# Great Yarmouth
# Third River Crossing Order 202[*]

# Document NCC/GY3RC/EX/052: Applicant's Responses to Second Written Questions

**Planning Act 2008**

**Infrastructure Planning**

**The Infrastructure Planning (Examination Procedure) Rules 2010**

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# Foreword

The Response to the Examining Authority's Second Written Questions relates to an application ('the Application') submitted by Norfolk County Council ('the 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 the 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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# Glossary of Abbreviations and Defined Terms

| | |
|---|---|
| ASCO | ASCO UK Limited |
| CPA | Norfolk County Council, in its capacity as County Planning Authority |
| DCO | Development Consent Order |
| ES | Environmental Statement |
| ExA | Examining Authority |
| NCC | Norfolk County Council |
| OCoCP | Outline Code of Construction Practice |
| Perenco | Perenco Limited |
| pNRA | preliminary Navigation Risk Assessment |
| Scheme | The Great Yarmouth Third River Crossing project for which the Applicant seeks development consent |
| SoCG | Statement of Common Ground |
| UNCTAD | United Nations Conference on Trade and Development |
| The Applicant | Norfolk County Council (in its capacity as Highway Authority and promoter of the Scheme). |
| The Council | Norfolk County Council |

# 1 Applicant's Response to Second Written Questions

| ExQ | Question to | Question | Applicant's Response |
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| **2.0** | **General and Cross-topic Questions** | | |
| 2.0.1 | Applicant | I note the intention to adopt continuous fendering at the detailed design stage, is the Applicant able to provide an example of where such fendering has been used before and are there any disbenefits to such a system? | The requirement for protective fendering on the bridge passage was identified at an early stage through the pNRA development for the scheme.<br><br>The forms of fendering that can be used for pier protection vary considerably in terms of unit dimensions so in order to produce a worst-case assessment of impacts the preliminary design considered the form that required the most lateral space to accommodate, that being individual cone fenders.<br><br>During the vessel simulations and subsequent pNRA updates it was noted that provision of continuous fendering could provide an increased level of vessel protection in the event of certain incidents and, as noted in the Applicant's Responses to Written Representations submitted by Interested Parties at Deadline 3 (submitted by the Applicant at Deadline 4 - REP4-002) it was agreed to take this form forward in the detailed design.<br><br>Various fendering forms have been used on bridge piers adjacent to navigation channels, some examples are:<br>Continuous fendering, similar to the current anticipated design, is used on: |

| ExQ | Question to | Question | Applicant's Response |
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| | | | • Breydon Bridge (Great Yarmouth UK)<br>  <br>• Barrow Rail Bridge (Ireland)<br>  <br>• Kronprins Frederiks Bro (Denmark)<br>  |

| ExQ | Question to | Question | Applicant's Response |
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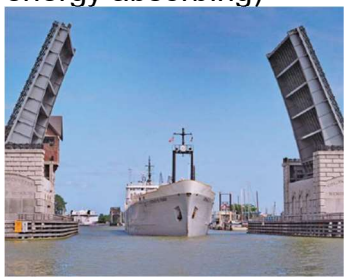
| | | | • Walk Bridge (Connecticut US)<br>  <br>• Colonel Patrick O'Rourke Bridge (New York US) (Not energy absorbing)<br>  |

| ExQ | Question to | Question | Applicant's Response |
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| | | | Discontinuous fendering, similar in principle to the initial fender design, is used on;<br><br>• Memorial Bridge (Maine US)<br>  <br><br>• Western Gateway Bridge (Salford UK)<br>  <br><br>• Sarah Mildred Long Bridge (New Hampshire US)<br>  |

| ExQ | Question to | Question | Applicant's Response |
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| | | | • Twin Sails Bridge (Poole UK) (Not energy absorbing)<br>  <br>Fendering is not always used on bridges across navigation channels, there is no fendering present on;<br>• Haven Bridge (Great Yarmouth UK)<br>  <br>• Tower Road Bridge (Birkenhead UK)<br>  |

| ExQ | Question to | Question | Applicant's Response |
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| | | | • Tower Bridge (London UK)<br>  <br><br>These are of course historic bridges, or replacements thereof, but they indicate that Harbour Authorities have not felt it necessary to upgrade these structures with impact protection fendering.<br><br>The advantages and disbenefits of fender arrangements are greatly affected by the nature of impact events that they are subjected to; the following paragraphs set out some of the principal differences between the fendering options.<br><br>In general, with a continuous fender solution, if such fendering suffers damage, either through impact or deterioration, it can be more difficult to repair or replace depending on how the front panels are designed and connected to the elastomeric units behind.<br><br>Continuous fender rubber units typically have a higher reaction force for a given energy capacity, meaning that they would impart more force into the supporting structure than discrete cone fenders from a given impact. |

| ExQ | Question to | Question | Applicant's Response |
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| | | | However continuous fenders perform better under shear forces than discrete panel fenders and are less susceptible to damage from such forces, predominantly caused by protrusions from vessel hulls. They also have better performance than cone fenders as impact angles increase from the perpendicular.<br><br>There are a number of other fendering solutions that could be considered, such as wheel or roller fenders, however these are not typically used for bridge abutment protection and would therefore be regarded as untested technology in these situations.<br><br>In conclusion, the Applicant considers that continuous fendering would provide the most appropriate form of bridge abutment protection and proposes to take this forward in the detailed design of the Scheme. |
| 2.0.2 | GYBC/NCC | The latest iteration of the dDCO (REP4-006 - Schedule 2 Requirements Part 2, Paragraphs 20 and 21) includes an increase in the determination period from 6 to 8 weeks for the discharge of certain details. Can the Council confirm whether it is satisfied with this amendment? | Please refer to item 17 in the 'matters agreed' section of the SoCG between the Applicant and Norfolk County Council as County Planning Authority (CPA) submitted at Deadline 4 (Document Reference NCC/GY3RC/EX/047, Planning Inspectorate Reference REP4-004) which confirms that agreement has been reached on the drafting of Part 2 of Schedule 2 of the draft DCO, included in revision 3 (Document Reference NCC/GY3RC/EX/048, Planning Inspectorate Reference REP4-005), see paragraphs 20 and 21. |

| ExQ | Question to | Question | Applicant's Response |
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| 2.0.3 | GYBC/NCC | The latest iteration of the dDCO (REP4-006 Schedule 2 Requirements, Paragraph 5) provides for details of specified structures to be agreed by NCC in consultation with GYBC. Can the Council confirm its acceptance of this requirement? | Please refer to item 11 in the 'matters agreed' section of the SoCG between the Applicant and NCC as CPA submitted at Deadline 4 (Document Reference NCC/GY3RC/EX/047, Planning Inspectorate Reference REP4-004) which confirms that agreement has been reached on the drafting of new requirement 5 which is included in revision 3 (Document Reference NCC/GY3RC/EX/048, Planning Inspectorate Reference REP4-005). |
| 2.0.5 | GYPC/Applicant | With regard to the suggestion that the bridge may need to open before certain vessels enter the port, is it known roughly what percentage of the time all berths on the approach to the bridge location would be occupied? | The likelihood of coincident occupation of all berths south of the bridge is quite difficult to determine from the data the Applicant has on vessel movements.<br><br>There are some berths that see very infrequent movement of vessels while other berths have almost daily movements to and from them.<br><br>It must be taken into account that not all berths would be suitable for all vessels, some would not have sufficient water depth to allow all vessels to safely lay alongside and some would not be of sufficient length to accommodate all vessels.<br><br>From the vessel arrival and departure data between 2008 and 2016 (being the data currently available to the Applicant) and using a mean vessel stay of 1 day, the average occupation (% days a vessel is on berth) of all 35 berths south of the bridge was 7%, the occupation of the 10 most used quays was 40%. If we |

| ExQ | Question to | Question | Applicant's Response |
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| | | | only consider these 10 most visited berths, the probability that all would be occupied simultaneously is 0.01% (equivalent to 1 day in 25 years).<br><br>An alternative, more conservative, assessment method is to utilise typical berth occupation figures for a "busy" port (UNCTAD, 2012, considered 70% to be the upper limit of manageable occupancy) and applying that figure across the "suitable" berths; this would give a figure of between 0.2% (0.73 days per year) and 2.8% (10 days per year) depending on the number of berths considered suitable.<br><br>Neither of these calculation methods gives rise to a forecast figure for the anticipated number of early bridge opening operations which is so high as to cause the Applicant to consider that the frequency of early bridge openings would be above manageable levels (in terms of impact on the local highway network). The calculations therefore reaffirm the Applicant's view that provision of a dedicated large vessel waiting facility is not warranted by the magnitude of the risk it would be provided to mitigate. |
| **2.1** | **Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations** | | |
| 2.1.2 | Perenco | Can Perenco confirm whether it was aware of the preferred alignment for the GYTRC at the time is occupied its current site at Fish Wharf? If yes, what | In response to the first part of this question, the Applicant is aware that at the time temporary planning permission was granted for Neptune Warehouse (Reference No. 06/13/0049/F dated 14 May 2013 – copy enclosed at Appendix A to this |

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| | | forward planning has been done to minimise the impact of the GYTRC project on business operations. | document) the decision notice included a condition (condition no. 1) relating to the temporary nature of the permission, with the reason for that condition being stated as follows:<br>*"The location of a permanent building in this location would be contrary to the aims of Policy CS 16 of the Great Yarmouth Draft Core Strategy and Norfolk County Local Transport Plan which seeks to protect the preferred route of the Third River crossing - on which the proposed structure stands – from development which would be prejudicial to the future of the crossing and permission is therefore granted on a temporary basis for a building which is of temporary construction and in accordance with the terms of the application and the design and access statement because of the special employment related benefits attributed to the application."* |
| 2.1.3 | ASCO | Can ASCO confirm whether it was aware of the preferred alignment for the GYTRC at the time it sublet the northern part of the Fish Wharf site to Perenco? If yes, what forward planning has been done to minimise the impact of the GYTRC project on business operations. | In response to the first part of this question, please refer to Applicant's comment at 2.1.2 above. |
| **2.2** | **Draft Development Consent Order (DCO)** | | |
| 2.2.1 | Applicant | Whilst noting the amendments to Art. 43, the latest dDCO (REP4-006) does | The Applicant has prepared drafting to clarify the distinction between commercial/recreational vessel movements but wished |

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| | | not include any wording to clarify the distinction between commercial/recreational vessel movements. Does the Applicant intend to address this? | to consult Great Yarmouth Port Authority and Great Yarmouth Port Company on the drafting before it was included in a version of the draft DCO being submitted into the examination.<br><br>The Applicant has provided the proposed drafting to Great Yarmouth Port Company and Great Yarmouth Port Authority, whose response is awaited. The Applicant is aiming to include an agreed form of drafting, clarifying the distinction between commercial/recreational vessel movements, in revision 5 of the draft DCO at Deadline 6. |
| **2.3** | **Transportation and Traffic/Highways** | | |
| 2.3.1 | Applicant | Can the Applicant explain in greater detail the extent to which impacts to nearby commercial premises, from changes in traffic and transport during the construction phase have been taken into account in the ES? It is acknowledged that a full CTMP will be compiled by the appointed contractor however, can the Applicant provide detail what measures (if any) are proposed to address/minimise the impact of construction activities? | As described in Chapter 17, Traffic and Transport, of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096), information provided by the Contractor has been used to derive worst-case estimates of traffic impacts during the construction phase. Using this information, the potential effects on public transport users, journey times and delays (motorised and non- motorised users), collisions and safety and fear and intimidation were assessed. Further information on the scope and methodology for the assessment of effects is provided in Section 17.4 of the ES.<br><br>The assessment of the effects of the Scheme during the construction phase concluded that the Scheme would be likely to |

| ExQ | Question to | Question | Applicant's Response |
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| | | | have a temporary, slight adverse effect on all traffic and transport receptors assessed, which include the effects on staff and visitors travelling to and from nearby commercial premises.<br><br>Mitigation measures for construction effects are provided throughout the Outline Code of Construction Practice (Outline CoCP) (Document Reference NCC/GY3RC/EX/043, Planning Inspectorate Reference REP3-014). In addition, as described in Chapter 11 of the Outline CoCP, part of the mitigation for construction effects is also addressed in the Framework Construction Traffic Management Plan (Appendix A to the Outline CoCP) and the Framework Workforce Travel Plan (Appendix B to the Outline COCP). The mitigation measures proposed are inclusive of but not limited to the following:<br><br>• The Contractor will endeavour to undertake noisy activities that are likely to lead to disturbance within the core working hours, which are 7:00 to 19:00 Monday to Friday and 07:00 to 13:00 on Saturdays (Paragraph 2.3.1 of the Outline CoCP);<br>• The Contractor will ensure that the orientation and layout of the compound activities are, as far as reasonably practicable, arranged to reduce environmental effects on adjacent land users (Paragraph 2.4.6 of the Outline CoCP);<br>• The Contractor will operate a 24-hour telephone line which would provide the public and any stakeholders with a number to call if they have any complaints to make about the Contractor's performance or if they wish to raise a concern |

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| | | | (Paragraph 2.6.1 of the Outline CoCP); and<br>• As detailed in Issue Number AS5 in the Response to Relevant Representations (Document Reference NCC/GY3RC/EX/008, Planning Inspectorate Reference REP1-002) access to all businesses and residential properties will be maintained during construction of the Scheme. There will be the need for some road closures and these will be advertised in advance and diversion routes will be provided. Chapter 9 and Chapter 11 of the Outline CoCP details the Applicant's commitments relating to traffic diversions and construction traffic.<br><br>A summary of all the mitigation 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).<br><br>Further details would be developed and agreed in liaison with the Highways Authority, however the indicative information demonstrates that the construction activities can be effectively phased in order to meet the anticipated programme whilst minimising disruption, for example, it is proposed that:<br><br>• The Contractor intends to maintain the pedestrian route from Suffolk Road over William Adams Way once the footway has been removed. The route would be via the controlled |

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| | | | crossings at the traffic signals at the junction with Southtown Road (Paragraph 3.2.3 of the Appendix A to the Outline CoCP);<br>• Southtown Road would remain open to traffic in both directions other than for a small number of overnight closures whilst the bridge deck beams are being laid (Paragraph 17.8.14 of the ES);<br>• The works to change the direction of Sutton Road and Swanstons Road would be undertaken at different times to ensure a convenient alternative route is available (Paragraph 17.8.14 of the ES); and<br>• The construction of the proposed roundabout on William Adams Way would be phased to ensure that there would be two-way traffic flow maintained always other than during a small number of night time closures (Paragraph 17.8.14 of the ES). |
| **2.4** | **Water Environment/Flood Risk** | | |
| 2.4.1 | Environment Agency | EA's position in relation to the scheme remains unclear and is causing uncertainty which is unhelpful to the Examination of this project. I note your comments in your letter dated 25 October 2019 in which you stated: "*Our national teams that verify the accuracy of flood modelling, are now reviewing* | Further to the Applicant's Response to the Written Representations (Document Reference NCC/GY3RC/EX/016, Planning Inspectorate Reference REP2-002) discussions on the Flood Risk Assessment, Environmental Statement - Appendix 12B (Document Reference 6.2, Planning Inspectorate Reference APP-135) have continued with the EA.<br><br>The Applicant considers the information presented in the Flood Risk Assessment is sufficient. Separately, the Applicant has |

| ExQ | Question to | Question | Applicant's Response |
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| | | *the submitted modelling with a deadline to report by 8 November"*. I would welcome a further update on the latest position and a firm date for the submission of final comments which should be no later than Deadline 5 (14 January 2020). | undertaken further sensitivity modelling relating to flood risk to address the queries raised by the Environment Agency. The further sensitivity modelling and a supporting memorandum were submitted to the Environment Agency for their review on 21st and 22nd October 2019.<br><br>Following the Environment Agency's initial review of the further sensitivity modelling and the supporting memorandum, two modelling queries raised by the Environment Agency were received by the Applicant on 13th November 2019. The Applicant responded to these two queries on 28th and 29th November 2019 through the provision of further sensitivity modelling and a supporting memorandum. Neither the two pieces of further sensitivity modelling nor the two explanatory memorandums change the conclusions of the Applicant's Flood Risk Assessment submitted in support of the DCO application.<br><br>Furthermore, with regard to the letter (dated 23rd December 2019) submitted to the Examining Authority by the Environment Agency, the Applicant has undertaken the Flood Risk Assessment (Document Reference 6.2, Planning Inspectorate Reference APP-135) in compliance with all applicable regulations and policies and undertook pre-application discussions with the Environment Agency. The findings of the Flood Risk Assessment are summarised in Chapter 12 of the Environmental Statement (Document Reference 6.1, Planning Inspectorate Reference APP-096); Table 12.1 in the Environmental Statement provides a |

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| | | | summary of the key legislation, policy and guidance applicable to the Flood Risk Assessment, which includes the National Policy Statement for National Networks and the overarching National Planning Policy Framework. With regard to the pre-application discussions, these commenced in 2017 and are summarised in Table 12.4 of the Environmental Statement and are recorded in greater detail in Table 2.1 of the Statement of Common Ground with the Environment Agency submitted at Deadline 5 of the Examination (Document Reference NCC/GY3RC/EX/054).<br><br>The Applicant continues to engage with the Environment Agency and understands that their review of the Flood Risk Assessment will be completed in January 2020. |

# Appendix A - temporary planning permission granted for Neptune Warehouse (Reference No. 06/13/0049/F)

**THE BOROUGH OF GREAT YARMOUTH**

Town and Country Planning Act 1990

# PLANNING PERMISSION

**Part 1 - Particulars of Application**

Reference No :- **06/13/0049/F**

Submitted :- 8th February 2013

**Development at :-**

Land Adj Asco Group Ltd
Fishwharf
Great Yarmouth
NR30 3LF

**For :-**

Erection of temporary modular building for use as warehouse and associated integral office accommodation and associated infrastructure

**Agent :-**

Mr S Nicholas
Paul Robinson Partnership (UK) LLP
The Old Vicarage
Church Plain
Great Yarmouth
NR30 1NE

**Applicant :-**

Mr G Hurren
Asco Group Ltd
Fishwharf
Great Yarmouth
NR30 3LX

**Part 2 - Particulars of Decision**

The Great Yarmouth Borough Council hereby give notice in pursuance of the provisions of the Town and Country Planning Act, 1990 that permission has been granted for the development referred to in Part 1 hereof in accordance with the application and plans submitted subject to the following conditions:-

1. This permission expires on 15th May 2022 and unless on or before this date application has been made for an extension to the period of permission and such application is approved by the Local Planning Authority, the building and associated infrastructure shall be permanently removed from the site.

   The reason for the condition is:-

   The location of a permanent building is this location would be contrary to the aims of Policy CS 16 of the Great Yarmouth Draft Core Strategy and Norfolk County Local Transport Plan which seeks to protect the preferred route of the Third River crossing - on which the proposed structure stands - from development which would be prejudicial to the future of the crossing and permission is therefore granted on a temporary basis for a building which is of temporary construction and in accordance with the terms of the application and the design and access statement because of the special employment related benefits attributed to the application.

2. The development hereby permitted shall be carried out entirely in accordance with the details shown on the application forms, design and access statement and plans received by the Local Planning Authority on 13th February 2013 and notwithstanding the Town and Country Uses Classes Order the building shall be for a storage and office use only in accordance with the approved layout and plans and shall not be used for any other purpose (including any other purpose within the Town and Country Planning (Use Classes) Order 1987, or in any provision equivalent to that class in any statutory instrument revoking and re-enacting that order with or without modification)

   The reason for the condition is :- In accordance with the terms of the aplication and submitted details.

3. Prior to commencement of the use hereby permitted any access gate(s), bollard,chain or other means of obstruction shall be hung to open inwards and shall be set back a minimum distance of 5 metres from the near edge of the adjoining highway carriageway. Any sidewalls / fences / hedges adjacent to the access shall be splayed at an angle of 45 degrees from each of the (outside) gateposts to the front boundary of the site.

   The reason for the condition is :-

   In the interests of highway safety.

4. Prior to the commencement of the use hereby permitted) the proposed access / on-site parking / servicing / loading, unloading / turning / waiting area shall be laid out, demarcated, levelled, surfaced and drained in accordance with the approved plan and retained thereafter free from any impediment to that specific use.

   The reason for the condition is :-

   To ensure the permanent availability of the parking / manoeuvring area, in the interests of highway safety.

5. Prior to the occupation of the building, a flood response plan shall be submitted to and agreed in writing with the Local Planning Authority.

   The reason for the condition is :- To minimise the risk to the occupants in the event of flooding.

6. Prior to the commencement of development, details of construction methodology together with supporting calculations shall be submitted to and agreed in writing with the Local Planning Authority. The submitted calculations shall be sufficient to prove that the buildings will be constructed to withstand both hydrostatic and hydrodynamic pressures associated with a breach in the defence adjacent to the dwellings. All buildings are to be constructed in accordance with the agreed methodology.

   The reason for the condition is :- To maintain the structural integrity of the buildings in the event of a failure of the defences.

7. REASON FOR APPROVAL OF THE APPLICATION :- The temporary building is for required for employment related uses for a limited period of time and meets the criteria for employment related uses in the port area in accordance with the relevant policies in the Great Yarmouth Borough Wide Local Plan 2001.

8. STATEMENT OF POSITIVE ENGAGEMENT: In dealing with this application Great Yarmouth Borough Council has actively sought to work with the applicant in a positive and proactive manner, in accordance with paragraphs 186 and 187 of the NPPF.

[redacted]

Date: 14th May 2013

Group Manager (Planning)
Town Hall, Hall Plain, Great Yarmouth