

Great Yarmouth

Third River Crossing Order 202[*]

Document NCC/GY3RC/EX/016: Responses to Written Representations

Planning Act 2008

Infrastructure Planning

The Infrastructure Planning (Examination Procedure) Rules 2010

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Foreword

This Response to Written 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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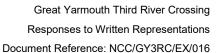
Figures

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Glossary of Abbreviations and Defined Terms

AMA	Active Modes Appraisal
ASCO	ASCO UK Limited
ASI	Accompanied Site Inspection
Cadent	Cadent Gas Limited
CoCP	Code of Construction Practice
cSPA	Candidate Special Area of Conservation
CTV	Crew Transfer Vessel
DCO	Development Consent Order
DfT	Department for Transport
DGHAR	Dangerous Goods in Harbour Areas Regulations
DML	Deemed Marine Licence
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EAR	Economic Appraisal Report
EIA	Environmental Impact Assessment
EIMP	East Inshore Marine Plan
ES	Environmental Statement
ExA	Examining Authority
ExQ	Examining Authority's First Written Questions
GHG	Greenhouse Gas
GYPA	Great Yarmouth Port Authority
GYPC	Great Yarmouth Port Company
HAZID	Hazard Identification
HRA	Habitat Regulations Assessment
HSE	The Health and Safety Executive
JNCC	Joint Nature Conservation Committee
NCC	Norfolk County Council





NPPF	National Planning Policy Framework
NPS	National Policy Statement
NPS NN	National Policy Statement for National Networks
NRA	Navigation Risk Assessment
NSBA	Norfolk & Suffolk Boating Association
PEA	Preliminary Ecological Appraisal
Perenco	Perenco UK Limited
pNRA	preliminary Navigation Risk Assessment
SoCG	Statement of Common Ground
TAR	Transport Assessment Report
TIN	Technical Information Note
The Applicant	Norfolk County Council (in its capacity as Highway Authority and promoter of the Scheme).
The Scheme	The Great Yarmouth Third River Crossing project for which the Applicant seeks development consent.
VMS	Variable Message Sign
VHF	Very High Frequency
WFD	Water Framework Directive



Introduction

1.1 Purpose of this Report

- 1.1.1 This report, submitted for Deadline 2 of the Examination, contains the Applicant's responses to Written Representations submitted by interested parties to the Examining Authority (ExA) for Deadline 1 on 8 October 2019.
- 1.1.2 Written Representations were submitted by the below parties:
 - Historic England (REP1-011);
 - Marine Management Organisation (REP1-012);
 - Natural England (REP1-013);
 - Anglian Water Services Limited (REP1-014);
 - Ashtons Legal on behalf of Perenco UK Limited (REP1-015);
 - BDB Pitmans on behalf of Great Yarmouth Port Company Limited and Great Yarmouth Port Authority (REP1-016);
 - Benvenuto Falat on behalf of Royal Yachting Association (REP1-017);
 - Burness Paull on behalf of ASCO UK Limited (REP1-018);
 - Goodchild Marine (REP1-019);
 - Gowling WLG (UK) LLP on behalf of Cadent Gas Limited (REP1-020);
 - Great Yarmouth Port Authority (REP1-021);
 - New Anglian Local Enterprise Partnership (REP1-022);
 - Norfolk Yacht Agency (REP1-023);
 - Great Yarmouth Port Company (REP1-024);
 - Roger Hannah on behalf of Regaland Limited (REP1-025);
 - Ian Blyth (REP1-026);
 - Michael Boon (REP1-027).
- 1.1.3 The report provides the Applicant's response to the issues raised, thereby providing a reference document for all interested parties and the Planning Inspectorate.
- 1.1.4 There were some Written Representations that did not make any point requiring a response. For each of those cases, those interested parties and issues raised are not identified in the tables following in this report.



2 Historic England [REP1-011]

2.1 Key Issues and Applicant's Response

Key Issue

2.1.1 Historic England stated in its Written Representation that it advised the Applicant on assessment of the impact of the proposed development on the historic environment prior to the submission of the application and has been in discussion with the Applicant about the assessment documents submitted since then. Historic England stated the Applicant has produced sufficient information to allow it to come to a view on this matter. Historic England has accepted the Applicant's assessment and agrees that there would be limited impact on heritage assets on the site and in the vicinity of the development. Historic England has discussed the methodology for investigating the archaeological potential of the site through ground works. Historic England confirmed it has now agreed that methodology with the Applicant. The detail of its advice is set out in the Representations and agreement with the Applicant on this matter is recorded in the Matters Agreed section of the Statement of Common Ground. Similarly, Historic England stated it had discussed and agreed with the Applicant the level of impact on the listed building the setting of which it considered could be harmed by the development. The detail of Historic England's view is set out in the Representations, and agreement with the Applicant on this matter is recorded in the Matters Agreed section of the Statement of Common Ground.

Applicant's Response

2.1.2 The Applicant welcomes Historic England's confirmation that the historic environment assessment, as presented in Chapter 9 of the Environmental Statement ('ES'), is sufficient (Document Reference 6.1, Planning Inspectorate Reference APP-096). The Applicant would like to thank Historic England for their engagement in the Application process, a summary of which is presented in the signed Statement of Common Ground ('SoCG') submitted at Deadline 1 of the Examination (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004).



3 Marine Management Organisation [REP1-012]

Key Issue

- 3.1.1 (4.1) The MMO confirms ongoing engagement with the Applicant since the submission of its Relevant Representation to the ExA on 1 August 2019.
- 3.1.2 (4.2) Whilst a number of points have been agreed between the MMO and the Applicant regarding the draft DML, there still remains a number of issues outstanding that were detailed within the MMO's Relevant Representation (dated 1 August 2019) and above in section 3. These outstanding issues are presented below and constitute the MMO's Written Representation.

Applicant's Response

3.1.3 It is understood that the terms of the Deemed Marine Licence ('DML') are agreed with Marine Management Organisation. This is reflected in the updated draft DCO submitted at Deadline 2 (Document Reference NCC/GY3RC/EX/023).

Key Issue

Policy and planning

- 3.1.4 (4.3.1) In examining the DCO Application, PINS is required to have regard to the Marine Policy Statement and any relevant marine plan.
- 3.1.5 (4.3.2) The MMO is the marine plan authority for the English inshore and offshore regions. In this regard, the MMO confirm that, as proposed, the Project will be undertaken within the East Inshore Marine Plan Area.

Applicant's Response

3.1.6 An assessment of the Scheme's conformance with the Marine Policy Statement and East Inshore Marine Plan ('EIMP') is provided in Section 7.7 of the Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188). The Case for the Scheme concludes that the Scheme conforms with both the Marine Policy Statement and the applicable policies in the EIMP.

Key Issue

Licensing requirements of the 2009 Act

3.1.7 (4.4.1) The marine licensing provisions of the 2009 Act set out which activities in the UK marine area require a marine licence. In broad terms, this includes any activity which involves the deposit or removal of articles or



substances below the level of mean high water springs, unless a relevant exemption applies.

- 3.1.8 (4.4.2) For Nationally Significant Infrastructure Projects ("NSIPs"), a DCO may include provisions deeming a marine licence for licensable activities taking place in the marine area. Alternatively, applicants may seek a marine licence directly from the MMO.
- 3.1.9 (4.4.3) In the present case, the MMO understands that the Applicant is seeking consent for all licensable activities via deemed consent within the draft DCO, the Deemed Marine Licence.
- 3.1.10 (4.4.4) The MMO has reviewed the DCO Application documents and sets out in the following table all works related to the Project which have so far been identified as to be carried out in the UK marine area: (See WRR for table)
- 3.1.11 (4.4.5) In order for any of the above activities to be included in the Deemed Marine Licence, 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.

Applicant's Response

- 3.1.12 The Applicant considers that the Environmental Impact Assessment ('EIA') has considered all likely significant effects arising from the Scheme (inclusive of licensable activities) and that mitigation, where required, is identified and the mechanisms for securing it are set out through provisions such as the DML (in Schedule 13 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020), Requirements (in Schedule 2 to the draft DCO) and certified documents (as listed in Schedule 15 to the draft DCO) such as the Outline Code of Construction Practice ('Outline CoCP') (Document Reference 6.16, Planning Inspectorate Reference APP-187).
- 3.1.13 The findings of the EIA are 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 and the Applicant has considered all practicable measures to avoid, minimise or offset environmental effects of the Scheme. 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 (Document Reference NCC/GY3RC/EX/014, Planning Inspectorate Reference REP1-008) was submitted at Deadline 1 of the Examination).



3.1.14 Further to discussions with the Marine Management Organisation, the DML included in the draft DCO at Deadline 2 (Document Reference NCC/GY3RC/EX/023) incorporates a specific list of licensable activities.

Key Issue

Deemed Marine Licence (DML)

- 3.1.15 (4.5.1) As detailed in section 1 (of the MMO's Written Representation REP1-012), the draft DML has been reviewed and updated by the applicant several times. The most recent draft was provided to the MMO 30 September 2019. All changes noted on the current draft DML have been agreed and made. As detailed in section 2, it may be necessary to amend the scope of the proposed development, amend existing conditions and/or include additional conditions. Comments of note regarding the draft DML, which currently do not require further information and/or action, are detailed below.
- 3.1.16 (4.5.2) Regarding Part 3 16 (2), our preference would be that this clause is removed from the DML completely. Restricting and/or preventing the flow of information after 6 weeks will slow the process and/or prevent the MMO making a determination. If the MMO cannot make a determination due to lack of information the return will be rejected. This clause has not been included in recent DMLs for similar schemes. The applicant has responded that they understand the risk associated with the inclusion of this clause but would prefer it remain. The MMO accept inclusion of this clause.
- 3.1.17 (4.5.3) Regarding Part 3 19, we approve inclusion of article 19. The applicant is aware and accepts that the MMO will charge for their time to review/comment on any submitted documents whether or not the DCO is approved.

Applicant's Response

3.1.18 The Applicant has discussed these issues with the Marine Management Organisation and reached agreement on the wording of all of the conditions of the DML. The updated and agreed version of the DML is included in the updated draft DCO (Document Reference NCC/GY3RC/EX/023) submitted at Deadline 2.

Key Issue

Dredge and Disposal

3.1.19 (4.6.1) 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 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.

- 3.1.20 (4.6.2) 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.
- 3.1.21 (4.6.3) Mitigation measures are set out in the Outline Code of Construction Practice and these appear appropriate. Although following a review of the additional requested information (see comments 8.1.1), additional mitigation may be recommended.
- 3.1.22 (4.6.4) 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.

Applicant's Response

- 3.1.23 The Applicant has responded to these points (which are repeated from the Marine Management Organisation's relevant representation) at Issue Number ENV29 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002).
- 3.1.24 The Applicant notes that as no additional operational dredging will arise as a result of the Scheme, and given that with the Scheme in place, dredging would continue to be carried out under the existing licence L/2016/00376/1 held by the Great Yarmouth Port Company ('GYPC'). The Applicant considers that matters such as sediment sampling, or the amount of dredged material, will be dealt with under the existing GYPC licence.

Key Issue

Fisheries

3.1.25 (4.6.5) With respect to fisheries, the evidence used to reach the ES conclusions (the assessment of the likelihood of and significance of potential



impacts) is insufficient with no references provided to support the conclusions stated.

- 3.1.26 (4.6.6) 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 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.
- 3.1.27 (4.6.7) The applicant has referenced the scoping opinion in paragraph 8.9.1 that a limitation of the 2m beam trawl is that it 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.
- 3.1.28 (4.6.8) 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 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.
- 3.1.29 (4.6.9) 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)". As detailed in section 2, condition(s) can be added to the DML to ensure agreed mitigation measures, such as piling timing or methodology restrictions, are implemented in full.

Applicant's Response

- 3.1.30 The Applicant has responded substantively to these points (which are repeated from the Marine Management Organisation's relevant representation) at Issue Number ENV30 of the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002).
- 3.1.31 Since that response, the Applicant has met with the Marine Management Organisation in relation to their fisheries concerns. The Marine Management Organisation was not able to discuss the concerns it has raised; it is seeking advice from Cefas whose response is expected in mid-November 2019.

Key Issue

Coastal Processes

- 3.1.32 (4.6.10) 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 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.
- 3.1.33 (4.6.11) MMO's understanding of the TUFLOW modelling detailed in the Sediment Transport Assessment (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, 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.



- 3.1.34 (4.6.12) 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 bed level updating and to derive a more accurate spatial description of impacts.
- 3.1.35 (4.6.13) 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).
- 3.1.36 (4.6.14) 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 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.
- 3.1.37 (4.6.15) The ES should include a discussion of a detailed scour assessment and any likely mitigation measures that this would entail.
- 3.1.38 (4.6.16) 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.

3.1.39 The Applicant has responded to all of these points (which are repeated from the Marine Management Organisation's relevant representation) at Issue Number ENV31 of its Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) and the Applicant has no further comments at this time.

Key Issue

Underwater Noise

3.1.40 (4.6.17) 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 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.

- 3.1.41 (4.6.18) 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).
- 3.1.42 (4.6.19) With regards to potential impacts, disturbance through construction and 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.
- 3.1.43 (4.6.20) 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.
- 3.1.44 (4.6.21) 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 are considered in sections 8.8.33 to 8.8.37. The ES simply concludes the following:
- 3.1.45 (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.
- 3.1.46 (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.



- 3.1.47 (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.
- 3.1.48 (4.6.22) 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.
- 3.1.49 (4.6.23) 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.
- 3.1.50 (4.6.24) Cumulative effects have been considered in Chapter 19 of the ES, although no cumulative effects have been identified with regard to underwater noise. Underwater noise must be considered in the cumulative impacts.
- 3.1.51 (4.6.25) 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". 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.

- 3.1.52 The Applicant has responded to these points (which are repeated from the Marine Management Organisation's relevant representation) at Issue Number ENV32 of its Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002).
- 3.1.53 Since that response, the Applicant has met with the Marine Management Organisation in relation to their underwater noise concerns. The Marine Management Organisation was not able to discuss the concerns it has raised; it is seeking advice from Cefas whose response is expected in mid-November 2019.



Key Issue

- 2.1. Historic England (HE)
- 3.1.54 (2.1.1) The MMO note HE's remark that the development has the potential to harm archaeological deposits of interest, both directly and indirectly and that they will comment on the Applicant's proposed mitigation strategy to ensure that the significance of the impacted remains/deposits is not lost.
- 3.1.55 (2.1.2) The MMO wish to advise that a condition could be added to the DML to ensure the Applicant follows the advice of HE and any agreed mitigation measures are implemented in full. To this end, the MMO would welcome engagement with both HE and the Applicant should they wish to discuss the inclusion of conditions within the DML, or any other matters within the remit of the MMO.

Applicant's Response

3.1.56 Further to the Relevant Representation raised by Historic England (Planning Inspectorate Reference RR-015) the Applicant has continued to engage positively with Historic England. Historic England has confirmed that the historic environment assessment, as presented in Chapter 9 of the Environmental Statement inclusive of the relevant mitigation measures, is sufficient (Document Reference 6.1, Planning Inspectorate Reference APP-096). The Applicant therefore does not consider it appropriate or necessary to incorporate conditions associated with the historic environment into the Deemed Marine Licence. The appropriate mitigation measures are included in the Outline 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). In addition, the Archaeological Written Scheme of Investigation (Document Reference 6.9, Planning Inspectorate Reference APP-180) is secured through Requirement 14 of the draft DCO.

Key Issue

- 2.2. Natural England (NE)
- 3.1.57 (2.2.1) The MMO note NE's advice to reduce impacts to interest features and protected species.
- 3.1.58 (2.2.2) The MMO wish to advise that if this advice was received under a standard marine licence application, condition(s) would be added to ensure the agreed mitigation measures are implemented in full. To this end, the MMO would welcome engagement with NE and the Applicant should they wish to discuss the inclusion of conditions within the DML, or any other matters within the remit of the MMO.



3.1.59 Such a condition is not required as the appropriate mitigation measures and monitoring measures, including protected species licensing requirements, are included in the Outline 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). As noted in Natural England's written representation (REP1-013), the mitigation measures within the Outline CoCP with respect to aquatic ecology are considered appropriate.

Key Issue

- (2.3) Royal Yachting Association (RYA), Great Yarmouth Port Authority (GYPA) and Great Yarmouth Port Company (GYPC)
- 3.1.60 (2.3.1) The MMO notes requests for inclusion of layby berths for vessels and waiting pontoons for smaller vessels.
- 3.1.61 (2.3.2) The MMO wish to advise that any changes to the scope of the development would need to be included in the DML and may require the inclusion of additional conditions within the DML. Once these requests have been addressed, the MMO would welcome engagement with the Applicant and, if necessary, the relevant IPs, to discuss the inclusion of conditions within the DML, or any other matters within the remit of the MMO.

Applicant's Response

- 3.1.62 Further to the vessel simulations undertaken, and discussions with GYPC and GYPA, the Applicant does not consider a large vessel waiting facility is necessary.
- 3.1.63 Furthermore, 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 vessel waiting facilities on the east bank is not practical considering the commercial nature of the quays present. The Applicant therefore does not consider that any changes or additional conditions would need to be included in the Deemed Marine Licence.

Key Issue

(2.4) RYA, GYPA, GYPC, Great Yarmouth Port Users Association, Ashtons Legal on behalf of Perenco UK Ltd, Mills & Reeve LLP on behalf of ASCO UK LIMITED, Alicat Workboats Ltd and Richards Dry Dock and Eng Ltd, Goodchild Marine Services Limited



- 3.1.64 (2.4.1) The MMO notes concerns regarding river access north of the proposed development, as well as impacts on existing commercial entities, both during the construction and operation phases and that some IPs have requested Protective Provisions to safeguard their business. The MMO also note suggestions that the control tower for the new bridge should also operate existing bridges across the River Yare to enable them to open in succession and allow vessels to travel along the river efficiently.
- 3.1.65 (2.4.2) The MMO encourage the Applicant to work with these IPs to resolve these concerns. The operation and maintenance regime would not be conditioned on the DML as it is not within the remit on the MMO. The MMO also wish to highlight that the proposed development is within the East Inshore Marine Plan area. Relevant policies should be considered by both the applicant and ExA, particularly Ports and Shipping Policy PS3.

- 3.1.66 The Applicant will work with Great Yarmouth Port Authority, 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. With regards to the control tower, safe operations of all three 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 continue their discussions with the relevant organisations to ensure that all concerns in respect of access and the location of the control tower are resolved.
- 3.1.67 The Applicant has considered the East Inshore and East Offshore Marine Plan, inclusive of the relevant policies, throughout the development of the Scheme. An assessment of the Scheme against the East Inshore and East Offshore Marine Plan is presented in paragraphs 7.7.16 to 7.7.80 of the Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188).

Key Issue

2.5. Environment Agency (EA) and RYA

3.1.68 (2.5.1) The MMO note the EA's and RYA's concerns regarding flood risk as a result of the proposed development. The EA also noted concerns regarding sediment transport. In the MMO's relevant representation, dated 1 August 2019, paragraph 8.3.7 it states '...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...' The MMO encourage the applicant to undertake further assessment of the environmental impacts resulting from the proposed development to address these concerns.
- 3.1.69 (2.5.2) The EA also noted other areas requiring further consideration, including code of construction practice and ecology and biodiversity enhancements.
- 3.1.70 (2.5.3) The MMO wish to advise that if this advice was received under a standard marine licence application, condition(s) would be added to ensure the agreed measures are implemented in full. To this end, the MMO would welcome engagement with the EA and the Applicant should they wish to discuss the inclusion of conditions within the DML, or any other matters within the remit of the MMO.

- 3.1.71 Further to the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) discussions on the Flood Risk Assessment, Environmental Statement Appendix 12B (Document Reference 6.2, Planning Inspectorate Reference APP-135) and the Sediment Transport Assessment, Environmental Statement Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130) have continued with the EA.
- 3.1.72 The Applicant considers the information presented in the Flood Risk Assessment and the Sediment Transport Assessment is sufficient and that further modelling would not change the outcomes. Separately the Applicant is undertaking further sensitivity modelling relating to flood risk to address the concerns raised by the Environment Agency, however, this is not expected to change the information presented in the Flood Risk Assessment or its conclusions.
- 3.1.73 A summary of the engagement to date is presented in the signed Statement of Common Ground with the Environment Agency submitted at Deadline 1 of the Examination (Document Reference NCC/GYTRC/EX/010, Planning Inspectorate Reference REP1-004). The Applicant continues to engage with the EA on such matters.
- 3.1.74 The Applicant has provided a response to each of the EA's comments as part of the Applicant's response to the Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002). The MMO's comments on these matters are considered in the same document and above.
- 3.1.75 The Applicant does not consider that additional conditions would need to be included in the Deemed Marine Licence to address the EA's comments.



4 Natural England (REP1-013)

4.1 Key Issues and Applicant's Responses

Key Issue

- 4.1.1 Based on the plans submitted Natural England considers that the proposed development will not have significant adverse impacts on:
 - Southern North Sea SAC;
 - Outer Thames Estuary SPA;
 - Breydon Water Ramsar;
 - Breydon Water SPA;
 - Breydon Water SSSI;
 - Great Yarmouth and North Denes SPA;
 - Great Yarmouth and North Denes SSSI;
 - The Broads SAC:
 - Broadland SAC:
 - Broadland Ramsar.

Applicant's Response

4.1.2 As reported in the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096) and the Habitats Regulations Assessment (HRA) (Document Reference 6.11, Planning Inspectorate Reference APP-182), this conclusion is agreed by the Applicant.

Key Issue

- 4.1.3 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.

Applicant's Response

4.1.4 Noted. Further to the Applicant's response to the Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002), consultation with Natural England is ongoing



regarding protected species (water voles), including the submission of a draft method statement devised to avoid any offence under the Wildlife and Countryside Act 1981 (as amended) with the aim of securing a Letter of No Impediment from Natural England.

4.1.5 Relevant mitigation that will affect construction methodologies and ensure that there are no adverse effects on designated sites is set out in the Outline Code of Construction Practice (Outline CoCP) (Document Reference 6.16, Planning Inspectorates Reference APP-187), compliance with which is secured pursuant to Requirement 5 of the draft DCO.

Key Issue

Further advice on mitigation

- 4.1.6 The development footprint is within close proximity to the aforementioned designed sites and to reduce impacts to interest features and protected species we advise the following actions are carried out.
- 4.1.7 We advise that mitigation measures as described in the Outline CoCP are implemented to limit disturbance and pollution impacts to designated sites and features of interest.

Applicant's Response

4.1.8 Noted. Further to the Applicant's response to the Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002), requirement 5 of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) will ensure the relevant part of the authorised development cannot begin until the full CoCP, in respect of that part, has been prepared and approved. Each part of the full CoCP must be prepared in accordance with the relevant part of the Outline CoCP.

Key Issue

Harbour Porpoise

4.1.9 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.

Applicant's Response

4.1.10 Noted. Although the presence of Harbour Porpoise in close proximity to the Scheme is considered very unlikely, as noted in the Applicant's response to



the Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) includes a commitment to follow Join Nature Conservation Committee's (JNCC) guidance document (2010) with regard to minimising the risk to marine mammals from construction activity.

Key Issue

Breeding Birds

- 4.1.11 Any vegetation clearance should avoid the breeding bird season and be checked prior to removal to avoid destruction of active bird nests.
- 4.1.12 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.

Applicant's Response

4.1.13 Proposals with regards to breeding birds that are in line with Natural England's comments are captured in the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) in paragraph 5.3.8.

Key Issue

Water Voles

4.1.14 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).

Applicant's Response

4.1.15 Noted. Further to the Applicant's response to the Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002), consultation with Natural England is ongoing regarding protected species (water voles), including the submission of a draft method statement designed to avoid any offence under the Wildlife and Countryside Act 1981 (as amended) with the aim of securing a Letter of No Impediment from Natural England.

Key Issue

Bats

4.1.16 Emergence and re-entry surveys should be undertaken as explained in section 6.2 in the Protected Species Survey Report.



- 4.1.17 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).
- 4.1.18 Sensitive onsite light management should be implemented to limit disturbance to bats as specified in section 5.3.7 of the Environmental Statement.

4.1.19 Noted. These requirements are captured in the Outline CoCP (Document Reference 6.16, Planning Inspectorate Reference APP-187) in paragraphs 5.3.5 - 5.3.7.

Key Issue

Fish

4.1.20 Any translocation of fish should be carried out by suitably qualified ecologists/scientists using evidenced and accepted methods. Where this involves changes in water level the Environment Agency should be consulted in advance.

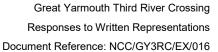
Applicant's Response

4.1.21 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. 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 development will begin until the full CoCP for that part of the authorised development, which must be written in accordance with the Outline CoCP and will contain the detail of the mitigation measures that are required, has been prepared in consultation with the Environment Agency.

Key Issue

Noise disturbance

4.1.22 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 Tames 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).





4.1.23 Natural England's response is welcomed with regards to noise disturbance at designated sites.



5 Anglian Water Services Limited (REP1-014)

5.1 Key Issues and Applicant's Responses

Key Issue

Existing Assets Affected

- 5.1.1 (2.1) There are sewers and associated infrastructure in Anglian Water's ownership located within the boundary of the site. These assets are critical to enable us to carry out Anglian Water's duty as sewerage undertaker.
- 5.1.2 (2.2) In relation to the sewers within the boundary of the Development Control Order, having laid the asset under statutory notice, Anglian Water would require the standard protected easement widths for these assets and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991 and the Protective Provisions sought by Anglian Water (outlined in section 3). Set out below is the standard easement width requirements;
- 5.1.3 (2.3) Standard protected strips are the strip of land falling the following distances to either side of the medial line of any relevant pipe;
 - 2.25 metres where the diameter of the pipe is less than 150 millimetres.
 - 3 metres where the diameter of the Pipe is between 150 and 450 millimetres,
 - 4.5 metres where the diameter of the Pipe is between 450 and 750 millimetres.
 - 6 metres where the diameter of the Pipe exceeds 750 millimetres.
- 5.1.4 (2.4) If it is not possible to avoid any of Anglian Water's sewers, then the sewer may need to be diverted in accordance with Section 185 of the Water Industry Act 1991. Anglian Water is, pursuant to Section 185 under a duty to divert sewers if requested to do so unless it is unreasonable to do so. A formal application will need to be made to Anglian Water for a diversion to be considered. Diversionary works will be at the expense of the Applicant.

Connections to the Foul and Surface Water Sewerage Networks

5.1.5 (2.5) Anglian Water is not aware of any foul connection(s) requirements made upon them for the development.



5.1.6 (2.6) Should a wastewater service be required and once agreement has been reached, there are a number of applications required to deliver the necessary infrastructure. These are outlined below;

Provision of Infrastructure

Onsite Foul water Section - 104 Water Industry Act 1991 Offsite Foul water Section - 104 Water Industry Act 1991

5.1.7 (2.7) Anglian Water 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 Reference 6.2, Planning Inspectorate Reference APP-136). Anglian Water 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 demonstrate that the applicant has followed the surface water hierarchy as specified in Part H of Building Regulations and further details of the flow control mechanisms to confirm the discharge rate which is assumed.

Draft Development Consent Order

- 5.1.8 (3.1) Anglian Water has had constructive dialogue with the Applicant regarding the wording of protective provisions specifically for the benefit of Anglian Water to be included in the Draft Development Consent Order (DCO). The DCO as currently drafted incudes protective provisions specifically for the benefit of Anglian Water (Schedule 14, Part 4) as previously requested.
- 5.1.9 (3.2) A surface water connection to a combined sewer which forms part of the public sewerage network is expected to be required for the eastern part of the development. The expectation is that a surface water strategy will be submitted for approval to Norfolk County Council as County Planning Authority following consultation with a number of bodies including the Great Yarmouth Borough Council and the IDB. However Anglian Water does not appear in the list of bodies to be consulted on the surface water strategy.
- 5.1.10 (3.3) Therefore Anglian Water would ask that the following amendment is made to the wording of the DCO:

Surface Water Drainage

5.1.11 10.—(1) No part of the authorised development which comprises any part of a surface water drainage 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



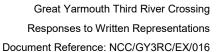
- authority, Anglian Water Services Ltd and the IDB, approved in writing by the county planning authority.
- 5.1.12 (2) The surface water drainage system submitted for approval by the county planning authority under sub-paragraph (1) must be in accordance with the drainage strategy and include a timetable for implementation.
- 5.1.13 (3) The surface water drainage system must be constructed in accordance with the system approved under sub-paragraph (1).
- 5.1.14 (3.4) Subject to this amendment being made Anglian Water are supportive of the wording of the Draft DCO.

- 5.1.15 As noted in the SoCG submitted at Deadline 1 (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004) the Protective Provisions for the benefit of Anglian Water are agreed between the Parties and positive discussions are taking place with them on an ongoing basis.
- 5.1.16 In respect of Anglian Water's comment at paragraph 2.7 of its Written Representation, as previously advised by Anglian Water, details of the flow control mechanisms, discharge rate and evidence of the discharge hierarchy will be provided during the formal connection/discharge application. The discharge hierarchy was considered in the development of the drainage design as shown and explained in the Drainage Strategy, as is referenced within the ES Appendix 12B Drainage Strategy (Document Reference 6.2, Planning Inspectorate Reference APP-136) at paragraphs 2.3.15 and 2.4.13 but further detail will be included within the application for consent to discharge pursuant to article 20 and Anglian Water's protective provisions within the draft DCO. This application will be submitted once the Contractor has produced the detailed design.
- 5.1.17 In respect of Anglian Water's proposed amendment to Requirement 10, the Applicant can confirm that it has made this change in the draft DCO submitted at Deadline 2.

Key Issue

Acquisition of Land in Anglian Water's Ownership

5.1.18 (4.1) Anglian Water note that it proposed to permanently acquire land in which Anglian Water's has had an interest in which appears to relate to subsoil associated with the public highway as identified on the submitted land plan (Document Reference 2.5, Planning Inspectorate Reference APP-010).





5.1.19 (4.2) To date Anglian Water has not had specific discussions about the implications of permanent possession of land in which Anglian Water has an interest as set out above. Anglian Water would wish to understand what is intended to ensure that Anglian Water can continue to serve our customers both during and after construction.

Applicant's Response

- 5.1.20 The land identified for permanent acquisition comprises an interest (by application of the ad medium filum presumption) in subsoil up to the half width of existing public highway which will remain public highway if the DCO is granted and the powers to acquire land are exercised.
- 5.1.21 Part 3 of Schedule 14 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) contains protective provisions for Anglian Water which will ensure that they will be able to continue to serve their customers both during and after construction.



6 Ashtons Legal on behalf of Perenco UK Limited (REP1-015)

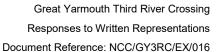
6.1 Key Issues and Applicant's Responses

Key Issue

- 6.1.1 Our Client has been actively working towards a solution acceptable to all related parties. Our Client has been in discussions with Norfolk County Council, ASCO, Great Yarmouth Borough Council and Great Yarmouth Port Company for a number of months.
- 6.1.2 A Statement of Common Ground with Norfolk County Council had been prepared but on the basis that the Norfolk County Council, ASCO, Great Yarmouth Borough Council, Great Yarmouth Port Company and our Client would have entered into an infrastructure agreement whereby appropriate mitigation arrangements would have been put in place for Perenco's partial relocation (next to its existing site) and that these would have enabled Perenco to stay in Great Yarmouth.
- 6.1.3 Since the agreement has not now been put in place, our Client has been put into some difficulty and the proposed Statement of Common Ground cannot be submitted.
- 6.1.4 Our Client continues to discuss the position with the Council to remedy the situation and enable our Client to remain in Great Yarmouth in the event that the Application is successful.
- 6.1.5 Our Client is reviewing their position and will seek to agree a revised Statement of Common Ground with the Council. However without any Agreement or agreed form Statement of Common Ground, our Client's position as detailed in their previous representations remains.

Applicant's Response

- 6.1.6 The Applicant has had regard to Perenco's Written Representation (Planning Inspectorate Reference REP1-015).
- 6.1.7 Detailed discussions have been ongoing between Perenco UK Limited ('Perenco'), ASCO UK Limited ('ASCO') and the Applicant since November 2017, with the Applicant's aim being to understand Perenco's (and ASCO's) respective and interdependent operational requirements and to explore all possible options to mitigate the potential impacts of the Scheme on both businesses. Since early September 2019, these discussions have intensified significantly.





- 6.1.8 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 before the end of the Examination, so that Perenco continues to be located within Great Yarmouth and Perenco's operations will not be interrupted as a result of the Scheme.
- 6.1.9 The Applicant hopes that ongoing discussions will facilitate the submission of an agreed Statement of Common Ground at a future examination deadline.



7 Benvenuto Falat on behalf of Royal Yachting Association (REP1-017)

7.1 Key Issues and Applicant's Responses

Key Issue

Weir-Effect

- 7.1.1 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 affected yet for Upper Reaches of the Broads (issue discussed with and registered by Environment Agency).
- 7.1.2 The RYA references that the EA states (TR010023 EA representation) that:
 - (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.
 - (1.8) Due to the issues outlined our position is to register a holding objection on the basis of insufficient information.
 - (1.9) We expect to continue to discuss this issue with the applicant to resolve the concerns that we have raised and welcome further engagement.
 - (1.10) Once the issues related to the hydraulic model are resolved we will be pleased to review a revised Flood Risk Assessment.



7.1.3 RYA awaits outcome of the EA revised Flood Risk Assessment. It may be that, should a revised Flood Risk Assessment alter the basic premise upon which other Interested Parties have made consequent statements, that various of these statements will alter and indeed draw-in new unregistered parties for making Representations.

Applicant's Response

- 7.1.4 Issue numbers ENV19 and MP9 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) considers these matters which are therefore not repeated here.
- 7.1.5 Discussion with the Environment Agency ('EA') around the adequacy of flood modelling are on-going and the outcomes of these discussions will be submitted to the ExA in due course.
- 7.1.6 The signed Statement of Common Ground (SoCG) for the EA (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004), submitted at Deadline 1, summarises the discussions undertaken to date with the EA. Discussions continue with the EA. To address queries and concerns raised by the EA, the Applicant has undertaken further sensitivity modelling which was submitted to the EA on the 21st and 22nd of October 2019.

Key Issue

Waiting Pontoons

- 7.1.7 [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.
- 7.1.8 [TR010043-000372 DCO Document 2.2 General Arrangement Plans Sheet 1-of-7] Applicant has shown the intended new Vessel Waiting Facilities at two quadrants of the new bridge; it has been indicated that these are in effect the "waiting pontoons". RYA has stated that these should not be potentially inappropriate large vessel fenderings.



- 7.1.9 Waiting pontoons for small-boats are welcomed; however there has been muddying between "Waiting Pontoons for small boats" and "Waiting Berths for large ships". To expect small boats to moor and wait adjacent to the new bridge, on the outside of a bend at times when large vessel movements might be expected is at very least foolhardy, if not wholly dangerous. Any boat placed alongside at these two positions partially covers the impact-protection-zone along the piers and places the boat at risk of being crushed should the ship veer off-course.
- 7.1.10 Waiting Pontoons for small-boats must be placed ...
 - (i) safely away from the risk-zone of the bridge passage channel and;
 - (ii) out-of-line of an ambient steering-direction.

Applicant's Response

- 7.1.11 Issue number MP10 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) and issue number 3 of the Applicant's written summary of oral submissions made at the Open Floor Hearing (Document Reference NCC/GY3RC/EX/009, Planning Inspectorate Reference REP1-003) cover this topic.
- 7.1.12 The commercial nature of the quays on the east bank makes location of a vessel waiting facility on this side of the river impracticable. The risks associated with collisions during large vessel passages is considered within the preliminary Navigation Risk Assessment ('pRNA') (Document Reference 6.14, Planning Inspectorate Reference APP-185) and additional operational measures are considered to reduce these risks, in particular that any vessels on the pontoons would be released through the bridge prior to a large vessel transit.

Key Issue

Opening Regimes & Control

7.1.13 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 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. This is not addressed by the Applicant and is considered an operational matter for consideration down-line. RYA believes that this is an important consideration to be addressed at this stage such that there is a binding requirement on the harbour/river operation.



- 7.1.14 Operating Regimes should have attendant carefully managed opening routines for all three bridges (New, Haven and Breydon) in succession.
 - The need for waiting at set pontoons should be minimised (though this recognised as wholly necessary for some), since each coming alongside manoeuvre is a time of increased personal risk;
 - It has to be recognised pragmatically that it cannot be anticipated that all small-boat users have access to onboard operable marine VHF radios, therefore systems of communication need to be versatile.
 - Nil requirement for dismasting's
 - It is perceived that a new meritorious opportunity arises with the New Bridge in potentially providing an effective Control point for transits.
 - Yachts should not be required to de-mast for many reasons, not least that
 - (i) incoming visitors may be unable and
 - (ii) a de-masted yacht carrying significant overhangs brings with it additional dangers to navigation and to crew.
- 7.1.15 Important Operational consideration to be addressed at this stage;
 - Minimise need for repeated coming alongsides/departures;
 - Versatile systems (VHF radio; Traffic lights; Electronic Visual Signs);
 - Single control point for efficacious through-transfers;
 - Nil requirement for dismastings.

- 7.1.16 Issue numbers MP11 and MP12 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) and issue number 3 of the Applicant's written summary of oral submissions made at the Open Floor Hearing (Document Reference NCC/GY3RC/EX/009, Planning Inspectorate Reference REP1-003) address these issues.
- 7.1.17 The Scheme of Operation set out in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) is intended to allow for publication of recreational opening times, when a vessel will be permitted an opening without the need to make use of the vessel waiting facilities. Paragraph 7 of Part 2 of Schedule 10 to the draft DCO sets out the procedure for bridge openings for recreational vessels.



- 7.1.18 The control tower will be provided with multiple methods for communication with vessels and the bridge will have standard marine traffic control signals and aids to navigation.
- 7.1.19 The Applicant will work with Great Yarmouth Port Company (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.
- 7.1.20 There are no requirements for vessels to de-mast to obtain a bridge transit.

Key Issue

Air-Draught

7.1.21 The reduced proposed height of the new bridge impacts on all of the above; the trade-off from previous ~12.5m clearance could have seen substantial mitigation in all of these effects.

Applicant's Response

7.1.22 Issue number MP13 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) fully explains the Applicant's position on this matter.



8 Burness Paull on behalf of ASCO UK Limited (REP1-018)

8.1 Key Issue and Applicant's Response

Key Issue

- 8.1.1 The text below is the Executive Summary as set out in section 2 of ASCO's Written Representation (Planning Inspectorate Reference REP1-018).
- 8.1.2 (2.1) For the reasons set out below, ASCO objects both to the principle and details of the DCO.
- 8.1.3 (2.2) ASCO is a major service company operating in the oil and gas sector from Fish Wharf in Great Yarmouth. Its operations are complex, highly regulated and sensitive to disruption and interference. It is a major employer in the area and is key to the local oil and gas service industry.
- 8.1.4 (2.3) ASCO's operations, landholdings and use of adjoining river berths will be adversely affected by the DCO. ASCO employs approximately 120 people directly at its Great Yarmouth business. ASCO conservatively estimates that a further 120 jobs are directly dependent upon its Great Yarmouth business including local transport companies, pilots, fuel tankers, crane companies, water companies, drilling mud companies, cement companies, and various other trade suppliers.
- 8.1.5 (2.4) The DCO is significantly lacking in relation to appropriate safeguards, protective provisions and mitigation measures in relation to ASCO's landholdings, operations and use of adjoining river berths.
- 8.1.6 (2.5) There has also been inadequate consideration by NCC of alternatives means for achieving the purpose of the DCO which would minimise the disruption to ASCO/Perenco's business. In this regard, the proposed footprint of the bridge cuts directly across the Perenco working yard (which is partially leased from ASCO). If the bridge could be landed on the eastern short some 40 meters to the north of its proposed landing point then this would significantly mitigate the adverse effects on ASCO/Perenco's business.
- 8.1.7 (2.6) In addition, the Application fails to properly understand and/or assess and/or mitigate the impact of the proposed development on ASCO and consequently, the oil and gas industry and local economy of Great Yarmouth as a whole, both on a temporary basis during the construction of the scheme and permanently following its operation.



8.1.8 (2.7) ASCO considers that the Application should not be granted unless appropriate safeguards, protective provisions and mitigation measures are fully incorporated into the Proposed Order to safeguard ASCO's business and that of its customers.

- 8.1.9 The Applicant has had regard to ASCO's Written Representation (Planning Inspectorate Reference REP1-018). Where the points raised by ASCO in its Written Representation reiterate those made in its Relevant Representation, the Applicant's response is as set out at issue numbers AS1 and AS7 in its Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002).
- 8.1.10 The Applicant notes the substantive points made in section 5 and sections 7 to 9 of ASCO's Written Representation, which set out, respectively, the interdependency of ASCO's working relationship with Perenco (section 5), ASCO's grounds of objection to the Scheme and the related DCO application (section 7), an explanation of ASCO's perception of the potential impacts of the Scheme on its business operations (section 8) and reference to its ongoing negotiations with the Applicant (section 9).
- 8.1.11 Given that discussions are currently ongoing between ASCO and the Applicant (and Perenco), and given the sensitive nature of the matters under discussion, the Applicant's written response to ASCO's Written Representation simply confirms that:
 - Detailed discussions have been ongoing between ASCO, Perenco and the Applicant since November 2017, with the Applicant's aim being to understand ASCO's and Perenco's respective and interdependent operational requirements and to explore all possible options to mitigate the potential impacts of the Scheme on both businesses. Since early September 2019, these discussions have intensified significantly.
 - The Applicant is working with both ASCO and Perenco to address operational concerns raised. This work is still ongoing with the aim of finding the right solution before the end of the DCO Examination, so that Perenco continues to be located within Great Yarmouth and Perenco's operations will not be interrupted as a result of the Scheme.
 - The Applicant hopes that a SoCG can be produced with ASCO so that this can be submitted at a future examination deadline.



9 Goodchild Marine (REP1-019)

9.1 Key Issues and Applicant's Responses

Key Issue

9.1.1 Goodchild Marine confirmed that they are not opposed to the Third River crossing if the infrastructure for the Lifting/Closing/Maintenance of the bridge is co-ordinated with the other two bridges which are currently in existence.

Applicant's Response

9.1.2 The Applicant notes Goodchild Marine's comment that it does not oppose the Third River Crossing Scheme if its lifting is co-ordinated with Breydon Bridge and Haven Bridge. As noted in its response to Goodchild Marine's Relevant Representation (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate's Reference REP1-002), 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.

Key Issue

- 9.1.3 Below is an outline of the issues with the current lifting of bridges that causes us and the complete Broads Network problems when trying to gain access to the sea.
 - a. The reliability and the speed in which repairs are actioned when the Breydon Bridge and Haven Bridge fail in Great Yarmouth, causes the situation of access to sea untenable and has resulted in Goodchild Marine Services Limited, facing enormous financial losses.
 - b. Our difficulty arises when the bridges are out of action and we must get a boat out to sea for trials/delivery/Boat show we have to either arrange lorry transport or Mutford Lock transit if operable for our smaller vessels but to transit through Mutford Lock is a day's journey for 2 staff members.
 - c. Our larger vessels can neither go out by lorry or via Mutford Lock and at that point we are land locked.
 - d. We have just completed the UK's first Hybrid Pilot boat which was booked into the Seawork Boat Show in June at Southampton. This vessel is very much in the public eye given the technological advances, so when we were advised this bridge was yet again out of action we had to seek alternatives. The maximum height available for road transportation is 5.1m which by dismantling the roof mounted



equipment and engaging the services of a specialist boat transport company we managed to get permission to undertake the road delivery option. The costs of preparing this vessel for transport and the necessary permits amounts to £23,162.47 with many hours and pressures to get the boat to the show which was part of the commitment in the tender documents for the sale of this vessel.

- e. We had very similar difficulties with Bridges in 2018 in June prior to our Seawork Boat show, and again had massive costs in time and money to achieve getting two boats to Seawork Boat show in time for the commencement.
- f. These two issues are just a small indicator of the huge costs incurred throughout the last two years.
- g. The Haven Bridge was out of action last year for an undisclosed period awaiting reports on the electrical system, this period alone cost our company a refit which we had been awarded worth around £130k as the client was unable to get assurances from Peel Ports or the Council when the bridge would be operational again.
- h. This clearly is affecting our operation and the job security of our staff and in this case the previous client has declared they will not consider us in the future as the risk of becoming land-locked is too onerous on their operations.

- 9.1.4 The maintenance of Breydon Bridge is the responsibility of Highways England. Maintenance of Haven Bridge is the responsibility of Norfolk County Council as highway authority. The provision of a Third River Crossing will allow greater capacity and resilience on the local road network.
- 9.1.5 Information on the maintenance regime of Haven Bridge is provided in the Applicant's response in paragraphs 9.1.34 to 9.1.36 below. The completion of the Third River Crossing will enable more substantive maintenance works to the Haven Bridge.
- 9.1.6 As identified in response to Issue Number MP3 in the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) the Applicant has outlined a number of measures in the Scheme design specification that are intended to reduce the potential of a Third River Crossing failure impacting marine operations.



Key Issue

- 9.1.7 Goodchild Marine state the lack of co-operation between Breydon and Haven bridges has been challenging over the previous years, however, with lots of hard work we have now started to see a co-ordinated approach between the following parties and ourselves, having instigated meetings to get all parties to talk together:
 - Norfolk County Council Haven Bridge
 - Highways England Breydon Bridge
 - Peel Ports Great Yarmouth Contractor for control of both Bridges

Applicant's Response

9.1.8 As noted in its response to Goodchild Marine's Relevant Representation (Document Deference NCC/GY3RC/EX/008, Planning Inspectorate's Reference REP1-002), 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.

Key Issue

Bridge Lifting

- 9.1.9 Goodchild Marine see a definite need to have all 3 bridges controlled by 1 point of contact with various systems of booking ie.
 - Portal on line system Telephone
 - VHF which is currently manned at Liverpool needs to be manned in Great Yarmouth
- 9.1.10 The Dutch system of Bridges to be lifted on demand would also be a system to look at.

- 9.1.11 The management process for booking bridge openings could be undertaken remotely and could be coordinated so as to simplify the booking process as much as possible.
- 9.1.12 As noted in its response to Goodchild Marine's Relevant Representation (Document Deference NCC/GY3RC/EX/008, Planning Inspectorate's Reference REP1-002), 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.



9.1.13 Along with Very High Frequency ('VHF') equipment, facilities for E-mail, web and telephone communications are also to be provided within the control tower. Due to the need for visual safety assessment during bridge operations it is not considered optimal to control bridge operations from remote locations, therefore each bridge will retain its own operating procedure and point of control location.

Key Issue

Siltation and Dredging Requirement

9.1.14 With the change of flow as a result of the main river narrowing this will inevitably change the tidal flow and will cause siltation to be of different quantities as is common now. If the Bridge changes this to such a point that the MMO licence we hold is insufficient to dispose of increased volumes we would seek support in gaining approval from the MMO for such increases, naturally this would increase our costs too. Having this assurance before the new bridge is constructed is critical to our operation.

Applicant's Response

9.1.15 A sediment transport assessment has been undertaken and is included within the ES Appendix 11C (Document Reference 6.2, Planning Inspectorate Reference APP-130) this indicates that there will be no significant effect on either flow or sediment movements north of the Haven Bridge, therefore we do not believe that any changes to existing dredging regimes in this location will be required.

Key Issue

Information to Vessels and Road Users

- 9.1.16 There needs to be LED type notices either side of each bridge to show the air draft so that vessels can assess if they can transit without the bridge lifting. This will need to include all three bridges as the river traffic will be joining at various points with so many bridges within the navigation.
- 9.1.17 The road traffic can be very well managed if the notices on all the Highways on entering the District with an LED sign show what time on the screen each of the three bridges will open during the day and traffic can divert to another route. (ie. as per car parks telling you how many spaces available a long way ahead of you approaching the car park)

Applicant's Response

9.1.18 Fixed air draft boards will be included on the Scheme bridge and are a specified requirement of the pNRA (Document Reference 6.14, Planning



Inspectorate Reference APP-185). Navigational aids at Haven and Breydon Bridges are beyond the remit of the Scheme.

9.1.19 Variable Message Signage ('VMS') signage is included within the Scheme to inform road users about bridge openings.

Key Issue

Mast Lowering

9.1.20 For inbound vessel wishing to transit the River Bure it would be necessary to have suitable pontoon berths between the new proposed bridge and the existing Haven bridge to facilitate lowering of masts given the River Bure has two fixed low bridges, currently there are no safe moorings to allow for this if the single pontoon between the Haven and Breydon Bridge is occupied.

Applicant's Response

9.1.21 The Scheme has no requirements for vessels to demast to obtain passage, therefore provisions required for other purposes are not considered as part of this Scheme.

Key Issue

Demise of Lowestoft

9.1.22 To further support our concerns on ensuring all bridges adopt efficient and reliable operations for navigation, evidence suggests that businesses upstream of the Lowestoft Bascule bridge have declined having a river crossing. However, this bridge does operate much more sympathetically to river users but the fact remains that businesses having a need to have reliable and easy access to the open sea have moved out. Some of these businesses have moved away from the area or had support to relocate in the old fish docks areas. Plans are well advanced for another river crossing in Lowestoft and from dealings with marine related businesses in the area grave concerns exist on likely impacts this further bridge may bring. I appreciate your examination is not focussed on Lowestoft, but in my view, it would be foolish to not study impacts this bridge has had on marine based businesses upstream which is a fear we have if bridges in Great Yarmouth do not adopt reliable and frequent openings.

Applicant's Response

9.1.23 The existing bascule bridge in Lowestoft which is owned by Highways England and forms part of the Strategic Road Network (A47) has three restricted time periods (am and pm peaks, and lunch time peak) to reduce the impact of bridge openings at peak periods on the highway network.



- 9.1.24 The Applicant's observations suggest that vessels supporting the off-shore energy industry, such as Crew Transfer Vessel's ('CTV'), are generally located within the old fish dock areas in Lowestoft, where the quays are better suited to the smaller type of vessels used, with the quays on the inner harbour being used for large commercial vessels.
- 9.1.25 In terms of businesses having a need for reliable and easy access from Lowestoft to the open sea, we are aware that Peterson UK, a major logistics and service provider to the offshore energy industry, has recently made arrangements to establish a new operational and logistics base in Lowestoft, in-land of the existing bascule bridge, as reported in the East Anglian Daily Times (https://www.eadt.co.uk/business/new-long-term-deal-in-growing-energy-support-sector-in-suffolk-port-1-5842428).
- 9.1.26 The proposed third crossing in Lowestoft has been the subject of a recent DCO Examination and the application has yet to be determined; however, documentation relating to the project is available on the Planning Inspectorate's website (https://infrastructure.planninginspectorate.gov.uk/projects/eastern/lakelothing-third-crossing/).

Key Issue

Mutford Lock Exit to Sea via Lowestoft

9.1.27 There has been considerable talk over recent years that Mutford lock may become permanently closed due to increased maintenance costs and no financial support locally. Should this happen it is very clear the three bridges will be the only route for vessels wishing to transit between the Broads network and the open sea. It is therefore paramount these issues be addressed before introducing yet another obstacle to the navigation.

Applicant's Response

9.1.28 In response to the Applicant's enquiry, the Broads Authority has confirmed that there is currently no intention to close Mutford Lock.

Key Issue

Pontoons Close to the Bridge

9.1.29 It is welcomed to see on the drawings that waiting pontoons are being introduced adjacent to the new bridge foundation. However, having these so close to the bridge and on the outside of a natural bend in the river is inviting a disaster. Any large vessels that are transiting the open bridge are likely to drift outboard on a bend (simply nature of steering vessel when underway). Having these on the outside of a bend I would suggest is not the best solution and is inviting damage or worst sinking of any small craft moored



there. If they must remain close to the bridge it would make much more sense to have these on the opposite side (inside of the rivers bend) which is much better protected should a vessel get things wrong. The stern of a vessel negotiating such a bend is extremely unlikely to drift into the bend.

Applicant's Response

- 9.1.30 As explained in the Applicant's response to issue number MP2, in the Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate's reference REP1-002) and in the Applicant's Responses to Examining Authority's First Written Questions ('ExQ') 1 1.0.5 (Document Reference NCC/GY3RC/EX/022), the optimum location for the small vessel waiting facilities is on the west bank of the River.
- 9.1.31 As explained in the response of ExQ1 1.0.5 (Document Reference NCC/GY3RC/EX/022), from the Vessel Simulations and through the subsequent NRA process (as reported in the application pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) it has not been shown that waiting pontoons on the east bank would be safer than on the west bank. During the vessel simulations more vessel passages occurred favouring the inside of the bend (i.e the east side) rather than the outside (i.e the west side), therefore it follows that pontoons on the east bank would put any occupant closer to passing vessels than pontoons on the west side would. Additional operational mitigations have been recommended in the update to the pNRA being submitted at Deadline 2 (Document Reference NCC/GY3RC/EX/029) which would require any vessels on the waiting pontoons to undertake their transit in advance of a large vessel passage.
- 9.1.32 The provision of pontoons on the east bank would create a significantly greater impact on existing port operations when compared to the west bank. Bollard Quay on the west bank has limited available quay margin (usable land behind the quay) for commercial operations and has not been in commercial operation for three years whereas Atlas Quay on the east bank is one of the main general cargo quays handling on average five vessels per month to the location of the vessel waiting facilities.

Key Issue

Haven Bridge Maintenance

9.1.33 The age of this bridge and the lack of maintenance that has been carried out has caused an inordinate number of breakdowns. The statement in the meeting that they would repair this when the Third Bridge is installed is to say but the least crazy, what will happen if the new bridge does not materialise?



Applicant's Response

- 9.1.34 Peel Ports carry out routine maintenance/servicing of Haven Bridge on behalf of Norfolk County Council in its capacity as local Highway Authority, and at NCC's cost, under an agreement. Routine maintenance is ongoing throughout the year.
- 9.1.35 In addition, once per year there is a planned closure of Haven Bridge to marine vessels, pedestrians and road vehicles overnight to allow more substantial maintenance. This year's closure is planned from 19:00 on 23 October to 05:00 on 24 October 2019.
- 9.1.36 Any major works would not be programmed until after the Third River Crossing is completed. If major works were programmed without the Third River Crossing there would be significant disruption over extended periods to both road and river traffic.

Key Issue

Navigational Access

9.1.37 The Navigation is always treated as 2nd Hand citizen to the Highways, but the river and sea brings in a lot of the local industry and employs a lot of local people whom depend upon efficient vessel movements. The 3'd crossing relating to the other two bridges needs to have a full and complete maintenance and operational systems (with spares being held) in place.

- 9.1.38 The Scheme of Operation contained in the draft DCO (Document Reference 3.1, Planning Inspectorate APP-020) specifies on demand openings for all commercial vessel movements acknowledging the primacy of navigation over the highway.
- 9.1.39 As identified in its response to Issue Number MP3 in its Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) the Applicant has outlined number of measures in the Scheme design specification that are intended to reduce the potential impacts of a bridge failure on marine operations.
- 9.1.40 As noted above in paragraphs 9.1.34 to 9.1.36, the Scheme will provide better opportunities for more substantial and longer term maintenance of Haven Bridge.



Key Issue

Yard Visit

9.1.41 We would like to invite you on a visit to our yard and we could then take you through the bridges on a vessel to show you the complexity of what we must deal with on a regular basis.

Applicant's Response

9.1.42 An Accompanied Site Inspection ('ASI') has been scheduled to take place on 19 November 2019; an itinerary for the ASI will be published on the Planning Inspectorate's website no later than a week in advance of the date of the ASI.

Key Issue

SoCG

9.1.43 Do you think there is a need to engage in a SoCG with the Applicant?

Applicant's Response

9.1.44 The Applicant can confirm that it is happy to develop a SoCG with Goodchild Marine and commence the development of this document with a view to its submission at Deadline 3.



10 Gowling WLG (UK) LLP on behalf of Cadent Gas Limited (REP1-020)

10.1 Key Issues and Applicant's Responses

Key Issue

- 10.1.1 Cadent Gas Limited ("Cadent") is a licensed gas transporter under the Gas Act 1986, with a statutory responsibility to operate and maintain the gas distribution networks in North London, Central and North West England. Cadent's primary duties are to operate, maintain and develop its networks in an economic, efficient and coordinated way.
- 10.1.2 Cadent have made a relevant representation in this matter on 2 August 2019 in order to protect apparatus owned by Cadent. Cadent does not object in principle to the development proposed by the Promoter.
- 10.1.3 Cadent does, however, object to the Authorised Works being carried out in close proximity to their Apparatus in the area unless and until suitable protective provisions and related agreements have been secured to their satisfaction, to which see further at paragraph 4.
- 10.1.4 They also object to any compulsory acquisition powers for land or rights or other related powers to survey, temporary acquisition powers or to override easements or rights or the stopping up public or private rights of access being invoked which would affect their existing Apparatus, or right to access and maintain their existing Apparatus. This is unless and until suitable protective provisions and any necessary related amendments to the wording of the DCO have been agreed and included in the Order or otherwise addressed between the parties.
- 10.1.5 Cadent wish to ensure appropriate land rights are available for any diversion of their assets sitting outside the adopted highway boundary and will require consent to be granted where there are proposals to work within the easement strip of any existing Cadent's Apparatus, to which see further at paragraph 2.

Cadent Assets

10.1.6 Cadent has low, Medium and Intermediate Pressure Gas Pipelines, assets and associated equipment ("Apparatus") located within or in close proximity to the order limits which may be affected by works proposed and which may require diversions subject to the impact assessment.



10.1.7 Furthermore, compulsory purchase powers are sought in relation to land

as follows:

(a) the DCO provides for compulsory acquisition of Cadent's freehold interest in Plot 2-16. Plot 2-16 forms part of Cadent's gas depot:

owned by Cadent or in relation to land which Cadent has existing rights over

- (b) the DCO provides for compulsory acquisition of temporary rights over Cadent's freehold interest in Plot 2-15 which also forms part of the gas depot.;
- (c) the DCO provides for the acquisition of new rights (including the imposition of restrictive covenants) for the purpose of constructing, protecting, accessing and maintaining the improved William Adams Way over land which Cadent has existing access rights namely (Plots 2-11, 2-12, and 2-14). These plots are used for access from the adopted highway to the gas depot; and
- (d) the DCO provides compulsory acquisition of the freehold of Plot 2-09. This Plot is not owned by Cadent but Cadent has rights of access over this plot. This land forms part of the means of access from the adopted highway to Cadent's existing gas depot.
- 10.1.8 Cadent has agreed (subject to contract) to transfer to the promoter part of the gas depot site within plot 2-16. This is subject to:
 - (a) Cadent having unfettered 24/7 access to the retained land used as a gas depot. This includes during and after the construction phase of the road scheme;
 - (b) the Promoter not preventing or impeding Cadent's access at any times over the existing access route from the public highway to the gas depot unless alternative arrangements are agreed in advance with Cadent;
 - (c) Cadent being compensated for the land in the usual way;
 - (d) the Promoter covering legal and agent's fees reasonably incurred whether or not the transfer proceeds.
- 10.1.9 In relation to the other plots over which Cadent has rights of access Cadent needs to retain unfettered 24/7 access to enable it to access the gas depot from the public highway. 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. In respect of all Cadent infrastructure located within the DCO boundary, or in close proximity to the proposed project and associated works, Cadent require protective provisions to be put in place to ensure:
 - (a) that all Cadent interests and rights of access are unaffected by the power of compulsory acquisition, grant and extinguishment of rights, survey



- powers and temporary use powers and temporary or permanent stopping up unless and until diverted under the protective provisions; and
- (b) to ensure that appropriate protection for the retained apparatus is maintained during and after construction of the project. This includes compliance with all relevant standards on safety as set out in paragraph 3 below; and
- (c) to ensure that consent is obtained from Cadent where any work is proposed in the easement strip of Cadent, which doesn't necessitate its diversion.
- 10.1.10 It is essential that Protective Provisions on Cadent's standard terms are agreed and included in the Order to prevent the acquisition of any of their existing Apparatus other than by agreement and that works in close proximity to Cadent's apparatus and any diversion of its apparatus adhere to those protective provisions.
- 10.1.11 Cadent have sought to engage with the Promoter on its standard form of protective provisions and we await a response from the Promoter. Accordingly we reserve the right to raise issues on the drafting of the DCO should the promoter not proceed to put in place Cadent's standard form Protective Provisions in the DCO.

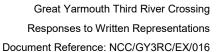
Regulatory Protection Framework

- 10.1.12 Cadent require all Promoters carrying out Authorised Development in the vicinity of their Apparatus to comply with:
 - (a) TSP/SSW/22 Safe Working in the vicinity of Cadent's High Pressure Gas Pipelines;
 - (b) ICE (institution of Gas Engineers) recommendations IGE/SR/18 Edition 2 Safe Working Practices to Ensure the Integrity of Gas Pipelines and Associated Installations, and
 - (c) the HSE's guidance document HS(G)47 Avoiding Danger from Underground Services.
- 10.1.13 The Industry standards referred to above have the specific intention of protecting:
 - (a) the integrity of the pipelines and thus the distribution of gas;
 - (b) the safety of the area surrounding gas pipelines;
 - (c) the safety of personnel involved in working with gas pipelines.
- 10.1.14 Cadent requires specific protective provisions in place for an appropriate level of control and assurance that the industry regulatory standards will be complied with in connection with works in the vicinity of Cadent's Apparatus.



Protective Provisions

- 10.1.15 Cadent seeks to protect its statutory undertaking, and insists that in respect of works in close proximity to their Apparatus as part of the authorised development the following procedures are complied with by the Applicant:
 - (a) Cadent has had the opportunity to review and consent to the plans, methodology and specification for works within 15 metres of any Apparatus, works which will adversely affect their Apparatus or otherwise breach distances/guidance set out in paragraph 3 above.
 - (b) DCO works in the vicinity of Cadent's apparatus are not authorised or commenced unless protective provisions are in place preventing compulsory acquisition of Cadent's land or rights or overriding or interference with the same.
- 10.1.16 Cadent maintain that without an agreement or qualification on the exercise of unfettered compulsory powers or its Apparatus the following consequences will arise:
 - (a) Failure to comply with industry safety standards, legal requirements and Health and Safety Executive standards create a health and safety risk.
 - (b) Any damage to Apparatus has potentially serious hazardous consequences for individuals/property located in the vicinity of the pipeline/apparatus if it were to fail.
 - (c) Potentially significant consequences arising from lack of continuity of supply;
- 10.1.17 Insufficient property rights have the following safety implications:
 - (a) Inability for qualified personnel to access apparatus for its maintenance, repair and inspection.
 - (b) Risk of strike to pipeline if development occurs within the easement zone in respect of which an easement/restrictive covenant is required to protect the pipeline from development.
 - (c) Risk of inappropriate development within the vicinity of the pipeline increasing the risk of the above.
- 10.1.18 The proposed Order does not yet contain fully agreed Protective Provisions expressed to be for the protection of Cadent to Cadent's satisfaction, making it currently deficient from Cadent's perspective nor does it address fully how property rights will be made available for the diversion of Cadent's assets to their satisfaction where compulsion, rather than agreement with a third party land owner is necessary.





10.1.19 Cadent contend that it is essential that these issues are addressed to their satisfaction to ensure adequate protection for their Apparatus and that Protective Provisions on their standard terms are provided.

10.1.20 Should this not be possible and attendance at a Compulsory Acquisition Hearing or Issue Specific Hearing is necessary then Cadent reserve the right to provide further written information in advance in support of any detailed issues remaining in dispute between the parties at that stage once they have received a substantive response from the promoter.

- 10.1.21 The Applicant is in discussions with Cadent Gas Limited ('Cadent') as to the drafting of the DCO in respect of on-going rights for Cadent in respect of apparatus and in relation to the terms of the draft Protective Provisions for its benefit included within the draft DCO.
- 10.1.22 Further to these discussions, amendments that will benefit Cadent have been made to article 25 within the Applicant's Revised draft DCO (Document Reference NCC/GY3RC/EX/023) submitted at Deadline 2. The Applicant is seeking to resolve the drafting of the Protective Provisions as soon as possible.
- 10.1.23 In respect of the transfer of land referred to in paragraph 2.2 of Cadent's Written Representation (Planning Inspectorate Reference REP1-020) the Applicant can confirm that the access requirements outlined are accepted. It can also confirm that its property advisors have made contact with Cadent's property manager for the site to seek to commence negotiations over the level of compensation payable and to give the required fee undertaking.



11 Great Yarmouth Port Authority (REP1-021)

11.1 Key Issues and Applicant's Responses

Key Issue

- 11.1.1 The Great Yarmouth Port Authority (GYPA), the statutory Port and Harbour Authority for the River Yare, wish to refer to its relevant representation which was received on 1 August 2019. The concerns outlined therein remain outstanding.
- 11.1.2 Meetings have taken place in relation to the safe operation of the harbour but full details including the report from HR Wallingford remain to be seen by GYPA.
- 11.1.3 Regrettably no progress has been made in respect of the concerns outlined in the Relevant Representation regarding the lay-by berth for inbound vessels into the Inner Harbour. It is feared that the bridge will have to remain open for 30 minutes if an inbound ship is to be brought into the harbour if no such lay-by berth is provided by the applicant, Norfolk County Council.

- 11.1.4 Issue number MP5 in the Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) addresses this issue.
- 11.1.5 The further simulations and updated pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) have now been issued to GYPC for their comments, and have been issued to the ExA at this deadline as well (Document Reference NCC/GY3RC/EX/029). Please also refer to the Applicant's response to ExQ1 1.0.4 (Document Reference NCC/GY3RC/EX/022).
- 11.1.6 The Applicant will continue to work with GYPC/Great Yarmouth Port Authority ('GYPA') to conclude this aspect of the assessments and to resolve any outstanding concerns.



12 Norfolk Yacht Agency (REP1-023)

12.1 Key Issues and Applicant's Responses

Key Issue

- 12.1.1 The Norfolk Yacht Agency stated it was not opposed to the third crossing in principal but are concerned that the pleasure boat has not been considered significantly enough at this stage.
- 12.1.2 Currently the Breydon Bridge is manned full time and will open on demand whereas the Haven Bridge, which is to seaward is not manned and requires booking 24 hours in advance. This makes no sense as Breydon Bridge has significantly more headroom than Haven when closed and a boat has nowhere to go unless Haven is open. There are very poor and quite dangerous provision of moorings lifts and appropriate pontoons for waiting vessels.

- 12.1.3 The operations at Haven and Breydon Bridges are controlled by GYPC.
- 12.1.4 Provision of facilities and the operations of other bridges are not within the scope of the Scheme, however 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.
- 12.1.5 Recreational vessel waiting facilities at the Third River Crossing are provided for within the Scheme.



13 Great Yarmouth Port Company (REP1-024)

13.1 Key Issues and Applicant's Responses

Key Issue

13.1.1 The Great Yarmouth Port Company Limited (GYPC) trades as Peel Ports Great Yarmouth. It operates the commercial port operations at the Port of Great Yarmouth, under an agreement with the Great Yarmouth Port Authority (GYPA). Under that agreement, GYPC also acts as agent for the harbour authority in the discharge of the GYPA's statutory functions except for those functions that GYPA cannot delegate to its agent, namely the making of bye-laws, the levying of ships dues, the appointment of the harbour master and decisions relating to the laying down of navigation buoys and the erection of lighthouses.

Applicant's Response

13.1.2 The Applicant acknowledges GYPC's role in relation to GYPA and the port.

Key Issue

13.1.3 GYPC acknowledge the potential benefits that the improved road connectivity to the peninsula and Outer Harbour by means of the new crossing will bring. GYPC do, however, have significant concerns over the potential adverse impact upon the considerable commercial activity upon the River Yare. GYPC consider the contents of the National Policy Statement for Ports (January 2012) to be a relevant policy consideration for the Examining Authority to have regard to. It unsurprisingly stresses the importance of Ports for the UK economy. In particular, the policy states at Para. 3.1.4, that shipping will continue to provide the only effective way to move the vast majority of freight in and out of the UK, and the provision of sufficient sea port capacity will remain an essential element in ensuring sustainable growth in the UK economy.

- 13.1.4 The Applicant has had regard to the Ports National Policy Statement ('NPS'), given the location of the Scheme. However, as outlined in paragraphs 7.2.2 and 7.2.3 in the Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188):
 - "7.2.2 It is acknowledged that the Scheme is not a port development. In addition, despite providing vessel waiting facilities, the Scheme does not constitute "the construction or alteration of harbour facilities" under Section 14(1)(j) of the Planning Act, nor do any parts of the Scheme meet the



definition of the construction or alteration of harbour facilities within Section 24(1) and 24(2) of the Planning Act.

7.2.3 However, the Scheme does traverse the River Yare, and supports both the nationally significant role of the Port's renewable energy sector and offshore gas and oil industries, and as an International Gateway. As discussed in Section 1.1.5 [of the Case for the Scheme], although the relevant NPS is the NPS NN, the NPS for Ports is also considered where appropriate..."

Key Issue

13.1.5 Further, at Para. 3.1.6, sea ports play an important role in the tourism and leisure industries, supporting many different forms of economic and social activity, including passenger cruise liners, channel ferries, sea going yachts and dinghies. The policy statement continues by stating that "Ports continue to play an important part in local and regional economies, further supporting our national prosperity." (Para. 3.1.7). GYPC believe that the Port of Great Yarmouth needs adequate protection to protect the economic benefits which derive from its success.

Applicant's Response

- 13.1.6 The Applicant has worked closely in the development of the application to seek to ensure that there is adequate protection for the Port of Great Yarmouth whilst enabling the delivery of a piece of highway infrastructure which will help to support the growth of the Port.
- 13.1.7 This has led to the development of a suite of articles and protective provisions within the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020), as well as a suite of mitigation measures within the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) (secured through requirement 14 in Schedule 2 to the draft DCO) which ensures the primacy of commercial river traffic in normal operation and, where practicable, also where there is a mechanical failure of the bridge. An updated version of the pNRA (Document Reference NCC/GY3RC/EX/029) has been submitted at Deadline 2.
- 13.1.8 Whilst the Applicant continues to discuss further matters of detail with GYPC, it is considered that the Scheme provides adequate protection for the Port.

Key Issue

13.1.9 The Great Yarmouth Port is divided into two distinct infrastructure assets, comprising the River (Yare) Port and the Outer Harbour. Whilst the commercial activity is split approximately equally between the River Port and the Outer Harbour, commercial vessel activity is split approximately two



thirds to one third in favour of the River Port. Similarly, the River Port has a higher proportion of operational activity / leased areas than the Outer Harbour.

Applicant's Response

13.1.10 The Applicant notes GYPC's description of the current operational activities in the Port and the Outer Harbour.

Key Issue

13.1.11 From the site visit, the Examining Authority may well see why GYPC has concerns over the potential adverse impact. 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. Therefore, GYPC seek to ensure the continued primacy of the harbour in terms of current and future shipping activity in an unfettered manner. The Applicant has acknowledged these concerns and has entered into negotiations with GYPC. These have been set out in the Statement of Common Ground (SoCG). Many of the concerns of GYPC have been met, but some, as outlined in the SoCG, have remained outstanding.

Applicant's Response

13.1.12 The Applicant submitted an agreed SoCG with the Great Yarmouth Port Company (Peel Ports) at Deadline 1 (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004). This SoCG identified some matters as being the subject of further discussion. The Applicant intends to discuss these outstanding matters further with a view to submitting further updates to the SoCG at the forthcoming deadlines identified by the ExA.

Key Issue

13.1.13 In particular, 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 terms of reference and scope for navigation simulation also remain outstanding. The navigational risk assessment therefore is unclear and unfinished.

Applicant's Response

13.1.14 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 about the potential for long-term effects on the sediment regime in the River.

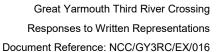


- 13.1.15 The terms of reference for the navigation simulations were issued to GYPC on 9th August 2019 with the simulations subsequently being undertaken with GYPC's port pilots and marine operations manager between 3rd and 5th September 2019.
- 13.1.16 A Hazard Identification ('HAZID') update workshop took place on 19th September 2019.
- 13.1.17 The pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) has been updated to reflect the additional vessel simulation and HAZID meeting, and has been issued to GYPC in for their comment prior to its submission to the ExA at Deadline 2 (Document Reference NCC/GY3RC/EX/029).

Key Issue

13.1.18 As indicated previously, GYPC strongly recommend that a lay-by berth should be provided for shipping, located to the south of the proposed crossing. It is the view of the harbour master, the port director and those that advise them that if there is no provision of a lay-by berth, the new bridge will have to be opened at the request of inbound Vessels before they enter the Inner Harbour and to remain open for at least 30 minutes to complete their transit. This provision will become a requirement for vessels wishing to transit the bridge that cannot pass under the closed bridge. This recommendation is on account that once the vessel has entered the harbour, there is no place for the vessel safely to be berthed if, for whatever reason, the bridge does not open. No prudent Master/pilot will permit such a vessel to pass into the Inner Harbour unless the bridge is confirmed open or there is a safe lay-by berth for the vessel. GYPC recognises it is in no-one's interests for the bridge to remain open for such a prolonged time period not least because the risk of severe disruption and congestion that will be caused to the free flow of traffic upon the surrounding road network. Proper arrangements to provide an emergency lay-by berth will mitigate the safe navigation risk ALARP and facilitate a reduction in bridge opening times.

- 13.1.19 Issue number MP5 of the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) addresses this issue. Please also refer to the Applicant's response to ExQ1 1.0.4 (Document Reference NCC/GY3RC/EX/022).
- 13.1.20 Following the additional vessel simulations carried out in September 2019 and the related HAZID meeting with GYPC held on 19 September 2019, the Applicant does not consider a large vessel layby berth is necessary and details of this are contained in the updated pNRA (Document Reference NCC/GY3RC/EX/029).





13.1.21 A layby facility for large vessels is not necessary because, the pilotage plan for the vessels' passage could include (in order of preference): proceeding to an alternative berth (where available), returning to sea, holding station mid river, or opening the bridge before the vessel enters the port.

Key Issue

13.1.22 Further details will be provided in answer to the Examining Authority's questions contained within the Rule 8 letter. Further questions and information can also be provided at the proposed Issue Specific Hearing in respect of the Port. Details of the concerns of GYPC in respect of the drafting issues set out in the latest SoCG can also be discussed at the Hearing into the draft DCO.

Applicant's Response

13.1.23 An Issue Specific Hearing on the effects of the Scheme on port operations is to be held on 19 November 2019.



14 Roger Hannah on behalf of Regaland Limited (REP1-025)

14.1 Key Issues and Applicant's Responses

Key Issue

Improve connectivity to support and promote economic and employment growth

14.1.1 Paragraph 6.2.17 of the Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022) suggests that improved connectivity will promote economic and employment growth. Further evidence, justification and reasoning is required to demonstrate how the Scheme will facilitate these improvements. In Regaland Limited's opinion, a more comprehensive package of measures, to be concentrated within the wider area and not just the Order Land, will be required to encourage economic growth.

Applicant's Response

Why the Scheme is expected to facilitate economic and employment growth

- 14.1.2 Traffic modelling shows that the Scheme will lead to a net reduction in journey times for trips within Great Yarmouth, as described in Section 7.5 of the Transport Assessment Report ('TAR') (Document Reference 7.2, Planning Inspectorate Reference APP-189). It will do this by providing shorter, more direct routes for some trips, and by reducing congestion generally, leading to less delay overall. The time thus saved is valuable, as it can be used for more productive purposes. This is particularly true of business travel and goods vehicle trips, which have been modelled explicitly, and represents a real saving for businesses and a commensurate benefit to the economy. This is shown in Section 5 of the Economic Appraisal Report ('EAR') (Document Reference 7.6, Planning Inspectorate Reference APP-200) which provides detailed breakdowns of the forecast benefits for different user classes (including business users and commuters), trip purposes and vehicle types (including goods vehicles).
- 14.1.3 Travel time savings will benefit businesses, because they reduce costs for business journeys and deliveries. Reductions in the time employees need to spend travelling to and from work means that businesses will have access to a larger potential workforce. As described in the EAR Sections 1.17.9 to 1.17.13, these agglomeration impacts were included in the economic assessment of the wider impacts of the Scheme, in line with DfT guidance in TAG Unit A2.1 (Wider Impacts) (2018), which defines agglomeration impacts as "one of the mechanisms by which transport schemes can boost social



welfare by raising the productivity of businesses due to better links to other businesses and sources of labour". It follows that businesses will also be accessible to more customers.

- 14.1.4 Examples of the journey time savings which are forecast to result from the Scheme are given in the TAR Section 7.5.2.
- 14.1.5 The Scheme is also expected to support and promote economic and employment growth by putting Great Yarmouth "on the map" in terms of its accessibility to the strategic road network and the rest of the UK, helping to change the perception that it is inaccessible by providing major new highway infrastructure, promoting Great Yarmouth as a place in which to invest, and as a centre for activities associated with offshore energy.

How the Scheme is part of a wider effort to encourage economic growth

14.1.6 Norfolk County Council has recently consulted on the emerging Great Yarmouth Transport Strategy, which sets out the vision, objectives and short, medium and long-term transport infrastructure required to support existing and new communities in Great Yarmouth. The vision of the strategy is:

To support sustainable economic growth in Great Yarmouth by facilitating journey reliability and travel mode choice for all, whilst contributing to improved air quality and safety.

- 14.1.7 The Great Yarmouth Third River Crossing Scheme is one of several projects currently being progressed. Others include:
 - Growth Fund Congestion Relief Schemes
 - Growth Fund Sustainable Transport Schemes
 - Great Yarmouth Town Centre Masterplan
 - Regeneration of underutilised land particularly in South Denes
- 14.1.8 Further information can be found on the following website: https://norfolk.citizenspace.com/consultation/great-yarmouth-transport-strategy/

Key Issue

Improve access and reduce congestion

14.1.9 Relieving congestion by increasing highway capacity has been referred to numerous times throughout the Statement of Reasons. Regaland Limited are concerned that the proposed Scheme as it currently stands will fail to tackle these problems in the long term and is simply a short-term measure. This in their opinion should form part of a comprehensive package of measures aimed at reducing vehicle usage. Without reducing vehicle usage,



there is a risk that the scheme will merely encourage more road users with any increased capacity quickly being absorbed by increased vehicle movements. This is a particularly important consideration given that a key aim of the scheme is to encourage development in the wider area which will inevitably add to the overall number of vehicle movements. Alongside commercial traffic accessing the Port, many existing and future vehicle movements are likely to comprise private cars used for daily commuting, occupied by one person. Regaland Limited suggest that a more productive use of resources would be to re-focus attention on improving public transport provision, making this more appealing and the use of a private car less appealing. Focusing on traffic reduction will be much more beneficial in tackling congestion and road safety as well as "improving journey time reliability", an aim set out in paragraph 6.2.17.

Applicant's Response

14.1.10 The EAR (Document Reference 7.6, Planning Inspectorate Reference APP-200) describes how traffic growth has been forecast in line with Department for Transport ('DfT') guidelines. The forecast takes full account of existing and planned residential and commercial development in the area, and uses industry standard rates for trip generation (TRICS). Growth has been constrained to align with the DfT's National Trip End Model using industry standard software (TEMPro). For these reasons, we consider the forecasts of future travel demand to be realistic, and a very good basis for assessing what would happen both with and without the Scheme in place.

Why we expect the Scheme to relieve congestion in the longer term by increasing capacity

- 14.1.11 The results of the assessment are clear. The TAR (Document Reference 7.2, Planning Inspectorate Reference APP-189) demonstrates that:
 - Without the Scheme, overall congestion, as indicated by journey times, will get worse as traffic demand increases (TAR Tables 7-2 to 7-4);
 - When the Scheme opens in 2023, overall congestion, as indicated by journey times, will reduce as a result of the increased capacity provided (TAR Tables 7-9 to 7-11);
 - Looking further ahead, to 2038, without the Scheme there would be insufficient capacity in the overall network to cope with increasing



levels of demand. As a result, congestion is forecast to increase significantly (TAR section 7.8); and

- In contrast, with the Scheme in place, overall traffic conditions in 2038 would be significantly better, as the network would be better able to support the forecast demand (TAR Section 7.8).
- 14.1.12 It is accepted that, to some extent, the provision of increased highway capacity can lead to additional trip generation, which could reduce benefits in terms of reducing congestion. Therefore, in line with DfT guidance, the assessment has already taken proper account of this by employing variable demand modelling techniques, as described in the EAR, Chapter 8.
- 14.1.13 Similarly, allowing congestion to increase to unacceptable levels could lead to a reduction in demand for travel, but it could also constrain the level of potential economic and employment growth, which would be undesirable.

How the Scheme will support other measures aimed at reducing vehicle usage

- 14.1.14 One of the Scheme's objectives is to improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses, encouraging more sustainable modes of transport.
- 14.1.15 The TAR describes how the Scheme will provide a new more direct route for pedestrians and cyclists into the peninsula. Dedicated facilities on the new bridge will improve journey quality and is expected to encourage more people to use more sustainable modes of travel, such as walking and cycling. The new crossing will also allow bus operators to consider amending bus routes to make use of the Scheme, potentially reducing their costs and enabling them to attract more passengers. Buses may also benefit from overall reductions in congestion due to the Scheme.

Key Issue

Support Regeneration

14.1.16 Paragraph 6.2.18 of the Statement of Reasons indicates that the Scheme "supports the regeneration of retail, leisure and commercial uses within the town centre". Whilst highway improvements may be able to improve access, it is unclear how the Scheme in its current form will contribute towards this goal. Regaland Limited consider that a much more comprehensive package of measures will be required to stimulate investment and subsequent regeneration but that the Statement of Reasons fails to identify what these are and how they will be delivered.



Applicant's Response

How the Scheme will contribute towards the regeneration of retail, leisure and commercial uses within the town centre

- 14.1.17 As noted, the Scheme will result in a general improvement in accessibility, as indicated by reduced journey times to and from all areas of Great Yarmouth, including the town centre.
- 14.1.18 Overall, it will be easier for customers to access shops and other businesses in the town centre.
- 14.1.19 The Scheme is also expected to support planned development and encourage economic and employment growth in Great Yarmouth generally. Growth in the town's economy will mean that people have more disposable income, some of which is likely to be spent in the town centre.
- 14.1.20 The Scheme will remove some through traffic from the town centre, by providing an attractive alternative to the Haven Bridge (where the volume of traffic is forecast to reduce by more than 40% with the Scheme in place). This will help to make the town centre a more attractive place for shoppers and visitors.
- 14.1.21 It is reasonable to assume that these effects will be beneficial for town centre businesses.
 - How the Scheme will be complemented by other measures to stimulate investment and regeneration
- 14.1.22 It is not suggested that the Scheme is all that is needed to regenerate the town centre. This is reflected in the Great Yarmouth Town Centre Regeneration Framework and Masterplan (Great Yarmouth Borough Council, May 2017) which states that "in the medium term no single investment is likely to do more to boost the regeneration of the town centre than the proposed Great Yarmouth Third River Crossing" as it has "the potential to significantly relieve the town centre of Port-related traffic", but goes on to state that the opportunity for the town centre will then be to "reallocate road space and invest in the public realm". The strategy for the regeneration of Great Yarmouth Town Centre is set out in the Great Yarmouth Local Plan: Core Strategy 2013-2030 (Great Yarmouth Borough Council, adopted December 2015), especially in Policy CS7 (Strengthening our Centres), Policy CS8 (Promoting tourism, leisure and culture) and CS17 (Regenerating Great Yarmouth's Waterfront).



Document Reference: NCC/GY3RC/EX/016

Key Issue

Improve road safety

14.1.23 Regaland Limited accept that the proposed Scheme may assist in reducing heavy traffic from unsuitable routes within the town centre but that it is unclear how this will result in the direct "saving of 54 casualties over the period 2023 to 2082" (paragraph 6.2.17). Regaland Limited consider that it is unclear how such a specific number can be realistically estimated. Regaland Limited would request that further information is provided by the Applicant to demonstrate how road safety will be improved within the wider area.

Applicant's Response

How the forecast saving of 54 casualties was estimated

- 14.1.24 The difference between the forecast number of casualties with the Scheme in place and the forecast number of casualties without the Scheme in place is estimated to be 54.
- 14.1.25 The EAR (DCO Document Reference 7.6, Planning Inspectorate Reference APP-200) describes how the impacts of the Scheme, including safety impacts, have been appraised in line with DfT guidance.
- 14.1.26 The accident savings were calculated using output from the traffic model which predicts changes in traffic speed and flow on all parts of the network, at different times of the day, over a 60-year appraisal period. Paragraphs 4.3.1 to 4.3.13 of the EAR describe how these outputs are used to predict the likely change in the number of accidents and casualties due to the Scheme, using the DfT software: Cost and Benefits to Accidents Light Touch (COBA-LT). Paragraphs 5.3.1 to 5.3.4 of the EAR summarise the forecast benefits and Appendix C of the EAR includes further detail of the assessment.

Other measures the Applicant is taking to improve road safety

14.1.27 Norfolk County Council's Local Transport Plan to 2026 "Connecting Norfolk" sets out the ways in which the Applicant will fulfil its statutory duty to take steps to reduce and prevent road collisions in Norfolk. This includes preparing and carrying out a programme of measures to promote road safety, including through information, advice and training or engineering measures. The approach comprises: engineering improvements to the road network at points where there are high concentrations of collisions; delivering targeted education, training and campaigns that influence road user attitudes and resultant behaviour; and creating a safer environment for travel. The Applicant is committed to working with other agencies and local communities to deliver improvements.



14.1.28 The Scheme is identified as a key strategic connection in the "Connecting Norfolk" strategy.

Key Issue

Encourage more sustainable modes of transport

14.1.29 The Scheme intends to provide "a quicker route between west and east of the town for non- motorised users" and it is suggested that this will encourage more sustainable modes of transport" (paragraph 6.2.17). Regaland Limited suggest however that further measures will be required in order to successfully increase the use of more sustainable modes of transport and further details are requested as to how this will be effectively delivered. Furthermore, it is stated that along with improving journey quality, the Scheme will directly increase physical activity and reduce absenteeism. Regaland Limited consider that it is unclear how the Scheme will deliver this and that it would appear that this is a sweeping comment without any grounds on which to base this.

Applicant's Response

Why the Scheme is expected to encourage more sustainable modes of transport

- 14.1.30 The Scheme objectives include:
 - Improving access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses, encouraging more sustainable modes of transport.
- 14.1.31 The TAR (Document Reference 7.2, Planning Inspectorate Reference APP-189) describes how the Scheme will provide a new more direct route for pedestrians and cyclists into the peninsula. Dedicated facilities on the new bridge will improve journey quality and are expected to encourage more people to use more sustainable modes of travel, such as cycling and walking. The new crossing will also allow bus operators to consider amending bus routes to make use of the Scheme, potentially reducing their costs and enabling them to attract more passengers. Buses may also benefit from overall reductions in congestion due to the Scheme.

Why the Scheme is expected to help increase physical activity, and how this can help to reduce absenteeism

Active modes appraisal (walking and cycling)

14.1.32 A full report on the calculation of active modes benefits is contained in the Active Modes Appraisal Report in Appendix D of the EAR (Document Reference 7.6, Planning Inspectorate Reference APP-200).



14.1.33 The Active Modes Appraisal ('AMA') has been carried out in accordance with DfT advice in TAG Unit A5.1: Active Mode Appraisal (Jan 2014). It considers the impact of the Scheme on walking and cycling. Using the recommended methodology, evidence from comparable schemes in other areas, and data from local pedestrian and cycle counts, it demonstrates that there will be increased use of these active modes resulting from the provision of the Scheme.

Journey time and quality benefits for pedestrians and cyclists

14.1.34 The AMA assesses the economic value of the reductions in journey time and improvements in journey quality for pedestrians and cyclists attributable to the Scheme.

Health benefits

14.1.35 Walking and cycling are physical activities which can improve health and well-being. The method for calculating the physical activity impacts attributable to the Scheme is taken from 'Quantifying the health effects of cycling and walking' (World Health Organisation, 2007). The assessment follows the guidance set out in TAG Unit A5.1 and the recent DfT publication, 'Investing in Cycling and Walking: The Economic Case for Action' (2015).

Absenteeism benefits

14.1.36 Improved health can lead to fewer working days lost. The methodology used to assess the reduction in absenteeism levels attributable to the Scheme follows DfT guidance set out in TAG Units A4.1 and A5.1.

Conclusion

14.1.37 The results of these assessments are set out in detail in the AMA. They have a positive economic value and contribute to the Scheme's economic performance and the value for money assessment. These positive benefits have been assessed objectively, using the standard methodology recommended by the DfT, and are not (as has been suggested) based on a "sweeping comment", nor are they "without any grounds on which to base this".

Key Issue

Protect and Enhance the Environment by reducing Emissions

14.1.38 Regaland Limited consider that the proposed Scheme will result in greater network capacity and therefore, is likely to contribute towards an increase in traffic levels. Accordingly, it is of the opinion that the Scheme will contribute towards poor air quality, noise and visual effects rather than reducing this. Regaland Limited are concerned that details of how a reduction in



carbon emissions will be achieved or how "the Scheme will result in a slight beneficial impact in greenhouse gas emissions" are not specified and that the Applicant appears to solely rely upon this being achieved by decreasing congestion. Regaland Limited consider that the additional capacity created may be quickly absorbed. This will therefore lead to increased congestion together with increased air and noise pollution. Regaland Limited remain of the view that an initiative to reduce private vehicle use would be more beneficial in meeting this objective.

14.1.39 Regaland Limited have specified that improving access to public transport and its reliability is reinforced within The National Transport Strategy "Transport an Engine for Growth" (2013) document. Regaland Limited consider that this document also recognises the importance of "access to alternative modes of transport" (paragraph 6.6). It is submitted that the Scheme as currently proposed fails to identify any suitable measures which will be implemented in order to fulfil this requirement.
Accordingly, Regaland Limited do not consider that the proposed Scheme will meet the objective of protecting and enhancing the environment by reducing emissions of greenhouse gasses.

Applicant's Response

14.1.40 As with all scheme impacts, the basis of assessment is to compare what is forecast to happen with the scheme in place (the "Do Something" scenario) with what is forecast to happen if the Scheme is not implemented (the "Do Minimum" scenario).

Why the Scheme is expected to contribute towards a small reduction in emissions of Carbon Dioxide and other greenhouse gases, even when increased traffic demand is taken into account

- 14.1.41 Carbon dioxide and other greenhouse gases from transport are produced as a result of the burning of fuel usually petrol or diesel. The amount of fuel burnt by vehicles in the study area depends mainly on:
 - The number of journeys made
 - The average distance travelled
 - The speed of travel

Number of journeys made

14.1.42 Whilst the number of journeys made is expected to increase over the assessment period, this growth will mainly be due to background growth and new development, and will occur in both the "do something" and "do minimum" scenarios, rather than being an impact of the Scheme.



14.1.43 The Scheme is expected to generate a small number of additional trips as a result of the increased capacity that it will provide. Therefore, in line with DfT guidance, the assessment has used variable demand modelling techniques, as described in the EAR (Document Reference 7.6, Planning Inspectorate Reference APP-200), Chapter 8. This means that the forecast changes in greenhouse gas emissions (which are based on model outputs) already take full account of this impact.

Journey distance (vehicle kilometres)

14.1.44 The biggest traffic impact of the Scheme will be a reduction in average journey distances. This is because the new bridge will provide a shorter route into the peninsula for many journeys.

The speed of travel

14.1.45 Overall, average travel speeds will increase as a result of the Scheme, whilst congestion will decrease. Emissions are highest at very low speeds (congestion) and at high speeds, and lowest at speeds of around 50-60 km/hr. The calibrated traffic model estimates the speed on each part of the network based on the forecast traffic flow and the physical characteristics of each link, and this information, together with information about the volume and composition of traffic on each link is used to calculate the expected level of greenhouse gas emissions for each scenario.

Results of modelling greenhouse gas emissions and air quality

- 14.1.46 In the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096) the traffic modelling data was used to calculate the regional air pollutant emissions from traffic flow, speed and composition along road links meeting the criteria prescribed by the Design Manual for Roads and Bridges Volume 11 Section 3 Part 1 HA 207/07. As set out in Chapter 13 (Climate) paragraph 13.5.14 of the ES, the total operational stage enduser greenhouse gas ('GHG') emissions from traffic have been modelled as part of the air quality assessment to calculate the difference in GHG emissions between the "do something" and "do minimum" scenarios. The results are summarised in the ES Table 13.11 which shows that the total regional traffic GHG emissions for the operational lifespan of the Scheme (2023-2082) are approximately 1.4% less than the baseline scenario. Although the operational GHG emissions are forecast to reduce, GHG emissions are still being produced by the Scheme. Consequently, it was concluded that the operational stage would have a slight beneficial impact, however overall, there would be a neutral effect on climate change.
- 14.1.47 It is not claimed that the Scheme would have a large beneficial impact on GHG or air quality it would not. However, the assessment does not (as Regaland Limited suggests) ignore the effect of traffic growth in the



years following the Scheme opening, or the Scheme's contribution to this, and is therefore considered robust.

Noise

14.1.48 Regaland Limited points towards increased congestion; however, increased congestion generally leads to reduced noise emissions due to reduced vehicle speeds. Notwithstanding this, there are adverse operational noise effects acknowledged and quantified in the ES and these will ultimately need to be weighed in the wider context of the Scheme benefits and dis-benefits.

Visual Effects

14.1.49 Visual impacts of the Scheme are assessed in the Townscape and Visual Chapter of the ES (Chapter 10); this incorporates the Scheme as a whole, including the introduction of vehicles. Impacts associated with the new bridge, including impacts arising from traffic that will use the bridge, are assessed as the worst case of 4.5m high Heavy Goods Vehicles crossing the bridge deck. Varied traffic densities would not alter the overall conclusions of the assessment from a townscape and visual perspective.

How the Scheme will support more sustainable modes of transport

14.1.50 The response to this query has been provided in paragraphs 14.1.14 and 14.1.15 above.

Key Issue

Negotiations

14.1.51 The Statement of Reasons suggests that discussions and negotiations are ongoing and will continue during the DCO process. There has however been limited engagement with our client and no offer has been made in respect to the purchase of their land and property. Accordingly, the DCO is premature and is not a method of last resort. Further time is required to engage with affected owners and occupiers prior to the use of compulsory purchase powers.

Applicant's Response

14.1.52 The Applicant's property advisor (on behalf of the Applicant) first made contact with Regaland Ltd in relation to the proposed Scheme in February 2018; the Applicant was informed that Roger Hannah & Co had been instructed by Regaland Limited in May 2018. Representatives from the Applicant's property advisor and Roger Hannah & Co met on site in November 2018. Details of the Applicant's final DCO application land requirements were provided to Roger Hannah & Co in April 2019 along with a request for the landowner's compensation claim to be submitted to the



Applicant for consideration. No claim has been received to date despite subsequently reiterated requests.

- 14.1.53 The Applicant and its property advisor have been in contact with all the occupiers of the units on the Suffolk Road Industrial Estate, especially the occupiers of Units 10 and 11, which are identified for acquisition and demolition, to deal with their concerns and seek to help them with relocation to new premises.
- 14.1.54 The Applicant and its property advisor remain committed to seeking a negotiated acquisition of the land required for the Scheme, and, for the reasons explained in response to the first of the Key Issues raised in paragraph 14.1.55 below, does not accept that the DCO is premature.

Key Issue

Human Rights

14.1.55 It is our considered opinion that the proposed Order is also an infringement of our client's human rights under the Human Rights Act 1998. The Secretary of State must consider whether, on balance, the case for compulsory purchase justifies interfering with the human rights of the owners and occupiers of the Order land. Under Article 1 of the First Protocol, no one shall be deprived of his possessions except in the public interest. For the reasons set out above, Regaland Limited do not consider that the Scheme as proposed is fully in the public interest and many of the objectives given as justification for the confirmation of the Order can be met without resorting to a CPO. As such, there is inadequate justification for interfering with the human rights of the owners and occupiers affected by this proposed Scheme. The balance has not been struck between the individual rights and the wider public interest.

Applicant's Response

Why it is necessary for the draft Order to include provision for powers of compulsory acquisition

- 14.1.56 As is explained in Chapter 7 of the Applicant's Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022), the Applicant has sought to engage with affected landowners and others who have an interest in the land required for or affected by the Scheme, with the aim of agreeing proposals for the acquisition or use of the land. As such, the Applicant has powers of compulsory acquisition in contemplation only as a tool of last resort.
- 14.1.57 This approach is in accordance with that advocated by the Government in its guidance on the use of compulsory acquisition powers i.e. the guidance issued by the Department for Communities and Local Government in



September 2013, Planning Act 2008: Guidance related to procedures for the compulsory acquisition of land ("the 2013 DCLG Guidance") and the guidance issued by the Department for Communities and Local Government in October 2015, Guidance on Compulsory Purchase Process and the Crichel Down Rules, as updated by the Ministry of Housing, Communities and Local Government in February 2018 ("the 2018 MHCLG Guidance").

- 14.1.58 In accordance with the above-mentioned guidance, powers of compulsory acquisition are sought in order to ensure that if development consent for the Scheme was granted, the Applicant would still be capable of delivering the Scheme in the event that it was not possible to acquire all of the land by agreement within a reasonable timescale.
- 14.1.59 As paragraphs 6.3.3 to 6.3.7 of the Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022) explain:
 - "6.3.3 The 2013 DCLG Guidance (at paragraph 25) and the 2018 MHCLG Guidance (at paragraph 2) both state that reasonable steps should be taken to acquire land by negotiation and agreement wherever practicable and that, as a general rule, authority to acquire land compulsorily should only be sought if attempts to acquire by agreement fail. The concept of compulsory acquisition as a tool of last resort prevails.
 - "6.3.4 However, both the 2013 DCLG Guidance (at paragraph 25) and the 2018 DCLG Guidance (at paragraph 2) acknowledge that it may not always be practicable to acquire land by agreement.
 - "6.3.5 The 2013 DCLG Guidance states 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" and that, "Where this is the case it is reasonable to include provision authorising compulsory acquisition covering all the land required at the outset".
 - "6.3.6 The 2013 DCLG Guidance expands on this (at paragraph 26), advising that "Applicants should consider at what point the land they are seeking to acquire will be needed and, as a contingency measure, should plan for compulsory acquisition at the same time as conducting negotiations."
 - "6.3.7 In accordance with this guidance, the Applicant is seeking to acquire by agreement land and rights over land for the purposes of the Scheme and will continue to seek such acquisitions as the Application for the DCO is progressed."



- 14.1.60 In this context, the Applicant will continue to seek to negotiate with Regaland Limited regarding the proposed use and acquisition of its land for the purposes of the Scheme.
 - Why, if the powers of compulsory acquisition proposed in the draft Order were granted and subsequently exercised, the consequential interference with Regaland's rights under the European Convention on Human Rights and the Human Rights Act 1998 would be lawful and justified
- 14.1.61 The Applicant has had regard to the Convention rights which are of relevance to the determination by the Secretary of State in his decision on whether a compelling case exists for the DCO to be made in a form that includes powers authorising the compulsory acquisition of land or rights or interests in land, and the temporary possession of land.
- 14.1.62 The Applicant's position on the effect of the Scheme on affected persons' Convention rights is set out in Chapter 9 to the Statement of Reasons, where consideration is given to Articles 6 and 8 of the Convention and to Article 1 of the First Protocol.
- 14.1.63 The Applicant notes that the infringement of these Convention rights is authorised by law where the statutory procedures for obtaining the DCO are followed. In essence, an infringement is lawful where there is a compelling case in the public interest for the inclusion of powers of compulsory acquisition in the DCO and where the interference with a Convention right is proportionate to the legitimate aim served.
- 14.1.64 The Applicant considers that in respect of the Scheme these requirements are met – as is explained in detail in Chapter 9 of the Statement of Reasons.
- 14.1.65 Furthermore, the Statement of Reasons sets out at paragraphs 6.2.11 to 6.2.23:
 - Why the Applicant considers there is a compelling case in the public interest which would support the exercise of powers of compulsory acquisition in furtherance of the Scheme; and
 - Why the Applicant believes that the infringement of Convention rights which would arise if the Scheme were delivered would be proportionate to the legitimate aim served, in that the public benefits which would arise from the Scheme would outweigh the private losses suffered.

The Applicant's view that the Scheme proposals have been brought forward on the basis that the public benefits to which the Scheme would give rise



outweigh the individual losses that would be suffered by affected landowners, including Regaland Limited

- 14.1.66 As noted in the Statement of Reasons (Document Reference 4.1, Planning Inspectorate Reference APP-022), at paragraphs 6.3.23 to 6.3.25:
 - "The 2013 DCLG Guidance (at paragraph 12) notes that section 122 of the Planning Act 2008 requires the Secretary of State to be satisfied that there is a compelling case in the public interest for the land to be acquired compulsorily. Evidence of a compelling case will demonstrate that "the public benefits that would be derived from the compulsory acquisition will outweigh the private loss that would be suffered by those whose land is to be acquired".
 - "6.3.24 Paragraph 12 of the 2013 DCLG Guidance reiterates the principle that "land should only be taken compulsorily where there is clear evidence that the public benefit will outweigh the private loss".
 - "6.3.25 The Applicant has considered the nature and extent of the public benefits and the private losses that would flow from the implementation of the Scheme and on balance has concluded that the public benefits would outweigh the private losses.
- 14.1.67 The Applicant considers that in respect of the Scheme these requirements are met as is explained in detail in Chapter 6 of the Statement of Reasons.

Key Issue

14.1.68 In conclusion, there is "no compelling case in the public's interest" as required by national policy to acquire the Objector's land.

- 14.1.69 The Applicant is of the view that there is a compelling case in the public interest which would support the grant and subsequent exercise of powers of compulsory acquisition in respect of land owned and/or occupied by Regaland Limited.
- 14.1.70 For details of the Applicant's position, please refer to the Applicant's response to the Key Issue (Human Rights) set out in paragraphs 14.1.56 to 14.1.67 above.



15 Ian Blyth (REP1-026)

15.1 Key Issues and Applicant's Responses

Key Issue

15.1.1 Following the concerns voiced by Ian Blyth, A Fordable Cars, at the Open Floor Hearing on October 24 about the current traffic and parking along Southgates Road, Mr Blyth submitted photos that are intended to highlight a typical day along this stretch of road as his Written Representation.

Applicant's Response

15.1.2 The Applicant notes the photographs and concerns of A Fordable Cars with regards to the waiting restriction extension on the east side of Southgates Road. In its response to Question ExQ1 1.5.2 of the Examining Authority's First Written Questions (Document Reference NCC/GY3RC/EX/022) the Applicant has provided a justification for this extension – it is required to support the safe and efficient operation of the new junction.



16 Michael Boon (REP1-027)

16.1 Key Issues and Applicant's Responses

Key Issue

- 16.1.1 Mr Boon states in his Written Representation that the increase in traffic volumes on the roads around Great Yarmouth are the cause of congestion when the Haven Bridge had lifting problems, with the tailbacks of traffic unable to be dealt with by the current road system to the west of the town.
- 16.1.2 He states the records will show that generally the Haven Bridge performance, as it was well maintained and operated, has been good over recent years but obviously the media highlight bridge problems which tend to mask the sterling performance which the bridge has put in for the town. It has to be accepted though that the bridge is ageing and in consideration of siting it might have been replaced by a new bridge alongside the present structure as has happened in the past.
- 16.1.3 Mr Boon states that despite the series of meetings had with the Applicant and their navigation adviser, he remains concerned about a number of aspects of the Scheme and its road approaches. Mr Boon had hoped to have a reply to start to address the concerns raised with the Applicant, promised in August 2019 following the last of his meetings in March 2019, but states he has not heard anything further despite seeking a response.

- 16.1.4 The Applicant has engaged with Mr Boon and has attended two separate meetings with him on 9 October 2018 and 25 March 2019.
- 16.1.5 On 27 June 2019 the Applicant sent Mr Boon a Section 56 notice, in response to which Mr Boon contacted the Applicant requesting a response to the comments he had submitted during the Applicant's pre-application consultation and to questions he had raised in the meetings in October 2018 and March 2019.
- 16.1.6 In response to this request the Applicant advised Mr Boon that it would respond to his comments but suggested that in the meantime he register as an interested party using the Planning Inspectorate's prescribed process for registering (the Applicant also provided a copy of the Section 56 notice and Advice Note 8.2).
- 16.1.7 The Applicant was in the process of developing responses to Mr Boon's comments and queries, and this work has informed the Applicant's response to Mr Boon's Written Representation which in large part reiterates the comments and queries he previously raised.



Key Issue

Mr Boon states that having dealt with the Government with regard to the Breydon river crossing during his time in office with the Port Authority, he would have preferred to see the Scheme with the counterweights above the bridge. It seems that the county council as promoter is favouring one with the counterweights below and no reason has yet been given. Mr Boon raised the question of the flooding of the ballast chambers during high tides and how this would be dealt with, as it occurred at the Haven Bridge, but no answer has been supplied. He asked if the ballast chambers were flooded would the bridge be able to operate? Has a different design to mitigate this been thought of?

Applicant's Response

- 16.1.9 A solution with above-ground counterweights was considered as it would have reduced the amount of excavation required in both quays, as well as reducing the extent of loss of waterway compared to an option incorporating below deck counterweights, which require a bascule chamber. However, this option would have a significantly greater visual impact and maintenance of components located at height above the deck would have been more complicated. As a result, it is considered that a solution with below ground counterweights, in addition to being less visually intrusive and easier to maintain, is also more cost effective.
- 16.1.10 Chapter 12 of the ES (Document Reference. 6.1, Planning Inspectorate Reference APP-096) and the accompanying Appendix 12B Flood Risk Assessment (Document Reference 6.2, Planning Inspectorate Reference APP-135) assesses the potential impact of the Scheme on flood risk. The wall levels of the bascule counterweight chambers are above the calculated flood water level and are therefore not expected to flood.

Key Issue

16.1.11 (6.2) Mr Boon asked whether the port operators located above the bridge crossing level were content with a constraint on navigation and how this would be dealt with. It was said that no vessels would leave their berths above the bridge until the bridge was open. If this is the case lifting times estimated at 5 ½ minutes are likely to be underestimated. If in fact the bridge lift occurred while vessels were approaching it from upriver and the lift was not completed satisfactorily, he asked what would be the plans for vessels having to abort their entry to the bridge with the tide behind them.

Applicant's Response

16.1.12 Port operators that fell into the category of section 42(1)(d) consultees (i.e. those parties with an interest in land affected by the Scheme) were consulted on the Scheme proposals in accordance with the requirements of



the Planning Act 2008. The remainder of the businesses within Great Yarmouth were invited to participate in the consultation under section 47 (consultation with the local community) of the Planning Act 2008. The comments made by those consultees were documented in the Consultation Report (Document Reference 5.1, Planning Inspectorate Reference APP-025) together with the regard given to them.

- 16.1.13 In addition, the Applicant has engaged directly with the Great Yarmouth Port Company, Great Yarmouth Port Users Association and a number of individual port operators. The Applicant's response to the Examining Authority's First Written Question ExQ1 1.3.2 (Document Reference NCC/GY3RC/EX/022) details some of the engagement the Applicant has undertaken. This has included its attendance at Great Yarmouth Port Users Association meetings and AGMs.
- 16.1.14 The average lifting time for the bridge is based on the bridge specification documents, historic data on vessel movements and the vessel simulation results, the conclusions of which are set out in Appendix B of the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185). As this is a long-term average value it is relatively unaffected by variations in individual transit times, particularly for comparatively infrequent large vessel movements. An updated version of the pNRA (Document Reference NCC/GY3RC/EX/029) has been submitted at Deadline 2.
- 16.1.15 The risk of bridge failure on navigation is considered in the pNRA and it is considered that procedural mitigations set out in the pNRA will be sufficient to manage this risk. Emergency procedures for vessels in the event of a bridge failure will be dependent on the size and type of vessel, the departure or arrival berth, the berth utilisation at that time and the prevailing environmental conditions; assessment of these factors would be undertaken by the pilot and harbour master for each vessel during preparation of the pilotage plan for that vessel movement.

Key Issue

16.1.16 (6.3) Mr Boon asked where any vessel approaching the bridge from the sea might moor when waiting for the bridge to lift. He states he was told this had been planned by the navigation consultant and was then shown a conjectural vessel moored opposite the Spending Beach on the west bank of the river. He raised the matter that the Spending Beach had a navigational function in reducing wave turbulence in the Haven which had been in force for more than a century and that was why no building had taken place in the area of the Spending Beach itself since reflected waves from Brush Bend needed to spend their force on the east bank of the river in the Spending Beach. To plan to moor a vessel on the West Bank opposite the Spending Beach shows little knowledge of the port function and operation.



- 16.1.17 (6.4) Mr Boon also mentioned that the West Bank of the River was shallow piled compared with the east bank and any planned layby berth would have to be re-piled in steel at a much greater depth than at present with a layby berth length of at least 100m and this would be part of the costs of the scheme. Mr Boon commented that a few days beforehand he observed a large supply vessel drifting too far from the centre of the river towards the West Bank and it had gone aground having moved out of the navigable channel in the middle of the port. These issues relating to the channel position did not seem to be realised at the meeting.
- 16.1.18 (6.5) Mr Boon mentioned further that there was no navigational channel beside the west bank, as the dredged channel favoured the east side of the river where the operational berths were and this had been the position for many years. He stated that that the navigational consultant and Applicant had no idea that there was a designated channel favouring the eastern bank of the river and it would not be possible for any vessel of any size to moor on the west bank without a planned dredging program and asked whether the County Council was confident of maintaining access to a layby berth in the circumstances.

Applicant's Response

- 16.1.19 During the development of the Scheme, including dialogue with GYPC, consideration was given to the potential for a large vessel waiting facility to be located at berths 58/59. However, following further assessment of the likely risks associated with the Scheme and the development of the Scheme of Operation in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020), the proposed large vessel waiting facility at berths 58/59, opposite Spending Beach, was removed from the Scheme.
- 16.1.20 The existing quays, where the small vessel waiting facilities are proposed, are of sufficient depth so as not to require re-piling for the installation of those facilities.
- 16.1.21 The existing river bed levels, where the small vessel waiting facilities are proposed to be located, are of a depth sufficient to maintain adequate water levels without the need for dredging.

Key Issue

16.1.22 (6.6) In terms of the failure of the mechanism of the bridge to lift, Mr Boon expressed concern regarding vessels which might be trapped above it. It was said by way of response that the designers of the bridge would have to provide a guarantee to clear any and all operational lifting problems to allow the bridge to lift in one hour. Mr Boon states he did not think that this was realistic and asked for further information on how this remit would be carried out. During the construction planning of the Breydon Bridge the contractors



had to make detailed provisions for the supply of parts in its mechanism which could be accessed at short notice. Mr Boon asked whether this arrangement would be made and what were the considerations necessary?

Applicant's Response

- 16.1.23 The Applicant responded to concerns about resilience of the proposed new bridge in issue number MP3 of the Applicant's Response to Relevant Representations (Document Reference NCC/GY3RC/EX008, Planning Inspectorate Reference REP1-002).
- 16.1.24 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 development 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 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.
- 16.1.25 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.
- 16.1.26 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 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.
- 16.1.27 Schedule 14 to 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) position, without the need for the operating machinery to be engaged.

Key Issue

16.1.28 (6.7) Mr Boon asked who would compensate the various parties if vessels were trapped above the bridge in the event that it could not be raised.

Applicant's Response

- 16.1.29 The Applicant considers that this is a matter that would need to be considered by the relevant parties at the time of any incident; however, it notes that there is no statutory right to compensation for any changes to a public right of navigation.
- 16.1.30 The potential of the bridge to fail in operation due to a MEICA fault has been considered in the development 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, as detailed in paragraph 16.1.23 to 16.1.27. above.

Key Issue

16.1.31 (6.8) Mr Boon raised concerns that the purpose of the bridge so far downriver across the middle of the river port was to relieve the Haven Bridge primarily rather than deal with port traffic. He stated that if this is really the circumstances of building a third bridge funding might be more properly spent on improving the approaches to and the function of the carriageway on the Breydon Bridge, rather than cause such disruption to the port on highway grounds, rather than on promoting navigational grounds.



Applicant's Response

- 16.1.32 Improving the carriageway on the approaches to Breydon Bridge would not achieve the following objectives of the Scheme; namely:
 - To improve access and strategic connectivity between the hub of Great Yarmouth's port activities and the national road network thereby supporting and promoting economic and employment growth (particularly in the Enterprise Zone);
 - To improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses, encouraging more sustainable modes of transport and also reducing community severance.

Key Issue

16.1.33 (6.9) Mr Boon suggests that if the principal point of a bridge being built downriver is to send traffic northwards to reach the seafront and the town, then surely a bridge on the Queens Road site would fulfil that function just as well without disrupting the port. This was a point raised in discussion during meetings with the County Council and it is a matter of concern that a bridge across the navigable river in a 24-hour port should link the bypass within the optimum position to benefit both the port and the land-based traffic. He states it is concerning that none of these considerations appear to have been answered during consultation.

Applicant's Response

16.1.34 At the start of the feasibility work for the Scheme a variety of locations were considered. The location chosen was deemed to meet the objectives of the Scheme in the context of existing infrastructure constraints. More information on the evolution of the Scheme options is provided in Chapter 5 of the Case for the Scheme (Document Reference 7.1, Planning Inspectorate Reference APP-188) and Chapter 3 of the ES (Document Reference 6.1, Planning Inspectorate Reference APP-096).

Key Issue

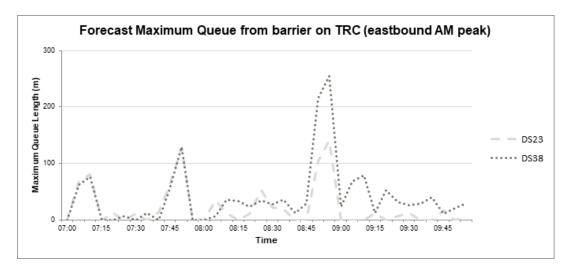
16.1.35 (6.10) Mr Boon appreciates that an average has been used in terms of time needed to lift the third river crossing to allow for the primacy of navigation. He states practically having regard to the history of the Haven Bridge, even that far up river, that this may be optimistic in terms of delays. He states he is also concerned that the traffic management of sending vehicles towards the third river crossing from the west bank of the river off the western bypass may cause traffic locks when the feedback to the crossing from the west bank is fully utilised with traffic. It was said during meetings with the County Council that the scheme would be developed to send traffic further north to cross at the haven bridge if traffic was heavy on the western bypass and a right turn towards the river was not practical. If this is the case and having



regard for the traffic locks experienced so far along the bypass in the summer period is this really a practical way to utilise a bridge in this position. He is concerned during this part of the discussion that traffic management, even ahead of the planned improvements on the roundabouts on the western bypass, was taking priority over any impact on ships needing to navigate in this part of the river. He expected more information to address these points and did not feel that what he was told was satisfactory at this juncture.

- 16.1.36 The operational and transit times for the bridge are based on the bridge specification documents, historic data on vessel movements and vessel simulation results, the conclusions of which are set out in Appendix B of the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185). Additional vessel movements above the historic average have been considered to allow for future increases in port activity, again these are summarised in the pNRA.
- 16.1.37 The Scheme has been designed with reference to detailed traffic modelling, utilising extensive road traffic and river vessel movement data in order to ensure there is sufficient capacity to accommodate forecast flows without excessive queuing, with a particular focus on the new crossing and its impact on the adjacent local and strategic road network. The modelling includes an opening schedule derived from the historic vessel movement data and taking full account of pilot boat movements, resulting in a range of opening times during the modelled period. The results are recorded in the Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189).
- 16.1.38 With respect to the operation of the western approach to the bridge, results from the traffic modelling indicate that the maximum forecast queue at 2038 can be accommodated within the existing road space on William Adams Way without blocking back to the A47 (the maximum queue from the barriers on the bridge is approximately 250m, compared with approximately 300m available stacking space). At 2023, the forecast maximum queue is 140m.





16.1.39 Appendix G of the Statement of Commonality for SoCGs submitted at Deadline 1 (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004) includes the SoCG between the Applicant and Highways England. Item 4 in Table 4.1 of that SoCG notes that:

"In view of the assessed impacts, it is agreed that the strategic road network can accommodate the impact of the scheme with the proposed mitigation"

- 16.1.40 The 'strategic road network' referred to above includes the A47 western bypass.
- 16.1.41 The Scheme also provides a Variable Message Sign on the A47 northbound approach to Harfrey's Roundabout that will advise drivers when the Third River Crossing bridge is raised and suggest an alternative route via Haven Bridge. However, at all other times the new crossing would be available for use and thereby providing the benefits of more direct access to the South Denes peninsula and reduced traffic congestion at Haven Bridge.

Key Issue

16.1.42 (7.1) Mr Boon states having referred to the initial planning for waiting berths on the west bank of the river position there appear to be further indicative amended plans for waiting berths downriver of the bridge for vessels wishing to transit. Mr Boon states he understood these were to be on the west bank of the river but that he has received no further details to his enquiry. If this original berthing arrangement has been altered what and where is the alternative?

Applicant's Response

16.1.43 The Scheme presented for pre-application consultation was based on earlier proposals which included a potential large commercial vessel waiting facility, for use in the event that the bridge failed to operate.



During the assessments which informed the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) the need for the large commercial vessel facility was considered and as a result it was removed from the Scheme.

Key Issue

- 16.1.44 (7.2) Mr Boon asks if any accounts been taken of the shallow piling on the west bank of the River where presumably a waiting berth would be constructed to avoid taking a current operational berth for this purpose. Does not a proper and effective waiting berth need to be constructed of at least 100 m in length? Part of the agreement for the Breydon Bridge referred to earlier was that a waiting berth was constructed above the bridge to allow vessels to wait to transit it. Smaller of course in this case because it is for vessels going up river to Norwich. Has Darby's Hard, closer to the proposed bridge on the west bank, been considered where a joint waiting berth, remedial highway scheme and flood protection scheme could be considered.
- 16.1.45 (7.3) If an operational berth is not to be affected on the west bank of the River, in terms of a waiting berth, what considerations have been made with regard to the navigable channel which would need to be dredged and maintained on the west bank as the operational port channel is on the east bank

- 16.1.46 Following further assessment of the likely risks associated with the Scheme and the development of the Scheme of Operation in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020), the proposed large vessel waiting facility (to which Mr. Boon's comments relate) has now been removed from the Scheme.
- 16.1.47 As explained in paragraphs 16.1.19 to 16.1.21, the provision of small vessel waiting facilities (north and south of the bridge) for vessels up to 50m length overall (LOA) is included within the Scheme; this is required to allow for the platooning of smaller recreational vessels as outlined in the Scheme of Operation in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020). The depth of water available at these locations is sufficient to allow installation of these small vessel waiting facilities without impacting on the quay walls.
- 16.1.48 The Environment Agency is carrying out flood defence improvement works in Great Yarmouth. The Applicant is engaging with the Environment Agency to ensure that the Scheme is coordinated with these flood defence proposals.



Document Reference: NCC/GY3RC/EX/016

Key Issue

16.1.49 (8.1) Mr Boon asked what navigable width or other structural constraint is involved in the design and construction of the bridge to vessels passing up and down river and commented that he had yet to receive a clear reply from the Applicant on the effect on navigation. He also asked what the clearance at the top of the lifting spans will be, assuming that they will not be vertical. These are the constraints offered by any proposed bridge. If the lifting leaves do not rise to totally vertical plane then the constriction on the river width will be the difference between the lifted leaves at their full height.

Applicant's Response

16.1.50 The design of the proposed bascule bridge will permit the use of the full width of the navigable channel between the faces of the fendering system, which will not be less than 50m; there will be an unlimited air draught between these points when the bridge is raised.

Key Issue

16.1.51 (8.2) Mr Boon states he has been looking at the vessels currently berthing above and in the vicinity of the proposed construction. It seems to him that some of these have a very wide beam which might prove to make the passage through the spans problematical in difficult tidal conditions.

Applicant's Response

16.1.52 The navigation width through the bridge is considered acceptable for all vessels that can currently access the river port, including those with a wide beam. Vessel simulations have been undertaken to assess the effects of the scheme on navigation using vessels agreed with the GYPC; the outcomes of these simulations are included within Appendix C of the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185) expanded to Appendices C, D & E of the updated pNRA (Document Reference NCC/GY3RC/EX/029, submitted at Deadline 2).

Key Issue

16.1.53 (8.3) Mr Boon states most offshore supply vessels enter the port stern first and are piloted by the port pilots; Mr Boon asked if port pilots have been involved actively in any computer designated passages to seek their opinions. When considering the outer harbour construction, Mr Boon took the port pilots to a sophisticated model at research Station at Wallingford. Mr Boon asks whether, in the case of the Scheme, this has been undertaken or whether the bridge crossing has been modelled elsewhere and if so to what level of technical practicality?



Applicant's Response

16.1.54 In the development of the Scheme, vessel simulations (including stern first transits) have been undertaken at both East Coast College and HR Wallingford; GYPA/GYPC pilots have been, and will continue to be, directly involved in the vessel simulations.

Key Issue

16.1.55 (8.4) Great Yarmouth is not a compulsory pilotage port however and if vessels, seeking to moor and leave berths above the proposed crossing, have to take pilots to safely reach their berths who will pay for that pilotage caused by the construction of the bridge.

Applicant's Response

16.1.56 Great Yarmouth has compulsory pilotage requirements for all vessels exceeding 40m length overall which would apply to this scenario, unless a valid Pilotage Exemption Certificate (PEC) is effective. Discussions with GYPC are ongoing regarding the provision of PECs during and following the Scheme's construction. With the exception of those PEC holders it is not considered that any vessel that currently does not require a pilot will require a pilot as a result of the Scheme.

Key Issue

16.1.57 (8.5) Mr Boon asked what are the arrangements for downriver transits through the proposed bridge spans? He states his arrangements with the Haven and Breydon bridges were that they lifted together but they were closer together. The distance between the Haven Bridge and projected new bridge is much longer. How would the passage of vessels which required a bridge lift from quays above the proposed crossing operate?

- 16.1.58 The operational procedures for the Scheme bridge are included within the Scheme of Operation in Schedule 10 to the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020); these have been agreed with the GYPA/GYPC.
- 16.1.59 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.



Key Issue

16.1.60 (8.6) Mr Boon believes that the average time for a bridge lift utilised in the operational plan, having had experience of the Haven and Breydon bridges, is underestimated. Over the past few months he has observed the lifting of both the Breydon Bridge, the Haven Bridge and the bascule bridge at Lowestoft. Whereas on occasions the total lift allowing time is within the tolerance suggested by the applicants no account seems to have taken place that the subsequent return to free flowing traffic could take at least 20 minutes in busy periods and sometimes considerably longer.

Applicant's Response

- 16.1.61 The transit times for the bridge are based on the bridge specification documents, historic data on vessel movements and the vessel simulation results, the conclusions of which are set out in Appendix B of the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185).
- 16.1.62 The Scheme has been designed with reference to detailed traffic modelling, utilising extensive road traffic and river vessel movement data in order to ensure there is sufficient capacity to accommodate forecast flows without excessive queuing, with a particular focus on the new crossing and its impact on the adjacent local and strategic road network. The results are recorded in the Transport Assessment (Document Reference. 7.2, Planning Inspectorate Reference APP-189).
- 16.1.63 In order to understand the detailed operation of the network, a Paramics microsimulation model has been used. This models the interaction of individual vehicles including the build up and dissipation of queues associated with bridge openings. The model demonstrates that queues on the approaches to the bridge will dissipate back to normal levels within approximately 5 minutes of the barriers being raised. This can be seen on the graph included in response to key issue described in 16.1.36 above.

Key Issue

16.1.64 (8.8) Mr Boon asked if any consideration been taken of the turbulence caused by the bridge piers in the river coupled with fast ebb or flood tides. At the Haven Bridge the tide is fierce around the bridge buttresses and scour holes have developed in the past. Might this sort of consequence result in the requirement for the assistance of towage which is not the case now? If so, what arrangements have been made?

Applicant's Response

16.1.65 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).

- 16.1.66 At the request of GYPC additional vessel simulations have been undertaken, using the outputs from the hydrodynamic modelling and the scope for these simulations was sent to GYPC for comment prior to the simulations taking place.
- 16.1.67 Vessel simulations undertaken have not indicated that an increase in the requirement for tug assistance is likely to result from the construction of the Scheme.
- 16.1.68 The 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. An updated version of the pNRA (Document Reference NCC/GY3RC/EX/029) has been submitted at Deadline 2.

Key Issue

16.1.69 (8.9) Mr Boon asked if any consideration has been made on how vessels approaching the bridge for a transit with the ebb behind them abort the crossing if the lift fails. Does this not mean that passage time from a berth cannot commence until the bridge is safe for passage?

Applicant's Response

16.1.70 Dependent on the manoeuvrability of the vessel, an evaluation as part of the pilotage plan for that vessel would need to determine the most appropriate timing for opening the bridge. There is a range of changeable criteria that would need to be considered, for example tidal conditions, weather conditions, berth utilised/distance from the bridge and manoeuvrability of the vessel.

Key Issue

16.1.71 (8.10) Mr Boon states that any bridge structure constructed within the river will affect the volume of water able to pass through that particular point reducing or restricting the flood or ebb flow. The River Yare within the urban area has a channel which is piled to prevent flooding and obviously no flood plain within Great Yarmouth itself. Bearing in mind the narrow River Yare within the urban area together with the established peculiarities of the effect of flood and ebb tides in this particular location has any consideration been given to asking the Environment Agency to model any consequences of construction which might cause flooding? What reduction in percentage in river flow might be caused by the bridge structure itself?



Applicant's Response

16.1.72 A detailed Flood Risk Assessment has been undertaken as part of the Scheme preparation; discussions with the EA on this are also on-going. Chapter 12 of the ES (Document Reference. 6.1, Planning Inspectorate Reference APP-096) and the accompanying Appendix 12B Flood Risk Assessment (Document Reference 6.2, Planning Inspectorate Reference APP-135) assesses the potential impact of the Scheme on flood risk arising from both the construction and operation of the Scheme and concludes that no increase in flood risk would be caused by the Scheme.

Key Issue

16.1.73 (9.1) Mr Boon states the constraints provided by another narrowed navigation channel will affect the ability of larger port traffic to transit the area. Mr Boon comments that is obviously difficult to forecast what size and type of traffic might emerge in the future but that one would hope that the unimpeded ability of the Port Authority to utilise its quays through its operator in a variety of manners would be mitigated as much as possible. Mr Boon states that one fact, having regard to his quarter of a century in the port industry, is that vessels get larger and more complex. He has observed this over the past three or four years in the size of offshore vessels which berth on the quays immediately upstream and downstream of the projected crossing site.

Applicant's Response

16.1.74 The Scheme is designed to permit the continued access of all vessels that can currently access the River Port. While it is the case that offshore support vessels are generally getting larger, they are also being designed to be more manoeuvrable and controllable, thereby increasing the accuracy with which they can be navigated so as to increase their operational window in terms of environmental conditions. These factors would indicate that their access to the port would not be adversely impacted by construction of the Scheme, as was borne out by the results of the vessel simulations, which informed the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185).

Key Issue

16.1.75 (9.2) Mr Boon states that Bollard Quay and Gas House Quay on the west bank have been used in the past for the construction of accommodation modules on wide beamed barges berthed alongside. Bollard Quay is a public quay under the operational control of the port authority and its operator and has also been used for timber and other general cargoes with lengthy vessels. However, Mr Boon asks whether any bridge construction will affect the operation use and capability of this quay, which, Mr Boon notes, was expensively re-piled for use during his watch as Chief Executive and has



been similarly dealt with again subsequently although there appear to be problems with the quay at the present time. How will the construction of any crossing in this location affect the Bollard Quay which also doubles as a strategic flood protection wall for Southtown?

Applicant's Response

16.1.76 The Scheme is not considered to create any impediment to the use of berths other than in respect of those berths which would need to be removed to accommodate the Scheme. There will be some adjustments to the flood protection walls and tie-ins on which the Applicant has been in discussions with the EA.

Key Issue

16.1.77 (9.3) Mr Boon asks if there are restrictions on the use of Bollard Quay because of the construction of a bridge with a narrowed navigation span; he also enquires about the plans for the applicants to provide alternative facilities for the port authority and its operators?

Applicant's Response

16.1.78 The vessel simulations undertaken have indicated that there will be no new restrictions on the type or size of vessels that will be able to use the sections of Bollard Quay to the north of the Scheme. It is the Applicant's understanding that the GYPC is undertaking repairs to bring the quay back into use. Construction of the Scheme will result in the loss of some berths directly within the footprint of the Scheme and this loss will be compensated.

Key Issue

16.1.79 (9.4) The former Fish Wharf on the east bank is the largest area of quayside freehold owned by the Port Authority. There is a considerable amount of land behind the quayside which can be used for storage and also adjacently with the old gas holder site in the port authority's control across South Denes Road. If the proposed bridge crossing is downriver or crosses the Fish Wharf itself what impact will it have on utilisation of its crucial quays. Where will this valuable quayside facility be replaced by the Applicants.

Applicant's Response

16.1.80 The Scheme is not considered to create any impediment to use of berths other than those directly within the footprint of the Scheme. A Commercial Agreement has been entered into between the Applicant and GYPC covering amongst other issues the impact of the bridge crossing on GYPC's land and the compensation payable arising from this.



Key Issue

16.1.81 (9.5) Mr Boon states the Port Authority built a large warehouse on the west bank of the River on the former timber wharf of Jewson's which has had a variety of uses and is now an offshore complex but large vessels berth at the quayside. Mr Boon asks whether there would be any constraints on the current large vessels which use this quay, currently not requiring pilotage or towage, by the construction of a narrow bridge channel downstream.

Applicant's Response

- 16.1.82 Primacy of vessel navigation is acknowledged by the Applicant and both article 43(6) of the draft DCO (Document Reference 3.1, Planning Inspectorate Reference APP-020) 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 commercial opening.
- 16.1.83 The Scheme is not considered to create any impediment to use of berths other than those which would need to be removed to accommodate the Scheme.

Key Issue

16.1.84 (9.6) Mr Boon asks if the Applicant, in the discussions with port operators, checked as to whether the construction of the bridge will mean that any port operators will need to move from their current sites within the port to maintain their operation or have taken steps to leave the port altogether. This latter scenario would be most undesirable and Mr Boon states he would hope that every effort has been made by the Applicant to ensure that the construction of the bridge does not diminish the number of operators who are present in the port as frontline generators for the Great Yarmouth economy.

- 16.1.85 The Scheme is not considered to create any impediment to use of berths other than those which would need to be removed to accommodate the Scheme. The main directly affected port operators are ASCO and Perenco.
- 16.1.86 Detailed discussions have been ongoing with ASCO and Perenco since November 2017, with the Applicant's aim being to understand ASCO's and Perenco's respective and interdependent operational requirements and to explore all possible options to mitigate the potential impacts of the Scheme on both businesses



16.1.87 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 before the end of the DCO Examination, so that Perenco continues to be located within Great Yarmouth and Perenco's operations will not be interrupted as a result of the Scheme.

Key Issue

16.1.88 (9.7) Mr Boon states the availability of quayside berthing is essential for a port to be able to develop. There would be a large area of river with operational quaysides on both sides of the river above the bridge crossing which would be restricted by the constraints of the bridge itself. Downstream of the projected bridge crossing site East Quay bridge is an active operational site that owing to the fact that the West Quay is piled on the shallow basis, has little backup land below Gorleston and no dredged channel the port becomes one-sided. Has the Applicant taken account of this situation as the practical unconstrained berthing within Great Yarmouth would be restricted unless new areas were opened up?

Applicant's Response

- 16.1.89 The Applicant has been in constant discussion with GYPC to ensure that the impacts of the Scheme on the Port are minimised, which it has done through the Scheme design and the mitigation measures contained within it, and within the pNRA (Document Reference 6.14, Planning Inspectorate Reference APP-185). The Applicant also notes that neither GYPC nor GYPA have raised the issue of berth availability within the wider port as a concern.
- 16.1.90 As explained in paragraph 16.1.21 above no dredging is required to facilitate the installation of vessel waiting facilities on the quay side.

Key Issue

Road approaches to the proposed bridge and traffic implications

16.1.91 (10.1) When the question of the third bridge crossing was mooted, Mr Boon thought that the suggestion was that its principal benefit would be to provide an access for the port operational facilities on the east bank of the river, the outer harbour and the South Denes. He states he remains concerned, having heard that it is meant to alleviate the Haven Bridge traffic by crossing the river at this downriver point, that is envisaged that town traffic would turn north along South Denes Road and South Quay, a single carriageway route through traffic light junctions fed by roads to the east. Similarly, traffic wishing to access the port, unless there is a designated route southwards and eastwards along Hartman Road, would have to contend with the narrow roads in the South Denes. Similarly, traffic seeking to get to the seafront by using the crossing will have to use the existing road system which is poor at this point between the river and the sea. Mr Boon noted that there was one



of several artists impressions of the new structure and road published in the Great Yarmouth Mercury which gave the picture of a dual carriageway road approaching the river at the flat level with no indication of what the traffic will meet on the other side in terms of road capability which, unless improvements take place, will transfer congestion on to the east bank, especially with town designated traffic.

- 16.1.92 The key aims of the Scheme are documented in the Applicant's Case for the Scheme (including Planning Statement) (Document Reference 7.1, Planning Inspectorate Reference APP-188) and are defined as follows:
 - To support Great Yarmouth as a centre for both offshore renewable energy and the offshore oil and gas industry, enabling the delivery of renewable energy NSIPs and enhancing the Port's role as an international gateway;
 - To improve access and strategic connectivity between Great Yarmouth Port and the national road network thereby supporting and promoting economic and employment growth (particularly in the Enterprise Zone);
 - To support the regeneration of Great Yarmouth, including the town centre and seafront, helping the visitor and retail economy;
 - To improve regional and local access by enhancing the resilience of the local road network, reducing congestion and improving journey time reliability;
 - To improve safety and to reduce road casualties and accidents, in part by reducing heavy traffic from unsuitable routes within the town centre;
 - To improve access to and from the Great Yarmouth peninsula for pedestrians, cyclists and buses, encouraging more sustainable modes of transport and also reducing community severance; and
 - To protect and enhance the environment by reducing emissions of greenhouse gases and minimising the environmental impact of the Scheme.
- 16.1.93 The Scheme has been designed with reference to detailed traffic modelling, utilising extensive road traffic and river vessel movement data in order to ensure there is sufficient capacity to accommodate forecast flows without excessive queuing, with a particular focus on the new crossing and its impact on the adjacent local and strategic road network. The results are recorded in the Transport Assessment (Document Reference 7.2, Planning Inspectorate Reference APP-189).



- 16.1.94 The Transport Assessment concludes that in the 2023 AM and PM peak hour 'Do Something' scenario (i.e. with the Scheme) vehicle flows on South Quay would reduce by 46% and 36% respectively when compared to the 'Do Minimum' scenario (i.e. without the Scheme). Further south the assessment concludes that on Southgates Road the 2023 AM and PM peak hour vehicle flows would increase by 86% and 22% respectively in the 'Do Something' scenario when compared to the 'Do Minimum' scenario; however, the forecast flows here do not exceed the link capacity (i.e. the capacity of the relevant part(s) of the highway network to accommodate traffic).
- 16.1.95 On South Denes Road (south of the new crossing) the assessment concludes that in the 2023 AM and PM peak hour 'Do Something' scenario vehicle flows on South Quay would increase by 6% and 16% respectively when compared to the 'Do Minimum' scenario. Again the forecast flows here do not exceed the link capacity.
- 16.1.96 A new signalised junction is proposed on the eastern side of the river, as shown on Sheet 2 of the General Arrangement Plans (Document Reference 2.2, Planning Inspectorate Reference APP-007). This junction has been designed to accommodate forecast flows, as detailed in paragraphs 7.7.41 and 7.7.42 of the Transport Assessment. The proposed junction also accommodates controlled crossings for pedestrians and cyclists.
- 16.1.97 Regarding traffic using the Third River Crossing heading for the seafront, the modelling indicates that these volumes are low for the time periods considered (neutral weekday morning and evening peak periods). It is anticipated that there may be greater volumes of traffic making these movements at weekends and during holiday periods.
- 16.1.98 Regarding traffic heading for the outer harbour, there are several cross routes which are of sufficient width to accommodate HGVs, including Main Cross Road and Hartman Road. The SATURN model (Simulation and Assignment of Traffic in Urban Road Networks) shows traffic is forecast to use several of these routes.
- 16.1.99 Chapter 7 of the Transport Assessment considers the forecast flows on the local network and concludes they can be accommodated within the current link capacity including all routes across the peninsula.
- 16.1.100 In light of the above, the Applicant considers that Mr Boon's concerns about the impacts of the Scheme on traffic on the east bank and the peninsula are capable of resolution.

Key Issue

16.1.101 (10.2) Mr Boon states there has been a railway line alignment on the east bank of the river from the East Quay, protected for many years in local plans, although the lines no longer exist at the present time but in the past



travelled all the way to Vauxhall station and the rail network. In terms of future European traffic plans, where much traffic is being transferred to rail particularly from ports, it is essential that this rail alignment is protected in the construction of the Scheme. Mr Boon states he has mentioned this point to the Applicant which has indicated that it has taken this point on board in the planning of the design of the bridge. The Applicant appears to be appraised of the fact that this alignment must be protected in the interests of the future growth of the port transportation options. Can this be confirmed?

Applicant's Response

- 16.1.102 A 2001 Borough Wide Local Plan policy stated that the Borough Council in conjunction with the County Council, as Highway Authority, together with the Port Authority would investigate and ultimately seek to safeguard a non-statutory alignment for a future rail link to the port through negotiations with developers, statutory agencies and other interested parties.
- 16.1.103 Though the policy is still extant, it doesn't have a defined designation on any Proposals Map and it was not actively taken forward in any subsequent policy in the Great Yarmouth Local Plan: Core Strategy 2013-2030 (Great Yarmouth Borough Council, adopted December 2015). The planning "weight" that can be afforded the policy is therefore limited, due to its age. It is also not being allocated in the emerging Part 2 Local Plan (LPP2). Therefore, at the point of LPP2 adoption (scheduled for December 2020), the policy will be superseded and will cease to be part of the Development Plan.
- 16.1.104 In fact, the Vauxhall Bridge, which forms part of this link, has recently been the subject of improvements to promote it as part of a key walking and cycling route, rather than as part of the rail network.

Key Issue

16.1.105 (10.3) Mr Boon states he remains uneasy with regard to the projected traffic flows off the western bypass to utilise the bridge. It seems, Mr Boon comments, that traffic flow forecasts for the two roundabouts planned on the bypass together with planned work at the Breydon Bridge have been utilised to consider a third bridge traffic flows before any works have taken place. This means that there are four random elements untested in actual traffic flows because of the timing of construction works taken together with the attempt to predict future traffic flows. It appears that the bridge construction team are relying on the Highways Agency traffic flows and plans for remodelled roundabouts at the Breydon Bridge, the Gapton Hall roundabout and the Harfrey's Roundabout. Mr Boon states he understands that the Highways Agency, which is responsible for the modelling of the roundabout changes and consideration of traffic flows, has recently



indicated that it will take another year to finalise roundabout designs and the traffic flow models are being reconsidered. In these circumstances the timetable for the bridge construction and the facts which it is utilising in terms of traffic flows have yet to be finalised. Living in Great Yarmouth, Mr Boon has regularly seen the traffic solidly locked on the western bypass from Breydon Bridge stationary back beyond the Harfrey's Roundabout towards Gorleston. There appears to be no available evidence at the present time that the roundabout planning for the western bypass by the Highways Agency will cause these jams to be alleviated. Surely the original planning was for the roundabouts to be replaced, traffic flows measured and evaluated and the bridge crossing needs met from this scenario?

Applicant's Response

- 16.1.106 The Scheme has been designed with reference to detailed traffic modelling, utilising extensive road traffic and river vessel movement data in order to ensure there is sufficient capacity to accommodate forecast flows without excessive queuing, with a particular focus on the new crossing and its impact on the adjacent local and strategic road network. The modelling includes an opening schedule derived from the historic vessel movement data and taking full account of pilot boat movements, resulting in a range of opening times during the modelled period.
- 16.1.107 The results are recorded in the Transport Assessment (Document Reference. 7.2, Planning Inspectorate Reference APP-189).
- 16.1.108 With regard to Highways England's plans for the A47 junctions, Appendix G of the Statement of Commonality for SoCG at Deadline 1 (Document Reference NCC/GY3RC/EX/010, Planning Inspectorate Reference REP1-004) includes the SoCG between the Applicant and Highways England. Item 4 in Table 4.1 of that SoCG notes that:

"In view of the assessed impacts, it is agreed that the strategic road network can accommodate the impact of the scheme with the proposed mitigation".

16.1.109 Table 4.1 also notes that the A47 Great Yarmouth junctions form part of the Government's Road Investment Strategy (RIS) for 2015-2020. The proposed works announced by Highways England in a Preferred Route Announcement (PRA) in August 2017 include improvement and upgrade to the Vauxhall and Gapton Hall junctions on the A47. These proposals to improve the A47 did not take into account the Great Yarmouth Third River Crossing Scheme. Highways England is currently reviewing the A47 scheme as currently presented in the PRA. If any changes are subsequently required to be made to the PRA, they will be announced by Highways England in due course.



16.1.110 As noted in paragraph 8.5.1 of the Transport Assessment, Norfolk County Council continues to liaise closely with Highways England and the parties have recently completed a joint study to quantify the value for money and operational performance of alternative combinations of schemes at Vauxhall, Gapton Hall and Harfrey's Roundabouts both with and without the Third River Crossing. The outcomes of this study will be used to inform ongoing discussions between Norfolk County Council and Highways England in order to promote optimum improvements on the highway networks in Great Yarmouth.

Key Issue

16.1.111 (10.4) Mr Boon states he appreciates that normal highway planning is based on forward traffic flow figures. However, Mr Boon asks the question of the Applicant as to what would happen, as it would appear from the current situation that the Harfreys roundabout and the short approach on the western bank to the bridge crossing would be locked by traffic. The reply surprised him in that it appeared to be envisaged that there would be signage indicating that the third river crossing could not be used in these circumstances because of blocked traffic on the bypass which will be sent north to cross at the Haven Bridge. Mr Boon states he heard port operators say that if this is the scenario, however desirable the third crossing is, does it merit the construction of the third river crossing at this point. Mr Boon states that no doubt some sort of answer can be produced to this scenario but with the delay in the Highways Agency's plans for roundabouts on the western bypass the situation is not helping the planning of an effective bridge crossing to deal with the traffic problems.

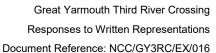
Applicant's Response

16.1.112 The Applicant has responded to the comments on forecast operation and proposed VMS signage in paragraph 16.1.41 above and has responded to the comments on the interaction of the Third River Crossing with Highways England's planned A47 schemes in paragraph 16.1.108 to 16.1.110 above.

Key Issue

Conclusion

16.1.113 Mr Boon states "The points which I have made in this paper were carefully thought through from my own experience of the port and the port industry over a quarter of a century having seen the effects of bridges constructed over other active operational navigable waterways. I write as an individual with the concern that navigation primacy in the Scheme is dealt with properly and effectively and that the existing operation of the port is neither hindered nor precluded from developing in the future. An access across the river which does not hinder navigation is highly desirable if in fact the whole of the road network across the A 47 is finally developed and dualled into





Yarmouth with the final link of the Acle Straight. As I had taken an active part in the promotion of the need for improved road schemes, starting over 40 years ago now, one appreciates the timescale needed to improve the Great Yarmouth traffic system. One also appreciates the need to make certain that the appropriate parts of the 'road to the port' are constructed in a practical timescale that neither hinders the operation of traffic within the town nor affects the port operation as it operates in a highly competitive field. My comments are meant to be constructive in addressing a wide variety of points which did not seem to be on the agenda of the Applicants. I hoped in this respect to be helpful in adding my small area of knowledge to the scheme to ensure as I thought that the navigation in the River Yare was not hindered unnecessarily. At the time at which I write I do not have answers to the questions which I have posed even although I have spent almost a year asking them in attending exhibitions, open consultations and having detailed meetings with the applicants myself. If satisfactory explanations are now available I would be pleased to hear them because my overriding aim is to see that the port of Great Yarmouth, which I served for a quarter of a century, retains its strategic position in the future without limitations in order to be a principal economic driver for the town in terms of whatever the energy scenario becomes and with our historic shipping all relationships with the continent of Europe."

Applicant's Response

16.1.114 The Applicant notes the comments above and is happy to continue to engage with Mr Boon moving forward. The Applicant has demonstrated, in the responses given above, that the concerns and issues raised by Mr Boon have been addressed in the development of the Scheme as is evidenced in the submitted application documents.