarding the function of a Statutory Harbour Authority. You should also be aware of the Great Yarmouth Port Users Association who represent commercial operators a number of whom are situated to the north of the proposed bridge and will be keen to ensure there is no impact upon their operations.

By way of background Peel Ports Group purchased Great Yarmouth Port Company in December 2015 with the aim of both expanding our influence on the east coast and to diversify into the offshore oil & gas and wind industries. Peel Ports are wholly invested in a 'step change' for Great Yarmouth Port and as an example are already delivering enhancements of the port infrastructure at Great Yarmouth Outer Harbour for several high profile offshore wind projects.

A £7 million investment commenced in October 2016 will support the construction of primary infrastructure and ground works for the Galloper Wind Farm and East Anglia ONE Wind Farm projects. Construction work includes the delivery of a yard storage and marshalling area, as well as the installation of heavy-lift quay facilities. This area will serve as the arrival hub for many of the key components of the Galloper Wind Farm such as nacelles, blades, towers and electrical modules, and as the base for the tower pre-assembly and nacelle preparation. These components will be shipped in from their manufacturing facilities and after preparation they will be loaded onto the specialist installation vessels for transport to the nearby development sites.

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With respect to improved road connectivity to the Outer Harbour and South Denes the “principle” of a Third River Crossing is a project that Great Yarmouth Port Company would endorse as being beneficial to realising our future growth aspirations. However this support is heavily caveated upon current (and future) marine and vessel requirements of our cargo owners and port users upon the River Yare not being prejudiced in any way.

Having reviewed your current consultation material it is not unsurprising that feedback provided from Stage 1 in respect of highway capacity and resilience has confirmed as follows:

- Congestion in Great Yarmouth is a serious issue;
- The Third River Crossing would make journeys faster;
- Congestion would be reduced by the new crossing.

From a marine operations perspective your literature confirms that “*The bridge will need to be opened for most vessels*”. I am aware that there has been considerable discussion around the air draught (and the potential to increase the height) and can only assume that the County Council has concluded the bridge design and its horizontal alignment is such that very few vessels would be able to safely pass underneath. Indeed, I understand our pilot boats will not be able to move freely without a bridge lift vastly impacting upon our response and capability.

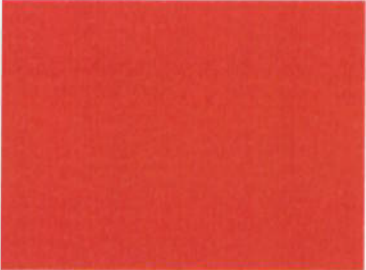
A number of other key facts are presented as follows:

- Estimated number of openings on a typical day (in 2023) – 15 (based upon our assessment of predicted river traffic);
- Combined length of time the bridge is closed to traffic on a typical day – 75 minutes (approx average of 5 minutes per opening);
- Total time each day the bridge is open to traffic/pedestrians/cyclists – 22 hours 45 minutes.

It would be useful to better understand the basis of the preceding facts and the assumptions being made in terms of road network availability v vessel activity. Presenting the bridge openings (75 minutes) across a 24 hour period is somewhat misleading tends to suggest there would be minimal traffic disruption. From our considerable experience in operating The Manchester Ship Canal it is the case that vessel activity which is tidally dependent and which can co-incide with the AM and PM peak flows can cause significant disruption to traffic flows in and around Warrington Town Centre. In the case of Warrington there are 3 swings bridges situated on arterial routes within 2 miles of each other.

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At Great Yarmouth as well as trying to reconcile vessel activity during peak periods upon the highway network there is also a seasonality particularly associated with offshore vessel support. Such activity historically increases during the summer, as the better weather conditions allow greater periods of up time when conducting maintenance on the offshore gas platforms. In addition to this, summer campaigns also take place at similar times e.g. gas pipe maintenance, anti-scour, offshore wind farm O & M. It would be reasonable to assume that there will be an increase in O & M activities associated with the Galloper Wind Farm and East Anglia ONE Wind Farm projects highlighted above. Such current and future vessel activity would clearly overlap when there is increased car traffic upon the network associated with tourism and peak activity within Great Yarmouth.

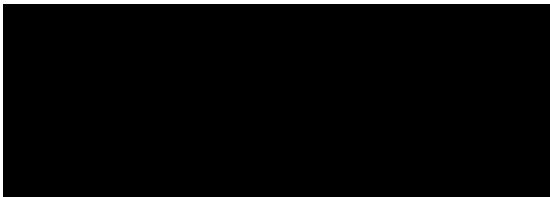
There are a number of associated issues not limited to but including:

- Protective Provisions during construction and operational phases;
- Integrity of quay walls and indemnities;
- Operational Protocols for the Third River Crossing;
- Marine safety;
- Land assembly and CPO process.

A meeting has been diarised for 31st October 2017 with representatives from Norfolk County Council and Peel Ports Group.

Please do not hesitate to make contact should you require any further information or clarification.

Yours sincerely,



Warren Marshall MRTPI CMILT
Group Planning Director

Cc Richard Goffin – Port Director
Gary Doyle – Group Harbour Master

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From: [Karen Thorpe](#)
To: [Great Yarmouth Third River Crossing](#)
Subject: Great Yarmouth Third River Crossing
Date: 04 May 2018 14:14:30
Attachments: [image001.png](#)
[image002.jpg](#)
[image003.png](#)
[image004.jpg](#)
[image005.jpg](#)
[image006.jpg](#)
[image007.jpg](#)
[image008.png](#)
[image009.jpg](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)

Good afternoon,

Thank you for sending the relevant information and material regarding the Great Yarmouth Third River Crossing Scheme.

Harlaxton Energy Networks Ltd. at this time has no assets in the area, and will not be implementing any in the near future, therefore Harlaxton has no comment to make on this scheme.

Kind Regards

Karen Thorpe
Distribution Administration Assistant
0844 800 1813



Visit our website harlaxtonenergynetworks.co.uk and explore at your leisure
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From: Dave.Adams2@hse.gov.uk on behalf of NSIP.Applications@hse.gov.uk
To: [Environmental Services](#)
Subject: NSIP - Great Yarmouth Third River Crossing – EIA Scoping Consultation
Date: 02 May 2018 09:22:31
Attachments: [image002.png](#)

Dear Planning Inspectorate,

Thank you for your letter of 6th April 2018. HSE does not comment on EIA Scoping Reports but the attached information is likely to be useful to the applicant.

Kind regards,

Dave Adams

Dave.MHPD.Adams

Land Use Planning Policy, Chemicals, Explosives & Microbiological Hazards Division, Health and Safety Executive.

Desk 76, 2.2, Redgrave Court, Merton Road, Bootle, Merseyside L20 7HS

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www.hse.gov.uk | <http://hse.gov.uk/landuseplanning>

HSE EVP Blue Logo.png



From: Environmental Services [mailto:environmentalservices@pins.gsi.gov.uk]
Sent: 06 April 2018 12:30
Subject: TRIM: TR010043 – Great Yarmouth Third River Crossing – EIA Scoping Notification and Consultation

Dear Sir/ Madam

Please see attached correspondence on the proposed Great Yarmouth Third River Crossing.

Please note the deadline for consultation responses is 04 May 2018, and is a statutory requirement that cannot be extended.

Kind Regards

Marie Shoesmith

Senior EIA and Land Rights Advisor

Major Applications & Plans

The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Direct line: 0303 444 5092

Helpline: 0303 444 5000

Email: Michael.Breslaw@pins.gsi.gov.uk

Web: infrastructure.planninginspectorate.gov.uk (National Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: [@PINSGov](https://twitter.com/PINSGov)

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www.hse.gov.uk

CEMHD Policy - Land Use Planning
NSIP Consultations
Building 2.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: TR010043
Our ref: 4.2.1.6355
HSE email: NSIP.applications@hse.gov.uk

FAO Marie Shoesmith
The Planning Inspectorate
Bristol
BS1 6PN
By e-mail

02/05/2018

Dear Ms Shoesmith

**PROPOSED GREAT YARMOUTH THIRD RIVER CROSSING (the project)
PROPOSAL BY NORFOLK COUNTY COUNCIL (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017 (as amended)
– Regulations 10 and 11**

Thank you for your letter of 6th April 2018 regarding the information to be provided in an environmental statement relating to the above project. HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

According to HSE's records there are two major accident hazard installations in the vicinity of this nationally significant infrastructure project:

- 1) Transco Great Yarmouth Gas Holders
- 2) ASCO Fuels and lubricants

HSE's Land Use Planning advice would be dependent on the location of the bridge and other areas where public may be present and so it is possible that HSE may advise against this proposal. When we are consulted further by the Applicant with further information, under Section 42 of the Planning Act 2008, we can update our advice.

Hazardous Substance Consent

The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015.

Hazardous Substances Consent would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Explosives sites

No comment from an explosives perspective.

Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11

Annex on the Planning Inspectorate's website - Annex G – The Health and Safety Executive . This document includes consideration of risk assessments on page 3.

Electrical Safety

No comment from a planning perspective.

Waste

In respect of waste management the applicant should take account of and adhere to relevant health and safety requirements. Particular attention should be paid in respect of risks created from historical landfill (buried waste) sites. More details can be found on HSE's website at: <http://www.hse.gov.uk/waste/index.htm>

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively any hard copy correspondence should be sent to:

Mr Dave Adams (MHPD)
NSIP Consultations
2.2 Redgrave Court
Merton Road, Bootle,
Merseyside L20 7HS

Yours sincerely,



Dave Adams
(CEMHD4 Policy)



Marine
Management
Organisation

Marine Licensing Team
Lancaster House
Hampshire Court
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Marie Shoesmith
Planning Inspectorate (PINS)
(By email only)

Your reference:
TR010043_000013
Our reference:
DCO/2018/00010

04 May 2018

Dear Ms Shoesmith,

Great Yarmouth Third River Crossing: Scoping Opinion

Thank you for your letter dated 06 April 2018 requesting the Marine Management Organisation's comments on the Great Yarmouth Third River Crossing Environmental Impact Assessment Scoping Report, dated March 2018. Enclosed with this letter are the Marine Management Organisation's comments on that report. If you have any queries or require clarification on any of the above, then please do not hesitate to contact me.

Yours sincerely,

Frances Edwards



Marine Licensing Case Officer
Marine Management Organisation
T: 0208 0265215
E: lisa.southwood@marinemanagement.org.uk



INVESTORS
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Marine Management Organisation

Comments on Environmental Impact Assessment Scoping Report

Title: Great Yarmouth Third River Crossing (“the Project”)

Applicant: Norfolk County Council

MMO Reference: DCO/2018/00010

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1 Proposal

Great Yarmouth Third Crossing is to be a bridge across the River Yare. It will connect the South Denes peninsula to the strategic road network via the A47 Harfrey's roundabout. A bascule bridge design is being proposed, but consideration is also being given to a potential alternative swing bridge design. The bascule bridge option will be a single span, double leaf trunnion bascule (upward opening) with two plant rooms for hydraulic and electrical equipment. The bridge will have a vertical clearance of 5.6m (between Mean High Water Springs level (MHWS) and the bottom deck of the bridge) and will require the construction of piers and fenders at each embankment of the River Yare. A navigation channel of 50m between the fenders would be maintained. New road connections will be required on both sides of the river. The bridge will include new footway and cycleway links. The swing bridge design option would comprise of a single leaf swing bridge, with 50m between the fenders and a vertical clearance between the bridge deck and MHWS of 7.3m.

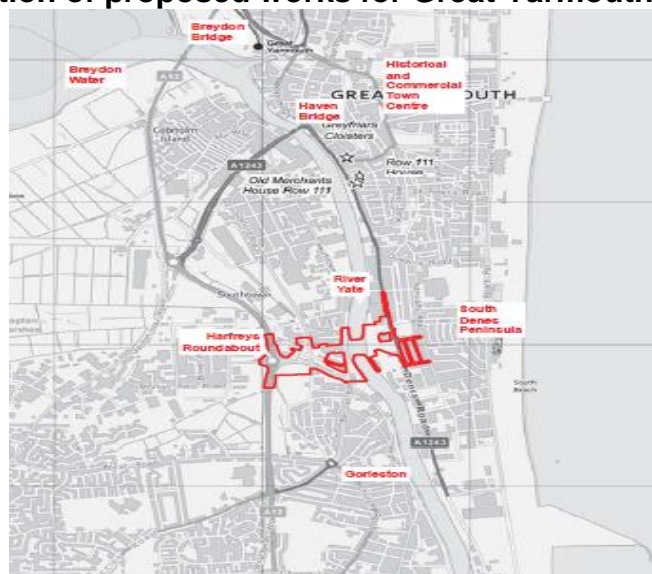
1.1 Project Background

Great Yarmouth is located at the mouth of the River Yare, one of the main waterways providing access to the Norfolk Broads. The river bisects Great Yarmouth with the town centre, seafront, industrial areas and outer harbour located on the narrow, 4km long, South Denes peninsula, isolated from the rest of the town. The project will provide a third crossing of the River Yare, creating a direct link into the southern part of the South Denes peninsular. It will improve access to the port, outer harbour, employment areas, the seafront and residential areas.

2 Location

The Great Yarmouth Third Crossing is located across the River Yare in Great Yarmouth, between which is displayed in Figure 1 below.

Figure 1: Location of proposed works for Great Yarmouth Third Crossing



3 The Marine Management Organisation's role in Nationally Significant Infrastructure Projects

The Marine Management Organisation (MMO) was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.

The responsibilities of the MMO include the licensing of construction works, deposits and removals in the marine area by way of a marine licence¹. Marine licences are required for deposits or removals of articles or substances below the level of MHWS, unless a relevant exemption applies under the Marine Licensing (Exempted Activities) (Amendment) Order 2013 (the "2013 Order").

In the case of Nationally Significant Infrastructure Projects ("NSIPs"), the Planning Act 2008 (the "2008 Act") enables Development Consent Order's ("DCO") for projects which affect the marine environment to include provisions which deem marine licences². Alternatively, applicants may wish to separately seek consent for a marine licence directly from the MMO rather than having it deemed by a DCO.

For NSIPs where applicants choose to have a marine licence deemed by a DCO, during pre-application the MMO will advise developers on the aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction within the marine area, this would also include assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.

Whether a marine licence is deemed within a DCO or consented independently by the MMO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations. This includes ensuring that there has been a thorough assessment of the impact of the works on the marine environment (both direct and indirect), that it is clear within the DCO which works are consented within the deemed marine licence, that conditions or provisions imposed are proportionate, robust and enforceable and that there is clear and sufficient detail to allow for monitoring and enforcement. To achieve this, the MMO would seek to agree the deemed marine licence with the developer for inclusion with their application to the Planning Inspectorate ("PINS").

Further information on licensable activities can be found on the MMO website³. Further information on the interaction between PINS and the MMO can be found in our joint advice note⁴.

¹ Under Part 4 of the 2009 Act

² Section 149A of the 2008 Act

³ <https://www.gov.uk/guidance/do-i-need-a-marine-licence>

The MMO recognises there is some overlap between the geographical jurisdiction of the MMO and the local planning authorities (i.e. between MHWS and mean low water springs).

The MMO has considered this and is of the view that matters which fall within the scope of the marine licensing provisions of the 2009 Act (i.e. anything below MHWS) are generally best regulated by conditions on marine licences. This should minimise the risk of inconsistency between different schemes of regulation, or of a duplication of controls.

In considering applications for marine licences to be consented independently by the MMO, the MMO regularly consults with bodies including, but not limited, to:

- the Environment Agency
- Natural England
- Natural Resources Wales (for works in or affecting Wales)
- the Maritime and Coastguard Agency
- Historic England
- local planning authorities
- local harbour authorities
- local inshore fisheries and conservation authorities
- the Royal Yachting Association (RYA)
- the Royal Society for the Protection of Birds
- the corporation of the Trinity House of Deptford Strond.

Where a marine licence is to be deemed within a DCO, the MMO would expect that comments provided by the above list of bodies and any other relevant bodies are taken into consideration.

4 Activities for this project that would be licensable under the 2009 Act

The report includes limited detail regarding work activities and their associated methodologies. Further detail is required to understand which activities require licensing under the 2009 Act, and to enable a robust assessment of their impact on the marine environment.

Any additional works or activities in the marine area which may require a marine licence under the 2009 Act should be notified to the MMO at the earliest opportunity, and the impacts of such works considered in the Environmental Impact Assessment (EIA) process.

⁴ <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2012/04/Advice-note-11-Annex-B-MMO.pdf>

5 Scoping Opinion

The Planning Inspectorate have requested a Scoping Opinion from the MMO. In so doing a Scoping Report entitled “Norfolk County Council – Great Yarmouth Third River Crossing – Environmental Impact Scoping Report 70041951-ENV-EIA SCOPING/A March 2018” has been submitted to the MMO for review.

The MMO agrees with the topics outlined in the Scoping Report and, in addition, we outline that the following aspects be considered further during the EIA and must be included in any resulting Environmental Statement.

5.1 Habitats Directive / Wild Birds Directive

The MMO welcomes the inclusion of the following designated sites in the scoping report and that they are screened in until such times it can be screened out.

- Outer Thames Estuary Special Protection Area (SPA)
- Extension of Outer Thames Eastuary proposed SPA (pSPA)
- Breydon Water SPA, Ramsar and Site of Special Scientific Interest (SSSI)
- Great Yarmouth North Denes SPA and SSSI

5.2 Benthic Ecology

The MMO welcomes the inclusion of future surveys for ‘aquatic ecology’ as identified in Table 19. Impacts on the benthic ecology from potential impacts from noise and vibration should be included in the ES.

5.3 Seascape / Landscape

The MMO welcomes the assessment of townscape character and visual impact assessment, but would also expect an assessment of the visual impact from the river, as seen by approaching vessels.

5.4 Fish Ecology and Commercial Fisheries

The MMO would expect an assessment of impacts to fish ecology and commercial fisheries be included in the ES.

5.5 Archaeology / Cultural Heritage

The MMO are content with 500m buffer for cultural heritage features, but would defer to Historic England on this matter.

5.6 Navigation / Other Users of the Sea

The MMO would expect that impacts to navigation and other users of the sea are considered in the ES, and a navigational risk assessment produced to inform final assessments. The MMO considers that commercial and leisure traffic will be disrupted during both construction and operation phases, and that a full assessment of the impacts should be carried out in consultation with Great Yarmouth Harbour Authority.

5.7 Seabed / Land / Soil Quality

The MMO welcomes the intention to assess the potential for the disturbance of contaminated river bed sediment.

5.8 Population and Human Health

The MMO welcomes the intention to identify water sports through consultation with local groups, but would also expect regional bodies such as the RYA and The Broads Authority to be consulted to identify the extent of individuals taking part in water sports in the river.

5.9 Acoustics

Chapter 6.3 identifies the presence of potentially sensitive receptors within the River Yare pSPA. The MMO would welcome specific detail regarding the impact of noise and vibration on features of the pSPA. This should be included within the ES as a section of the Biodiversity chapter rather than the Noise and vibration chapter, which focusses on noise and vibration in the air. The MMO would also welcome consideration of underwater noise on sensitive receptors.

5.10 Materials

The MMO would expect that the impacts of dredging and disposal of marine sediment will be fully assessed in the ES.

5.11 Planning Context

The East Marine Plan is not referenced within the Report. The project contains elements both within, and bordering, the East Inshore Marine Plan Area and a review and assessment against relevant plan policies should, therefore, be included within the ES⁵.

6 Conclusion

The MMO considers that the topics highlighted in this scoping opinion must be assessed during the EIA process. The MMO would expect to see a thorough and robust assessment of impacts upon marine receptors and clear justification provided for topics / impacts / receptors which have been scoped out. The MMO welcomes further consultation and recommends that Norfolk County Council engage with the MMO to discuss the licensing requirements under the 2009 Act.

Frances Edwards - Marine Case Officer



04 May 2018

⁵ <https://www.gov.uk/government/collections/east-marine-plans>
<http://mis.marinemanagement.org.uk/>



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Agency

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Our ref:

By email to: GYTRC@pins.gsi.gov.uk

03 May 2018

Dear Sir/Madam

Scoping Consultation in preparation of an Environmental Statement for the Proposed Great Yarmouth Third River Crossing

Thank you for your letter dated 6th April 2018 inviting the Maritime and Coastguard Agency (MCA) to comment on the Environmental Impact Assessment Scoping Report for the proposed Great Yarmouth Third River Crossing.

We note that the proposed scheme will provide a third crossing over the River Yare, and that the design of the bridge has yet to be developed. The River Yare is a navigable river and therefore the development would need to allow for vessels operating in the vicinity. We also note that the location falls within the jurisdiction of a harbour/port Authority.

From the information provided, it appears that the only aspect for MCA to consider with regards to the safety of navigation will be as a result of any infrastructure required in or over the marine environment. A Marine Licence under the Marine and Coastal Access Act 2009 will likely be required, at which time the MCA will be invited to comment on the application from a navigation safety perspective.

The developers will need to ensure that there is sufficient air clearance to allow for the range in size of vessels expected to operate in that area. We would expect to see consideration given to any potential impact the construction works may have on navigation of both commercial and recreational vessels, and proposed risk mitigation measures. This will be undertaken in accordance with the port/harbour authority.

In addition, The MCA would like to point the developers in the direction of the Port Marine Safety Code (PMSC). They will need to liaise and consult with the Port/Harbour Authority to develop a robust Safety Management System (SMS) for the project under this code.

The sections that we feel cover Navigational safety under the PMSC and its Guide to Good Practice are as follows:

From the Guide to Good Practice, section 7 Conservancy, a Harbour Authority has a duty to conserve the harbour so that it is fit for use as a port, and a duty of reasonable care to see that the harbour is in a fit condition for a vessel to be able to use it safely. Section 7.7 Regulating harbour works covers this in more detail and have copied the extract below from the Guide to Good Practice.

7.7 Regulating harbour works

7.7.1 Some harbour authorities have the powers to license works where they extend below the high watermark, and are thus liable to have an effect on navigation. Such powers do not, however, usually extend to developments on the foreshore.

7.7.2 Some harbour authorities are statutory consultees for planning applications, as a function of owning the seabed, and thus being the adjacent landowner. Where this is not the case, harbour authorities should be alert to developments on shore that could adversely affect the safety of navigation. Where necessary, consideration should be given to requiring the planning applicants to conduct a risk assessment in order to establish that the safety of navigation is not about to be put at risk. Examples of where navigation could be so affected include:

- high constructions, which inhibit line of sight of microwave transmissions, or the performance of port radar, or interfere with the line of sight of aids to navigation;
- high constructions, which potentially affect wind patterns; and
- lighting of a shore development in such a manner that the night vision of mariners is impeded, or that navigation lights, either ashore and onboard vessels are masked, or made less conspicuous.

There is a British Standards Institution publication on Road Lighting, BS5489. Part 8 relates to a code of practice for lighting which may affect the safe use of aerodromes, railways, harbours and navigable Inland waterways.

Yours faithfully,

Helen Croxson
Navigation Safety Branch

Land and Acquisitions

Spencer Jefferies
Development Liaison Officer
Network management
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SUBMITTED ELECTRONICALLY:
GYTRC@pins.gsi.gov.uk

www.nationalgrid.com

03 May 2018

Dear Sir/Madam

Application by Norfolk County Council for an Order granting Development Consent for the Great Yarmouth Third River Crossing (the Proposed Development)

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

This is a response on behalf of National Grid Electricity Transmission PLC (NGET) and National Grid Gas PLC (NGG)

I refer to your email dated 6th April 2018 regarding the Order. NGET and NGG have no assets in the vicinity of the Order therefore, do not object to the Order and wish for no further consultation.

I hope the above information is useful. If you require any further information please do not hesitate to contact me.

Yours sincerely



Spencer Jefferies
Development Liaison Officer, Land and Acquisitions.

Date: 02 May 2018
Our ref: TR010043
Your ref: 243387



GYTRC@pins.gsi.gov.uk

BY EMAIL ONLY

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T 0300 060 3900

Dear Sir/Madam

Environmental Impact Assessment Scoping consultation (Regulation 15 (3) (i) of the EIA Regulations 2011): Great Yarmouth Third River Crossing
Location: Great Yarmouth, Norfolk

Thank you for seeking our advice on the scope of the Environmental Statement (ES) in your consultation dated 06 April 2018 which we received on the same date.

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.

Case law¹ and guidance² has stressed the need for a full set of environmental information to be available for consideration prior to a decision being taken on whether or not to grant planning permission. Annex A to this letter provides Natural England's advice on the scope of the Environmental Impact Assessment (EIA) for this development.

Should the proposal be amended in a way which significantly affects its impact on the natural environment then, in accordance with Section 4 of the Natural Environment and Rural Communities Act 2006, Natural England should be consulted again.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. For any queries relating to the specific advice in this letter only please contact Victoria Wight on 0208 225 7617. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

Victoria Wight
Norfolk and Suffolk

¹ Harrison, J in *R. v. Cornwall County Council ex parte Hardy* (2001)

² *Note on Environmental Impact Assessment Directive for Local Planning Authorities* Office of the Deputy Prime Minister (April 2004) available from <http://webarchive.nationalarchives.gov.uk/+http://www.communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/noteenvironmental/>

Annex A – Advice related to EIA Scoping Requirements

1. General Principles

Schedule 4 of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011, 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 (EclA) have been developed by the Chartered Institute of Ecology and Environmental Management (CIEEM) and are available on their website.

EclA is the process of identifying, quantifying and evaluating the potential impacts of defined actions on ecosystems or their components. EclA 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 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

The ES should thoroughly assess the potential for the proposal to affect designated sites. European sites (e.g. designated Special Areas of Conservation and Special Protection Areas) fall within the scope of the Conservation of Habitats and Species Regulations 2017. In addition paragraph 118 of the National Planning Policy Framework requires that potential Special Protection

Areas, possible Special Areas of Conservation, listed or proposed Ramsar sites, and any site identified as being necessary to compensate for adverse impacts on classified, potential or possible SPAs, SACs and Ramsar sites be treated in the same way as classified sites.

Under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 an appropriate assessment needs to be undertaken in respect of any plan or project which is (a) likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and (b) not directly connected with or necessary to the management of the site.

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.

Sites of Special Scientific Interest (SSSIs) and sites of European or international importance (Special Areas of Conservation, Special Protection Areas and Ramsar sites)

The development site is within close proximity to the following designated nature conservation sites:

- The Outer Thames Estuary Special Protection Area
 - Breydon Water Special Protection Area
 - Breydon Water Ramsar
 - Great Yarmouth North Denes Special Protection Area
 - Breydon Water Site of Special Scientific Interest
 - Great Yarmouth and North Denes Site of Special Scientific Interest
 - And within the proposed Outer Thames Estuary Special Protection Area
-
- Further information on the SSSI and its special interest features can be found at www.magic.gov. The Environmental Statement should include a full assessment of the direct and indirect effects of the development on the features of special interest within these sites and should identify such mitigation measures as may be required in order to avoid, minimise or reduce any adverse significant effects.
-
- Natura 2000 network site conservation objectives are available on our internet site <http://publications.naturalengland.org.uk/category/6490068894089216>

2.3 Regionally and Locally Important Sites

The EIA will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geoconservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The Environmental Statement should therefore include an assessment of the likely impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures. Contact the local wildlife trust, geoconservation group or local sites body in this area for further information.

2.4 Protected Species - Species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017

The ES should assess the impact of all phases of the proposal on protected species (including, for example, great crested newts, reptiles, birds, water voles, badgers and bats). 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. 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.

In order to provide this information there may be a requirement for a survey at a particular time of year. Surveys should always be carried out in optimal survey time periods and to current guidance by suitably qualified and where necessary, licensed, consultants. Natural England has adopted [standing advice](#) for protected species which includes links to guidance on survey and mitigation.

2.5 Habitats and Species of Principal Importance

The ES should thoroughly assess the impact of the proposals on habitats and/or species listed as 'Habitats and Species of Principal Importance' within the England Biodiversity List, published under the requirements of S41 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 here <https://www.gov.uk/guidance/biodiversity-duty-public-authority-duty-to-have-regard-to-conserving-biodiversity>.

Government Circular 06/2005 states that Biodiversity Action Plan (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.

Natural England advises that a habitat survey (equivalent to Phase 2) is carried out on the site, in order to identify any important habitats present. In addition, ornithological, botanical and invertebrate surveys should be carried out at appropriate times in the year, to establish whether any scarce or priority species are present. The Environmental Statement should include details of:

- Any historical data for the site affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species (e.g. whether priority species or habitat);
- The direct and indirect effects of the development upon those habitats and species;
- Full details of any mitigation or compensation that might be required.

The development should seek if possible to avoid adverse impact on sensitive areas for wildlife within the site, and if possible provide opportunities for overall wildlife gain.

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

2.6 Contacts for Local Records

Natural England does not hold local information on local sites, local landscape character and local or national biodiversity priority habitats and species. We recommend that you seek further information from the appropriate bodies (which may include the local records centre, the local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document).

3. Designated Landscapes and Landscape Character

Landscape and visual impacts

Natural England would wish to see details of local landscape character areas mapped at a scale appropriate to the development site as well as any relevant management plans or strategies pertaining to the area. The EIA should include assessments of visual effects on the surrounding area and landscape together with any physical effects of the development, such as changes in topography. The European Landscape Convention places a duty on Local Planning Authorities to

consider the impacts of landscape when exercising their functions.

The EIA should include a full assessment of the potential impacts of the development on local landscape character using [landscape assessment methodologies](#). We encourage the use of Landscape Character Assessment (LCA), based on the good practice guidelines produced jointly by the Landscape Institute and Institute of Environmental Assessment in 2013. LCA provides a sound basis for guiding, informing and understanding the ability of any location to accommodate change and to make positive proposals for conserving, enhancing or regenerating character, as detailed proposals are developed.

Natural England supports the publication *Guidelines for Landscape and Visual Impact Assessment*, produced by the Landscape Institute and the Institute of Environmental Assessment and Management in 2013 (3rd edition). The methodology set out is almost universally used for landscape and visual impact assessment.

In order to foster high quality development that respects, maintains, or enhances, local landscape character and distinctiveness, Natural England encourages all new development to consider the character and distinctiveness of the area, with the siting and design of the proposed development reflecting local design characteristics and, wherever possible, using local materials. The Environmental Impact Assessment process should detail the measures to be taken to ensure the building design will be of a high standard, as well as detail of layout alternatives together with justification of the selected option in terms of landscape impact and benefit.

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 advises that the cumulative impact assessment should include other 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.

Heritage Landscapes

You should consider whether there is land in the area affected by the development which qualifies for conditional exemption from capital taxes on the grounds of outstanding scenic, scientific or historic interest. An up-to-date list may be obtained at www.hmrc.gov.uk/heritage/lbsearch.htm.

4. Access and Recreation

Natural England encourages any proposal to incorporate measures to help encourage people to access the countryside for quiet enjoyment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways are to be encouraged. Links to other green networks and, where appropriate, urban fringe areas should also be explored to help promote the creation of wider green infrastructure. Relevant aspects of local authority green infrastructure strategies should be incorporated where appropriate.

Rights of Way, Access land, Coastal access and National Trails

The EIA should consider potential impacts on access land, public open land, rights of way and coastal access routes in the vicinity of the development. Consideration should also be given to the potential impacts on the adjacent England Coast Path National Trail. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer. Appropriate mitigation measures should be incorporated for any adverse impacts. We also recommend reference to the 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.

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.

7. Cumulative and in-combination effects

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.

The ES should include an impact assessment to identify, describe and evaluate the effects that are likely to result from the project in combination with other projects and activities that are being, have been or will be carried out. The following types of projects should be included in such an assessment, (subject to available information):

- a. existing completed projects;
- b. approved but uncompleted projects;
- c. ongoing activities;
- d. plans or projects for which an application has been made and which are under consideration by the consenting authorities; and
- e. plans and projects which are reasonably foreseeable, i.e. projects for which an application has not yet been submitted, but which are likely to progress before completion of the development and for which sufficient information is available to assess the likelihood of cumulative and in-combination effects.

From: [Lambert, Angelina](#)
To: [Great Yarmouth Third River Crossing](#)
Subject: FW: TR010043_000013: Third River Crossing, Great Yarmouth, norfolk
Date: 04 May 2018 15:51:10

Dear Marie Shoemith

I refer to the above.

Further to my letter of 4 May 2018 – attached to this email, Norfolk County Council as Highway Authority would also require a full transport assessment detailing the impact of the development on the Local Highway Network to be included in an ES. A Travel Plan will not be required.

If you have any queries, do not hesitate to contact me.

Regards

Angelina Lambert
Principal Planner (Development Control)

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Environment and Planning
Community and Environmental Services Department
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General enquiries: 0344 800 8020 or information@norfolk.gov.uk
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From: Lambert, Angelina
Sent: 04 May 2018 15:38
To: 'GYTRC@pins.gsi.gov.uk' <GYTRC@pins.gsi.gov.uk>
Subject: TR010043_000013: Third River Crossing, Great Yarmouth, norfolk

Dear Marie Shoemith

Please find attached comments from Norfolk County Council in relation to the scoping consultation for the above scheme.

If you have any queries, do not hesitate to contact me.

Regards

Angelina Lambert
Principal Planner (Development Control)

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NCC general enquiries: 0344 800 8020
Text relay no: 18001 0344 800 8020

Your Ref: TR010043_000013
Date: 04 May 2018

My Ref: H/6/2018/6004
Tel No.: (01603) 222756
Email: MaWP@norfolk.gov.uk

Dear Ms Shoesmith

Planning Act 2008 (as amended) and The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations) – Regulations 10 and 11

Scoping consultation and notification of the Applicant's contact details and duty to make available information to the Applicant if requested

NSIP: Proposed Third River Crossing, Great Yarmouth

Thank you for your letter dated 6 April 2018 consulting Norfolk County Council on the scoping report and notifying the Council of the applicant's contact details, in respect of the above proposal.

It is considered the topics area covered are appropriate and the approach to the scoping report is generally acceptable subject to comments received below and appropriate mitigation measures being secured. Whilst the applicant has identified 'option 32' as the preferred option, it is noted that the final design is yet to be clarified, therefore any subsequent Environmental Statement (ES) should consider the worst case scenario within the range of options under consideration and include a non-technical summary.

Please find below, comments in relation to the issues that should be considered and addressed in a subsequent ES.

Natural Environment

Ecology: I consider that the environmental baseline data that is presented is appropriate. Some preliminary ecology surveys have been completed to date (Phase 1, Water Voles and Bats) and, although they were outside optimal seasons, I do not see that this is a particular constraint. The site has been assessed as being of low significance for bats, although I note that further bat emergence/returning surveys will be completed in due course for buildings that will need to be removed. Some signs of Water Voles have been

identified within the footprint of the scheme and that the report indicates further surveys will be completed in due course for this species, to determine if a protected species mitigation licence is required.

I consider the data collected to date is appropriate. With the additional ecological work that is proposed, robust assessments of potential impacts will be able to be made. In terms of the assessments of impacts on ecology, the proposed assessment methodology is appropriate and consistent with industry guidelines and current best practice.

I note that the potential SPA for the mouths of the Rivers Yare and Bure (associated with the Outer Thames Estuary SPA), is being treated as if it were an SPA when considering ecological effects.

Landscape: I consider that the baseline data that has been provided in terms of Townscape is appropriate. The methodology proposed for the assessment itself is in line with current industry guidelines and best practise – the use of desk based surveys and site visits will support initial baseline work. The provisional identification of a 3km study area seems appropriate for the scale and location of development. Key mention should be made to Sustrans National Route 517 which is referenced on Figure 5

PROW: No Public Rights of Way are within the red line of the proposed development, or within a reasonable distance that means they might be affected. However, a promoted Sustrans Cycle Route is within the scheme boundary. This does not appear to be specifically referenced in the Scoping report but it is depicted in Figure 5.

For further information, or queries relating to the natural environment, please contact the Natural Environment Team by email at NETI@norfolk.gov.uk

Cultural Heritage

Archaeological: The cultural heritage desk-based assessment provided with the scoping documentation is a partial document (as acknowledged in section 6.5.38 of the Great Yarmouth Third River Crossing Environmental Impact Assessment Scoping Report provided in the scoping documentation). It is based on selected datasets, rather than the full range required by Chartered Institute for Archaeologist standard and guidance, the Regional Standards for Field Archaeology in the East of England (2003) and the recently released Standards for Development-led Archaeology in Norfolk (2018).

Paragraph 128 of the National Planning Policy Framework (2012) requires applications to describe the significance of heritage assets affected, as minimum consulting the relevant Historic Environment Record. Although the scoping report and the desk-based assessment suggest the Norfolk Historic Environment Record has been consulted, this does not appear to have happened. Instead, both documents appear to make use of the incomplete version of the Norfolk Historic Environment Record made available through the Norfolk Heritage Explorer website (as explained in footnote 33 on page 41 of the Scoping Report). As made clear on the Norfolk Heritage Explorer website, this dataset is not suitable for use in the planning process (as it is an incomplete selected dataset).

The Scoping Report proposes the production of a full archaeological desk-based assessment as part of the Environmental Statement, a suggestion the historic environment strategy and advice team fully supports. We would expect this document to include full and formal consultation of the Norfolk Historic Environment Record and for the requirements of the National Planning Policy Framework, Chartered Institute for Archaeologist standard

and guidance, and Standards for Development-led Archaeology in Norfolk (2018) to be followed in full. The historic environment strategy and advice team can provide a brief for the full desk-based assessment on request.

The Scoping Report highlights the work of the Great Yarmouth Archaeological Map (section 6.5.6), the potential for medieval deposits to survive below ground level either side of the River Yare (section 6.5.9), and for a buried shoreline and palaeo-environmental remains to be present within the footprint of the Third River Crossing (section 3.5.21 and Appendix D). With these in mind it proposes the production of a palaeo-environmental desk-based assessment, a proposal the historic environment strategy and advice team fully supports. Given how high the potential for a buried shoreline and palaeo-environmental remains to survive within the footprint of the Third River crossing is, we recommend the Environmental Statement also includes the results of an archaeological/palaeo-environmental borehole survey (which would constitute a field evaluation, as required by paragraph 128 on the National Planning Policy Framework; the historic environment strategy and advice team can provide a brief for this work on request). If it were to be produced before the borehole survey took place, we would be willing to review the requirement for it in light of the results of the palaeo-environmental desk-based assessment.

Historic buildings: The cultural heritage desk-based assessment highlights the potential for the Third River Crossing to affect the immediate setting of at least twelve listed buildings (pages 18-19) and refers to a number of undesignated historic buildings that could also be affected (pages 15-16). The historic environment strategy and advice team recommends the impact of the proposal on the significance of designated and undesignated historic buildings (including the contribution provided by their setting) is fully considered as part of the Environmental Statement, in accordance with paragraphs 128 and 132-134 of the National Planning Policy Framework.

For further information, or queries relating to the historic environment, please contact the Historic Environment Team by email at hep@norfolk.gov.uk

Water Environment

Lead Local Flood Authority:

The scheme consists of a reconfiguration of the existing road layout (Harfrey's roundabout) on the western bank of the River Yare, a new bridge and a new junction (at South Denes Road) on the eastern bank of the River Yare. There are several options of bridge design with option 32 being the preferred.

Whether or not an EIA/ES is required we consider that the following issues should be considered and addressed in appropriate detail and mitigation agreed at an early stage. This would be in conjunction with the Lead Local Flood Authority (LLFA) and other appropriate authorities prior to applying for a Development Management Order (DCO) and/or commencement of the scheme.

We are aware of issues of flooding within the same catchment as the proposal at Burgh Road and Beccles Road, Gorleston. The flooding which occurred in February 2016 and July 2016 and we as the LLFA are currently investigating it and will provide a publically available report. Our draft report indicates that 14 properties flooded, 3 of these flooded internally with the remainder flooding externally. The causes of flooding are still being investigated and local knowledge suggests that there are capacity issues on the watercourses in this area and it is likely constrained from culverting and discharge to tidal influenced watercourses. It is known that the drainage in this area is on a flat gradient and

is sensitive to changes. As this area of flooding is upstream on the same watercourse as the development, it is very important that robust investigation and mitigation is provided to prevent an increased risk by adversely altering the drainage patterns. We would also suggest that options are considered to improve the flood risk from the current highway drainage in this area which may include providing more storage for runoff or improving existing culverts.

Whilst the scoping report focuses on the main flood risk and impacts from tidal flooding, suggesting that disturbing the local drainage patterns can also have significant impacts locally. We would like to highlight at this early stage that other sources of flooding such as ordinary watercourse and surface water flooding can be significant and have impacts on properties local to the development. These issues should be considered with an appropriate assessment and mitigation be proposed. This would be looking at the changes to existing surface water flooding (for a significant rainfall event which does not coincide with a tidal flood event) and how these will be mitigated.

We strongly recommend that any EIA includes or planning application for development is accompanied by a flood risk assessment (FRA) and detailed surface water drainage strategy/design to address;

- Local sources of flood risk, including those from ordinary watercourses, surface water flow and groundwater and any mitigation required to prevent an increased risk of flooding in line with National Planning Policy Framework (paragraph 103).
- How surface water drainage will be managed on site and show compliance with the written Ministerial Statement HCWS 161 by ensuring that Sustainable Drainage Systems for the management of run-off are put in place. This will account for the development to increase the risk of flooding in nearby areas, the management of this risk and any additional surface water runoff caused by the addition of hard surfaces to ensure that the development does not increase flood risk on the site or elsewhere, in line with National Planning Policy Framework (paragraph 103).
- Where any SuDS are proposed it is important to demonstrate that the SuDS hierarchy has been followed both in terms of:
 - surface water disposal location, prioritised in the following order: disposal of water to shallow infiltration, to a watercourse, to a surface water sewer, combined sewer / deep infiltration (generally greater than 2m below ground level),
 - the SuDS components used within the management train (source, site and regional control) to address flood risk and water quality mitigation required from the additional new development.
- At least one feasible proposal for the disposal of surface water drainage should be demonstrated and should be supported by the inclusion of appropriate supporting information.
- Information to show how any phasing of the development will affect the overall drainage strategy and what arrangements, temporary or otherwise, will need to be in place at each stage of the development in order to ensure the satisfactory performance of the overall surface water drainage system for the entirety of the development. Construction of large development schemes can cause additional

runoff through the nature of removing topsoil and having temporary works. We would like to see that adequate measures are put in place to minimise temporary additional runoff and that this is diverted away from any final drainage scheme. This would be to minimise siltation and blockage of newly created drainage infrastructure.

- Any drainage strategy should also contain a maintenance and management plan detailing the activities required and details of who will adopt and maintain the all the surface water drainage features for the lifetime of the development

Parts of the proposed development are within the Environment Agency Risk of Surface Water Flood mapping for all events from the 3.33 % AEP (1 in 30 year) up to the 0.1%AEP (1 in 1000 year). The site is located within Flood Zone 2 and 3 of the Environment Agency River and Coastal Flood map, and they should be consulted regarding the development and this source of flooding which is primarily dominated by the sea. For information, we hold no records of incidences of internal flooding within 0.5km but there are 18 within 2.5km of the site which reflects the designation of the area as a critical drainage catchment. Norfolk County Council only record and investigate internal flooding since 2011 and a search for other incidences of flooding should be made to inform your proposals. The NCC Flood Investigation Report from 2014 for Great Yarmouth can be found at <https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/flood-investigations> The development is within the Claydon, Southtown and Cobham crossing into South Yarmouth Critical Drainage Catchments (designated in partnership between the LLFA and District Council). This reflects the number of properties that have already experienced flooding and are predicted to be at a risk of flooding in this area. We are not aware of any sewer flooding, however, this should be confirmed with Anglian Water. We have no available information on groundwater flooding potential at this location.

We would highlight that any FRA undertaken should be based on the requirements of the National Planning Policy Framework (NPPF), and that the drainage strategy should incorporate appropriate Sustainable Drainage Systems (SuDS) proposals in accordance with appropriate guidance including "Non-statutory technical standards for sustainable drainage systems" March 2015 by Department for Environment, Food and Rural Affairs. We suggest the following with specific regard to information requirements for all sources of flooding and SuDS for this development.

- A full review of history of flooding for surface water, groundwater and sewer flooding. Consideration for predicted flooding from strategic mapping available, e.g. Environment Agency Flood Maps, surface water management plans, flood investigation reports and searches of relevant authority databases.
- Identify where surface water flooding in the design storm is expected to occur pre development and how the flooding may occur, how it may or may not coincide with other flood events e.g. tidal and how this may change locally post development e.g. creation of raised road junctions or embankments.
- Due to the strategic nature of the development we suggest that consideration is given to the 1% and 0.1% annual probability flood events.
- Where the existing drainage scheme exists and outfalls to, if the outfall is constrained, is the water is treated prior to discharge and the current standard of flood protection of the existing drainage infrastructure.
- A CCTV survey be carried out of the current existing drainage infrastructure to help assess the current standard of protection and its location of discharge point.

- Investigation into any dependency of pumped drainage networks, what systems are in place, how they interact with the current scheme, who owns them, current maintenance and emergency plans in case of failure.
- Where new infrastructure is being installed creating additional impermeable areas we would expect this change to be mitigated to the 1% Annual Probability flood event plus an allowance for climate change due to its location within the critical drainage catchments. As the scheme is a brownfield redevelopment it should be assessed if it can be mitigated as close to greenfield as possible and options are considered to betterment from the existing situation. Betterment should include consideration of how water enters the drainage scheme, conveyance network as well as storage features.
- Both the existing and proposed drainage schemes need to consider the delay of discharge due to high tides (we suggest that seasonal high tides are considered as are potential surges during storm events).
- When considering the SuDS discharge hierarchy, brownfield contamination and groundwater levels being influenced by the tide need to be considered for infiltration. If discharging to an existing discharge location, this needs to be shown to be connected to the wider watercourse network. If discharging to an Anglian Water Sewer network, we expect that in principal agreements are provided showing the location and agreed discharge rates. If there are conflicts with LLFA advice on discharge rates / volumes we expect that discussion and agreement sought prior to the detailed design of the drainage network.
- Drainage schemes should consider how the water quality of water is treated prior to discharge. If there is available land for filter trenches or filter strips this would be beneficial to the environment over oil interceptors.

We note that section 6.7 (Water Environment) of the Scoping Report states that groundwater levels are close to the surface in the scheme. This is expected due to its close proximity to the River Yare and associated tidal influence. It also states that there is no information on the current drainage scheme and can only assume that the ditches and balancing ponds eventually drain to the River Yare. We welcome that the report also notes that the development is a medium risk of surface water flooding, so surface water and sewer flooding will be considered further.

We also welcome that it is noted that there is a potential for the decrease in water quality, increase in flood risk from the development interrupting the flow paths, local drainage arrangements and the increased surface runoff from the development. Whilst we welcome the proposal to provide an assessment into the impacts of the construction and operation of the scheme, we highlight that this is likely to need more than a desktop study. Detailed information is likely required on the current drainage scheme and how the development will alter this. This will include detailed supporting plans and calculations.

Whilst the Scoping report highlights that the Design Manual for Roads and Bridges (DMRB – Highways Agency 2009) will be considered, we would request that consideration for the CIRIA SuDS manual is given. There is also a helpful document with practical design of drainage schemes during construction from CIRIA titled C768 - Guidance on the construction of SuDS (2017).

We have had early discussions with the applicant's consultant (WSP) and it has been indicated that the design of the drainage will comprise of a positive drainage system consisting of highway gullies, carrier pipes, combined kerb drainage, filter drains and, where possible, grassed surface water channels along with drainage ponds / underground

storage features. Design will account for runoff being as close to Greenfield as possible and storage design may be limited by the available space within an existing built up area.

We understand that there may be a need to divert an existing ditch. Please note, if there are any works proposed as part of this application that are likely to affect flows in an ordinary watercourse, then the applicant is likely to need the approval of the appropriate body. In this case the application is within the authority of the local Internal Drainage Board. For information, Norfolk County Council, in line with good practice seeks to avoid culverting, and NCC consents for such works will not normally be granted except as a means of access. It should be noted that this approval is separate from planning approval.

Further guidance on the information required by the LLFA from applicants can be found at <https://www.norfolk.gov.uk/rubbish-recycling-and-planning/flood-and-water-management/information-for-developers>.

Should you have any further queries relating to the above comments, please contact the LLFA via email llfa@norfolk.gov.uk

Minerals and Waste

The site covered by the Scoping report is partially underlain by a Mineral Safeguarding Area (sand and gravel) safeguarded as part of the adopted Norfolk Minerals and Waste Core Strategy and Development Management Policies DPD. The eastern bank of the River Yare is underlain by safeguarded mineral resources; the western bank is not, as deposits here are primarily clay, sand, silt and peat. There are also a number of safeguarded waste management facilities whose consultation areas intersect the site boundary for the Third River Crossing (TRC). The Norfolk Minerals and Waste Core Strategy policy CS16 'Safeguarding' is applicable to both mineral and waste safeguarding.

The contents of the Scoping Report, regarding ground conditions, are noted. In Table 43 and 44 of the Scoping report, the comments regarding the reuse and/or recycling of arisings from demolition and construction are noted and welcomed.

A summary of borehole results indicates that while the geology is as expected, there is a considerable surface depth of 'made ground' across the site. There is a risk that the 'made ground' may contain contaminants which would render any surface minerals unsuitable for prior extraction and reuse. Mineral resources present at greater depth extracted as part of the construction phases may be suitable for reuse.

The Scoping report indicates that ground investigations will form part of the Environmental Statement. These investigations should include a Mineral Resource Assessment as to whether onsite mineral resources extracted as part of the construction would be suitable for reuse. If suitable resources exist, their reuse should form part of a Materials Management Plan.

The safeguarded waste management facilities are not within the site boundary for the TRC. Therefore, the Waste Planning Authority does not consider that the construction of the TRC crossing will prejudice the continued operation of the waste management facilities, in principle. There is the potential for indirect impacts as the result of traffic management operations as part of the construction works, this will need to be assessed as part of the application.

The Mineral Planning Authority has published standing advice on mineral safeguarding, which can be found on the Norfolk County Council website at www.norfolk.gov.uk/nmwdf on the 'Adopted Policy Documents' page.

The Mineral Planning Authority would welcome discussion, if there are any queries regarding the preparation of a Mineral Resource Assessment.

If you have any queries, please contact Richard Drake (Senior Planner, Minerals and Waste Policy) by email at richard.drake@norfolk.gov.uk or telephone 01603 222349.

If you have any queries, please do not hesitate to contact the case officer, Angelina Lambert, on Norwich 01603 223806.

Yours sincerely

A large black rectangular redaction box covering the signature of Nick Johnson.

Nick Johnson
Head of Planning



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Ms Marie Shoesmith
Senior EIA and Land Rights Advisor
The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol BS1 6PN

Your Ref : TR010043-000013

Our Ref : 43557

4th May 2018

Dear Ms Shoesmith

**Re: Scoping Consultation
Application for an Order Granting Development Consent for the proposed
Great Yarmouth Third River Crossing**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Our response focuses on health protection issues relating to chemicals and radiation. Advice offered by PHE is impartial and independent.

We note that the promoter intends to scope out a standalone Health section and understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the Environmental Statement (ES). However, we believe the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

The attached appendix outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. We are happy to assist and discuss proposals further in the light of this advice.

Yours sincerely

Environmental Public Health Scientist

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA¹. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES².

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place

¹ Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from: <http://webarchive.nationalarchives.gov.uk/20100410180038/http://communities.gov.uk/planningandbuilding/planning/sustainability/environmental/environmentalimpactassessment/>

² DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- should fully account for fugitive emissions
- should include appropriate estimates of background levels
- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)
- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data
- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1
 - This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion
- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

Additional points specific to emissions to air

When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)
- should include modelling taking into account local topography

Additional points specific to emissions to water

When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts
- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)
- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc) alongside assessment of potential exposure via drinking water

Land quality

We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the

migration of material off-site should be assessed³ and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

Other aspects

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report⁴, jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible." PHE supports the inclusion of this information within EIAs as good practice.

³ Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

⁴ Available from: <http://www.cph.org.uk/wp-content/uploads/2012/08/health-risk-perception-and-environmental-problems--summary-report.pdf>

Electromagnetic fields (EMF)

This statement is intended to support planning proposals involving electrical installations such as substations and connecting underground cables or overhead lines. PHE advice on the health effects of power frequency electric and magnetic fields is available in the following link:

<https://www.gov.uk/government/collections/electromagnetic-fields#low-frequency-electric-and-magnetic-fields>

There is a potential health impact associated with the electric and magnetic fields around substations, and power lines and cables. The field strength tends to reduce with distance from such equipment.

The following information provides a framework for considering the health impact associated with the electric and magnetic fields produced by the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Policy Measures for the Electricity Industry

The Department of Energy and Climate Change has published a voluntary code of practice which sets out key principles for complying with the ICNIRP guidelines:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

Companion codes of practice dealing with optimum phasing of high voltage power lines and aspects of the guidelines that relate to indirect effects are also available:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224766/powerlines_vcop_microshocks.pdf

Exposure Guidelines

PHE recommends the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP). Formal advice to this effect was published by one of PHE's predecessor organisations (NRPB) in 2004 based on an accompanying comprehensive review of the scientific evidence:-

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Abds1502/>

Updates to the ICNIRP guidelines for static fields have been issued in 2009 and for low frequency fields in 2010. However, Government policy is that the ICNIRP guidelines are implemented in line with the terms of the 1999 EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publichealth/Healthprotection/DH_4089500

Static magnetic fields

For static magnetic fields, the ICNIRP guidelines published in 2009 recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT.

Power frequency electric and magnetic fields

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines published in 1998 give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m⁻¹ (kilovolts per metre) and 100 µT (microtesla). The reference level for magnetic fields changes to 200 µT in the revised (ICNIRP 2010) guidelines because of new basic restrictions based on induced electric fields inside the body, rather than induced current density. If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects.

Long term effects

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE)

SAGE was set up to explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government:

<http://www.emfs.info/policy/sage/>

SAGE issued its First Interim Assessment in 2007, making several recommendations concerning high voltage power lines. Government supported the implantation of low cost options such as optimal phasing to reduce exposure; however it did not support the option of creating corridors around power lines on health grounds, which was considered to be a disproportionate measure given the evidence base on the potential long term health risks arising from exposure. The Government response to SAGE's First Interim Assessment is available here:

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

The Government also supported calls for providing more information on power frequency electric and magnetic fields, which is available on the PHE web pages (see first link above).

Ionising radiation

Particular considerations apply when an application involves the possibility of exposure to ionising radiation. In such cases it is important that the basic principles of radiation protection recommended by the International Commission on Radiological Protection⁵ (ICRP) are followed. PHE provides advice on the application of these recommendations in the UK. The ICRP recommendations are implemented in the Euratom Basic Safety Standards⁶ (BSS) and these form the basis for UK legislation, including the Ionising Radiation Regulations 1999, the Radioactive Substances Act 1993, and the Environmental Permitting Regulations 2016.

PHE expects promoters to carry out the necessary radiological impact assessments to demonstrate compliance with UK legislation and the principles of radiation protection. This should be set out clearly in a separate section or report and should not require any further analysis by PHE. In particular, the important principles of justification, optimisation and radiation dose limitation should be addressed. In addition compliance with the Euratom BSS and UK legislation should be clear.

When considering the radiological impact of routine discharges of radionuclides to the environment PHE would expect to see a full radiation dose assessment considering both individual and collective (population) doses for the public and, where necessary, workers. For individual doses, consideration should be given to

⁵ These recommendations are given in publications of the ICRP notably publications 90 and 103 see the website at <http://www.icrp.org/>

⁶ Council Directive 96/29/EURATOM laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation.

those members of the public who are likely to receive the highest exposures (referred to as the representative person, which is equivalent to the previous term, critical group). Different age groups should be considered as appropriate and should normally include adults, 1 year old and 10 year old children. In particular situations doses to the fetus should also be calculated⁷. The estimated doses to the representative person should be compared to the appropriate radiation dose criteria (dose constraints and dose limits), taking account of other releases of radionuclides from nearby locations as appropriate. Collective doses should also be considered for the UK, European and world populations where appropriate. The methods for assessing individual and collective radiation doses should follow the guidance given in 'Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012'⁸. It is important that the methods used in any radiological dose assessment are clear and that key parameter values and assumptions are given (for example, the location of the representative persons, habit data and models used in the assessment).

Any radiological impact assessment should also consider the possibility of short-term planned releases and the potential for accidental releases of radionuclides to the environment. This can be done by referring to compliance with the Ionising Radiation Regulations and other relevant legislation and guidance.

The radiological impact of any solid waste storage and disposal should also be addressed in the assessment to ensure that this complies with UK practice and legislation; information should be provided on the category of waste involved (e.g. very low level waste, VLLW). It is also important that the radiological impact associated with the decommissioning of the site is addressed. Of relevance here is PHE advice on radiological criteria and assessments for land-based solid waste disposal facilities⁹. PHE advises that assessments of radiological impact during the operational phase should be performed in the same way as for any site authorised to discharge radioactive waste. PHE also advises that assessments of radiological impact during the post operational phase of the facility should consider long timescales (possibly in excess of 10,000 years) that are appropriate to the long-lived nature of the radionuclides in the waste, some of which may have half-lives of millions of years. The radiological assessment should consider exposure of members of hypothetical representative groups for a number of scenarios including the expected migration of radionuclides from the facility, and inadvertent intrusion into the facility once institutional control has ceased. For scenarios where the probability of occurrence can be estimated, both doses and health risks should be presented, where the health risk is the product of the probability that the scenario occurs, the dose if the scenario occurs and the health risk corresponding to unit dose. For inadvertent intrusion, the dose if the intrusion occurs should be presented.

⁷ HPA (2008) Guidance on the application of dose coefficients for the embryo, fetus and breastfed infant in dose assessments for members of the public. Doc HPA, RCE-5, 1-78, available at <https://www.gov.uk/government/publications/embryo-fetus-and-breastfed-infant-application-of-dose-coefficients>

⁸ The Environment Agency (EA), Scottish Environment Protection Agency (SEPA), Northern Ireland Environment Agency, Health Protection Agency and the Food Standards Agency (FSA). Principles for the Assessment of Prospective Public Doses arising from Authorised Discharges of Radioactive Waste to the Environment August 2012. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/296390/geho1202bklh-e-e.pdf

⁹ HPA RCE-8, Radiological Protection Objectives for the Land-based Disposal of Solid Radioactive Wastes, February 2009

It is recommended that the post-closure phase be considered as a series of timescales, with the approach changing from more quantitative to more qualitative as times further in the future are considered. The level of detail and sophistication in the modelling should also reflect the level of hazard presented by the waste. The uncertainty due to the long timescales means that the concept of collective dose has very limited use, although estimates of collective dose from the 'expected' migration scenario can be used to compare the relatively early impacts from some disposal options if required.

Annex 1

Human health risk assessment (chemical pollutants)

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used
- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account
- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach¹⁰ is used

¹⁰ Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24



Great Yarmouth Third River Crossing

Royal Mail Group Limited Environmental Statement (ES) Scoping consultation response

Introduction

This representation is in response to the letter to Royal Mail from PINS dated 6 April 2018 inviting Royal Mail's comments on the information that should be provided in the ES above proposal and other relevant comments.

Royal Mail's consultants BNP Paribas Real Estate have reviewed Norfolk County Council's Scoping Report as submitted to PINS on 6 April 2018.

Royal Mail-relevant information

Royal Mail is responsible for providing efficient mail sorting and delivery nationally. As the Universal Service Provider under the Postal Services Act 2011, Royal Mail has a statutory duty to deliver mail to every residential and business address in the country as well as collecting mail from all Post Offices and post boxes six days a week.

Royal Mail's postal sorting and delivery operations rely heavily on road communications. Royal Mail's ability to provide efficient mail collection, sorting and delivery to the public is sensitive to changes in the capacity of the highway network.

Royal Mail is a major road user nationally. Disruption to the highway network and traffic delays can have direct consequences on Royal Mail's operations, its ability to meet the Universal Service Obligation and comply with the regulatory regime for postal services, thereby presenting a significant risk to Royal Mail's business. Royal Mail's nearest operational property is Great Yarmouth Delivery Office, 6 North Quay, Great Yarmouth NR30 1AA which is approximately 2.5 km from the site of the proposed Third River Crossing.

Every day, in exercising its statutory duties Royal Mail vehicles use all of the main roads that may potentially be affected by additional traffic arising from the construction of the proposed Third Crossing.

Royal Mail is aware that the Third River Crossing proposal is part of a wider package of measures being proposed by for the A47 by Highways England including modifications to Vauxhall Roundabout, Gapton Hall Roundabout and Fullers Hill Roundabout. There are significant congestion issues in Great Yarmouth at present and the Third River Crossing and the wider proposed measures will, once complete, improve traffic flows and journey times. This will ultimately benefit Royal Mail's operations from Great Yarmouth Delivery Office, but Royal Mail is concerned about the potential for disruption to its operational vehicle traffic during the construction programme.

Royal Mail therefore wishes to ensure the protection of its future ability to provide an efficient mail sorting and delivery service to the public in accordance with its statutory obligations which may be adversely affected by the construction and operation of this proposed scheme.



Royal Mail's position on this proposal

Royal Mail has no issue with the principle of the proposed Third River Crossing which, once constructed, will have a positive effect on traffic flows through Great Yarmouth and its environs. However, Royal Mail has significant concerns about the impact that its construction and post construction effects will have on its road based operations to and from Great Yarmouth Delivery Office.

Royal Mail's comments / requests on the ES

Royal Mail has the following comments / requests:

1. Royal Mail requests that Norfolk County Council's ES includes information on the needs of major road users (such as Royal Mail) and acknowledges the requirement to ensure that major road users are not disrupted though full consultation at the appropriate time in the planning and construction process.
2. The ES should include more detailed information on construction traffic mitigation measures to be implemented, including a draft Construction Traffic Management Plan (CTMP).
3. A full and detailed assessment of cumulative traffic impact should be included within the ES.
4. Royal Mail requests that it is pre-consulted by Norfolk County Council on proposed road closures / diversions/ alternative access arrangements, hours of working and the content of the CTMP. The ES should formally acknowledge the need for this consultation with Royal Mail and other relevant local businesses / occupiers.

Royal Mail is able to supply the applicant with information on its road usage / trips if required.

Should PINS or Norfolk County Council have any queries in relation to the above then in the first instance please contact Holly Trotman (holly.trotman@royalmail.com) of Royal Mail's Legal Services Team or Daniel Parry-Jones (daniel.parry-jones@bnpparibas.com) of BNP Paribas Real Estate.

From: [Kim Woodhouse](#)
To: [Breslaw, Michael](#)
Subject: consultation TR010043 Greta Yarmouth Third River Crossing EIA Scoping notification
Date: 12 April 2018 18:14:19
Attachments: [image001.gif](#)
[image002.gif](#)
[image003.gif](#)
[image004.gif](#)
[image005.gif](#)
[image006.gif](#)

Dear Michael

Thank you for your email regarding the above. Please be advised that South Norfolk Council does not have any comments to make with regard to this proposal.

Kind regards

Kim Woodhouse

Corporate Business Support Manager

t 01508 533846 e kwoodhouse@s-norfolk.gov.uk www.south-norfolk.gov.uk



South Norfolk Council, working with you, working for you.



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From: [Stephen Vanstone](#)
To: [Great Yarmouth Third River Crossing](#)
Cc: [Trevor Harris](#); [Martin Thomas](#); [Thomas Arculus](#)
Subject: RE: TR010043 – Great Yarmouth Third River Crossing – EIA Scoping Notification and Consultation
Date: 02 May 2018 08:32:37

FAO – Marie Shoemith,

Trinity House would expect to see a marine navigation risk assessment, following consultation with Peel Ports Great Yarmouth, to form part of the Environmental Statement. Within this risk assessment we would expect to see proposed risk mitigation measures, including any aids to navigation deemed necessary, throughout the lifetime of this project.

Trinity House would be happy to meet with the applicant later in the application process to give further advice concerning the aforementioned.

Kind regards,

Steve Vanstone
Navigation Services Officer

Navigation Directorate
Trinity House
Trinity Square
Tower Hill
London
EC3N 4DH

Tel: 0207 4816921

E-mail: stephen.vanstone@thls.org

From: Environmental Services [<mailto:environmentalservices@pins.gsi.gov.uk>]
Sent: 06 April 2018 12:41
To: Navigation
Cc: Thomas Arculus
Subject: FW: TR010043 – Great Yarmouth Third River Crossing – EIA Scoping Notification and Consultation

Dear Sir/ Madam

Please see attached correspondence on the proposed Great Yarmouth Third River Crossing.

Please note the deadline for consultation responses is 04 May 2018, and is a statutory requirement that cannot be extended.

Kind Regards

Marie Shoemith
Senior EIA and Land Rights Advisor
Major Applications & Plans
The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN
Direct line: 0303 444 5092

Helpline: 0303 444 5000

Email: Michael.Breslaw@pins.gsi.gov.uk

Web: infrastructure.planninginspectorate.gov.uk (National Infrastructure Planning)

Web: www.gov.uk/government/organisations/planning-inspectorate (The Planning Inspectorate)

Twitter: @PINSgov

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WAVENEY LOWER YARE & LOTHINGLAND INTERNAL DRAINAGE BOARD

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Solicitor and Clerk

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BS1 6PN

By email only: GYTRC@pins.gsi.gov.uk

24 April 2018

Dear Sirs

**Application by Norfolk County Council for an Order granting
Development Consent for the Great Yarmouth Third River Crossing
(the Proposed Development)**

Thank you for your letter dated 6th April 2018 regarding the above. The proposed third river crossing will have an impact on drainage flows within the Burgh Castle drainage district which is managed by the Waveney Lower Yare & Lothingland Internal Drainage Board. The drainage district operates to a water level management plan which is available on request. The applicant should cover in the ES the potential impact and mitigation proposed for the water level management plan and drainage district.

Yours faithfully

Mrs D Lovegrove
Assistant to the Clerk to the Board