

Great Yarmouth Third River Crossing Order 202[*]

Document NCC/GY3RC/EX/008: Response to Relevant Representations

Planning Act 2008

The Infrastructure Planning

The Infrastructure Planning (Examination Procedure) Rules 2010

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Foreword

This Response to Relevant Representations document is part of the Examination submissions relating to an application ('the Application') submitted by Norfolk County Council ('the Applicant') to the Secretary of State for a Development Consent Order ('DCO') under the Planning Act 2008.

If made by the Secretary of State, the DCO would grant development consent for construction, operation and maintenance of a new bascule bridge highway crossing of the River Yare in Great Yarmouth, and which is referred to in the Application as the Great Yarmouth Third River Crossing (or 'the Scheme').



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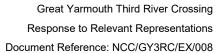
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Glossary of Abbreviations and Defined Terms

CcCP	Code of Construction Practice
cSPA	Candidate Special Area of Conservation
DCO	Development Consent Order
dDCO	Draft Development Consent Order
DGHAR	Dangerous Goods in Harbour Areas Regulations
DML	Deemed Marine Licence
DMRB	Design Manual for Roads and Bridges
EIA	Environmental Impact Assessment
ES	Environmental Statement
GYPA	Great Yarmouth Port Authority
GYPC	Great Yarmouth Port Company
HRA	Habitat Regulations Assessment
HSE	The Health and Safety Executive
JNCC	Joint Nature Conservation Committee
MAGIC	Multi Agency Geographical Information for the Countryside
MEICA	Mechanical, Electrical, Instrumentation, Control and Automation
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPS NN	National Policy Statement for National Networks
NSBA	Norfolk & Suffolk Boating Association
PEA	Preliminary Ecological Appraisal
pNRA	preliminary Navigation Risk Assessment
SOCG	Statement of Common Ground
TIN	Technical Information Note
VMS	Variable Message Sign





WFD

Water Framework Directive



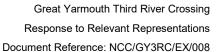
Introduction

1.1 Purpose of this Report

- 1.1.1 This report provides a response to the key issues raised in the relevant representations submitted by Interested Parties. A total of 33 relevant representations were submitted to the Inspectorate as set out below;
- Two from local authorities;
- Twelve from statutory organisations;
- Eight from affected persons; and
- Eleven from members of the public and businesses.
- 1.1.2 The responses have been grouped into themes in line with the Principal Issues in the Rule 6 letter, dated 29 August 2019.
- 1.1.3 The report provides Norfolk County Council's, as the Applicant, response to the issues raised, thereby providing a reference document for all Interested Parties and the Examining Authority.
- 1.1.4 All the relevant representations received have been reviewed and considered for this report. The purpose of the report is not to provide a direct response to each individual relevant representation but instead to identify key issues on a thematic basis and provide a response to these issues, while also identifying the interested parties who have raised them.
- 1.1.5 Where the same issue has been raised in multiple responses, the Applicant has only responded once to the issue raised but has listed each of the Interested Parties' names against the issue.

1.2 Structure of this Report

1.2.1 The report is structured thematically, with responses to the relevant representations being grouped in line with the Principal Issues identified by the Examining Authority in Annex B of the Rule 6 letter, as set out below:





- Context: No issues received
- Policy: No issues received
- Draft Development Consent Order (dDCO): Chapter 2
- Environment: Chapter 3
- Compulsory Acquisition and other Land Matters: Chapter 4
- Maritime and Port Operation matters: Chapter 5
- Highway and Transportation issues: Chapter 6
- Socio-economic: No issues received
- Other matters arising from representations: No issues received
- 1.2.2 By way of exception to the above, the relevant representations submitted by ASCO and Perenco have not been split up on a thematic basis but have been responded to in their entirety. The Applicant's response to ASCO's relevant representation is set out in chapter 7 and the Applicant's response to Perenco's relevant representation is in chapter 8.
- 1.2.3 Within the report those Interested Parties indicated with an asterisk (*) are affected persons who are named in the Book of Reference (Document Reference 4.3, Planning Inspectorate Reference APP-023a).
- 1.2.4 The Application documentation can be viewed on the Planning Inspectorate website at:
 - https://infrastructure.planninginspectorate.gov.uk/projects/eastern/great-yarmouth-third-river-crossing/.
- 1.2.5 Where this report refers to Application documentation or Examination submissions, these are cross referenced to the Planning Inspectorate's references in the Examination Library on the 'Documents' tab on the Inspectorate's website (address as above).



2 Issues on the Draft Development Consent Order (DCO)

2.1 Overview

- 2.1.1 Four interested parties raised issues on the draft DCO. Table 2-1 sets out the matters raised on the DCO theme, alongside responses from the Applicant.
- 2.1.2 The draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) will be revised and submitted to the Examining Authority for Deadline 2, further to discussions with stakeholders.



Table 2.1: Matters raised on draft DCO

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
DCO1	RR-014	Great Yarmouth Port Company (part of Peel Ports Group)*	GYPC has requested "Protective Provisions" for the benefit of the port, a scheme of operation and articles in the Development Consent Order which will not prejudice the operation of the port. Parties have entered into a Statement of Common Ground (SoCG).	The Applicant is continuing its discussions with Great Yarmouth Port Company to ensure that all its concerns in respect of those aspects of the draft Order are resolved.
DCO2	RR-019	Environment Agency	Protective Provisions The Applicant seeks to disapply various pieces of legislation (Article 3 of the Explanatory Memorandum submitted with the draft DCO).	The Applicant will engage with the Environment Agency to ensure that the Protective Provisions between the parties are able to be considered as agreed.
			We are currently considering our position in relation to the legislation which is relevant to the Environment Agency. However, the draft protective provisions contained within part 4 of Schedule 14 of the draft DCO do not correspond with the latest version of the Environment Agency's model protective provisions.	



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			We will be responding to the Applicant on these issues in due course and will provide the Examining Authority with an update.	
DCO3	RR-028	Cadent Gas Limited*	Cadent's rights to retain its apparatus in situ and rights of access to inspect, maintain, renew and repair such apparatus located within or in close proximity to the order limits including should be maintained at all times and access to inspect such apparatus must not be restricted. Cadent has identified that it will require adequate protective provisions to be included within the DCO to ensure that its apparatus and land interests are adequately protected and to include compliance with relevant safety standards. Cadent has low, medium and intermediate pressure gas pipelines and associated below or above ground apparatus located within or in close proximity to the order limits which may be affected by works proposed and which may require	The Applicant is willing to agree protective provisions for the benefit of Cadent in respect of both its land and apparatus concerns within the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) and will engage with Cadent to ensure that an agreed form of drafting is able to be able added to the dDCO.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			diversions subject to the impact assessment.	
DCO4	RR-028	Cadent Gas Limited*	It is important that sufficient rights are granted to Cadent where necessary to allow Cadent to maintain its gas distribution network in accordance with its statutory obligations. To date, Cadent has not been consulted on the extent of land secured pursuant to the DCO or the form of rights to be acquired. Further discussion is required with the Promoter to identify the impact to Cadent apparatus. Furthermore, compulsory powers are sought across Cadent land and plots (plots 2-10, 2-11, 2-15 and 2-16) within which Cadent has rights of access to an existing gas depot. These rights of access must remain unfettered.	As noted by Cadent and as set out in the Negotiations Tracker (Document Reference 4.4, Planning Inspectorate Reference APP-024) there has been correspondence between the parties, and the Applicant will build on this to seek to agree the protective provisions as soon as possible.
DCO5	RR-028	Cadent Gas Limited*	To date Cadent has received limited correspondence in relation to proposals to acquire its land and requires further discussion on the likely impact of these proposals.	The Applicant notes Cadent's concerns regarding land take and the securing of appropriate new rights over land and



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			As a responsible statutory undertaker, Cadent's primary concern is to meet its statutory obligations and ensure that any development does not impact in any adverse way upon those statutory obligations. Adequate protective provisions for the protection of Cadent's statutory undertaking have not yet been agreed or discussed between parties.	confirms its intention to address these points in its discussions with Cadent.
DCO6	RR-027	Anglian Water Services Ltd*	Connections to public sewerage networks Anglian Water is not aware of any requirements made upon them for a foul connection(s) to the public sewerage network for the above project. We understand that a surface water connection to an existing combined sewer is required to for the eastern part of the development as outlined in the submitted drainage strategy (document 6.2). We have had constructive discussions with the applicant regarding the proposed surface water strategy and are supportive of the strategy in principle subject to evidence being provided to demonstrate that they have followed the surface water hierarchy	The Applicant is grateful for Anglian Water's engagement in constructive dialogue around the Applicant's proposed drainage strategy. A foul connection will be required from the control tower into the public sewerage network. The Applicant will continue to engage with Anglian Water in the context of its approach to drainage but doesn't consider it to be appropriate for Anglian Water to be specifically referenced in requirement 10 which is principally concerned with managing flood risk. Anglian Water's



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			as specified in Part H of Building and further details of the flow control mechanisms to confirm the discharge rate which is assumed. We note that the Draft DCO as submitted includes a requirement for a surface water strategy to be submitted for approval by Norfolk County Council as County Planning Authority following consultation with a number of bodies (Schedule 2, Part 1). Given that the intention is that Anglian Water would continue to be involved in the development of surface water drainage strategy it is requested that the wording be amended to include reference to Anglian Water being consulted on the strategy.	interest as a sewerage undertaker is acknowledged but is addressed in article 20 (discharge of water) which provides for the process for connection to a public sewer, and its apparatus is protected through the protective provisions contained in Part 3 of Schedule 14 to the dDCO.



3 Issues on Environment

3.1 Overview

- 3.1.1 Five interested parties raised issues relating to the environment. Table 3-1 sets out the matters raised on the environment theme, alongside responses from the Applicant.
- 3.1.2 These issues relate to the Environmental Statement (ES) (Document Reference 6.1, Planning Inspectorate Reference APP-096) and accompanying appendices (Document Reference 6.2, Planning Inspectorate References APP-097 to APP-160).



Table 3.1: Matters raised on environment

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
ENV1	RR-013	Roger Hannah Ltd on behalf of Regaland Lim ited *	Asks if environmental impact could be further reduced	An environmental impact assessment (EIA) has been undertaken and the findings reported in the Environmental Statement (ES) (Document Reference 6.1, Planning Inspectorate Reference APP-096). Where likely significant environmental effects are identified in the ES, mitigation and monitoring measures have been proposed, where appropriate, to avoid, minimise or offset such effects of Scheme. The Applicant has considered all practicable measures to avoid, minimise or offset environmental effects, whilst endeavouring to achieve the objectives of the scheme. A summary of the mitigation and monitoring measures identified is presented in the Mitigation Schedule (Document Reference 6.13, Planning Inspectorate Reference APP-184, an updated version of which [NCC/GY3RC/EX/014] was submitted at Deadline 1 of the Examination).



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
ENV2	RR-017	Natural England	Natural England has no objection subject to the following requirements: • implementation of specific construction methods to limit impacts to designated sites • identification of licensing and mitigation requirements for protected species	Natural England's response is welcomed. Chapter 8: Nature Conservation of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) reports that there are likely to be negligible (not significant) effects on the three designated sites within the study area prior to the implementation of additional mitigation measures. Mitigation and monitoring measures, including licensing requirements, are included in the Outline Code of Construction Practice (CoCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187), compliance with which is secured through Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020).
ENV3	RR-017	Natural England	Further advice on mitigation The development footprint is within close proximity to the aforementioned designed sites and to reduce impacts to interest features and protected species we advise	Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) ensures that no part of the authorised construction activities will begin until the full CoCP,



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			mitigation measures as described in the Outline Code of Construction Practice are implemented to limit disturbance and pollution impacts to designated sites and features of interest.	which must be written in accordance with the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187), following consultation with Great Yarmouth Borough Council, the lead local flood authority, the IDB and the Environment Agency, approved in writing by the County Planning authority.
ENV4	RR-017	Natural England	Harbour porpoise Mitigation should include the adoption of measures set out in the Joint Nature Conservation Committee (JNCC) document entitled 'Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise' (2010) as stated in section 7.8.41 of the Environmental Statement	The Habitat Regulations Assessment (HRA) (Document Reference 6.11, Planning Inspectorate Reference APP-182) reports that there is a negligible risk to the harbour porpoise feature of the Southern North Sea Candidate Special Area of Conservation (cSPA). Regardless, paragraph 4.2.4 of the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP- 187) includes a commitment to follow JNCC's guidance document (2010) with regards minimising the risk to marine mammals from construction activities.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) will ensure no part of the authorised construction activities will begin until the full CoCP, which must be written in accordance with the Outline CoCP, has been prepared and approved.
ENV5	RR-017	Natural England	 Breeding birds Any vegetation clearance should avoid the breeding bird season and be checked prior to removal to avoid destruction of active bird nests. If active bird nests are present, an appropriate exclusion zone should be retained and works delayed until birds have fledged and the nest is inactive. 	Any works regarding vegetation clearance will be in accordance with current legislation and guidance.
ENV6	RR-017	Natural England	Water voles Any works that directly impact upon water voles should be subject to mitigation and/or a protected species license from Natural England to avoid an offence under the Wildlife and Countryside Act 1981 (as amended).	Discussions on this matter continue with Natural England. The discussion process aims to provide Natural England with sufficient comfort in order to establish a Letter of No Impediment for the Scheme and will be reflected in the



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Statement of Common Ground due for submission at Deadline 1.
ENV7	RR-017	Natural England	 Emergence and re-entry surveys should be undertaken as explained in section 6.2 in the Protected Species Survey Report. If the presence of roosting bats is confirmed further survey work will be required to inform an application for a protected species licence (Preliminary Bat Roost Report, section 6.3.2) Sensitive onsite light management should be implemented to limit disturbance to bats as specified in section 5.3.7 of the Environmental Statement. 	Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) will ensure no part of the authorised construction activities will begin until the full CoCP, which must be written in accordance with the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187), has been prepared and approved. Paragraphs 5.3.5 to 5.3.7 of the Outline CoCP include measures to minimise the risk to bats, inclusive of those raised by Natural England (notably, section 2.5 and paragraphs 5.3.5 - 5.3.7 of the Outline CoCP).
ENV8	RR-017	Natural England	Fish Any translocation of fish should be carried out by suitably qualified ecologists/scientists using evidenced and accepted methods. Where this involves	Paragraph 5.4.1 of the Outline CoCP Document Reference 6.16, Planning Inspectorate Reference APP- 187) includes measures to minimise effects on fish, inclusive of those raised by Natural England.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			changes in water level the Environment Agency should be consulted in advance.	With regards to consultation with the Environment Agency, Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) will ensure no part of the authorised construction activities will begin until the full CoCP, which must be written in accordance with the Outline CoCP, has been prepared and approved in writing by several stakeholders, including the Environment Agency.
ENV9	RR-017	Natural England	Noise disturbance Natural England is satisfied that noise levels produced by the works will be below the recommended thresholds for both continuous and discontinuous noise (Waterbird toolkit) at designated sites, with the exception of the River Yare (Outer Thames Estuary SPA). However, surveys have shown that features of interest are not present within the vicinity of works and no likely significant effect anticipated (Habitats Regulations Assessment, section 7.3).	Natural England's response is welcomed with regards to noise disturbance at designated sites. Section 7.3 of the Habitats Regulations Assessment (HRA) (Document Reference 6.11, Planning Inspectorate Reference APP-182) lists the European Designated Sites screened into the assessment. The assessment for each European Designated Site is contained within Sections 7.4 to 7.12 of the HRA.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
ENV10	RR-017	Natural England	Water volume and quality The Sediment Transport Assessment (sections 6.5.2 and 7.1.7) explains that there will be negligible change in the sediment regime and water levels at Breydon Water and no likely significant effect is anticipated. We advise direct contact with the Environment Agency to apply for the appropriate permit and assess water quality impacts of the proposed drainage strategy.	The Environment Agency has provided comments on the Sediment Transport Assessment, ES Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130) and the Drainage Strategy, ES Appendix 12C (Document Reference 6.2, Planning Inspectorate Reference APP-136). The Applicant is in ongoing discussion with the EA. As noted in paragraph 2.3.3 of the Drainage Strategy, the specific discharge location should be confirmed by the Contractor with the Environment Agency in accordance with Article 20 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020). The Applicant would apply for discharge activity environmental permits in the ordinary way.
ENV11	RR-017	Natural England	Landscape Paragraph 170 of the National Planning Policy Framework (NPPF) highlights the need to protect and enhance valued landscapes through the planning system.	Chapter 10 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) contains the Townscape and Visual Assessment of the Scheme. The assessment takes account



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			This application may present opportunities to protect and enhance locally valued landscapes, including any local landscape designations. You may want to consider whether any local landscape features or characteristics (such as ponds, woodland or dry stone walls) could be incorporated into the development in order to respect and enhance local landscape character and distinctiveness, in line with any local landscape character assessments. Where the impacts of development are likely to be significant, a Landscape & Visual Impact Assessment should be provided with the proposal to inform decision making. We refer you to the Landscape Institute Guidelines for Landscape and Visual Impact Assessment for further guidance.	of the regulatory and policy framework, which includes the NPS NN, NPS for Ports, NPPF and other relevant policies (see Table 10.1 of the ES). Landscape features / characteristics have been considered in the Scheme design, as described in the Approach to Detailed Design (Document Reference 7.4a, Planning Inspectorate Reference APP-196). For example, Section 4 of the Approach to Detailed Design refers to the design of the public realm features reflecting the setting of the Scheme (i.e. the mixed-use port area of Great Yarmouth). Design mitigation is secured through Requirements 4 and 6 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020). Requirement 4 requires the design to be developed in general accordance with the General Arrangement Plans (Document Reference 2.2, Planning Inspectorate Reference APP-007) and the Approach to Detailed Design. Requirement 6 requires the landscaping



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				scheme to be developed in general accordance with the Landscaping Plans (Document Reference 2.9, Planning Inspectorate Reference APP-014).
				The assessment has been undertaken in accordance with the Guidelines for Landscape and Visual Impact Assessment (2013) and the associated Townscape Character Assessment (Technical Information Note 05/2017) (TIN-05-2017), as noted in Table 10.1 and paragraph 10.4.11 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096). As summarised in Table 10.13 of the ES, significant moderate adverse residual effects are anticipated only in two instances, during the construction phase and during operational phase year 1 (associated with a deterioration in outlook at some viewpoints).
				It is recognised that due to the location, massing and scale of the development, that bridge structure mitigation is unfeasible in this instance. Therefore,



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				embedded mitigation (public realm improvements, tree planting and vegetated embankments) has instead been incorporated within the proposed design, which seeks to respond to and integrate the Scheme with the existing townscape.
ENV12	RR-017	Natural England	Best and most versatile agricultural land and soils Local planning authorities are responsible for ensuring that they have sufficient detailed agricultural land classification (ALC) information to apply NPPF policies (Paragraphs 170 and 171). This is the case regardless of whether the proposed development is sufficiently large to consult Natural England. Further information is contained in GOV.UK guidance Agricultural Land Classification information is available on the Magic website on the Data.Gov.uk website. If you consider the proposal has significant implications for further loss of 'best and most versatile' agricultural land, we would be pleased to discuss the matter further. Guidance on soil protection is available in the Defra Construction Code of Practice for	As identified in paragraphs 6.6.5 to 6.6.10 of the EIA Scoping Report (Document Reference 6.6, Planning Inspectorate Reference APP-177) and paragraphs 10.4.20 to 10.4.21 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096), the baseline conditions of the application site (and surrounding study areas) are of an urban character. Therefore, no agricultural land is present and thus no effects on 'best and most versatile' agricultural lands are anticipated.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			the Sustainable Use of Soils on Construction Sites, and we recommend its use in the design and construction of development, including any planning conditions. Should the development proceed, we advise that the developer uses an appropriately experienced soil specialist to advise on, and supervise soil handling, including identifying when soils are dry enough to be handled and how to make the best use of soils on site.	
ENV13	RR-017	Natural England	Local sites and priority habitats and species You should consider the impacts of the proposed development on any local wildlife or geodiversity sites, in line with paragraphs 171 and 174 of the NPPF and any relevant development plan policy. There may also be opportunities to enhance local sites and improve their connectivity. Natural England does not hold locally specific information on local sites and recommends further information	With reference to any local wildlife or geodiversity sites, Table 8.10 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) and Section 7.3 of the HRA (Document Reference 6.11, Planning Inspectorate Reference APP-182) identifies sensitive receptors (namely designated 'wildlife' sites) that were assessed in relation to the Scheme. The identification of the sites for assessment was based on a desk study



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			is obtained from appropriate bodies such as the local records centre, wildlife trust, geoconservation groups or recording societies. Priority habitats and Species are of particular importance for nature conservation and included in the England Biodiversity List published under section 41 of the Natural Environment and Rural Communities Act 2006. Most priority habitats will be mapped either as Sites of Special Scientific Interest, on the Magic website or as Local Wildlife Sites. List of priority habitats and species can be found https://jncc.gov.uk/our-work/uk-bap/. Natural England does not routinely hold species data, such data should be collected when impacts on priority habitats or species are considered likely. Consideration should also be given to the potential environmental value of brownfield sites, often found in urban areas and former industrial land, further information including links to the open mosaic habitats inventory can be found	and a Preliminary Ecological Appraisal (PEA), reported in the Environmental Statement – Appendix 8B and 8C, (Document Reference 6.2, Planning Inspectorate Reference APP-115 and APP-116). The potential effects on these sites are considered in Section 8.8 of the ES and Sections 7.4 to 7.12 of the HRA. With reference to priority habitats and Species, the effects of the Scheme are considered in Section 8.8 of the ES. No significant effects upon priority habitats or species are predicted as a result of the Scheme. Though paragraph 8.4.10 of the ES concludes that black redstarts will not be significantly affected by the Scheme, measures are included to enhance their environment (notably open brownfield sites). The enhancement measures are summarised in Section 6.3 of the Approach to Detailed Design (Document Reference 74a, Planning



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			https://www.buglife.org.uk/resources/habita t-hub/brownfield-hub/.	Inspectorate Reference APP-196). Mitigation measures are also included in paragraphs 5.3.8 to 5.3.10 of the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187).
ENV14	RR-017	Natural England	Ancient woodland, ancient and veteran trees You should consider any impacts on ancient woodland and ancient and veteran trees in line with paragraph 175 of the NPPF. Natural England maintains the Ancient Woodland Inventory which can help identify ancient woodland. Natural England and the Forestry Commission have produced standing advice for planning authorities in relation to ancient woodland and ancient and veteran trees. It should be taken into account by planning authorities when determining relevant planning applications. Natural England will only provide bespoke advice on ancient woodland, ancient and veteran trees where they form part of a SSSI or in exceptional circumstances.	The Detailed Arboricultural Report, Environmental Statement – Appendix 8H (Document Reference 6.2, Planning Inspectorate Reference APP- 121) identifies and assesses all trees which may reasonably be directly or indirectly affected by the Scheme. The Detailed Arboricultural Report was prepared in accordance with Natural England's and the Forestry Commission's joint guidance document (2014), as detailed in paragraph 3.2.8. Paragraphs 4.2.5 – 4.2.6 of the Detailed Arboricultural Report state that the presence of locally notable, ancient and veteran trees within the study area was checked using the Woodland Trust's Ancient Tree Inventory and Natural England's Multi Agency Geographical Information for the Countryside (MAGIC)



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				(ancient woodlands only); presences were verified on a site walkover. There are no areas of ancient woodland within the study areas. Paragraph 6.2.4 of the Detailed Arboricultural Report discusses the only veteran tree present within the study area. Whilst within the study area, this veteran tree will not be removed or
ENV15	RR-017	Natural England	Environmental enhancement Development provides opportunities to secure net gains for biodiversity and wider environmental gains, as outlined in the NPPF (paragraphs 8, 72, 102, 118, 170, 171, 174 and 175). We advise you to follow the mitigation hierarchy as set out in paragraph 175 of the NPPF and firstly consider what existing environmental features on and around the site can be retained or enhanced or what new features could be incorporated into the development proposal. Where onsite measures are not possible, you should	affected as part of the Scheme. Paragraph 4.2.4 of the Design Report (Document Reference 7.4, Planning Inspectorate Reference APP-195) states that "Where practicable, the Scheme aims to improve or enhance existing townscape as part of the proposals and ensure that benefits for the communities and environment are realised". Such improvement and enhancement measures have been incorporated in the practical design requirements in the Approach to Detailed Design (Document Reference 7.4a, Planning Inspectorate Reference APP-196) secured through Requirement 3 of the draft DCO (Document Reference



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			consider off site measures. Opportunities for enhancement might include:	3.1, Planning Inspectorate Reference APP-020).
			 Providing a new footpath through the new development to link into existing rights of way. 	
			Restoring a neglected hedgerow.	
			 Creating a new pond as an attractive feature on the site. 	
			 Planting trees characteristic to the local area to make a positive contribution to the local landscape. 	
			 Using native plants in landscaping schemes for better nectar and seed sources for bees and birds. 	
			 Incorporating swift boxes or bat boxes into the design of new buildings. 	
			Designing lighting to encourage wildlife.	
			Adding a green roof to new buildings.	
			You could also consider how the proposed development can contribute to the wider environment and help implement elements of any Landscape, Green Infrastructure or	



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			Biodiversity Strategy in place in your area. For example:	
			 Links to existing greenspace and/or opportunities to enhance and improve access. 	
			 Identifying opportunities for new greenspace and managing existing (and new) public spaces to be more wildlife friendly (e.g. by sowing wild flower strips) 	
			 Planting additional street trees. 	
			 Identifying any improvements to the existing public right of way network or using the opportunity of new development to extend the network to create missing links. 	
			 Restoring neglected environmental features (e.g. coppicing a prominent hedge that is in poor condition or clearing away an eyesore). 	
ENV16	RR-017	Natural England	Access and recreation Natural England encourages any proposal to incorporate measures to help improve	One of the key objectives of the Scheme is to " improve access to and from the Great Yarmouth peninsula for pedestrians,



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			people's access to the natural environment. Measures such as reinstating existing footpaths together with the creation of new footpaths and bridleways should be considered. 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 delivered where appropriate.	cyclists and buses". Overall it is considered that the Scheme will result in significant improvement in accessibility for pedestrians and cyclists. Such improvements are summarised in paragraphs 5.5.32 to 5.5.36 of the Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188) and visually depicted in Plates 7-20 and 7-21 of the Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189). With regards to green networks, the linear nature of the Scheme design will be utilised to support biodiversity through the implementation of 'green routes' to enhance connectivity, notably to Queen Anne's Road and Suffolk Road (from Southtown Road); it is proposed that these routes feature landscaping to benefit biodiversity and add visual interest. Further details are provided in Section 4 of the Approach to Detailed Design (Document Reference 7.4a, Planning Inspectorate Reference APP-196) and secured through Requirement 3 of the draft DCO



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				(Document Reference 3.1, Planning Inspectorate Reference APP-020).
ENV17	RR-017	Natural England	Rights of Way, Access land, Coastal access and National Trails Paragraphs 98 and 170 of the NPPF highlights the important of public rights of way and access. Development should consider potential impacts on access land, common land, rights of way, coastal access routes and coastal margin in the vicinity of the development and the scope to mitigate any adverse impacts. Consideration should also be given to the potential impacts on any nearby National Trails, including the England Coast Path. The National Trails website www.nationaltrail.co.uk provides information including contact details for the National Trail Officer.	An assessment of the effects of the Scheme in relation to open land, Public Rights of Way and coastal access routes (in particular the England Coast Path) has been undertaken, the outcomes of the assessment are presented in Chapter 14: People and Communities of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096). The Applicant wishes to reassure Natural England that it has considered all practicable measures to avoid, minimise or offset environmental effects. A summary of the measures to avoid, minimise or offset environmental effects is presented in the Mitigation Schedule (Document Reference 6.13, Planning Inspectorate Reference APP-184, an updated version of which [NCC/GY3RC/EX/014] was submitted at Deadline 1 of the Examination).



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ENV18	RR-017	Natural England	Biodiversity duty Your authority has a duty to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available here.	An assessment of the effects of the Scheme regarding biodiversity and nature conservation has been undertaken, the outcomes of the assessment are presented in Chapter 8: Nature Conservation of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096). The Applicant has considered all practicable measures to avoid, minimise or offset environmental effects, whilst achieving the scheme objectives. Where appropriate, enhancement measures have also been proposed; with specific regard to biodiversity this includes watercourse habitat enhancement to maximise their suitability for water voles, as described further in paragraph 8.8.74 of the ES and set out in Section 5.3 of the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187). Such enhancement measures are secured through Requirement 5 of the draft DCO (Document Reference 3.1, Planning



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				Inspectorate Reference APP-020) which will ensure that no part of the authorised construction activities will begin until the full CoCP, which must be written in accordance with the Outline CoCP, has been prepared for that part of the authorised development and approved in writing by the county planning authority, following consultation with, amongst others, Great Yarmouth Borough Council and the Environment Agency.
ENV19	RR-019	Environment Agency	Flood Risk Assessment: Environmental Statement Appendix 12B - Flood Risk Assessment 1.1 - The hydraulic model is important supporting information to the Flood Risk Assessment; it is used to inform the flood risk posed to the development and offsite impacts caused by it. 1.2 - Prior to submission the applicant sought advice regarding hydraulic modelling and the Flood Risk Assessment 1.3 - We have undertaken two reviews of the hydraulic tidal modelling undertaken to support this application. However, the	Discussions on the Flood Risk Assessment, Environmental Statement - Appendix 12B (Document Reference 6.2, Planning Inspectorate Reference APP-135) and the associated modelling continue with the Environment Agency. The Applicant notes the concerns raised by the Environment Agency, however, it considers the information presented in the Flood Risk Assessment is sufficient and that further modelling would not change the outcomes. Separately the Applicant is undertaking further sensitivity modelling to address the concerns raised by the Environment



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			 application was submitted before our second review was concluded. 1.4 - Our modelling reviews have identified concerns with the model as presented. 1.5 - Our concerns include: That the model boundary is too small and needs to be enlarged Accurate representation of some of the flood defences Inconsistencies in how structures have been represented in the applicant's model and the Environment Agency's 2011 model 1.6 - As presented the model is not sufficient to understand the offsite impacts likely to arise from the proposed development. 1.7 - Due to the uncertainties surrounding the hydraulic model, we are unable to place reliance on the Flood Risk Assessment because the evidence on which it relies cannot be regarded as sound. 	Agency, however, this is not expected to change the information presented in the Flood Risk Assessment or its conclusions. An update will be provided to the Environment Agency once the further sensitivity modelling is complete. The Applicant will continue to engage with the Environment Agency on these matters.



The Applicant welcomes the comment that the Environment Agency does not have any significant concerns regarding areas within its remit with the assessment
presented in the Sediment Transport Assessment, Environmental Statement - Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130) and that the conclusions are reasonable, although the Applicant does not consider there to be shortcomings in the assessment.
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			2.2 - The Assessment states at various points for example section 11.4.38 that the Assessment was developed in consultation with the Environment Agency. This is misleading; whilst we provided initial advice, we did not have ongoing engagement in the development of the document.	The Applicant has provided a response below for each of the key points raised by the Environment Agency. 2.2 – With specific reference to paragraph 11.4.38 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) this refers to the comments provided by the Environment Agency on the proposed sediment transport assessment methodology in a letter dated 28th January 2019. Comments were provided in relation to tidal boundary derivation, sediment and velocity survey data extraction and processing, 3D baseline model build and calibration, and the construction phase assessment.
			2.3 - However, we note that the main analysis is based on the spring and neap tide work, which uses the Gorleston tide gauge data. This is a standard and acceptable approach.	2.3 – The Applicant is pleased to note that the Environment Agency accepts the approach to the sediment transport modelling.



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			2.4 - At section 6.2.3, peak speeds on a typical spring tide of 2m/s are predicted. This is very fast and may not be an accurate prediction. At the existing Haven Bridge, current speeds are around 1.5m/s, which seems more reasonable in an estuarine environment.	2.4 – Paragraph 6.2.3 of the Sediment Transport Assessment discusses the localised impact on water speed within the Principal Application Site (with reference to Plate 6-2). The Applicant does not consider 2m/s 'very fast' due to anecdotal evidence referred to in paragraph 2.1.5 of the Sediment Transport Assessment which states that current speed peaks up to 2m/s can been seen on the outgoing tide. A simple comparison between the Principal Application Site and Haven Bridge would suggest that due to the increased size of the footprint of the knuckles in comparison to the existing Haven Bridge supports, the water speed would be slightly higher. This means that the flow cross sectional area at the Principal Application Site is smaller than that at Haven Bridge therefore the water speed will be greater. The design of the knuckles funnels the flow through an area approximately 50% less than the full width of the channel therefore it is expected that the increase in velocity will be approximately double that seen in the baseline flow as is shown on Plate 6-2.



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Number			2.5 - The model calibration requires further consideration. Hourly measurements over 12 hours are not sufficient to support a model calibration. Furthermore, there is no indication of variations through the water depth.	The Applicant notes the Environment Agency's comment regarding the modelled flow rates at the Principal Application Site. The Applicant considers that the velocities shown in the modelling are reasonable due to the location and design of the knuckles on the eastern and western sides of the River Yare. 2.5 - The calibration presented in Section 5.3 of the Sediment Transport Assessment utilises a velocity survey carried out by the Applicant. The calibration was undertaken using the best information available at the time of the Application. Long time series of velocity are difficult to obtain and are usually associated with long-term research projects in very specific areas. The ability for a hydraulic model to match the velocity with the accuracy shown in Section 5.3 in the calibration run at nine separate locations at different times is considered an appropriate and sufficient calibration. The
				Applicant considers that the information presented in the Interpretative



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			2.6 - Section 5.2.22 details a vertical resolution of 1m at the seabed. In 6-7m total depth this is not enough to give high accuracy predictions – which are essential for sediment transport.	Assessment is sufficient and that further calibration would not change the outcomes of the assessment. 2.6 - The model used to inform the Sediment Transport Assessment uses speed at the bottom of the water column to calculate the bed stresses for the sediment transport. The resolution choice used in the model took into account the impact on runtimes for the model and is considered a proportionate balance between accuracy and granularity. The Applicant notes that increasing the resolution is likely to slightly decrease the bed speed and reduce the predicted sediment transport. Therefore, the assessment has been carried out based on a conservative and reasonable worst-case scenario.
			2.7 - Section 6.2.27 states that long-term sediment transport modelling 'cannot be undertaken'. We disagree, this type of modelling is feasible and desirable for a project such as this one.	2.7 & 2.8 – Paragraph 6.2.27 of the Sediment Transport Assessment notes that the long-term modelling using the model set up presented was not carried out as the model run time to consider a simulation

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			2.8 - The sediment analysis seems to disregard the hydrodynamic predictions. The Assessment effectively assumes that the sediment will scour until the open cross section area of the channel under the bridge reaches its current size. Since the width has been reduced by a factor of 2, the Assessment assumes that the depth will increase by a factor of 2, leading to a conclusion of 7m scour depth. This conclusion is incorrect and erroneous and should be reconsidered.	would be excessive at the horizontal and vertical resolutions used. The reasonable worst case used is where the maximum possible (initial) erosion rate is used throughout because using continually updated erosion rates will show a continual reduction of the impact over time, giving a smaller impact than that assessed in the Sediment Transport Assessment. The assessment carried out is therefore a conservative and reasonable worst case scenario which has shown the limits of the effects from the structure. An initial erosion rate was calculated using the model and a maximum depth of scour was calculated using simplified hydraulics, this demonstrates that the realistic worst case, appropriate for assessment in the ES has been tested. The scenario presented represents the simulation where the scour rate is greatest and uses the simplified hydraulic calculation to present a likely maximum depth where the velocity returns to baseline conditions.



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			2.9 - The Assessment does not appear to consider the geology of the site. There may be bedrock present under the proposed bridge that would halt the progress of scour.	2.9 – The volume of material in the model used to inform the Sediment Transport Assessment represents the sand and silt on top of the bedrock based on the borehole data presented in the Borehole Log Review and Deposit Modelling Report, Environmental Statement - Appendix 9C (Document Reference 6.2, Planning Inspectorate Reference APP-125). As explained in paragraph 5.2.17 and Plate 5-5 of the Sediment Transport Assessment, should the model scour be enough at any point to remove all this material then the model will not be able to scour further. This represents when the bedrock layer is exposed and no further scour occurs. The scour depth assessment discussed in paragraph 6.2.39 of the Sediment Transport Assessment does not take the bedrock into consideration. This provides an assessment of a conservative and reasonable worst-case scour depth.
			2.10 - There is no mention of the environmental effects of the deepening of the channel, or of mitigation against it.	2.10 – The Sediment Transport Assessment presents the findings of the modelling assessment, the environmental



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				impacts are discussed throughout Chapter 11: Road Drainage and the Water Environment and section 8.8 of Chapter 8: Nature Conversation of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096).
			2.11 - The Assessment assumes that the sediment will scour out from under the bridge, and then settle in the adjacent low-velocity areas, on either side of the knuckles. This appears simplistic. There is no mention of how far the sediment may disperse along the estuary before settling, or whether it might re-suspend. The transport pathways that lead to this local deposition are not considered, and neither is the long-term evolution of the estuary.	2.11 – Plate 6-34 of the Sediment Transport Assessment shows the likely erosion and deposition areas from the modelling in a conservative and reasonable worst-case scenario. This shows that main areas of sediment movement (suspension, dispersal distance and deposition) are localised to the Principal Application Site, showing erosion in the channel centreline and the deposition along the quay walls. In line with simple hydrodynamics, it is assumed that over time the erosion / deposition rates will reduce as the bed finds equilibrium and as a result the impact will reduce. The conclusion in paragraph 7.1.8 of the Sediment Transport Assessment states that no additional material will be transported into the engineered channel



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				due to the presence of the Scheme. The Applicant considers this is to be a conservative and reasonable worst-case assessment.
			2.12 - However, from an ecological perspective, there is little habitat that would be affected by additional silt deposition in the proximity of the works (1.5km upstream or downstream).	2.12 - The Applicant welcomes the Environment Agency's confirmation that there is little habitat that would be affected by silt deposition in the proximity of the Scheme.
			2.13 - The river channel through Great Yarmouth is predominantly steel piling and concrete walls, with occasional small bars of saltmarsh / reed bed where the location allows, the channel is regularly subjected to dredging to maintain navigation.	2.13 – The Applicant notes this response. Current dredging operations in the River Yare are covered by Licence L/2016/00376/1 held by GYPC.
ENV21	RR-019	Environment Agency	Groundwater: Document 6.2 Environmental Statement V.2. Technical Appendix 11F: Groundwater Modelling Study of the Bascule Pit Groundwater Control System 3.1 - Whilst we agree that the proposed dewatering is unlikely to have any	The Applicant welcomes the Environment Agency's agreement that the proposed dewatering is unlikely to have significant effects to local groundwater resources. The Applicant has provided a response below for each of the key points raised by the Environment Agency.



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			significant and long term impacts on local groundwater resources we would like to see the full data set used to determine the model parameters, in particular, the relative river and aquifer levels and geological data used to support the division of the Crag into sand and clay layers. Full details of the proposals for the dewatering discharge should also be provided; the discharge will presumably ameliorate some of the abstraction impacts on the River Yare.	3.1 – The groundwater model, as summarised in the Groundwater Modelling Study of the Bascule Pit Groundwater Control System, Environmental Statement – Appendix 11F (Document Reference 6.2, Planning Inspectorate Reference APP-133) was based on a preliminary conceptual model and the preliminary ground investigations and is sufficient for assessing the likely significant effects of the Scheme. As described in paragraph 1.1.2 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System the complexity of the groundwater model was determined in accordance with the Environment Agency's 2007 guidance document, titled 'Hydrogeological impact appraisal for dewatering abstraction' and thus is consistent with the level of risk presented by construction dewatering. The Applicant implemented a thorough sensitivity analysis of hydraulic properties using the realistic worst-case scenario, which is detailed in Section 2.5 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System.



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			3.2 - No derogation at the Camplings laundry abstraction from the shallow sand & gravel aquifer is acceptable in terms of yield or water quality, even if occurring only for a short period of time; we would like to see a more detailed assessment of the impacts in this context.	Full details regarding dewatering discharge will be provided at the detailed design stage as part of an application for an environmental permit / discharge licence in due course, as noted in paragraph 4.1.4 of the Consents and Agreements Position Statement (Document Reference 7.3, Planning Inspectorate Reference APP-194), should such methods be required. 3.2 – The Applicant considers that that the information presented in the Groundwater Modelling Study of the Bascule Pit Groundwater Control System is sufficient for the purposes of assessing the likely significant effects of the Scheme, and that further detailed simulation of the Camplings Ltd laundry abstraction would not change the conclusions. The groundwater model, as summarised in paragraph 3.2.5 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System, depicts that the drawdown will decrease exponentially with distance away from the cofferdam. During the construction phase groundwater



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				mixing local to the cofferdam caused by local changes in flow path is very unlikely to lead to any impacts on water quality or yield at the Camplings Ltd laundry abstraction, as depicted in paragraph 3.3.13 and 4.1.3 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System. During the operational phase, using a realistic and reasonable worst-case scenario, there is a slight risk of longer term deterioration of water quality at the Camplings Ltd laundry abstraction until the groundwater system returns to its pre-construction state, as depicted in paragraph 3.3.14 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System. Regarding yield, during the operational phase significant effects on the Camplings Ltd laundry abstraction are not predicted, as depicted in paragraph 4.1.3 of the Groundwater Modelling Study of the Bascule Pit Groundwater Control System. The Applicant considers that the assessment is sufficient to understand the likely significant effects of the Scheme. The



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				Environment Agency will be provided with sufficient information in the context of an application to it for a water abstraction licence, as and when a sufficient level of detail will be available to support such an application.
			3.3 - Full details of the proposals for the dewatering discharge should also be provided; the discharge will presumably ameliorate some of the abstraction impacts on the River Yare.	3.3 – Full details regarding dewatering discharge will be provided at the detailed design stage, as noted in paragraph 4.1.4 of the Consents and Agreements Position Statement (Document Reference 7.3, Planning Inspectorate Reference APP-194).
			3.4 - It is the Environment Agency's policy not to dis-apply the requirement for a licence under the Water Resources Act 1991. A licence will be required for construction dewatering, unless the proposal falls within the recognised exemptions. The following link provides details: http://www.legislation.gov.uk/uksi/2017/104 4/regulation/5/made	3.4 – The Environment Agency's policy is noted. The draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) does not seek the disapplication of the licencing requirements of the Water Resources Act 1991. As noted in paragraph 4.1.4 of the Consents and Agreements Position Statement (Document Reference 7.3, Planning Inspectorate Reference APP-194), the Applicant would apply for water abstraction



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				licences and discharge activity environmental permits in the ordinary way.
ENV22	RR-019	Environment Agency	Groundwater 3.5 - Document 6.2 Environmental Statement V.2. Technical Appendix 11B: Impact Assessment Criteria for Surface Water and Groundwater 3.6 - Assessing the importance of a water body by using its Water Framework Directive (WFD) status is not appropriate. The WFD requires us to work to bringing all water bodies to Good status; no further deterioration in status is permitted. 3.7 - Any derogation of a right to abstract water is likely to be unacceptable, even if this is a temporary requirement during construction.	The summary of receptors, provided in Tables 11-10 and 11-11 of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096), includes a description of key features, which refers to the Water Framework Directive (WFD) status amongst, other information. The Applicant has considered the WFD status as supporting information with regards to water body sensitivity. With regards the assessment in relation to the WFD the Applicant would like to refer the Environment Agency to the WFD Assessment, Environmental Statement – Appendix 11E (Document Reference 6.2, Planning Inspectorate Reference APP-132) which presents a robust assessment appropriate to the Scheme. As noted in paragraph 1.1.7 of the WFD Assessment, the Applicant is aware of the requirement of the WFD (Directive 2000/60/EC of the European Parliament and of the Council of



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				23 October 2000) to ensure all surface water and groundwater bodies' "good" status (in terms of ecological and chemical quality and water quantity as appropriate). Paragraph 1.6.4 and 1.6.5 of the WFD Assessment concludes that (i) whilst the Scheme may have some localised effects on watercourses directly affected by the Scheme, and the local groundwater aquifer, these are insufficient to lead to any deterioration in status or ability to meet the objectives of the respective waterbodies and (ii) that the Scheme will not prevent the achievement of the wider WFD objectives in the Anglian River Basin District. As such the Applicant does not foresee reasons why an abstraction licence, if required, would not be granted. The Applicant would apply for water abstraction licences in the ordinary way following detailed design when sufficient detailed information is available to support a licence application.



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ENV23	RR-019	Environment Agency	Groundwater: Document 6.2 Environmental Statement V.2. Technical Appendix 11E: Water Framework Directive Assessment 3.9 - Whilst we agree that the proposal is unlikely to have any significant impact on the Broadland Rivers Chalk and Crag WFD groundwater body, table 1.4 ('Broadland Rivers Chalk and Crag Waterbody') conflicts with other information supplied to the Environment Agency.	The Applicant welcomes the Environment Agency's agreement that the Scheme is unlikely to have significant effects on the Broadland Rivers Chalk & Crag groundwater waterbody. The Applicant has provided a response below for each of the key points raised by the Environment Agency.
			3.10 - Table 1.4 suggests a lack of hydraulic continuity between the superficial deposits and the underlying Crag aquifer. However, previous/other consultation documents (e.g. Appendix 16C: Interpretative Environmental Ground Investigation Report, S. 5.2.12 & 5.2.13) suggest hydraulic continuity between superficial sands and the Crag to be likely and that waters in the two aquifers already mix. The degree of hydraulic continuity is important in assessing proposals; this point should be clarified.	3.10 The Applicant acknowledges that it could appear as though there could be some discrepancies with regard to the hydraulic continuity of Broadland Rivers Chalk & Crag groundwater waterbody between paragraphs 5.2.12 of the Interpretative Environmental Ground Investigation Report, Environmental Statement – Appendix 16C (Document Reference 6.2, Planning Inspectorate Reference APP-150) and Table 1.4 of the WFD Assessment, Environmental Statement – Appendix 11E (Document



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			3.11 - An assessment of the salinity of groundwater at the northern and southern sites should also be provided; if it is not saline, further assessment will be needed to determine how the piling will be undertaken within Lake Lothing itself without introducing saline water into the underlying aquifers.	Reference 6.2, Planning Inspectorate Reference APP-132). This apparent discrepancy is not a point of note as both aforementioned appendices acknowledge the potential for / against hydraulic continuity depending upon the presence of variable lithology and both assessments consider a conservative reasonable worst- case scenario. 3.11 - An assessment of the salinity of groundwater across the Principal Application Site has been undertaken. Table 1.6 and Table 1.9 of the WFD Assessment summarises that whilst groundwater quality sampling has confirmed the influence of saline intrusion in groundwater across the Principal Application Site it is not expected to cause any significant changes that would increase saline intrusion at the waterbody or catchment scale or prevent such bodies from achieving moderate to good status (as per Table 1.9 of the WFD Assessment.)



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ENV24	RR-019	Environment Agency	Contaminated Land: Document 6.2 Environmental Statement Appendix 16C - Interpretative Environmental Ground Investigation Report 4.1 - Overall we agree with the conclusions of the report that residual contamination is unlikely to pose a significant risk to the River Yare or deeper groundwater. We do have the following comments to make:	The Applicant welcomes the Environment Agency's agreement that residual contamination is unlikely to have significant effects to pose a significant risk to the River Yare or deeper groundwater. The Applicant has provided a response below for each of the key points raised by the Environment Agency.
			4.2 Table 6.5 – Screening Values and comparison with data – the table indicates that speciated hydrocarbons have been compared to the CL:AIRE Guidance 2017, however the values used are incorrect. This should be checked and amended	4.2 – The Applicant has undertaken a review of the CL:AIRE 2017 screening values depicted in Tables 6.4 and 6.5 of the Interpretative Environmental Ground Investigation Report, Environmental Statement – Appendix 16C (Document Reference 6.2, Planning Inspectorate Reference APP-150). The Applicant has observed one erratum in Table 6.5 of the Interpretative Environmental Ground Investigation Report whereby the screening value used for Aromatic C9-C10 is more stringent than the CL:AIRE 2017



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			4.3 Table 6.6 – Summary of groundwater exceedances 2006 GI – No values have been inserted into the table for cadmium, nickel, zinc, total cyanide and free cyanide. Given there have been some exceedances of the assessment criteria used, it may be beneficial to take up and downstream river samples to add into the risk assessment. In addition, construction activities must ensure that existing contamination is not mobilised by the creation of pathways, for example through piling.	screening value. Given the value used is more stringent this erratum does not affect the results of the assessment – a worst case scenario has been assessed. 4.3 –The Applicant considers the information presented in the Interpretative Environmental Ground Investigation Report is sufficient and that further detailed assessment would not change the conclusions of the assessment. With reference to construction activities, measures to minimise the risk of existing contamination being mobilised are included within Sections 6.2 and 10.3 of the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187). Such measures will be expanded upon within the full CoCP. In accordance with Requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) no part of the authorised construction activities would begin until the full CoCP, which must be written in accordance with the Outline CoCP (Document Reference 6.16,



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				Planning Inspectorate Reference APP- 187), has been prepared for that part of the authorised development and approved in writing by the county planning authority, following consultation with amongst others, the Environment Agency.
			4.4 Paragraph 9.4.2 – A strategy for dealing with unexpected contamination must be included in the Code of Construction Practice (CoCP).	4.4 – Requirement 8 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) and paragraph 10.3.2 of the Outline CoCP provides a process to be followed in the event of unforeseen contamination.
			4.5 - Given the presence of residual contamination, infiltration drainage would not be appropriate for this development.	4.5 – paragraphs 2.3.15 and 2.4.13 of the Drainage Strategy, Environmental Statement - Appendix 12C (Document Reference 6.2, Planning Inspectorate Reference APP-136) advise that infiltration drainage is not viable due to the shallow groundwater table in the area. Requirement 10(1), Schedule 2 of the draft DCO will ensure that no part of the authorised development which comprises any part of a surface water drainage



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				system is to commence until written details of that surface water drainage system have been submitted to and, following consultation with Great Yarmouth Borough Council, the lead local flood authority and the IDB, approved in writing by the county planning authority. In addition, Requirement 10(1) requires that the surface water drainage system submitted for approval by the county planning authority must be in accordance with the Drainage Strategy, which, as noted above, makes it clear that infiltration is not viable.
ENV25	RR-019	Environment Agency	Construction Practice: Document 6.16 Outline Code of Construction Practice 5.1 - In relation to point 5.4 above the detailed CoCP should include a strategy for unexpected contamination.	The Applicant welcomes the Environment Agency's agreement that the proposed attenuation storage and pollution controls are considered appropriate. The Applicant has provided a response below for each of the key points raised by the Environment Agency. 5.1 – Requirement 8 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) and paragraph 10.3.2 of the Outline CoCP (Document Reference 6.16, Planning



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			5.2 - Part 6.2 of the outline CoCP satisfactorily outlines the expected pollution prevention methods that should be included in the full CoCP including dust suppression, site drainage, spillage control measures etc. but, as recognised, there will be excavation dewaterings requiring disposal.	Inspectorate Reference APP-187) provides a process to be followed in the event of unforeseen contamination. 5.2 – The Applicant welcomes the Environment Agency's confirmation that the measures in the Outline CoCP in relation to pollution prevention are sufficient. Such measures will be expanded upon within the full CoCP. Requirement 5 of the draft DCO will ensure no part of the authorised construction activities will begin until the full CoCP, which must be written in accordance with the Outline CoCP, has been prepared for that part of the authorised development and approved in writing by the county planning authority, following consultation with amongst others, the Environment Agency, the lead local flood authority and the IDB.
			5.3 - If dewaterings are to be discharged to the foul sewer system, Anglian Water will need to be consulted and permission/consent gained.	5.3 – The Applicant has been in dialogue with Anglian Water in relation to the development of the Drainage Strategy, Environmental Statement - Appendix 12C



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				(Document Reference 6.2, Planning Inspectorate Reference APP-136). A written record of the Applicant's engagement with Anglian Water is reflected in the Statement of Common Ground due for submission at Deadline 1. Further, protective provisions are proposed with Anglian Water (Schedule 14, Part 3 of the draft DCO).
			5.4 - There should be no discharge to surface waters without Agency assessment of the treatment involved and, if required, a discharge permit.	5.4 - As noted in paragraph 4.1.4 of the Consents and Agreements Position Statement (Document Reference 7.3, Planning Inspectorate Reference APP-194), the Applicant would apply for discharge activity environmental permits in the ordinary way.
			5.5 - Regarding the scheme design, there are 2 options stated for the Western Discharge of surface water, to IDB-controlled watercourse or direct to the River Yare. In either case, the proposed attenuation storage and pollution controls would	5.5 – The Applicant welcomes the Environment Agency's confirmation that the proposed attenuation storage and pollution controls for both options stated for the Western Discharge of surface water are adequate to ensure sufficient protection from any accidental spills.



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			appear to be adequate to ensure sufficient protection from any accidental spills.	Sections 2.3 of the Drainage Strategy confirms and provides details of the proposed discharge options / locations for the western side of the Scheme. Requirement 10(2) of the draft DCO will ensure that the surface water drainage system must be developed in accordance with the Drainage Strategy.
ENV26	RR-019	Environment Agency	Ecology and Biodiversity 6.0 - We have no comments in relation to the reports submitted.	The Applicant has provided a response below for each of the key points raised by the Environment Agency. 6.0 – The Applicant welcomes the Environment Agency's note that it does not have comments in relation to the suite of reports relating to nature conservation.
			6.1 - However, increasingly developers seek to deliver a net gain for biodiversity on sites and indeed, a 10% net gain in biodiversity is expected to be proposed as a requirement in the forthcoming Environment Bill.	6.1 - A quantified assessment of biodiversity net gain is not considered appropriate; it is the Applicant's understanding that the forthcoming Environment Bill would mandate biodiversity net gain for housing and commercial developments (excluding



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				nationally significant infrastructure projects). This is specifically noted in Department for Environment, Food and Rural Affairs' 2018 consultation on Biodiversity Net Gain. Nevertheless, the Scheme has incorporated, where practicable, biodiversity enhancement measures. These are reflected in Section 6.3 of the Approach to Detailed Design (Document Reference 7.4a, Planning Inspectorate APP-196) secured through Requirement 3 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020).
				Throughout Scheme development it has been recognised that opportunities to incorporate biodiversity net gains should be considered and incorporated where practicable. A summary of the measures is presented in the Mitigation Schedule (Document Reference 6.13, Planning Inspectorate Reference APP-184, an updated version of which [NCC/GY3RC/EX/014] was submitted at Deadline 1 of the Examination). The Application is therefore considered



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				compliant with the requirements of the National Policy Statement for National Networks (2014) which requests in paragraph 5.23 that the Applicant should show how the Project " has taken advantage of opportunities to conserve and enhance biodiversity".
			6.2 - This proposal presents an opportunity to enhance the intertidal biodiversity of this watercourse through the installation of 'verti-pools' or other similar surface structures. These may be affixed to the setback surface of steel piling, where they remain protected from passing or moored vessels.	6.2 - Whilst the Scheme is primarily a functional infrastructure design it is acknowledged that further opportunities to benefit ecology and biodiversity (e.g. the installation of 'verti-pools') will be considered at the detailed design stage in line with Section 6.3 of the of the Approach to Detailed Design (Document Reference 7.4a, Planning Inspectorate reference APP-196) secured through Requirement 3 of the draft DCO.
ENV27	RR-021	Jennifer Elizabeth Baker*	I also have concerns about noise, dust, other types of pollution, loss of amenity, loss of natural habitat and associated wildlife, restricted access to the property, interruptions to services, potential threats	The Applicant appreciates these concerns and wishes to assure the respondent that an environmental impact assessment (EIA) has been undertaken and the findings reported in the Environmental Statement

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			to the safety of domestic pets (cats) during construction (pets acquired because of the secure local environment) and after completion.	(ES) (Document Reference 6.1, Planning Inspectorate Reference APP-096). The Applicant has considered all practicable measures to avoid, minimise or offset environmental effects. The Applicant would like to signpost the respondent to the Environmental Statement: Non-Technical Summary (Document Reference 6.5, Planning Inspectorate Reference APP-176) which summarises the relevant content and findings of the ES in a clear and concise manner. The Applicant intends to maintain access and services to Cromwell Road and Cromwell Court properties during construction.
ENV28	RR-022	Marine Management Organisation	The Applicant needs to clearly demonstrate through the environmental impact assessment ("EIA") process that the environmental impact of all licensable activities has been assessed and, where required, mitigated.	The Applicant considers that the EIA has considered all likely significant effects arising from the Scheme (inclusive of licensable activities). The findings are reported in the Environmental Statement (ES) (Document Reference 6.1, Planning Inspectorate Reference APP-096).



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				Where likely significant environmental effects are identified in the ES, mitigation and monitoring measures have been proposed and the Applicant has considered all practicable measures to avoid, minimise or offset environmental effects. A summary of the mitigation and monitoring measures proposed is presented in the Mitigation Schedule (Document Reference 6.13, Planning Inspectorate Reference APP-184, an updated version of which [NCC/GY3RC/EX/014] was submitted at Deadline 1 of the Examination).
ENV29	RR-022	Marine Management Organisation	8.1.1 - Whilst samples have been taken and analysed for physical and chemical properties, the details have not been provided. Given that dredging may occur during operation (albeit in line with the current licence) it cannot be assessed whether the sampling regime, analysis methods or results are appropriate to	The Applicant has provided a response below for each of the key points raised by the Marine Management Organisation. 8.1.1 – There are no requirements for dredging during the operational phase of the Scheme for the operation of the bridge. Whilst the Applicant acknowledges that dredging will continue to occur, as it does currently, within the River Yare any dredging during this phase would be



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			inform the Planning Inspectorate's decision. The results of the chemical analysis including coordinates should be provided to allow a full review to be undertaken.	undertaken under the existing Licence L/2016/00376/1 held by GYPC as part of its continuing regime to maintain the navigation.
			8.1.2 It has been stated that any dredging during operation will be incorporated into the current dredging regime along the River Yare, however details of this existing licence have not been provided and we cannot find a valid licence for this area on the MMO public register. We cannot comment on whether this approach is reasonable without being able to assess the dredging extents of both this application and the existing licence. We also cannot comment on whether the existing licence can accommodate the operational dredging activities given no estimate of dredging requirements have been provided.	8.1.2 - Current dredging operations in the River Yare are covered by Licence L/2016/00376/1 held by GYPC.
			8.1.3 - Mitigation measures are set out in the Outline Code of Construction Practice	8.1.3 – The Applicant welcomes the Marine Management Organisation's agreement



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			and these appear appropriate. Although following a review of the additional requested information (see comments 8.1.1), additional mitigation may be recommended.	that the proposed mitigation measures documented in the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) are considered appropriate. Further to the Applicant's response to 8.1.1 (above) no additional mitigation is thought to be required.
			8.1.4 - The applicant has identified (para 11.8.8) that "Any contaminants released will be quickly dispersed and diluted through the natural tidal flow regime. The effects will be similar to the dredging operations that already take place and have been assessed as slightly adverse". Whilst we agree with this conclusion for the operational works (dewatering of the cofferdam) due to the scale and short longevity, we cannot advise on the impacts during operation.	8.1.4 – The Applicant does not consider that there will be a change to the current baseline situation within the River Yare during the operation of the Scheme (i.e. there will be no change to the sediment load or the tidal flow as a result of the Scheme, as noted in Section 7 of the Sediment Transport Assessment, Environmental Statement - Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130).
ENV30	RR-022	Marine Management Organisation	8.2 Fisheries 8.2.1 - With respect to fisheries, the evidence used to reach the ES conclusions (the assessment of the likelihood of and	The Applicant has provided a response below for each of the key points raised by the Marine Management Organisation.



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			significance of potential impacts) is insufficient with no references provided to support the conclusions stated.	8.2.1 to 8.2.3: As stated in Section 3.1.4 of the Benthic and Fish Ecology Report, Environmental Statement – Appendix 8I (Document Reference 6.2, Planning
			8.2.2 - In Table 8.2 of the ES, the scoping opinion is given (ID7) which recommended that 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. The ES must assess any likely significant effects on protected fish species and species of conservation concern, including European eel, smelt and river lamprey, and	Inspectorate Reference APP-122), prior to the surveys being undertaken the Environment Agency, Natural England and the Marine Management Organisation were consulted over the proposed survey design and sampling methodologies, received comments were incorporated into the sampling design and field protocols, where applicable.
			present an assessment of potential impacts of noise and vibration on sensitive aquatic receptors, including benthic ecology and fish receptors. The applicant has not provided an assessment of the impact on migratory species present or the potential impacts on these species.	The assessment of effects on benthic and fish ecology, including noise and vibration effects, is summarised in paragraphs 8.8.33 to 8.8.37 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096). The assessments of the effects of noise and vibration on ecological receptors were based on the
			8.2.3 - The applicant has referenced the scoping opinion in paragraph 8.9.1 that a limitation of the 2m beam trawl is that it	framework and modelling established in Chapter 7: Noise and Vibration of the ES. The Applicant considers the information presented is sufficient and that the addition



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			would underrepresent bigger fish and migratory species as this type of gear does not adequately target these fish. However, in paragraph 8.8.49 this is not taken into consideration as the applicant states that "no protected or noted species (such as migratory fish) were recorded in the (benthic ecology) and fish surveys" so no further assessment was made to assess the impact on these species. The applicant must utilise other sources of previous surveys and background information to provide a desk-based assessment of fish species present in the area in addition to the snapshot provided by the four trawl surveys. 8.2.4 - The applicant has stated that underwater noise from the project has the potential to impact fish species. However, the applicant does not provide a clear methodology of the piling works but has provided the following basic information: Piling works (driven piles) will be required as part of the scheme. During construction, sheet piles will be used in the river channel	of further contextual information would not change the conclusions. The Applicant directs the Marine Management Organisation to the Benthic and Fish Ecology Report, Environmental Statement – Appendix 8I (Document Reference 6.2, Planning Inspectorate Reference APP-122) which provides data obtained from surveys and which was used to inform the conclusions set out above. The Applicant is in discussions with the MMO in relation to its concerns regarding bigger fish and migratory species and the information that has been provided, but is confident that the conclusions set out in the ES are robust. 8.2.3 – 8.2.4 – The construction and operation of the Scheme are considered to have little impact relative to the pressures already present in the River Yare. While detailed in river piling works will be fully detailed in the Deemed Marine Licence through Schedule 13 of the draft DCO it is



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			to create a cofferdam on either side (east and west) of the channel, which will form the footprint of the bridge supporting knuckles (12.7.1). The cofferdams will facilitate in-channel works within the River Yare. The cofferdams will become integrated into the permanent works bridge foundation. They will be dewatered as necessary and backfilled to create the knuckles. Fish will be translocated where necessary. No additional temporary works are proposed outside of the cofferdams. The cofferdams will reduce the width of the River Yare channel by approximately 50% to no less than 50 m (12.7.2). Furthermore, it is understood that no dredging of the riverbed is required to facilitate construction (para 16.7.30). No details were provided specifying the timing, nature and duration of the piling works or set against known local fish migrations. This is essential information required to assess the impact on migratory species as percussive noise can cause an acoustic barrier to their migration.	considered for the purposes of the assessment to involve a limited worst-case temporal extent (less than or equal to 66 days in total for the in channel works as set out in Table 7.26 of the ES (Document Reference 6.1 / Planning Inspectorate Reference APP-096)). As a result of the baseline conditions (presented in the Benthic and Fish Ecology Report, Environmental Statement – Appendix 8I (Document Reference 6.2, Planning Inspectorate Reference APP-122), the limited worst-case temporal extent, it is considered that on a qualitative basis considered there will be insignificant effects on fish populations and as such the matter was not given further consideration in the environmental impact assessment. There will be little or no noise related effects during the operational phase of the Scheme. Detailed information on in-river piling works, including method, timing and duration will be provided via the Deemed Marine Licence detailed in Schedule 13 of



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			8.2.5 - In paragraph 8.8.35 of the ES in the assessment of the disturbance effects of noise and vibration, a reference for the following statement should be provided "it would be expected that smaller fish might show behavioural responses at slightly lower levels (to underwater noise)".	the draft DCO (draft DCO). The temporary nature of effects on fish is based on the likely recoverability of fish populations from exposure to noise which is considered to be a limited impact over background levels. It is also noted that Appendix 8I of the ES reports that no migratory fish were recorded at the time of the survey. 8.2.5 – The appropriate reference to support the insertion is: Yelverton J T, Richmond D R, Hicks W, Saunders K and Fletcher E R. (1975) The relationship between fish size and their response to underwater blast. DNA 3677T, Lovelace Foundation for Medical Education and Research, Final Technical Report.
ENV31	RR-022	Marine Management Organisation	8.3 Coastal Processes 8.3.1 - The ES (and hence the modelling) assumes that the hydrodynamic profile of the finished bridge represents the maximum impact on the bed and hence that no separate model of the construction phase is required. While details of the cofferdam alignment were not part of this	The Applicant welcomes the comment from the Marine Management Organisation that additional modelling would not alter the outcomes of the TUFLOW modelling, as presented in Chapter 11: Water Environment of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) and the Sediment



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			review, the need to construct the piers inside of the cofferdams suggests that the construction phase footprint would be slightly larger than that assessed. MMO consider this to be a minor point since the river flow modelling upon which the effects assessments are based has captured the essential scale and tenor of the impacts and therefore do not believe that additional modelling for any small additional footprint would alter any part of the assessed outcome.	Transport Assessment, Environmental Statement - Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130). The Applicant has provided a response below for each of the key points raised by the Marine Management Organisation. 8.3.1 - The construction methodology is such that the cofferdams form an integral part of the finished pier structures, therefore there will be no additional footprint during the construction phase beyond that as shown as either permanent acquisition or temporary possession on the DCO Land Plans (Document Reference
			8.3.2 - MMO's understanding of the TUFLOW modelling detailed in the STA is that the model does not update the bed levels in response to the calculated changes in flow. The model reports a doubling of flow velocity in response to a halving of channel width; from this, a bed stress is calculated, and from bed stress a sediment transport rate is calculated,	 2.5, Planning Inspectorate Reference APP-010). 8.3.2 – The Applicant considers the assessment carried out in the Sediment Transport Assessment to be a realistic worst case. As the Marine Management Organisation states, in not updating the bed levels, the water velocity will not



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			allowing, finally, areas of erosion and deposition to be represented. However, paragraph 6.2.27 appears to indicate that the flow model does not update the bed elevation according to the sediment transport, which means that the flow results are indicative only – changes in bed elevation would modify the flows; feedback between changes in flow and changes in sediment transport would lead to a different distribution of outcomes to those represented in the ES. Reported changes in water surface elevation would not apply as these are a consequence of the flow acceleration and this would reduce as the bed is lowered. 8.3.3 - Paragraph 5.2.13 of the STA states that the model has been set up to simulate the distribution of sediment within the Yare, but it is inferred from the description that this is not spatially-variable (i.e., the subsequent paragraphs describe a vertical distribution but no horizontal/spatial variability). This would be of significance if the model were to be re-run to allow for	decrease, therefore the erosion and deposition rates used represent when the velocity is greatest and therefore when more scour is occurring. 8.3.3 – The modelling, presented in the Sediment Transport Assessment applies an initial average sediment volume to the whole model. A warmup period is used to balance the sediment throughout the domain which simulates the horizontal distribution of sediments. It is only after this procedure that the assessment is carried out. This allows the hydrodynamics of the area to place sediment around the domain and is recommended best modelling



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			bed level updating and to derive a more accurate spatial description of impacts.	practice. The volume of material in the model used to inform the Sediment Transport Assessment represents the sand and silt on top of the bedrock based on the borehole data presented in the Borehole Log Review and Deposit Modelling Report, Environmental Statement - Appendix 9C (Document Reference 6.2, Planning Inspectorate Reference APP-125).
			8.3.4 - Paragraph 5.2.17 states a two-layer approach to sediment distribution but Plate 5-5 and paragraph 5.2.18 present a 3-layered model. Again, this would only need clarification if a more accurate modelling of impacts were to be required (for assessments other than simply coastal process impacts).	8.3.4 – The two-layer model stated in paragraph 5.2.17 is an erratum and should refer to a three-layer model. The modelling which informed the Sediment Transport Assessment used a 3-layer approach to simulate the river bed. This is further explained in paragraph 5.2.17 of the Sediment Transport Assessment.
			8.3.5 - The STA indicates that a 50% reduction in channel width under the bridge is likely to cause scour sufficient to double the average water depth. The report also suggests that a more detailed scour assessment will be carried out as part of	8.3.5 and 8.3.6 – The modelling which informed the Sediment Transport Assessment was undertaken using the design summarised in Chapter 2: Description of the Scheme of the ES (Document Reference 6.1, Planning



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			final scheme. This is something that the MMO thinks should be carried out as part of the Environmental Statement, in the interests of more complete assessment. 8.3.6 - The ES should include a discussion of a detailed scour assessment and any likely mitigation measures that this would entail. 8.3.7 - The MMO believe that the ES should at least discuss whether the process impacts (i.e. flow and sedimentation) would increase in scale under climate change and, potentially, should also identify and include a transition case where the estuary type is neither ebb nor flood dominated. This is to ensure that the impacts can be expected to remain within the engineered channel and do not begin to affect (particularly) Breydon Water, since the role of this area as a storage volume may be even more important under higher sea levels.	Inspectorate Reference APP-096) and looked at the effects in the wider river reach. A realistic worst-case assessment of scour has been undertaken for the ES. Plate 6-33 of the Sediment Transport Assessment shows the likely maximum size and shape of the scour pattern locally for the Design submitted in the DCO. As the localised scour is dependent on the final design then a detailed localised scour assessment is considered not necessary and the results presented in the ES are a realistic worst case. The design of the Scheme will include for this potential scour and therefore no additional mitigation measures are envisaged. Consideration of scour will also be able to considered as part of the DML process. Detailed information on in-river piling works, including method, timing and duration will be provided via the Deemed Marine Licence detailed in Schedule 13 of the draft DCO (draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020)).

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				8.3.7 - The effects of climate change are discussed in Section 6.5 of the Sediment Transport Assessment and summarised in paragraph 11.5.66 of Chapter 11: Road Drainage and the Water Environment of the ES. In terms of tidal dominance looking at the impact of rising sea levels on the estuary dynamics, this section states that the Principal Application Site will have a negligible impact on the tidal dynamics in the climate change event.
ENV32	RR-022	Marine Management Organisation	8.4.1 - It is the opinion of the MMO that the evidence base to support ES conclusions (i.e. assessment of the likelihood and significance of the potential impacts of the proposed works) in terms of underwater noise is insufficient. In Table 8.2, there is a scoping opinion (ID7) which recommends that 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. The ES should assess any likely significant	The Applicant welcomes the Marine Management Organisation's comments. The Applicant would welcome a discussion with the Marine Management Organisation to discuss their comments further. The Applicant remains confident that this matter can be resolved. The Applicant has provided a response below for each of the key points raised by the Marine Management Organisation.



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			effects on protected fish species and species of conservation concern, including European eel, smelt and river lamprey. 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.	8.4.1, 8.4.3-8.4.4 – The Applicant directs the Marine Management Organisation to the Benthic and Fish Ecology Report, Environmental Statement – Appendix 8I (Document Reference 6.2, Planning Inspectorate Reference APP-122) which provides data obtained from surveys, which was used to inform the conclusions presented in Section 8.8 of the ES.
			8.4.2 - In terms of the environmental baseline, it is noted from section 8.3.33 of the ES that benthic ecology and fish receptors are considered to be of low importance. The report states that the main conservation interest is commercially important fish, which appear to use the area in low numbers. No protected or notable species (such as migratory fish) were recorded in the benthic ecology and fish surveys (please see comments on fisheries above).	The assessment of effects on benthic and fish ecology, including in relation to noise and vibration effects, is summarised in paragraphs 8.8.33 – 8.8.37 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096). The construction and operation of the Scheme are considered to have little impact relative to the pressures already present in the River Yare. While river piling works will be fully detailed in the Deemed Marine Licence through Schedule 13 of the draft DCO it is considered for the purposes of
			8.4.3 - With regards to potential impacts, disturbance through construction and	the assessment to involve a limited worst- case temporal extent (less than or equal to 66 days in total for the in channel works as



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			operational noise and vibration has been identified as a likely significant effect. It is therefore essential that the ES clearly describes the marine element of works. Currently the relevant information is distributed throughout the ES, which makes trying to assess the potential impacts on marine ecology difficult. 8.4.4 - There does not appear to be sufficient information on the in-river piling works. The MMO would expect there to be information on the anticipated duration of the piling activities and months when piling will be taking place, as well as the installation method. Information on the likely noise levels from piling operations in the river also need to be presented. 8.4.5 - Having reviewed Section 8.8, the assessment of effects on benthic and fish ecology is very minimal. Disturbance effects of noise and vibration during construction on benthic and fish ecology	set out in Table 7.26 of the ES (Document Reference 6.1 / Planning Inspectorate Reference APP-096). The baseline conditions are presented in the Benthic and Fish Ecology Report, Environmental Statement – Appendix 8I (Document Reference 6.2, Planning Inspectorate Reference APP-122). Given the limited worst-case temporal extent and the existing baseline conditions it is considered that on a qualitative basis there will be insignificant effects on fish populations. As a result, the matter was not given further consideration in the environmental impact assessment. There will be little or no noise related effects during the operational phase of the Scheme. The Applicant is in discussions with the MMO in relation to its concerns in respect of bigger fish and migratory species and the information that has been provided but is confident that the conclusions set out in the ES are robust.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			are considered in sections 8.8.33 to 8.8.37. The ES simply concludes the following: i. Construction related noise will represent a temporary, short to medium term duration and will affect a very small proportion of habitats present in the wider River Yare environment. ii. Vibration effects are mostly associated with piling activities during construction and the worst-case vibration levels with respect to the Outer Thames Estuary SPA (i.e. the river Yare) is also presented in Chapter 7: Noise and Vibration. Note that this chapter however addresses noise levels (and vibration) in air and is therefore not applicable to noise underwater. iii. Benthic ecology and fish are considered to be of local value. It is predicted that the impacts will be negligible (not significant) prior to the implementation of additional mitigation measures.	Appropriate mitigation for potential effects on aquatic receptors is proposed through the adoption of the measures set out in the Joint Nature Conservation Committee (JNCC) document entitled 'Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise' (2010). A commitment to follow JNCC (2010) is detailed in paragraph 4.2.4 of the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) and secured through Requirement 5 of the draft DCO. 8.4.2 – The conclusions presented in Section 8.8 of the ES relating to the importance of fish populations are drawn from the Benthic and Fish Ecology Report. Environmental Statement – Appendix 8I (Document Reference 6.2, Planning Inspectorate Reference APP-122). 8.4.5 – The Applicant directs the Marine Management Organisation to the



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			8.4.6 - Underwater noise can have a range of effects on fish (in addition to disturbance), including mortality and physical injury, physiological stress, hearing impairment (i.e. Temporary Threshold Shift), and masking of biologically important sounds. Piling works may cause an acoustic barrier in the river, temporarily delaying or hindering fish movement past the site - something which hasn't been considered in the assessment.	Applicant's response to comment 8.4.3 above. It also notes that in addition, prior to the surveys being undertaken, the Environment Agency, Natural England and the Marine Management Organisation were consulted over the proposed survey design and sampling methodologies and comments received from these parties were incorporated into the sampling design and field protocols, where applicable.
			8.4.7 - No specific receptors have been identified. The ES simply concludes that the predicted impacts on benthic and fish ecology will be negligible prior to the implementation of additional mitigation measures. The evidence to support this conclusion is lacking.	8.4.6 – Please see response to comment 8.4.3 above. Chapter 8 of the ES: Nature Conservation characterises impacts on fish to be reversible, local in spatial extent and of temporary duration in terms of magnitude. Fish species are assumed to be of local conservation value and thus negligible effects are concluded.
			8.4.8 - Cumulative effects have been considered in Chapter 19 of the ES, although no cumulative effects have been identified with regard to underwater noise.	8.4.7 – 8.4.9 – Please see the Applicant's response to 8.4.3.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			Underwater noise must be considered in the cumulative impacts.	
			8.4.9 - In summary, the assessment of the potential effects of underwater noise and vibration on fish and benthic receptors is insufficient. The ES simply concludes that "construction related noise will represent a temporary, short to medium term duration and will affect a very small proportion of habitats present in the wider River Yare environment. Benthic ecology and fish are considered to be of local value. It is predicted that the impacts will be negligible (not significant) prior to the implementation of additional mitigation measures", without providing any thorough details of the inriver piling works. The MMO would expect to see information on the anticipated duration of the piling activities and months when piling will be taking place, as well as the installation method. Information on the likely noise levels from piling operations in the river must also be presented.	



4 Issues on Compulsory Acquisition and Other Land Matters

4.1 Overview

- 4.1.1 Three interested parties raised issues relating to Compulsory Acquisition and other land matters. Table 4-1 sets out the matters raised on this theme, alongside responses from the Applicant.
- 4.1.2 Many of these issues are specific to the parties and their land interests. The Applicant has engaged with these parties and will continue to do so throughout the Examination.



Table 4.1: Matters raised on Compulsory Acquisition and other land matters

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
LA1	RR-011	Pauline Ablitt*	I am concerned that the proposed height of the bridge is the same height as my bedroom window and people will be able to look in. Could the safety barrier which are iron railings be made of sheet form of material and be a bit taller. This will also help with noise reduction. The double glazing we have is not sound proof and will have to be renewed. Will we be compensated? Opposite my house will be a massive brick wall. Light and blight and view. Also during construction will be noise and mess for two years. I hope the bridge will not cause my property to drop in value but I suspect it will. The new parking spaces opposite the property are a welcome addition.	The Applicant is aware of the concern about possible visual intrusion into certain properties. The Applicant will discuss any possible solutions with Ms Ablitt and other similarly affected individuals. The Environmental Statement Volume II Operational Phase Predicted Noise Levels - Residential (Document Reference 6.2, Planning Inspectorate Reference APP-112) identifies predicted noise levels at residential premises in the vicinity of the Scheme, including this property. The figures for this property, shown on page 141 of 197 of that document, do not meet the thresholds for noise mitigation under the Noise Insulation Regulations (NIR). At the detailed design stage of the Scheme, further analysis will be undertaken to determine whether any dwellings qualify under the NIR, as required by those Regulations.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				As no land acquisition is required from this property the consideration of the impact of the Scheme on its value will be dealt with under Part 1 of the Land Compensation Act 1973 at the appropriate time. The positive response to the provision of parking is noted.
LA2	RR-013	Roger Hannah Ltd on behalf of Regaland Limited*	Concerned about the level of negotiation undertaken to date and if the is DCO premature.	The agent for the landowner has been in dialogue with the Applicant's property consultant as is set out in the Negotiations Tracker (Document Reference 4.4, Planning Inspectorate Reference APP-024).
				Terms of engagement have been agreed. The Applicant has requested details of a compensation claim for consideration. To date no compensation claim has been submitted.
				Further contact with the agent is being made by the Applicant's property consultant to try and progress negotiations.

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				The Applicant therefore does not consider that the DCO application is premature. Further, having had regard to the Guidance published by the former Department for Communities and Local Government in September 2013: Planning Act 2008: guidance related to procedures for the compulsory acquisition of land, which, at paragraph 25, advises that "Where proposals would entail the compulsory acquisition of many separate plots of land (such as for long, linear schemes) it may not always be practicable to acquire by agreement each plot of land. Where this is the case it is reasonable to include provision authorising compulsory acquisition covering all the land required at the outset", the Applicant is of the view that it is reasonable and prudent to apply for a DCO which includes provision for compulsory acquisition whilst continuing to negotiate with persons affected by the Scheme.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				As explained in the Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022) at paragraphs 6.3.7 to 6.3.9, and in paragraphs 6.5.2 and 14.1.2, the Applicant's preference would be to acquire land needed for the Scheme by agreement rather than through the exercise of powers of compulsory acquisition.
LA3	RR-021	Jennifer Elizabeth Baker*	 loss of privacy and security upon losing land in the courtyard that is currently not open to the public loss of privacy and security, because of the public footpath shown as running (from Suffolk Road to the Southtown end of Cromwell Road) along the edge of Cromwell Court, with no barrier shown to separate footpath users from the courtyard, and potential noise and light pollution from this area 	The loss of land will be considered as part of the detailed design work – or covered by compensation assessed under the compensation code. The car park area used by residents of Cromwell Court is currently privately owned and the draft DCO seeks permanent acquisition of this area. This acquisition is sought to provide a turning area, that would allow vehicles utilising the proposed parking on Cromwell Road to turn around and exit via Southtown Road. The entire area is shown in the Application as being subject to proposed powers of compulsory acquisition, but it is possible



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				that not all of this area will be required to provide the turning area, which would allow a reduction in the extent of permanent acquisition being sought. Any proposal to reduce the area acquired would be dealt with during the detailed design process and would be the subject of localised engagement by the Applicant with residents of Cromwell Court.
LA4	RR-012	David Baker*	Request to be consulted over changes to Cromwell Court, Cromwell Road, Great Yarmouth. Interested Party is the owner of land which is used as a car park by the residents of Cromwell Court.	The residents of Cromwell Road and Cromwell Court were consulted as Section 42(1)(d) consultees during the preapplication consultations. They were also notified of the acceptance of the application under Section 56 of the Planning Act 2008. In addition, discussions will be ongoing between these residents and the Applicant throughout the development of the scheme.



5 Issues on Maritime and Port Operation Matters

5.1 Overview

5.1.1 Seven interested parties raised issues relating to maritime and port operations. Table 5-1 sets out the matters raised on this theme, alongside responses from the Applicant.



Table 5.1: Matters raised on maritime and port operations

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP1	RR-005	Goodchild Marine Services Limited	Whilst we are not opposed to the idea of a third river crossing we are strongly questioning how this bridge shall be operated given long term issues we have with gaining access to the open sea for our business having to rely upon both Breydon and Haven bridges. We would like some written reassurances from those who shall be responsible for operating this and the existing two bridges of exactly how they plan to synchronise all three bridges for passages to and from the sea.	The draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) contains, at Schedule 10, a Scheme of Operation that outlines how the scheme bridge is intended to function – and it is noted in particular that it requires 'on demand' openings for commercial vessels. The Applicant will work with GYPC, who operate Breydon and Haven Bridges (on behalf of Highways England and Norfolk County Council), to coordinate, where this is feasible, the opening regimes of the three bridges.
MP2	RR-005	Goodchild Marine Services Limited	We understand this crossing shall include layby pontoons to allow safe mooring should there be any unforeseen delays.	The requirement for small vessel waiting facilities is acknowledged and facilities are included within the Scheme on the West bank of the river both landward and seaward of the bridge. The provision of pontoons on the East bank is not practical considering the commercial nature of the quays present.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP3	RR-008	Alicat Workboats Ltd and Richards Dry Dock and Eng Ltd	We have had some reassurance about the operational side of the bridge. What happens during river closures in construction and the effect on business and also future life once the bridge needs maintenance and fails to open will impacts us a business, and ultimately the people we employ.	Construction The Environmental Statement (Document Refence 6.1, Planning Inspectorate Reference APP-096) covers an assessment of the impact of the closures and restrictions necessary for the construction of the Scheme. The Environmental Statement assessed the effects of these, based on 2 to 4 weeks of closures, as moderate adverse. However, following discussions with the Applicant's appointed Contractor and with the GYPC, proposed closures of the channel for construction purposes have been reduced to 3 closures not exceeding 3 days each (see article 23(3) of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020). The Protective Provisions agreed with GYPC/A as statutory Harbour Authority and incorporated into the draft DCO place duration and number limits along with notification timeframes on these closures so as to minimise disruption and allow for forward planning where disruption is unavoidable.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Operation The potential of the bridge to fail in operation due to a Mechanical, Electrical, Instrumentation, Control and Automation (MEICA) fault has been considered in the performance specification of the design of the bridge. In the event of a MEICA failure, there are "backup systems" and redundancy to enable the bridge to maintain operation. The intention is that the bridge deck will be moved to the raised position to reduce hinderance to marine vessels until such time as the fault is repaired. The bridge is designed to operate in three basic modes:
				 Automatic mode; Manual mode – step-by-step control by an operator; Manual maintenance mode – step-by-step control by trained maintenance operator with protective sequence interlocks.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				The bridge is also designed to include an emergency operation mode, for application when the operator considers an emergency has arisen under the Standard Operating Procedures. When this emergency operation mode is activated, the bridge and its mechanisms will stop in a controlled manner under the actions of the hydraulic system. Manual emergency operation will be subsequently allowed to return the bridge to the closed position.
				Once the bridge is in the closed position, either as a result of any emergency stop or other fault conditions during operation, procedures "back-up systems" mentioned above will allow the bridge to operate under supply fault conditions as follows:
				Standby power facilities diesel generator sets shall be permanently installed in the east and west bascule piers. In the event of a main power failure during bridge operations, the standby generator sets shall start automatically. In addition, a portable generator connection facility shall



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				provide an alternative emergency standby power supply in the event of a mains power failure and standby generator failure.
				Multiple hydraulic pumps such that the bridge can be opened in the event a pump fails or is removed to be serviced.
				Multiple hydraulic cylinders such that the bridge can be operated in the event a cylinder fails or is removed to be serviced.
				Operation of the bridge under reduced number of actuators – under the accidental condition of the failure of one actuator, it will be possible to move the bridge to the open or closed position as deemed necessary.
				Schedule 14 of the draft DCO includes a provision, at paragraph 70, which states that on a failure to operate, the bridge is to be kept (so far as practicable) in the raised position, so as to allow vessel passage. The bridge has been designed with tail locks which allow the bridge to be secured to the bascule abutment in the open (to navigational traffic)



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				position, without the need for the operating machinery to be engaged.
MP3aa	RR-014	Great Yarmouth Port Company (part of Peel Ports Group)*	GYPC has significant concerns over the potential adverse impact upon the considerable commercial activity upon the River Yare. This is because the new crossing will sever GYPC's operational landholdings and a number of its tenants and operators. Of particular relevance to GYPC is the safeguarding of commercial port activity upstream of the proposed crossing. GYPC therefore wish to ensure the continued primacy of the harbour in terms of current and future shipping activity in an unfettered manner. Our concerns remain over the likely impact of the effective 'severance' of the river on the considerable commercial activity in the River Yare, if the primacy of the Port is not acknowledged. GYPA fully support the comments and concerns in this respect raised by our agents Great Yarmouth Port Company (GYPC) It is of note that the current proposals have the	Primacy of vessel navigation is acknowledged by the Applicant and both article 43(6) of the dDCO and the Scheme of Operation (in Schedule 10 to the draft DCO) have been drafted to provide for the bridge to be opened as and when required to allow the passage of any vessel except a recreational vessel (see article 43(6) of the draft DCO). Recreational vessels will be expected to wait for the next recreational opening.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			potential to impact on the operation of the Port, both during construction of the crossing and in its subsequent operation.	
MP4	RR-014	Great Yarmouth Port Company (part of Peel Ports Group)*	GYPC remain concerned that there is a disagreement between the parties in relation to the flow of the river and the hydrological effects of the construction of the new bridge.	The Applicant has undertaken hydrodynamic modelling and assessments to the extent considered necessary for the production of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096). Discussions with GYPC about the modelling of hydrodynamic effects are continuing and refinements to the hydrodynamic modelling works are being undertaken to further address the concerns raised on the potential long-term effects the Scheme could have on the sediment regime in the River. The outputs of this modelling will form the basis of confirmation of various other assessments including Vessel Simulation and Flood Risk Assessment.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP5	RR-014	Great Yarmouth Port Company (part of Peel Ports Group)*	The navigational risk assessment therefore is unclear and unfinished and will remain unfinished for some time. At present, GYPC strongly recommend that a lay-by berth should be provided for shipping unless the navigational risk assessment can show otherwise. There is insufficient information to come to that view at this stage. The original output was considered lacking. Particularly, the level of detail in hydrological input was insufficient and prevented adequate simulation of vessel movements.	At the request of GYPC additional vessel simulations have been undertaken, the scope for these was sent to GYPC for comment prior to the simulations taking place. The preliminary Navigational Risk Assessment (pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185)) is a live document and will be updated as required during the development of the scheme. Following the additional vessel simulations and a HAZID meeting with GYPC on 19 September 2019, the Applicant does not consider a large vessel layby berth is necessary. To mitigate the potential effects of a bridge mechanism failure the operational procedures proposed for the bridge should take account of the alternative actions each vessel could take in the event of a failure of the bridge to open; for large vessels this should form part of the pilotage plan for the vessels' passage.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				These alternative actions could include: proceeding to an alternative berth, returning to sea, holding station mid river or, if no other safe alternative is available, opening the bridge before the vessel enters the port. The pNRA is currently being updated to reflect the additional vessel simulation work carried out, and the recent HAZID meeting.
MP6	RR-014	Great Yarmouth Port Company (part of Peel Ports Group)*	It is essential, GYPC believe, to conclude as soon as possible a proper evaluation of incremental hazards arising as a consequence of the new bridge and identification of possible mitigation measures. Our requirement for an emergency lay-by berth is required to maintain safety of navigation upon the River Yare and will result in less disruption and lead to significantly shorter delays for road traffic users when the bridge is required to be open to shipping.	Refer to response to MP5 above.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP6a	RR-020	Great Yarmouth Port Authority*	GYPA are particularly concerned that part of the Port may have to be closed during construction. This would place the Port at a competitive disadvantage as an operating base and impact on both current and prospective operations. This must be avoided.	Article 23 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) covers the temporary suspension of navigation for construction purposes and the Protective Provisions (agreed to the extent set out in the Statement of Common Ground dated 7 June 2019 with GYPC) incorporated into the draft DCO place duration and number limits along with notification timeframes on these closures so as to minimise disruption and allow for forward planning where disruption is unavoidable.
MP7	RR-020	Great Yarmouth Port Authority*	GYPA also has similar concerns to GYPC about the draft Navigational Risk Assessment. We would wish, for example, to see the risk of bridge failure or delay fully considered and the establishment of a control measure in the form of a layby berth for inbound vessels as a minimum.	Refer to response to MP5 above.
MP8	RR-022	Marine Management Organisation	Deemed Marine Licence (DML): 7.1.2 - Part 1 3 (2) refers to the development described in Schedule 1. The text included in	The Applicant acknowledges the items raised on the DML by the MMO in its Relevant Representation and has worked with the MMO on a revised drafting of the DML to



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			Schedule 1 does not clearly identify the licensable marine activities; these should be clearly identified here. 7.1.3 - Part 2 4 (1) (h) should be worded as 'ensure that a notice to mariners is issued at least 10 working days prior to the commencement of the licensed activities or any part of them advising of the start date and the expected vessel routes from the local construction ports to the relevant location.' 7.1.4 - The MMO recommend that the time frame of 8 weeks stated in Part 2 5 (1) either be completely removed or amended to align with our determination period of 13 weeks. 7.1.5 - The MMO recommend that the time frame of 8 weeks stated in Part 2 6 (1) either be completely removed or amended to align with our determination period of 13 weeks. 7.1.6 - The MMO recommend that the time frame of 8 weeks stated in Part 2 8 (1) either be completely removed or	address these issues with the aim of including a finalised version in the next iteration of the draft DCO (current Document Reference 3.1, Planning Inspectorate Reference APP-020).



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			amended to align with our determination period of 13 weeks.	
			7.1.7 - The original condition wording in Part 2 10 (1) has been agreed and should not be changed. The words 'intentionally or unintentionally' should not be removed.	
			7.1.8 - Regarding Part 3 16 (2), our preference would be that this clause is removed from the DML completely. We may need to request further information/clarification during the consultation period should it be requested by our direct consultees. Seeking permission to do so may delay the process further. This clause has not been included in recent DMLs for similar schemes.	
			7.1.9 - Regarding Part 3 18, Our determination period is 13 weeks and therefore this should be referenced in the DML. Should new information be submitted that requires the determination process to be repeated, the process is likely to take ~13 weeks. In exceptional circumstances it may take	



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			longer than 13 weeks to make a determination. Paragraph 3 has been replaced with wording from a DML for a similar scheme to require the MMO to notify the licence holder should this occur.	
MP9	RR-026	Royal Yachting Association	Regarding Leisure and Small-Boat users Any structure built into the waterway will restrict natural water flow-rate (akin to a 'weir-effect'); for upper-reaches of the whole Broads basin, this is highly likely to exacerbate risk of fluvial and pluvial (non-tidal) flooding up to ~20miles distant due to the system being less able to empty particularly after strong rain or after a 'Tidal Gate' standstill of waters. Flood Risk has been conducted for the immediate surrounds of Works, but there is no evidence of such study having been effected yet for Upper Reaches of the Broads (issue discussed with and registered by Environment Agency).	The Applicant has undertaken modelling and assessments to the extent considered necessary for the production of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096). This modelling has indicated that there would be minimal effect on water levels within Breydon Water and therefore there would be no measurable effect to locations further upstream.

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP10	RR-026	Royal Yachting Association	Small-boat "Waiting Pontoons" [Not potentially inappropriate large-vessel fenderings] are requested both within the inter-bridges pool (inside) and below the new bridge (outside). Norfolk & Suffolk Boating Association (NSBA) recommends waiting pontoons at all-four quadrants of any bridge to accommodate any small vessels which may have difficulty berthing in unfavourable conditions. Thus far within the Project only one location has been proposed below the new bridge; proposal for inter-bridges pontoon has been side-stepped.	The requirement for small vessel waiting facilities is acknowledged and facilities are included on the West bank of the River both up and down stream of the bridge as part of the Scheme. The Applicant believes this provision is sufficient to mitigate the impacts of the Scheme.
MP11	RR-026	Royal Yachting Association	The eventual regime of openings (timing, signals, access) needs to accede to limitations of potentially slow moving and restricted manoeuvrability of smaller vessels, especially under sail.	The draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) contains, in Article 43 and at Schedule 10, a Scheme of Operation that outlines how the bridge is intended to function. The timings of notification for operation are set out in the Scheme of Operation which provides at paragraph 3 for 2 hours' notification of opening to be given, which is



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				considered sufficient time for manoeuvrability to be taken into account by a vessel master. Navigation lighting requirements, including bridge control signals, will be discussed with the GYPC/A as the Local Lighthouse Authority prior to obtaining approval from the General Lighthouse Authority (Trinity House).
MP12	RR-026	Royal Yachting Association	The intended Control Tower should in interests of efficiency operate both existing old and new bridges, particularly for through-passage of vessels accessing or exiting The Broads.	Safe operations of all 3 bridges require a visual assessment prior to the deck being raised. Therefore, the existing control tower is required for the existing bridges and the new control tower is required for the Scheme Bridge. The Applicant will work with GYPC, who operate Breydon and Haven Bridges (on behalf of Highways England and Norfolk County Council), to coordinate, where this is feasible, the opening regimes of the three bridges.
MP13	RR-026	Royal Yachting Association	The reduced proposed height of the new bridge impacts on all of above; the trade-off from previous ~12.5m clearance could have seen substantial mitigation in all of these effects.	The clearance height of 4.5m under the bridge at the navigation channel is dictated by the lengths and gradients of the approaches to the opening span, the lengths are limited by the locations of the tie-in points to the existing road network and the gradients are



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				constrained by practical accessibility requirements.
				The alignment and gradients of the approach road and embankments are being designed in accordance with national standards from The Design Manual for Roads and Bridges (DMRB), including up to a maximum 1 in 20 (5%) gradients on the approach roads which are suitable for non-motorised users (pedestrians and cyclists).
				Consideration was given to the maximum height of bridge that could be achieved at 7.5m clearance however analysis of recorded vessel movements indicated that this increased clearance would produce only a minor reduction in the number of openings required and was not cost effective compared to the increased cost of construction. (pNRA Appendix B) (Document Reference 6.14, Planning Inspectorate Reference APP-185)
				In choosing a way forward there is a balance to be made when considering conflicting considerations. A 10m clearance scheme



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				would have a number of design compromises and a 14m clearance scheme would require the scheme to extend well beyond South Denes Road, significantly into the peninsula with much greater associated land, property, cost and visual impacts. It would also not remove the need for a lifting bridge. The traffic modelling work undertaken to date for the Scheme assumes that the bridge will open for all commercial river vessels and that the bridge will operate 24 hours a day, 7 days a week. The impact on both cost and benefits is reflected in the traffic modelling and economic work. A design that enables the bridge to open for all commercial river vessels on demand does significantly reduce the argument to provide a bridge with a higher clearance with its associated costs and impacts.
MP14	RR-033	Great Yarmouth Port Users Association	Concerned about the height of the air draft planned is such that will require significant openings to allow exit and entrance.	Refer to response to MP13 above



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
MP15	RR-033	Great Yarmouth Port Users Association	Concerned about the difficulty created when the bridge is broken down and requiring repairs. This happens on several occasions to our haven bridge and has created difficulties for at least one business to the north of this bridge.	Refer to response to MP1 above.
MP16	RR-003	Trinity House	Trinity House wishes to be a registered interested party due to the impact the development may have on navigation within Trinity House's area of jurisdiction. It is likely that we will have further comments to make on the application and the draft Order throughout the application process.	The Applicant acknowledges the role of Trinity House in approval of navigation aids etc. and anticipates further discussions will take place following development of a draft lighting scheme in consultation with GYPC/A. Saving for Trinity House has been included in the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) at article 63.



Matters on Highways and Transportation

6.1 Overview

6.1.1 Ten interested parties raised issues relating to highways and transportation. Table 6-1 sets out the matters raised on the theme, alongside responses from the Applicant.



Table 6.1: Matters raised on highways and transportation

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
HW1	RR-004	Norfolk Constabulary	On behalf of Norfolk Constabulary, I am interested in the whole bridge project, particularly in relation to the management of traffic using the new facility. This also relates to the size and type of vehicles that will be permitted to use the bridge as it is important for us to use the bridge in the future for heavy abnormal indivisible loads to avoid them using the more unsuitable routes to South Quay.	Chapter 17 of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096) reports the outcome of the assessment of likely significant effects arising from the Scheme on Traffic and Transport. Its summary concludes that during the operational phase, the assessment has shown that the Scheme would have a large beneficial (significant) effect on pedestrian and cyclist journey times and delay, a moderate beneficial (significant) effect for public transport users, driver delay and fear and intimidation of non-motorised users and a slight beneficial effect on collisions and safety. The Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189) assesses the expected transport impacts of the Scheme and in doing so, it also sets out the transport case for the Scheme. Chapter 7.11 of this document details the



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				impact of the Scheme on abnormal load routes. There are currently no formally designated abnormal load routes within Great Yarmouth. However, abnormal loads do on occasion need to pass through the area. The scheme has been designed to provide an alternative (and in many cases a shorter) route for these abnormal loads, removing them from the town centre.
				The bridge is being designed to the load model SV196 defined by the UK National Annex to EN 1991-2:2003. The SV196 model would be considered at the higher end of the spectrum for the design of a bridge on Motorways, Trunk Roads and Principal Road extensions of trunk roads; having the vehicle characteristics of a maximum gross weight of 196 tonnes with a maximum basic axle load of 16.5 tonnes. As such the bridge design can accommodate all categories 1, 2 and 3 of abnormal indivisible load vehicles covered by the Road Vehicles (Authorisation of



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Special Types) (General) Order 2003 (STGO).
HW2	RR-004	Norfolk Constabulary	Clearly there will be traffic disruption during the construction phase which we will be showing an interest in to ensure no unnecessary delays are made during the construction phase if given the go ahead.	Chapter 17 of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096) reports the outcome of the assessment of likely significant effects arising from the Scheme on Traffic and Transport. Its summary concludes that during construction the Scheme would be likely to have a temporary, slight adverse impact on all traffic and transport effects assessed.
				Chapter 11 of the Outline Code of Construction Practice (CoCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187) details the Applicant's commitments relating to construction traffic. In particular the Framework Construction Traffic Management Plan (Appendix A) sets out the high-level principles of the management and control strategy related

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				to pedestrians and vehicular movements during construction.
				Key stakeholders (including the Police) will be consulted on any proposed road closures or any other traffic management that could significantly affect traffic flows in the vicinity.
HW3	RR-004	Norfolk Constabulary	We will be looking at the construction of the bridge and suicide prevention methods employed during its construction.	To ensure that the design reduces or mitigates the opportunity for and likely impact of a suicide attempt, the current design has a 1.4m high pedestrian/cyclist guardrail parapet on the outer extremities of the north and south non-motorised user facilities across the bridge to act as an impediment for suicide jump attempts. In addition, traffic barriers are also proposed to mitigate the risk of a member of public stepping out in front of oncoming traffic. The control tower will be manned 24 hours a day for operational procedures and the bridge site will be fitted with 24 hour CCTV monitoring across the bridge including its approaches. This provision of manned



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				attendance/surveillance at the bridge would reduce the potential risk of a possible suicide attempt at this site. The operational manual for the bridge shall include emergency protocol for dealing with potential suicide attempts.
HW4	RR-007	The Health and Safety Executive	Based on the information presented, this development will impact on the DGHAR sites as shown on Plan A. If this is approved, HSE will be required to review the licences for the nearby DGHAR sites. The review should also consider the proposed structure from a vulnerable perspective and also the existence of a major construction perspective.	The Applicant is engaged with the HSE's Principal Inspector to discuss the review of the current licenses for the nearby Dangerous Goods in Harbour Areas Regulations (DGHAR) sites.
HW5	RR-009	Alan Forder	Concerned about the proposed parking restrictions outside business and the impact it will have. My business relies on customers being able to park and leave their cars outside our business on their way to work, and breakdown trucks dropping off vehicles out of hours and leaving cars 24/7. If in the future this won't be possible it will affect the business revenue and the viability of remaining	The Applicant has proposed 'no waiting at any time' restrictions on Southgates Road/South Denes Road approaches to the South Denes Road Traffic Signalled junction to facilitate theoperation of the proposed Traffic Signalled junction. The Applicant is happy to consider a potential reduction of the proposed 'no waiting at any time' restrictions on the



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			operating fully from Great Yarmouth. Since the Outer Harbour construction there is now reduced traffic and these restrictions will affect things for the whole infrastructure on Southgates Road.	approaches to the South Denes Road Traffic Signalled junction providing that the operation of the junction would not be impeded by parked vehicles.
HW6	RR-021	Jennifer Elizabeth Baker*	Main concerns are related to proposals to give at least part of Cromwell Court the status of public road specifically: - retention of reserved parking for Number 5 - guaranteed access to this parking and to all the areas currently within the bounds of the property and its garden; and also to include the area currently used for parking for Number 5 and the garden and amenity space adjacent to this	The car park area used by residents of Cromwell Court is currently privately owned and through the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) the Applicant seeks powers of compulsory acquisition in respect of this area. The powers of compulsory acquisition are required to provide a turning area, that would allow vehicles utilising the proposed parking on Cromwell Road to turn around and exit onto Southtown Road. It would make the whole area public highway and remove the privately-owned parking spaces. However, the Applicant is happy to consider a reduction in the proposed area of permanent acquisition, with the aim of reducing the impact on privately owned parking spaces, providing that sufficient space for the vehicle turning area can still be provided.

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
HW7	RR-021	Jennifer Elizabeth Baker*	Concerned about the responsibility for the upkeep of the areas adjacent to those to which the public will have access	The ongoing maintenance of the public realm areas will be undertaken by Norfolk County Council as the relevant highway authority. However, this does not preclude the involvement of the local community and the Applicant welcomes any expression of interest from members of the local community that may wish to be involved in the upkeep of these areas.
HW8	RR-025	BNP Paribas Real Estate on behalf of Royal Mail*	The construction phase of the Third River Crossing may present risk of impact / delays to Royal Mail's road-based operations on the surrounding road network. Royal Mail has requested from Norfolk County Council confirmation on the extent of land required for the Variable Messaging Sign proposed adjacent to Great Yarmouth Delivery Office (Work No. 13D) as well as details of the proposed construction timescale In order to address the above concerns Royal Mail requests that the DCO application includes a requirement that Royal Mail is pre-consulted by Norfolk County Council or its contractors on:	The area of permanent acquisition, shown as plot 8-01 on Land Plans Sheet 8 of 9 (Document Reference 2.5, Planning Inspectorate Reference APP-010), is required to provide a proposed Variable Message Sign (VMS) on the North Quay approach to Fuller's Hill Roundabout. Plot 8-01 is shown as extending from the Fuller's Hill Roundabout to Rampant Road, which is across the frontage of properties that include the Royal Mail's Great Yarmouth Delivery Office. The full extent of Plot 8-01 is considered necessary at this stage to accommodate the VMS and its electrical/communication

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			1. any proposed road closures/ diversions/ alternative access arrangements, 2. hours of working, the content of the final Construction Traffic Management Plan (CTMP) 3. details of the Variable Messaging Sign proposed adjacent to Great Yarmouth Delivery Office (Work No. 13D).	connections. The position of the VMS will not restrict the access to the Delivery Office. There may be a need to provide connections across the frontage of the delivery office and its access, and in this event the Applicant will work with Royal Mail to mitigate the impact on them. The final position of the VMS and related connections will be determined at the detailed design stage. Chapter 11 of the Outline Code of Construction Practice (CoCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187) details the Applicant's commitments relating to construction traffic. In particular the Framework Construction Traffic Management Plan (Appendix A) sets out the high level principles of the management and control strategy related to pedestrians and vehicular movements during construction.

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Key stakeholders (including Royal Mail) will be notified of any road closures or any other traffic management that could significantly affect traffic flows in the vicinity of their premises.
HW9	RR-032	Hope (Borough of Great Yarmouth)*	Concerned about the no waiting on Queen Anne's Road outside the Kings Centre. The north side of this road is frequently used by centre users as overflow parking and having a no parking restriction imposed on this road would severely impact the day to day users and use of our popular community centre. Many of these users include parents with small children who would benefit from parking as near to the centre as possible. We would not have an objection to the south side of the road being designated as no waiting as this side is not used for parking anyway, but the north side of the road (alongside the pavement) is where we have the issue. The No Parking restriction seems to start outside of our entrance and head towards the roundabout from there. We would like to suggest that the no parking restriction	The current proposal is for a new 'no waiting at any time' restriction to be introduced on both sides of Queen Anne's Road extending from its junction with the new roundabout north-westwards for a distance of approximately 65 metres. The Applicant is happy to consider a potential reduction in the extent of the 'no waiting at any time' restrictions proposed for the north side of Queen Anne's Road, providing the approach to and egress from the roundabout would not be impeded by parked vehicles.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			starts a far as possible towards the roundabout, leaving space for more unrestricted parking than is currently proposed at the west end of Queen Anne's road.	
HW10	RR-004	Norfolk Constabulary	The construction of the bridge is important in relation to how much traffic/pedestrians/cyclists can use the bridge. Interested in how construction of the bridge will be managed, projected vehicle usage, routes affected by the new facility and congestion relief.	Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189) sets out the comprehensive analysis which has been undertaken to assess the impacts of the Scheme on motorised vehicles, walkers and cyclists within the study area. It demonstrates that the Scheme can accommodate forecast future traffic growth, taking full account of bridge openings for river vessels, whilst relieving congestion on other key routes in the town. The Scheme includes dedicated facilities for walkers and cyclists in the form of a segregated route on the northern side of the bridge and signalised crossings, designed to tie in with existing routes and which will provide significant time savings for slow mode journeys between key destinations on either side of the River Yare. Outline Code of Construction



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Practice (COCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187) sets out the underlying principles which will be applied during the construction phase, including proposed mitigation of impacts. Framework Construction Traffic Management Plan (Appendix A of COCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187) sets out the high level principles of the management and control strategy relating to pedestrian and vehicular movements during construction.
HW11	RR-013	Roger Hannah Ltd on behalf of Regaland Limited*	Concern whether increased road capacity from the scheme will be quickly absorbed by traffic	Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189) sets out the comprehensive analysis which has been undertaken to assess the impacts of the Scheme on motorised vehicles, walkers and cyclists within the study area. It demonstrates that the Scheme can accommodate forecast future traffic flows, taking full account of bridge openings for river vessels. The Scheme will also relieve congestion on other key routes in the town. The traffic modelling demonstrates that



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				overall traffic conditions in 2038 would be significantly better with the Scheme in place; without the Scheme, congestion in parts of Great Yarmouth could increase to unacceptable levels.
HW12	RR-013	Roger Hannah Ltd on behalf of Regaland Limited*	Should the Scheme go further to promote more sustainable modes of transport, improve road safety, and encourage comprehensive regeneration.	Promoting sustainable modes. The Scheme includes dedicated facilities for walkers and cyclists in the form of a segregated route on the northern side of the new bridge and signalised crossings, designed to tie in with existing routes and which will provide significant time savings for slow mode journeys between key destinations on either side of the River Yare. The Scheme incorporates improvements to existing bus facilities on Southtown Road to enable step free access. Framework Construction Traffic Management Plan (Appendix A of Outline Code of Construction Practice (CoCP) (Document Reference 6.16, Planning Inspectorate Reference APP-187)) sets out measures to reduce the number of



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				vehicles travelling to the Site, with an emphasis on minimising the number of private car trips to and from the Site by encouraging alternative modes of transport and identifying control mechanisms for car use and parking. The contractor appointed to construct the Scheme will also be required to produce a Construction Worker Travel Plan in the form shown in Appendix B of CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187), and the Traffic Liaison Officer will work with staff to encourage and promote use of sustainable travel.
				Improving road safety. The Scheme has been designed to current standards, taking into account the outputs from Road Safety Audits and current best practice. CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) sets out the underlying principles which will be applied during the construction phase, including proposed mitigation of impacts.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				Encouraging comprehensive regeneration. As explained in the Applicant's Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022 at paragraphs 1.1.6 and 6.2.18) and Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188 at section 4.5), one of the objectives of the Scheme is to "support the regeneration of Great Yarmouth, including the town centre and seafront, helping the visitor and retail economy". By providing improved access for shoppers and visitors, the Scheme would support the regeneration of retail, leisure and commercial uses of site within the town centre. The regeneration case for the scheme is set out in APP-188 at section 4.4.
				In addition (as explained in paragraph 1.1.5 of APP-022) Great Yarmouth is in a prime position to benefit from economic growth associated with significant national support and investment in the offshore



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				wind, oil and gas industries. The South Denes and Beacon Park Enterprise Zone sites were formed to exploit such opportunities, and the Scheme would help to provide the resilient transport infrastructure necessary to capitalise on the planned investment whilst also regenerating the town centre (including the Waterfront area) and maintaining a thriving visitor economy in Great Yarmouth. The Scheme will support and encourage comprehensive regeneration in Great Yarmouth by providing a new highway link which will: Reduce overall congestion within the town, and provide the capacity to accommodate growth; and Improve accessibility between key industrial and regeneration areas and the Strategic Road Network.



Response to ASCO's* Relevant Representation

7.1 Context

7.1.1 Table 7-1 sets out the matters raised in ASCO's Relevant Representation (RR -016), alongside responses from the Applicant.



Table 7.1: Matters raised by ASCO

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
AS1	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	The Application fails to properly assess and address the adverse effects on ASCO arising from the acquisition of land, and the construction and operation of the proposed development. The proposed temporary and permanent land take and effects of the scheme would have a serious adverse effect on ASCO's business and, in turn, the business of its customers including Perenco, and the wider oil and gas industry and economy of Great Yarmouth. As a result of this, and generally, Norfolk County Council ('NCC') has not incorporated in the Proposed Order or otherwise provided for proper mitigation of the scheme's impacts on ASCO nor sufficiently safeguarded ASCO's important interests. ASCO operates complex and highly regulated facilities at both Fish Wharf and Gas House Quay. The safe and successful operation of a complex logistics supply business on a scale of operation carried on at Fish Wharf	Detailed discussions have been ongoing with ASCO and Perenco since November 2017 to understand their operational requirements and explore all possible options to mitigate the impact of the Scheme on both businesses. The Applicant is working with both Perenco and ASCO to address operational concerns raised. This work is still ongoing with the aim of finding the right solution so that Perenco continues to be located within Great Yarmouth, Perenco's operations will not be interrupted as a result of the Scheme and the current working relationship between ASCO and Perenco is maintained. The Applicant does not, however, intend to enter into negotiations with ASCO regarding protective provisions. This is on the basis that ASCO is a commercial entity and there is no statutory undertaking that



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			requires reliable and unencumbered transportation routes both onshore and offshore and sufficient useable quayside, warehousing and laydown space to deliver those operations in a safe and viable way. This is achieved through ASCO and Perenco's current arrangements at Fish Wharf. NCC has failed to properly understand and assess the nature of ASCO's operations at both Fish Wharf and Gas House Quay.	would be protected by protective provisions.
			If the proposed compulsory acquisition were to take place, the land remaining in ASCO's and Perenco's control is too small to meet those requirements in a safe and efficient manner without the entire site being reconfigured.	
			Perenco may relocate its business to another port. The loss of Perenco's business carries a significant risk of impacting on the viability of the remainder of ASCO's business carried out at the Fish Wharf site due to the volume of business necessary to justify the economic operation	



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			of the full range of supply base services currently on offer.	
			Protective provisions are required in the Proposed Order to control NCC's activity so as to avoid disruption to ASCO and its clients' operations. In addition, ASCO is concerned that the adverse effects and uncertainty caused by the Proposed Order are a potential disincentive to future investment in the site, and give rise to the potential for key customers, suppliers and supply chain to relocate out of the county.	
AS2	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	Changes to water flow arising from the bridge: ASCO is concerned about potential changes in water flow in the River Yare and the impact this may have on its ability to safely berth, load and unload vessels at its quayside facilities (particularly when the tide is in ebb and/or flood status). ASCO considers that the studies which NCC have undertaken are inadequate and do not adequately demonstrate that the resulting water movements and tidal flows will not present a hazard. ASCO fuels vessels with	The Applicant has undertaken hydrodynamic, sediment transport and vessel simulation modelling and assessments to the extent considered necessary for the production of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096). These works indicate that there would be minimal effect on the hydrodynamics in the River in the areas of ASCO's operations and any effects would not impact upon the ability to operate the berths.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			marine gas oil and loads and unloads dangerous goods at its Fish Wharf and Gas House Quay facility. If there are significant new currents affecting this facility, this has the potential to compromise safety.	Notwithstanding this, refinements to the hydrodynamic modelling works are being undertaken to further address the concerns raised by ASCO and other parties on the potential long-term effects the Scheme could have on the sediment regime in the River.
AS3	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	River congestion arising from the bridge: Due to the immediate proximity of the Fish Wharf and Gas House Quay facilities to the proposed bridge, ASCO is concerned that both during the construction phase and when fully operational there is a high potential for vessel traffic travelling up river to be held south of the bridge. This would compromise ASCO's ability to arrive and depart from its quaysides due to additional traffic. There is also a general history of lifting bridges suffering mechanical failures which adds to this particular concern. Furthermore, the removal of the adjoining Berth 13 from operational use during the construction process will further reduce the berthing space available. ASCO's	Construction Article 23 of the draft Order (Document Reference 3.1, Planning Inspectorate Reference APP-020) places duration and number limits on the temporary suspension of navigation in connection with the authorised development so as to minimise disruption and allow for forward planning by those affected where disruption is unavoidable. Berth 13 is currently very shallow due to shoaling in front of the berth and therefore is not regularly used at the present time. Operation



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			operations are time critical and restrictions or delays upon sailing times will not be acceptable to its customers.	Article 43(6) of the draft DCO and the related Scheme of Operation set out in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) include provision for 'on demand' opening for all commercial vessels, the objective of which is to ensure that commercial vessels suffer no interruption to passage. Waiting facilities are included on the West bank of the River both landward and seaward of the bridge for recreational craft (<50m) so they will not compromise navigation if held.
AS4	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	Heavy lift facility: It should be noted that ASCO's heavy lift facility is located at Gas House Quay and forms an essential part of its offering to the developing decommissioning and renewables markets. The nature of this work requires larger vessels to berth and the aforementioned additional river traffic and changes to water flow have the potential to severely compromise these activities.	The Applicant has undertaken hydrodynamic, sediment transport and vessel simulation modelling and assessments to the extent considered necessary for the production of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096). These works indicate that there would be minimal effect on the hydrodynamics in the River in the areas of the Heavy Lift facilities



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
				at Gas House Quay and any effects would not impact upon the ability to operate the berth.
				Notwithstanding this, refinements to the hydrodynamic modelling works are being undertaken to further address the concerns raised by ASCO and other parties on the potential long-term effects the scheme could have on the sediment regime in the River.
AS5	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	Road access to ASCO facilities: (i) ASCO operates a receipt & dispatch facility for clients at Fish Wharf which entails approximately 100 small and large deliveries on an average working day. Many of these deliveries are time critical for offshore production. ASCO is concerned by the potential disruption to its business caused by proposed changes to the road layout in the immediately proximate area, both during the construction of the scheme and following its completion, particularly in respect of the various temporary road closures and new	Access to all businesses and residential properties will be maintained during construction of the Scheme. There will be the need for some road closures and these will be advertised in advance and diversion routes will be provided. Chapter 9 and Chapter 11 of the Outline Code of Construction Practice ('CoCP') (Document Reference 6.16, Planning Inspectorate Reference APP-187) details the Applicant's commitments relating to traffic diversions and construction traffic. The expected transport impacts of the Scheme during operation are set out in the



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			signalised crossings. ASCO considers that these have the potential to adversely affect access and egress to its facilities. It is essential that full unimpeded access and egress to ASCO's facility is maintained at all times. ASCO considers that the Proposed Order does not adequately account for this.	Transport Assessment (TA) (Document Reference 7.2, Planning Inspectorate Reference APP-189). The TA concludes 'Areas designated for employment and regeneration, including the Outer Harbour, are separated from the rest of the town and the Strategic Road Network ('SRN') by the river, forcing traffic through town centre. Congestion is already a problem and is forecast to get worse by 2023, becoming as traffic increases in the longer term. The Scheme will effectively resolve these problems by providing a new, much shorter link between the SRN and the eastern part of the town, avoiding unsuitable roads in the town centre. Overall it will reduce journey times, queuing and congestion, generating significant transport economic benefits.'
AS6	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	Fish Wharf is a Control of Major Accident Hazards Regulations 2015 ('COMAH') Tier 2 Facility due to the storage and handling of marine gas oil and lubricants. It is therefore essential that emergency vehicle	During construction of the Scheme access to Fish Wharf will be maintained at all times for the emergency services.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			access to the site is also maintained at all times.	
AS7	RR-016	Mills & Reeve LLP on behalf of ASCO UK Ltd	Negotiations with NCC: ASCO has engaged with NCC over approximately the last 18 months. Through those discussions, ASCO and Perenco have identified a series of safeguards and accommodation works necessary to resolve both ASCO's and Perenco's concerns with regards to the proposed land take. As at the date of this submission no binding commitments have been given by NCC to secure the necessary works. However, ASCO remains in dialogue with both NCC and Perenco. ASCO wishes to emphasise that if NCC wishes to keep to its proposed DCO timetable there is an increasingly narrow time window available in order to undertake the necessary works and implement safeguards, without leading to the implementation of the Proposed Order works needing to be delayed. In order to ensure ASCO's and its clients' operational integrity, protective works and safeguards must be completed in advance	The Applicant is working with both Perenco and ASCO to address operational concerns raised. This work is still ongoing with the aim of finding the right solution so that Perenco continues to be located within Great Yarmouth, Perenco's operations will not be interrupted as a result of the Scheme and the current working relationship between ASCO and Perenco is maintained.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			of the implementation of the Proposed Order.	



8 Response to Perenco's* Relevant Representation

8.1 Context

8.1.1 Table 8-1 sets out the matters raised in Perenco's Relevant Representation (RR-024), alongside responses from the Applicant.



Table 8.1: Matters raised by Perenco

Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
PE1	RR-024	Ashtons Legal on behalf of Perenco UK Ltd	1. The DCO provides for the taking of a significant part of Perenco's site. The impact on the business is so severe that, unless alternative arrangements are made Perenco will be forced to leave Great Yarmouth. Document 4.4: Negotiations Tracker is now misleading. Perenco has been engaged in discussions with Norfolk County Council ('NCC'), Peel Ports and ASCO for a considerable period for the remodelling of the Perenco and ASCO sites on an agreed basis so as to provide appropriate facilities for Perenco to remain. NCC has not brought this to fruition and Perenco is now in a position where the DCO, as it stands, will prevent it remaining in Great Yarmouth, since there are no alternative sites available. Perenco has currently no good business reason to leave; it is deeply ironic that a scheme which has an objective to support the offshore energy sector should be promoted on the basis that a leading North Sea operator should be forced to depart to	Detailed discussions have been ongoing with ASCO and Perenco since November 2017 to understand their operational requirements and explore all possible options to mitigate the impact of the Scheme on both businesses. The Applicant is working with both Perenco and ASCO to address operational concerns raised. This work is still ongoing with the aim of finding the right solution so that Perenco continues to be located within Great Yarmouth, Perenco's operations will not be interrupted as a result of the Scheme and the current working relationship between ASCO and Perenco is maintained.



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			another port, to its detriment and that of the local economy.	
			2. Perenco now has to object to the scheme as a matter of principle, as well as questioning its justifications. The public good of providing a third crossing as proposed in this scheme does not outweigh the harm to Perenco's business operation and impact on its land and North Sea operations, the loss of its business to its services supplier and the consequential impact on the town of loss of a major energy operator. NCC has not made an adequate case for the public interest being so compelling as to justify dispossession of Perenco. The Scheme should not be allowed to proceed on the basis that Perenco would be forced to relocate to another port, which would require adequate time for planning and implementation.	
			3. NCC have considered alternatives previously. Whilst this scheme is their preferred choice, insufficient regard has been paid to the impact on Perenco. NCC	



Issue Number	Rep no.	Name	Summary of Relevant Representation	Response
			should find an alternative way of meeting its objectives without causing the departure of Perenco.	
			4. Compensation would normally be dealt with under other procedures but the very high cost of relocation to another port is relevant to the financing of the scheme and requires a fundamental reappraisal. That compensation will represent a significant additional burden to the public purse which cannot be justified.	
			5. NCC's approach to resolving transportation needs for the town is fundamentally flawed because it has failed to adequately account for the harm to Perenco, its supplier and the local economy from forcing Perenco to relocate. Compensation is not an adequate remedy.	

