

The Lake Lothing (Lowestoft) Third Crossing Order 201[*]



Lake Lothing
**THIRD
CROSSING**

Document SCC/LLTC/EX/51: Applicant's Responses to Written Representations and Interested Parties Responses to Written Questions

Planning Act 2008

Infrastructure Planning

The Infrastructure Planning (Examination Procedure) Rules 2010

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Foreword

The Applicant's Responses to Written Representations and Interested Parties Written Questions (Document reference SCC/LLTC/EX/51) relates to an application ("the Application") submitted by Suffolk County Council ("the Applicant") to the Secretary of State (through the Planning Inspectorate) 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 Applicant to construct, operate and maintain a new bascule bridge highway crossing, which would link the areas north and south of Lake Lothing in Lowestoft, and which is referred to in the Application as the Lake Lothing Third Crossing (or "the Scheme").

CONTENTS	PAGE No.
Foreword	ii
Figures.....	vi
Abbreviations.....	vii
1 Introduction.....	1
1.1 Purpose of this report.....	1
2 Anglian Water.....	2
2.1 Summary and response to Written Representations	2
3 ABP	5
3.1 Summary and response to Written Representations	5
4 B.S. Pension Fund Trustee Limited [REP3-017]	8
4.1 Summary and response to Written Representations	8
5 Cadent Gas Limited [REP3-008].....	12
5.1 Summary and response to Written Representations	12
6 Cara Robinson [REP3-022].....	13
6.1 Summary and response to Written Representations	13
7 Environment Agency [REP3-015].....	16
7.1 Comments on ExA's Written Questions	16
8 Historic England [REP3-007].....	21
8.1 Summary and response to Written Representations	21
9 PFK Ling Limited (REP3-023).....	22
9.1 Summary and response to Written Representations	22
10 Lowestoft Cruising Club [REP3-001 and REP3-002}	36
10.1 Comments on ExA's Written Questions	36
10.2 Response to Relevant Reps	39
11 Marine Management Organisation (MMO) [REP3-014]	41
11.1 Comments on ExA's Written Questions	41
11.2 Response to Relevant Reps	42

12	Network Rail [REP3-020 and REP3-021].....	46
12.1	Summary and response to Written Representations	46
13	Howes Percival LLP on behalf of Overseas Interests Inc, Waveney Fork Trucks Limited, Lift Truck Rentals Limited, Nexen Lift Trucks Limited, Oakes Recruitment Limited, Team Oakes Limited and Hitech Grand Prix Limited [REP3-018 and REP3-019]	48
13.1	Summary and response to Written Representations	48
14	Northumbrian Water Limited [REP3-011, REP3-012, REP3-013].....	69
14.1	Summary and response to Written Representations	69
15	NWES [REP3-009]	91
15.1	Summary and response to Written Representations	91
	Appendix A - Extract from APP-018 - 2.3 Land Plans (Sheet 2 of 5).....	93
	Appendix B - Review of Central and Western Bridge Options.....	94
	Appendix C – Rebuttal of matters raised by ABP in Section 20 of their Written Representation (Inadequacies of the Environmental Statement).....	95
	Appendix D – Explanatory Paper on the Applicant's Proposals for Land owned by Lings and Nexen	101
	Appendix E – Section 151 Officer's letter.....	105
	Appendix F - Applicant's motortrade specialist report	106
	Appendix G – Swept Path Analysis Drawings	107
	Appendix H – Sensitivity Test to re-assess capacity of Access Road / Waveney Drive Priority Ghost Island Junction	108
	Appendix I – Response to Northumbrian Water Limited's Written Representation - Noise and Vibration Appendix	114
	Appendix J - B1531 Figures	115

Figures

Figure A-1 Extract from APP-018 - 2.3 Land Plans (Sheet 2 of 5)	93
Figure J-1 AM 2037 flow difference Do Something (With LLTC Scheme) vs Do Minimum (Without LLTC scheme)	115
Figure J-2 PM 2037 flow difference Do Something (With LLTC Scheme) vs Do Minimum (Without LLTC scheme)	116

Abbreviations

ABP	Associated British Ports
CftS	Case for the Scheme
CoCP	Code of Construction Practice
DCLG	Department for Communities and Local Government (now referred
DCO	Development Consent Order
dDCO	Draft Development Consent Order
DfT	Department for Transport
DGM	Design Guidance Manual
DML	Deemed Marine Licence
DMRB	Design Manual for Roads and Bridges
DR	Design Report
EA	Environment Agency
EIA	Environmental Impact Assessment
ES	Environmental Statement
FRA	Flood Risk Assessment
GI	Ground Investigation
HRA	Habitats Regulations Assessment
HGV	Heavy Goods Vehicle
LPA	Local Planning Authority
MMO	Marine Management Organisation
NMC	Non Material Change
NMU	Non-motorised user
NNNPS	National Networks National Policy Statement
NRA	Navigational Risk Assessment
NSIP	Nationally Significant Infrastructure Project
OAR	Options Appraisal Report
OBC	Outline Business Case
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
PNPS	Ports National Policy Statement
SCC	Suffolk County Council

SoCG	Statement of Common Ground
SoS	Secretary of State
SSSI	Site of Special Scientific Interest
SRN	Strategic Road Network
SuDS	Sustainable Drainage System
TA	Transport Assessment
WDC	Waveney District Council
WFD	Water Framework Directive
WSI	Written Scheme of Investigation
WR	Written Representations

1 Introduction

1.1 Purpose of this report

1.1.1 This report, submitted for Deadline 4 of Examination, contains the Applicant's provides responses to Written Representations (WR) and answers to the Written Questions prepared by interested parties and submitted to the Examination for Deadline 3 on 8 January 2019.

1.1.2 WR's were submitted by the below parties:

- Anglian Water
- Associated British Ports [REP3-024 and REP3-025]
- B.S. Pension Fund Trustee Limited [REP3-017]
- Cadent Gas [REP3-008]
- Cara Robinson [REP3-022]
- Historic England [REP3-007]
- Marine Management Organisation (MMO) [REP3-014]
- Network Rail [REP3-020 and REP3-021]
- New Anglia Local Enterprise Partnership [REP3-006]
- Northumbrian Water Limited [REP3-011, REP3-012, REP3-013]
- NWES Property Services Limited [REP3-009]
- Overseas Interests Inc, Waveney Fork Trucks Limited, Lift Truck Rentals Limited, Nexen Lift Trucks Limited, Oakes Recruitment Limited, Team Oakes Limited and Hitech Grand Prix Limited [REP3-018 and REP3-019]
- PFK Ling Limited [REP3-023]

1.1.3 In addition, responses to the Examining Authority's Written Questions were provided by the below parties:

- Associated British Ports [REP3-026]
- Environment Agency [REP3-015]
- Lowestoft Cruising Club [REP3-002]
- Marine Management Organisation [REP3-014]
- Waveney District Council [REP3-004]

1.1.4 Lowestoft Cruising Club [REP3-001] and the MMO [REP3-014] also provided responses to comments on Relevant Representations

1.1.5 The report provides Suffolk County Council's, as the Applicant, response to the issues raised, thereby providing a reference document for all interested parties and the Planning Inspectorate.

1.1.6 There were some Written Representations, or part of representations and Written Question 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 Anglian Water

2.1 Summary and response to Written Representations

Reference	Extract	Applicant's response
2.1-2.5	<p>Existing Assets Affected</p> <p>Anglian Water stated in their response that there were water recycling assets within the boundary of the Development Control Order and 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.</p> <p>Standard protected strips are the strip of land falling the following distances to either side of the medial line of any relevant pipe;</p> <ul style="list-style-type: none"> • 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. <p>Anglian Water stated that if it was not possible to avoid any of Anglian Water's water recycling assets, then the asset may need to be diverted in accordance with Section 185 of the Water</p>	<p>Effects on Anglian Water's existing assets and connections to them as a result of the Scheme will be able to be managed through the protective provisions for Anglian Water's benefit within the draft DCO; the provisions of article 15, and as a result of the drainage strategy secured through Requirement 6.</p> <p>In this regard, the Applicant notes that Anglian Water set out in their Written Representation that the Protective Provisions in the draft DCO are agreed.</p>

Reference	Extract	Applicant's response
	<p>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.</p>	
2.6-2.8	<p>Connections to the foul and surface water sewerage networks</p> <p>Anglian Water stated anticipated foul flows are not expected to raise any significant issues for the capacity of the existing network based upon the discharge rate currently proposed.</p> <p>It confirmed the surface water strategy as submitted proposes to connect to the public sewerage network. Anglian Water confirmed they are supportive of the strategy in principle based upon information provided to date subject to the discharge rates being confirmed.</p> <p>Anglian Water confirmed a number of applications required to deliver the necessary infrastructure.</p>	
4.1-4.3	<p>Acquisition of land in Anglian Water's ownership</p> <p>Anglian Water questioned about the Application which proposes to permanently acquire land in Anglian Water's ownership as identified on the submitted land plan (document APP-18). There appears to be an existing inline sewage pumping station (Lowestoft Road-Denmark Road SP) in Anglian Water's ownership located immediately adjacent or within the boundary</p>	<p>There is a discrepancy between the extent of the boundary of Anglian Water's freehold title, SK192481, and the physical boundary of the sewage pumping station on the ground.</p> <p>The excerpt in Appendix A taken from APP-018 - 2.3 Land Plans (Sheet 2 of 5) shows the extent of title SK192481 (highlighted in yellow). The footprint of the sewage</p>

Reference	Extract	Applicant's response
	<p>of parcel 02-03. Similarly there are existing foul sewers located within the parcels identified as being within Anglian Water's ownership (parcels 02-02, 02-03 and 02-05).</p> <p>Anglian Water states it has not had specific discussions about the implications of permanent possession of land in Anglian Water's ownership on the operation and maintenance of the existing assets as set out above.</p>	<p>pumping station is smaller than the extent of the freehold title, part of which extends into the adjacent land holding of Waveney District Council and part into the public highway. Plot 2-03 on the Land Plans is part of the public highway (footway and verge adjacent to Denmark Road), within Anglian Water's freehold title, SK192481. As such the Book of Reference (application document APP-009; updated at Examination Deadline 4 with Document Reference SCC/LLTC/EX/55) lists Anglian Water as the owner of plot 2-03 (in respect of part of registered title), and also lists Suffolk County Council as owner and occupier (in respect of public highway). There will not be any impact on the sewage pumping station.</p> <p>Impacts are not expected to occur to the foul sewers located within this parcel, but they would in any event be protected pursuant to Anglian Water's Protective Provisions within the draft DCO.</p>

3 ABP

3.1 Summary and response to Written Representations

3.1.1 In response to ABP's response to the ExA's questions and its Written Representation, the Applicant has produced its own paper on the impacts of the Scheme to the Port, which is available at Document Reference SCC/LLTC/EX/59. That paper deals with the points (where a response is required) made by ABP in parts 1-20, 22 and 24 of its representation and its response to the ExA's questions. The points made by ABP in paragraphs 11.7 - 11.8 and parts 21 and 23 of its representation are set out in this document in the table below.

Written Rep Ref.	Summary / Extract	Applicant's Response
11.7-11.8	<p>Western Option</p> <p>ABP raised concern about the assessment of alternative routes for the crossing, in particular the reason for the Applicant rejecting a western option for the bridge. ABP stated if appropriately designed and located, this option would have been supported by ABP because it would not have detrimentally impeded port operations. In addition, ABP query whether the environmental effects of the proposed LLTC were properly considered in the context of the western option, bearing in mind the recent decision in Holohan (Brian Holohan and Others v An Bord Pleanala, (Case C-461/17).</p> <p>ABP state that the Applicant has promoted a line for the bridge that cuts through the middle of the operational Inner Harbour. The Applicant's proposal not only bisects the Port but, for the scheme to retain sufficient financial viability to justify the Government funding upon which the project depends – whilst contemplating an opening bridge, the Applicant also intends to retain total control of the periods when the bridge can be opened – in that the alternative</p>	<p>As explained in chapter 3 of the Environmental Statement (Document Reference 6.1, PINS Reference APP-136), the Applicant undertook a robust alternatives process before settling on the central option, including consideration of a western option.</p> <p>The Applicant has produced a note reviewing the western option in more detail, re-looking at that alternatives process in the context of the most up to date information, and concludes that it is still appropriate to conclude that the central option should be taken forward. This note can be found at Appendix B.</p> <p>With regard to the query relating to the 'Holohan' decision, the Applicant has prepared an updated Habitats Regulation Assessment (Document Reference SCC/LLTC/EX/42, PINS Reference REP3-038) which considers that case, and as with the HRA submitted with the application, concludes that there are no significant</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	would mean that the Applicant would have to re-calculate the benefit cost ratio ("BCR") test.	<p>effects upon the integrity of European Sites. The need to consider alternatives in the context of HRA is only required when a significant effect has been identified and hence, therefore, no such consideration of alternatives in the HRA is necessary.</p> <p>It is of note that the EIA regulations and the 'Holohan' case to which ABP refer identify that an "outline" of the alternatives should be provided, and as stated above, chapter 3 of the ES provides a robust discussion of the alternatives that have been considered and the reasons, including the environmental reasons, for adopting the central option.</p> <p>The Applicant has produced a note explaining the Justification and Traffic Effects of the draft Scheme of Operation (Document Reference SCC/LLTC/EX/60) which considers the effect of bridge lifts on the BCR.</p>
Part 21	Environmental Statement ABP make a number of statements as to the robustness and veracity of the Applicant's assessment of the impacts of the Scheme on the Port within the Environmental Statement.	The Applicant has responded to these comments in a separate note, which is available at Appendix C.
Part 23	Funding ABP consider that the Applicant has not made funds available, and has not proven that such funds are available, for compensation and mitigation works relating to the 'serious detriment' they claim is caused to the Port by the Scheme; as well as any injurious affection	The Applicant has detailed in the Funding Statement (Document Reference 4.2, PINS Reference APP-008) and included appendices that the funding is secured for the delivery of the scheme. This has been reinforced with the Applicant's response to ExA question 3.7 to 3.10.

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>and severance claims that may be made by the Ports.</p> <p>ABP also considers that there are errors in the Funding Statement relating to the figures stated.</p>	<p>In addition, a letter dated 29 January 2019 from the Council's Section 151 Officer confirms that the requisite funding will be available for the Scheme. A copy of the letter is included at Appendix E.</p>

4 B.S. Pension Fund Trustee Limited [REP3-017]

4.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's Response
n/a summary provided	<p>B.S. Pension's key concern is to ensure that the value of the Interested Party's asset is properly protected in respect of potential impact from the construction and operation of the Project.</p> <p>The Interested Party has received heads of terms for a Land and Works Agreement. However it stated the Applicant has been slow to progress the agreement to acquire the land in a timely manner, engage in negotiations with the Interested Party, or respond to the initial points raised by the Interested Party on these documents despite many months having elapsed.</p> <p>The Interested Party's disagreement with the Applicant's application is limited to the attempted inclusion of compulsory acquisition powers in the DCO in relation to the Land.</p> <p>The Interested Party disagrees that the Applicant has "engaged in extensive consultation and negotiations" in regard to the acquisition of the Land.</p> <p>The Interested Party disagrees that there is a compelling case in the public interest for powers of compulsory acquisition, in relation to the Land, to be included in the DCO. The Interested Party states the Applicant has not demonstrated that all reasonable alternatives to compulsory acquisition (including</p>	<p>The Applicant notes the Interested Party's continued comments in relation to lack of engagement, but on this occasion, does not consider them to be well founded. Since the start of September 2018, over 40 emails have been exchanged between the Applicant and Interested Party.</p> <p>Since that time, a fee undertaking to cover the Interested Party's reasonable costs has been finalised. All information requested by their appointed agent, including Engineering Section Drawings and Plans, has been provided in good time, and a detailed telephone discussion regarding the heads of terms for a Land and Works Agreement and potential impacts of the Scheme has taken place.</p> <p>There was a short delay between the Interested Party's agent visiting the subject property in November and his report to his Interested Party client in January. During this time, the Applicant sought initial comments on the heads of terms and other matters in relation to the Scheme on three occasions. However, the discussions that have since taken place have been positive and the Applicant believes that an agreement with the Interested Party is likely to be in place by or before the close of examination.</p> <p>The Applicant recognises the Interested Party's key concern is to ensure that the value of their asset is properly protected in</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>modifications to the scheme) have been explored (2013 DCLG Guidance paragraph 8), in particular, it has not properly engaged in the negotiation of a voluntary agreement with the Interested Party for acquisition of the Land.</p> <p>The Interested Party is concerned that the Applicant may use compulsory purchase powers, which should be a "last resort" in a situation where agreement was possible. Correspondence with the Promoter to date and their limited responses is clear evidence that reasonable steps have not been exhausted. The Promoter should not be able to rely on compulsory purchase powers in the DCO in relation to the Land, until it can demonstrate it has taken reasonable steps to acquire the land by agreement.</p>	<p>respect of potential impact from construction and operation of the Project. The Applicant has attempted to address this concern during the course of its negotiations with the Interested Party, and in the specific responses in relation to BS Pension Fund Trustee Ltd in its Response to Relevant Representations (Doc Ref AS-013).</p> <p>As a number of the points raised by the Interested Party in its Written Representation are stated to be a reiteration of the submissions in its earlier Relevant Representation, the Applicant would like to reiterate and expand on the points in its previous response as follows:</p> <p>No proposals are being made that would materially affect or change the access to Wickes or any other part of the Landowner's interest. The land permanently required for the scheme comprises of a landscaped verge area, outside of the fence line and operational boundary of the rear service yard of the property. With this in mind, the construction and operational stages of the Scheme are unlikely to have a significant impact on the use of the property or the income/value derived from it as an asset.</p> <p>It is acknowledged that the Scheme would result in a significant increase in traffic on Peto Way since it links directly to the Scheme. However, these increases have been modelled and the highway network is shown to satisfactorily accommodate this increase – please refer to the junction assessment for junctions 12 (Peto Way / Denmark Road / Barnards Way) and 13 (Denmark Road / Rotterdam Road) in</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>sections 8.12 and 8.13 of Transport Assessment (Document Reference SCC/LLTC/EX/23, PINS Reference REP3-056) which confirms they continue to perform satisfactorily in both the design year (2022 and future year 2037).</p> <p>Additionally, once operational, the Scheme will provide improved accessibility to customers on foot and in vehicles from the south of the town. Furthermore, it is the Applicant's view that the value of the property as an asset will be enhanced on completion of the Scheme as a direct result of the increased prominence and visibility of the retail warehouse to passing traffic/trade. This view appears to be supported by the current tenant of the property, having confirmed during early discussions that it viewed the Scheme favourably in terms of business.</p> <p>With regard to noise, Figure 13.3 (document reference 6.2/ PINS document reference APP-152) shows that the opening year traffic noise at the entrance to Wickes will increase by a 'minor' amount (i.e. between 1.0 and 2.9db) and the south western corner will be subject to a major increase of +5dB. However, this is not considered to be detrimental to the operation of the business given its nature.</p> <p>Additionally, the Environmental Statement (Document Reference 6.1, PINS Reference APP-136) does not consider odour likely during the construction or operation of the Scheme. Dust has been considered in the air quality assessment in the Environmental Statement which reports that as a worst case, dust will be restricted to within 50m from the</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		Order limits and with mitigation in place will be no greater than slight adverse to those most sensitive receptors.

5 Cadent Gas Limited [REP3-008]

5.1 Summary and response to Written Representations

Written Rep Reference	Summary/Extract	Applicant's Response
n/a summary provided	<p>Cadent Gas has raised concerns as to the:</p> <ul style="list-style-type: none"> works being carried out close to their Apparatus until suitable protective provisions have been secured to their satisfaction 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. ensure appropriate land rights are available for any diversion of their assets and will require crossing agreements where there are proposals to work within the easement strip of any existing Cadent's Apparatus sitting outside the highway boundary. wording to amend the Order in relation to grant to Cadent adequate rights to lay, access and maintain their apparatus. 	<p>The Applicant has made a number of amendments to the draft DCO (Document Reference SCC/LLTC/EX/63) at article 25, Schedule 6 and the Protective Provisions for Cadent's benefit at Deadline 4.</p> <p>It is anticipated that the Applicant and Cadent will reach agreement on these matters such that it will be possible, ultimately, for Cadent's objection to be withdrawn.</p>

6 Cara Robinson [REP3-022]

6.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's Response
n/a summary provided	<p>Carter Jonas, wrote on behalf of Cara Robinson. In their Written Representation they object to the Application and raise issues over the level of engagement provided to Ms Robinson by the Applicant.</p> <p>They also provide comments on the draft terms proposed by the Applicant. They state no suitable replacement premises have been identified by the Applicant.</p> <p>Ms Robinson submits that the Applicant has not satisfied the requirement to seek to acquire property by agreement before applying powers.</p>	<p>The Applicant is engaged in ongoing discussions with the landowner's representative, with a view to putting in place Option Agreements that assist in giving the landowner certainty as far as possible in mitigating business disturbance and assisting in finding a suitable alternative property.</p> <p>The Applicant has provided reassurances in respect of compensation being payable for the permanent acquisition of land, with any additional business disturbance to be assessed according to the Compensation Code and relevant articles within the DCO.</p> <p>The Applicant has engaged with the landowner's representative by way of extensive email correspondence, telephone discussions and meetings dating back to October 2017.</p> <p>Agreement has been reached in principle for two Option Agreements; the first relates to the Applicant's compulsory acquisition of the landowner's business premises and, the second relates to the discretionary acquisition of the Affected Party's nearby family home, which is not required for the Scheme, but which the Applicant has agreed to acquire due to the personal circumstances of the Affected Party. This provides the Affected Party with additional flexibility in seeking to mitigate the effect of the requirement for the Scheme to</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>acquire the business premises.</p> <p>Heads of Terms were issued on 13th June 2018 in respect of both Option Agreements and this was followed by telephone discussions on 14th and 19th June, a meeting on 12th July 2018 and further exchanges of correspondence on the 25th and 30th July 2018.</p> <p>During that engagement the landowner's representative raised specific concerns about:</p> <ol style="list-style-type: none"> 1. An earliest "short stop" date that the Options can be exercised; 2. The Applicant's ability to terminate the options only if the DCO does not proceed; and 3. The compensation code applying to an assessment of compensation due to the landowner. <p>The Applicant provided reassurances in respect of all these issues during the above mentioned engagement and the landowner's representative promised at that same time to provide a summary claim, together with an opinion of value in respect of the landowner's properties. That promise was made again in correspondence dated 31 August 2018. However, the Applicant has not yet received those valuations or heads of claim.</p> <p>Notwithstanding this delay, the Applicant has engaged with the landowner directly and arranged via telephone discussions and correspondence dated 9th, 15th and 21st of January 2019</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>to inspect the premises ahead of receiving the landowner's proposed claim and valuations.</p> <p>The Applicant has engaged through telephone discussions and email correspondence of 9th and 21st January 2019 with the landowner's representative again to further progress the Heads of Terms and respond to the same reiterated concerns that were raised and responded to in July 2018.</p> <p>The Applicant has responded to those same queries again and re-issued and reiterated historic correspondence and reassurances.</p> <p>This engagement is ongoing and the Applicant is hopeful that collaborative discussions will continue and result is the option agreement being put in place in the near future.</p>

7 Environment Agency [REP3-015]

7.1 Comments on ExA's Written Questions

ExA Ref.	ExA directed to	Question	Response	Applicant's Comment
2.41	Environment Agency	<p>In respect of ES Chapter 17 Road Drainage and the Water Environment [APP-136]:</p> <p>i. Does the Environment Agency agree with this assertion made by the Applicant in relation to Leathes Ham and Oulton Broad?</p> <p>ii. The Environment Agency has expressed concerns over the completeness of evidence in respect of sediment transportation. Please can you provide further details about the nature of these concerns, including identifying the data</p>	<p>i. In paragraph 17.4.8 the applicant states that Leathes Ham has not been considered further in the assessment because it is a freshwater body that is not hydraulically with flow from Lake Lothing. The fact that the waterbody is a freshwater lake suggests that it is not in direct hydraulic continuity with Lake Lothing. If it is, and it is groundwater fed, it would suggest that a freshwater gradient is maintained from the aquifer to Lake Lothing and therefore saline water does not enter Leathes Ham. Leathes Ham is located in an area of alluvium (clay, silt sand & gravel) which</p>	<p>The Applicant provided an updated Sediment Transport Assessment at Deadline 3 (Document Reference SCC/LLTC/EX/36, PINS reference REP3-049) which took into account the EA's comments. This document is now considered as agreed between the parties, and this is set out in the SoCG in the Deadline 4 SOCG Report (Document Reference SCC/LLTC/EX/53).</p>

ExA Ref.	ExA directed to	Question	Response	Applicant's Comment
		that you consider is required? (The Sediment Transport Assessment [APP-201] is indicated as being updated for Examination Deadline3)	<p>suggests that hydraulic separation from the underlying Crag aquifer is likely.</p> <p>There is a sand & gravel aquifer up-gradient of the site which could provide seepage flow to the lake; works in Lake Lothing would not impact on Leathes Ham if this were to be the case. Internet searches indicate that the lake was created after an area dug for peat was flooded. This suggests that flood waters may inundate the site, but it is not indicative of a hydraulic connection in terms of the local aquifers. The balance of the information available suggests that the conclusion drawn in S17.4.8 of the ES is reasonable.</p>	
			ii. The Sediment Transport	

ExA Ref.	ExA directed to	Question	Response	Applicant's Comment
			<p>Assessment [APP-201] report discusses the long-term effects of sediment transport with the bridge in place, but not any sediment aspects of building it. Although we have specific comments about the appropriateness of the assessment (regarding the structure once in place), we believe that the long-term risk is low. The Applicant has been in discussion with us regarding revisions to the assessment.</p> <p>Our concern relates to sediment that may be released during construction. Appropriate low-impact construction techniques are available, but we have not seen a methodology statement for the bridge construction, and so have no reassurance</p>	

ExA Ref.	ExA directed to	Question	Response	Applicant's Comment
			<p>that they will be used(Processes such as placing and removing sheet piles can disturb sediment from the bed.)</p> <p>The principal data required is a statement of the proposed construction method, supported by estimates of the sediment size and quantity re-suspended by the various processes. It is noted that the Interim Code of Construction Practice makes brief reference to sediment-laden water at paragraph 8.1.2 but this information should be expanded either in the Sediment Transport Assessment or in the detailed Code of Construction Practice.</p>	
2.45	Environment Agency	Impacts on groundwater quality are anticipated to be of minor magnitude, resulting in an effect of slight adverse significance, based on the	We confirm that we agree with the outcome of the risk assessment for the piling works at Lake Lothing.	The Environment Agency's comments are noted.

ExA Ref.	ExA directed to	Question	Response	Applicant's Comment
		<p>findings of the Piling Risk Assessment [APP- 193] and as set out in ES Chapter 12 [APP- 136].</p> <p>Can the Environment Agency and the Marine Management Organisation confirm that they agree with the outcome of the assessment?</p>		

8 Historic England [REP3-007]

8.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's Response
n/a summary provided	<p>Historic England confirmed that the visualisations and accompanying commentary in the ES provide sufficient information to allow the level of harm to be determined and in their view the resulting harm is less than substantial.</p> <p>Historic England has supported the production of the Cultural Heritage Desk Based Assessment or DBA (see ES Vol 3 Appendix 9A) and have made various comments on draft documents. In particular, the applicant has produced a specific Deposit Model (ES Vol 3 Appendix 9B)</p> <p>They noted that a WSI must be agreed prior to the project commencing, and before any further pre-construction surveys take place.</p> <p>Historic England confirmed the current draft (Document Reference: SCC/LLTC/EX/30 Dated December 2018) is acceptable to them subject to a clarification of the wording of paragraph 5.2.1 of the document, and subject to any comments from the Local Authority Archaeological Service.</p> <p>Historic England also confirmed they are currently engaged in finalising a Statement of Common Ground with the applicant (21/12/2018). This document is currently subject to minor changes which will bring the document in line with our statutory remit.</p>	<p>As reflected in the SOCG Report submitted at Deadline 4 (Document Reference SCC/LLTC/EX/53), there are no outstanding matters with Historic England.</p>

9 PFK Ling Limited (REP3-023]

9.1 Summary and response to Written Representations

Written Rep Ref.	Extract / Summary	Applicant's Response
Main report paragraph 25	PFK Ling Limited notes that the Development Brief for the Kirkley Waterfront and Sustainable Urban Neighbourhood does not have an Objective that a road bridge over Lake Lothing is required.	<p>The Applicant at paragraphs 8.4.20 to 8.4.21 of the Case for the Scheme (Document Reference 7.1, PINS Reference APP-091) responds to points raised in Ling's Written Representation (Examination Library Reference REP3-023) at paragraph 25.</p> <p>The Lake Lothing and Outer Harbour Area Action Plan (AAP) was produced in accordance with Policy CS05 of Waveney Core Strategy. Policy CS05 sets the objectives of the AAP, which include the need for <i>"better connections between the communities north and south of Lake Lothing"</i>. In addition, the justification at Paragraph 5.24 of the AAP it is stated that <i>"innovative ways of funding and delivering the Area Action Plan will be sought, in particular to achieve long held ambitions for a third crossing of Lake Lothing, as a means of improving connections between communities"</i>.</p> <p>Policy SSP3 (Kirkley Waterfront and Sustainable Urban Neighbourhood) of the AAP sets out the vision for the Kirkley Waterfront area which comprises 59.8 hectares of brownfield land on the south bank of Lake Lothing between the waterfront and Victoria Road / Waveney Drive, part of which forms the application site for the southern landing point of the bridge. The policy advises that any development in this site must accord with a number of principles and on page 88 of the AAP, the policy specifically requires that <i>"xii. Development should not preclude a potential third crossing which could be constructed in the future"</i>.</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		<p><i>and new vehicular routes should take into consideration potential for future widening”.</i></p> <p>As stated in Paragraph 8.4.21 of the Case for the Scheme, the Sustainable Urban Neighbourhood and Kirkley Waterfront Development Brief Supplementary Planning Document, adopted in May 2013, identifies land within the Order Limits for residential and employment uses. The document states at Paragraph A2.4 that a key consideration in the development of this area will be to ensure that <i>“future options for a third crossing of Lake Lothing are not jeopardised”</i>.</p> <p>As such, the Applicant does not agree with Lings' position on this issue.</p>
Main report paragraphs 51-61	PFK Ling Limited interprets the National Networks National Policy Statement (NNNPS) as proving that there is only a need for the Scheme and not a vital, critical or <u>compelling</u> need for the Scheme as it is an 'other road' which forms part of a 'national network' rather than being part of the strategic road network.	<p>The Applicant considers that this argument is misconceived.</p> <p>Paragraph 1.5 of the NNNPS states that 'in this NPS' the 'national road network' refers to the SRN and 'other roads' that are designated as nationally significant under section 35 of the Planning Act 2008.</p> <p>The highways proposed as part of this Scheme, which is a project designated under section 35 of the Planning Act 2008, therefore fall within the definition of 'national road network' within the NNNPS.</p> <p>Chapter 2 of the NNNPS explains the need for development of the 'national networks'. At paragraph 2.2, which discusses the need for changes in general terms, it states that there is a 'critical need' to improve the 'national networks'. Paragraph 2.2 does not use</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		<p>the word 'improve' in the context of a difference to an 'addition' to the national networks - this differentiation is not made until later in that chapter.</p> <p>Paragraph 2.10 goes on to state that the Government has concluded that there is a 'compelling' need for <u>development</u> of the 'national networks'. The same terminology is used in paragraph 2.22, linking development of the national road network to supporting further economic development, employment and housing.</p> <p>Part 2 of the NNNPS identifies the critical and vital need for changes to the 'national networks', building on the text in chapter 1 which ensures that projects designated pursuant to a direction made under s.35 should be considered within that framework. The fact that the Scheme will not form part of the SRN is therefore not relevant.</p>
Main report paragraphs 50 and 66, 73 and 76, and Appendix H	It is claimed that the envisaged acquisition is physically unjustified for the plots listed below for the reasons set out below, and that the tests in section 122(2)(a) and (b) of the Planning Act 2008 and in MHCLG guidance are therefore not met.	<p>In its responses which follow, addressing the Plot-based queries identified as items (a) to (h) (in the 'Extract/Summary' column), the Applicant provides a clear explanation of the reasons why the plots in question have been included in the DCO Application and how it is envisaged that they would be used to enable or facilitate the implementation of the Scheme in the event that development consent is granted on the basis sought.</p> <p>These responses are provided in the context of the 'conditions' set out in sections 122(2)(a) and (b) of the Planning Act 2008, which are reflected in the relevant MHCLG Guidance requiring applicants (at paragraph 9) to have a clear idea of how the land is proposed to be used.</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		<p>As is explained below, all of the Plots queried in Lings' Written Representation are required by the Applicant either pursuant to section 122(2)(a), in that they are required for the Scheme itself, or pursuant to section 122(2)(b), where they are required to facilitate the Scheme, or are incidental to it, in that they have been included in the Application with the specific purpose of seeking to help to mitigate the effects of the Scheme on Lings' site.</p> <p>The Applicant is therefore of the view that the inclusion of these plots in the DCO Application is justified and that the tests in section 122(2)(a) and (b) of the Planning Act 2008 are met.</p>
Appendix D paragraphs 6.5 – 6.8	a) Plot 3-58; as it is not clear from the DCO documentation and no assurance has been given that the land will be able to be used by Lings to reconfigure its site, despite the view from SCC's advisors that this is its purpose.	<p>The Applicant has provided clear reasoning within the Statement of Reasons (Document Reference 4.1, PINS Reference APP-007) for its inclusion of Plot 3-58 / 5-37 and its intention to relocate the current tenant (occupying Plots 3-58 and 5-37), Enterprise Rent-A-Car, to alternative premises so that the building they occupy can be refurbished to provide a replacement for Lings' used car facility, which is proposed to be demolished in furtherance of the Scheme.</p> <p>In the context of the on-site relocation proposals outlined above, it is not (and has never been) the Applicant's intention to acquire, either compulsorily or by agreement, <i>Lings'</i> interest in the land comprised in Plots 3-58 and 5-37. Indeed, as is made clear, through the wording in the relevant plot descriptions in the Book of Reference (Document Reference 4.3, PINS Reference APP-009; updated at Examination Deadline 4 to Document Reference SCC/LLTC/EX/55), the Applicant seeks a power to acquire all interests <i>other than those owned by Lings</i> – i.e. the intention is to</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		<p>acquire the leasehold interest owned by Enterprise, in order to facilitate the on-site relocation proposals outlined above.</p> <p>Therefore, as has been explained to the landowner and their representatives, the use of the land in Plots 5-37 and 3-58 is not directly required for the Scheme (and therefore does not come within the ambit of section 122(2)(a) of the Planning Act 2008; rather it is required to facilitate, or is incidental to, the Scheme (per section 122(2)(b)). Of course, should the Landowner decide that this land is no longer needed for its own purposes, then the Applicant will have no cause to include within the DCO application proposals to acquire it, since it was only included following discussion with the landowner's representatives, who indicated that its inclusion would assist in mitigating the impact of the Scheme on Lings' business.</p>
Appendix D paragraphs 6.16 – 6.19	b) Plot 3-32; as it appears to be excessive and it is not clear what access or statutory undertakers apparatus is proposed to benefit from the rights sought to be imposed	<p>The Statement of Reasons (Document Reference 4.1, PINS Reference APP-007) sets out that this plot is required to construct, use, access, maintain and protect the new A12 Lake Lothing Third Crossing, and for the diversion protection and maintenance of and access to statutory undertakers' apparatus and for new access to premises.</p> <p>Until detailed design is complete, the exact configuration of utilities (and related access and maintenance requirements) cannot be known, therefore flexibility of a proportionate nature is required, and this is reflected in the drafting of the rights which are currently sought over this plot. When, in due course, more detail becomes available, it will be possible to identify more specific requirements and the Applicant intends to implement any powers</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		granted through the DCO on that basis.
Appendix D paragraph 6.20-6.21	c) Plot 5-10; as it is not clear from the Rights of Way and Access Plans that the access for which rights are sought to be imposed in this plot is within this plot.	<p>The Applicant has provided reasoning within the DCO Book of Reference (latest version Document Reference SCC/LLTC/EX/55) for the inclusion of Plot 5-10, which is required for the purposes of utilities infrastructure and the future infrequent but regular inspection and maintenance of the Scheme. Part of this area will also facilitate the demolition of the landowner's used car sales building, which straddles Plots 5-11, 5-10 and 5-28.</p> <p>In terms of access for maintenance of the Scheme, it is the Applicant's intention that in relation to the access rights required over Plot 5-10 access from the public highway would be taken via the proposed new private means of access shown as reference 14 on the Rights of Way and Access Plans and described under reference 14 in Part 3 of Schedule 4 to the draft DCO.</p> <p>In terms of utilities, until the detailed design is complete, the exact configuration of utilities (and related access and maintenance requirements) cannot be known, therefore flexibility of a proportionate nature is required and this is reflected in the drafting of the rights which are currently sought over this plot. When, in due course, more detail becomes available, it will be possible to identify more specific requirements and the Applicant intends to implement any powers granted through the DCO on that basis.</p> <p>Appendix D provides more information on the Lings-Nexen sites.</p>
Appendix D paragraph 6.22	d) Plot 5-14; as the plot is larger than the access said to be provided within the plot	The Applicant has explained to the landowner's representative that Plot 5-14 is included to allow for the installation of services and carrying out works to provide the landowner with an area for

Written Rep Ref.	Extract / Summary	Applicant's Response
		<p>external/ frontage vehicle display space in front of the Kirkley Ham, with rights of access and egress over Asda's adjacent Plot 5-15.</p> <p>In that context, the land in Plots 5-14 (and 5-15) is not directly required for the Scheme and therefore does not come within the ambit of section 122(2)(a) of the Planning Act 2008; rather it is required to facilitate, or is incidental to, the Scheme (per section 122(2)(b)). Of course, should the Landowner decide that it does not need these rights then the Applicant would have no cause to seek a power to acquire them through the DCO.</p> <p>In addition, new rights were included in the DCO Application in response to earlier discussions with Lings regarding options for accommodating transporter movements within the site.</p>
Appendix D paragraph 6.23 and Appendix B paragraphs 34-42	e) Plot 5-31; as the access proposed within this plot would be detrimental to Lings' business	<p>The Applicant is currently engaged in discussions with the Landowner about Plot 5-31, which is no longer proposed to be used as the landowner's main access route into the site.</p> <p>Permanent rights of access via Plot 5-31 are, however, still required in respect of utilities installation and the future infrequent but regular inspection and maintenance of the scheme (with access from the public highway being proposed to be taken via new private means of access reference 14 as shown on the Rights of Way and Access Plans (Document Reference 2.5; PINS Reference APP-027).</p> <p>These new rights will only be required intermittently and will therefore not restrict unduly the landowner's continued use of plot 5-31 for external car display space.</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
Appendix D paragraphs 6.24 – 6.28	f) Plot 3-57; as it is not clear whether it is proposed for temporary possession or compulsory acquisition and it is unclear which adjoining owners are intended to benefit from the temporary additional operational space suggested for the plot	<p>Plot 3-57 is shaded green on the Land Plans (Document Reference 2.3, PINS Reference APP-019) and, as the key to the Land Plans denotes, is proposed to be subject to powers of temporary possession (not compulsory acquisition). This intention is corroborated by the wording in the description in the Book of Reference (Document Reference 4.3, PINS Reference APP-009; updated at Examination Deadline 4 to Document Reference SCC/LLTC/EX/55) of Plot 3-57, where it is clearly stated that the Applicant seeks a power of temporary possession in respect of the land in Plot 3-57.</p> <p>The Applicant has provided reassurances to the landowners' representatives that temporary possession of the neighbouring Nexen Plot 3-56 and construction of temporary hard standing thereon is proposed to facilitate Lings' temporary use of that land during a phased reconfiguration of their site. The temporary possession of Lings' Plot 3-57 is proposed to provide access for that temporary construction upon Plot 3-56.</p> <p>Discussions are ongoing with the landowner in respect of its continued requirement for this land.</p>
Appendix D paragraphs 6.9 – 6.15	g) Plot 5-37; for the same reasons as 3-58, and also because the works it is said to be acquired for appear not to be relevant to the plot.	<p>The Applicant has provided clear reasoning within the Statement of Reasons (Document Reference 4.1, PINS Reference APP-007) for their inclusion of Plot 5-37/ 3-58 in the DCO Application and their intention to relocate the current tenant Enterprise Rent-A-Car to alternative premises so that the building they occupy can be refurbished to provide a replacement for Lings' used car facility, which is proposed to be demolished.</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		Please refer to the Applicant's response above regarding Plot 3-58 as referenced in Lings' Written Representation at Appendix D, paragraphs 6.5 – 6.8, item (a) Plot 3-58.
Appendix D paragraphs 6.29-6.30	h) Plot 5-28; as the Rights of Way and Access Plans do not show an access off Riverside Road at this location, as is suggested by the Applicant for this plot.	<p>The Applicant has provided clear reasoning within the DCO Book of Reference (latest version Document Reference SCC/LLTC/EX/55) for its inclusion of Plot 5-28 and its intention to use this area temporarily (pursuant to powers of temporary possession); as has been previously discussed with the Landowner, such powers are required to facilitate the demolition of the landowner's used car sales building, which straddles Plots 5-11, 5-10 and 5-28.</p> <p>Plot 5-28 is not proposed to be used for access; as the entry for Plot 5-28 in Appendix A to the Applicant's Statement of Reasons (Document Reference 4.1, PINS Reference APP-007) explains, and as is noted above, the land is proposed to be subject to powers of temporary possession to provide working space during construction.</p> <p>Appendix D provides more information on the Lings-Nexen sites.</p>
	Lings raises a number of concerns in relation to the funding for the Scheme and the ability of SCC to a) therefore pay compensation to Lings and b) meet the test in MHCLG guidance that there is a reasonable prospect of the requisite funds becoming available:	The Applicant has detailed in the Funding Statement (Document Reference 4.2, PINS Reference APP-008) and included appendices that the funding is secured for the delivery of the scheme. This has been reinforced with the Applicant's response to ExA question 3.7 to 3.10.
a) Appendix D paragraphs 7.11-7.16 and Main	It queries what certainty that the £8m additional funding acknowledged by the Applicant to be required for land acquisition or the £8.3m ('local contribution') required of the Scheme Total Cost outstanding at OBC stage,	The additional £8m which, it was noted in June 2018, may be required to fund the Scheme, has been accounted for in the County Council's capital budget.

Written Rep Ref.	Extract / Summary	Applicant's Response
<p>Report paragraphs 115-128</p> <p>b) Appendix D paragraph 7.12 and Main Report paragraphs 145 - 150</p> <p>c) Appendix D paragraph 7.22 and Main Report paragraphs 105-114</p> <p>d) Appendix D paragraph 7.23 and Main Report paragraphs 129-131</p> <p>e) Appendix D paragraphs 7.20 – 7.21</p> <p>f) Main Report paragraphs</p>	<p>will in fact be/made available for the delivery of the project given:</p> <p>a) that a Cabinet decision of 19 June 2018 confirmed only that the budget needed to be contained and a new Cabinet decision on a definitive budget had to be reported back in Autumn 2019; predicated on a reduction of other costs, rather than a guarantee of funding, and so the decision is actually just to defer any outstanding commitment (noting that the Council is best placed to make this decision but has not yet done so);</p> <p>b) it is not clear on what basis a 22 December 2015 letter from the Council's section 151 officer was able to claim that any funding requirement would be met by the Council; given that the Cabinet was then asked to additionally approve £8m, and that from the OBC it appears that the letter related only to the local contribution.</p> <p>c) the Cabinet's expressed concern about project costs, casting doubt that they would approve funding if such costs are not reduced; which should be in the context of the Council's reserves and its ability to borrow;</p> <p>d) the context of SCC having recently put on hold another large project: the Upper Orwell Crossings;</p> <p>e) the financial difficulties facing County Councils</p>	<p>The County Council is currently meeting with partners with regard to funding the £8.3m local contribution, the requirement for which was identified previously in the Outline Business Case. Ultimately, if contributions can not be found from other local sources, the £8.3m local contribution will also be provided from the Council's capital reserves or from prudential borrowing.</p> <p>The sum of £8m (referenced in the Cabinet report of June 2018) includes provision for the costs of land acquisition and compensation associated with the delivery of the Lake Lothing Third Crossing scheme.</p> <p>The Lake Lothing Third Crossing is one of Suffolk County Council's priority projects. This has been recognised in the recent Suffolk County Council Cabinet Report (dated 29 January 2019) concerning the future of the Upper Orwell Crossings, which states at paragraph 9 that, "the Lake Lothing Third Crossing project ... is underwritten by the County Council as a firm spending commitment".</p> <p>Having taken the recent decision not to proceed with the Upper Orwell Crossings, the Council is focused on and wholly committed to delivering the Lake Lothing Third Crossing.</p> <p>Accordingly, a letter from the Council's Section 151 Officer dated 29 January 2019 confirms the Council's intention to underwrite the 'local contribution' of £8.3m referred to in the Outline Business Case for the Lake Lothing Third Crossing scheme, in the event that contributions from third parties and / or local funding</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
81 – 83, 100 and in relation to CIL, paragraphs 28-40.	<p>and nationally;</p> <p>f) the suggestions within the OBC for the local contribution, other than a direct contribution from the County Council, do not appear to be available</p>	<p>contributors prove not to be forthcoming. The Section 151 Officer's letter also confirms that the Council would, if necessary, use prudential borrowing to fund this contribution.</p> <p>In addition, the Section 151 Officer's letter confirms that the additional £8m budget pressure identified and reported to the Council's Cabinet in June 2018 has been accounted for in the Council's future capital budget.</p> <p>A copy of the Section 151 Officer's letter is appended to this document at Appendix E.</p>
Main Report paragraphs 151-160	On the above basis, Lings considers that the Funding Statement does not accurately report on the level of funding and certainty of it.	The Applicant does not consider the Funding Statement (Document Reference 5.2, PINS Reference APP-008) to be unclear; however the response set out above aims to clarify any confusion Lings may have about the level of funding which is expected to be required to deliver the Lake Lothing Third Crossing and about the Council's identification of available and certain sources of funding.
<p>a) Appendix D paragraphs 7.27-7.28 and 7.30 – 7.32 and Main Report 80(b)</p> <p>b) Appendix D paragraph 7.29-7.30</p>	<p>It queries whether the land acquisition budget is adequate even when considering the additional £8m identified, noting:</p> <p>a) the Council has spent £3.75m of the confirmed £3.63m land acquisition budget set out in the OBC on one transaction, gives cause for concern that sufficient funds will be available and means that there are currently no funds available for land acquisition;</p> <p>b) even if the £8m increase was given by the</p>	<p>The Applicant notes Lings' concern regarding the level of expenditure to date on land which has been acquired to facilitate the delivery of the Scheme.</p> <p>The Applicant's Property Costs Estimate includes an allowance for material detriment claims; this is formulated on the basis of quantified risk, on account of material detriment ordinarily falling within the standard heads of claim applied in the event that land is proposed to be acquired compulsorily.</p> <p>However, the cost of the mitigation packages being proposed by</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
c) Appendix D paragraph 7.34 -7.35 d) Appendix D paragraphs 7.37-7.44 e) Appendix D paragraphs 7.47 – 7.51 and Appendix 4 to Appendix D	<p>Cabinet, this would leave only £7.88m to cover all heads of compensation, risk and inflation for a number of parties;</p> <p>c) it is not clear from the Funding Statement whether Material Detriment claims are included in the acquisition budget which could be substantial;</p> <p>d) that agreement has not been reached with a number of parties, and that in respect of Nexen, ABP and NEWS, these claims could be substantive; and</p> <p>e) the claim for Lings would potentially take up a substantial amount or all of the proposed £8m increase.</p>	<p>Associated British Ports (in relation to its assertion that the Scheme would cause serious detriment to its statutory undertaking) are not covered by the Property Costs Estimate. This is because in the event that such mitigation packages were required (and it is the Applicant's position that they are not) the costs of providing such mitigation would form part of the Scheme costs, rather than the land acquisition costs.</p> <p>The Applicant is aware that it is still negotiating with a number of parties with interests in land which is required for the Scheme and this is why it identified and reported an additional £8m budget pressure to its Cabinet in June 2018.</p>
	Concern is raised about the commercial effects on the business arising from the Scheme as a result of the following factors, and the compensation sought as a result:	These are matters that the Applicant's motortrade specialist representative has addressed in his report of 25 January 2019 (Appendix F) and we summarise this in the below rows.
Appendix B paragraph 43 and Appendix C paragraphs 6.3.5 and 6.4.1 – 6.4.8	Loss of Display Space and Display Visibility	The site is a prominent site that enjoys a good level of profile to the surrounding road network. By extension all parts of the site benefit from the profile generated by its frontage to Waveney Drive. Whilst there may be loss of some spaces at the front of the site, there will still be display spaces available at the front of the site and that may require further spaces to be provided further back on the site. However, the site will remain a high, if not higher profile site after the Scheme has been completed.
Appendix B paragraphs 44	Undertaking reconfiguration works on site causing 'commercial shock'	The Applicant is mindful of the landowner's business being sensitive to what they describe as 'commercial shock' and

Written Rep Ref.	Extract / Summary	Applicant's Response
– 48 and context set out in paragraphs 1 – 30 and Appendix C parts 3 - 5		reassurances have been provided in respect of the compensation code providing the landowner with protection and recourse to claim compensation for reasonable heads of claim in respect of business disturbance suffered as a consequence of the Scheme.
Appendix C paragraph 6.5.1 – 6.5.2	Loss of Motorlings used car building	As has already been explained above, the Applicant's inclusion of Plot 3-58 / 5-37 in the DCO Application relates to proposals to relocate the current tenant of those plots, Enterprise Rent-A-Car, to alternative premises so that the building they currently occupy can be refurbished to provide a replacement for Lings' used car facility, which would need to be demolished to accommodate the Scheme.
Appendix C paragraph 6.6.1	Loss of Enterprise site causing irregular shaped site	<p>As above noted above, the applicant has provided clear explanations within the Statement of Reasons (Document Reference 4.1, PINS Reference APP-007) for their inclusion in the DCO Application of Plots 3-58 / 5-37 relating to the proposed relocation of the current tenant, Enterprise Rent-A-Car, to alternative premises so that the building they currently occupy can be refurbished to provide a replacement for Lings' used car facility, which is proposed to be demolished to accommodate the Scheme.</p> <p>As has been explained above, the freehold interest in the land that Enterprise currently occupy is not proposed to be acquired by the applicant; rather the intention is that it will remain with the landowner and (once it is no longer subject to the leasehold interest owned by Enterprise Rent-A-Car) can then be integrated in to the wider site, or refurbished to re-provide facilities which would be lost if the used car building (in plots 5-28/5-10/5-11) is</p>

Written Rep Ref.	Extract / Summary	Applicant's Response
		removed as proposed.
Appendix B paragraph 49	Dust from construction works affecting cars	Again, the Applicant is mindful of the sensitivity of the landowner's business to such disturbance and additional costs and, as such, the Applicant has sought to provide reassurances to the landowner and their representatives in respect of the compensation code providing the landowner with protection and recourse to claim compensation for all reasonable heads of claim in respect of business disturbance, including the costs of additional car washing to deal with dust caused by construction works.
Appendix B paragraph 39, Appendix C paragraph 6.3.3 and 6.3.5	<p>Concern is raised about the proposed design of revised access arrangements in Lings (as provided in December 2018 (see paragraph 37 and Annexes 3 and 4 of Appendix B) and the consequential commercial effects.</p> <p>Concern that a two way access to the east of the main building, including for transporters would conflict with staff and vehicles accessing and egressing through the same access points causing a safety hazard</p>	<p>The Applicant has proposed a non-material change to the Application, further to discussions with Lings regarding access to the site.</p> <p>The revised access arrangements proposed in the non-material changes application submitted to the Examining Authority at Examination Deadline 4 differ from the original access proposal in that they would not include the sharp left turn into the site, but would instead direct traffic alongside the eastern façade of the Lings building. The detail of the traffic circulation routes within the site is the subject of further discussion between the Applicant and the landowner.</p>

10 Lowestoft Cruising Club [REP3-001 and REP3-002]

10.1 Comments on ExA's Written Questions

ExA Question Ref.	ExA directed question to	ExA Question	Response	Applicant's comment
2.23	The Applicant	Please explain in detail why you require the proposed bridge site to be closed to navigation for a continuous period of three weeks during the construction.	<p>Lowestoft Cruising Club's (LCC) response LCC have not seen any convincing evidence that a summer three week closure is required.</p> <p>Responses to Relevant Representations A three week closure in the sailing season would influence a much longer period as vessels cruising before the closure would be unable to return to their moorings, and vessels planning to leave in e.g. school holidays for an extended cruise could well miss their cruising opportunity for the whole season.</p> <p>A three week closure might be acceptable if it takes place between November and March, the quietest part of the sailing season.</p>	<p>As noted in the Applicant's response to this question at Deadline 3 (Document Reference SCC/LLTC/EX/10, PINS Reference REP3-029), the duration of 3 weeks is derived from a worst-case assessment of the potential time that could be required to complete the installation and initial commissioning of the main span and includes allowances for potential weather delays.</p> <p>However, as is set out in the interim CoCP (Document Reference SCC/LLTC/EX/61), the general obligation on the Contractor is to keep the navigation channel open at all times except when it is <u>required</u> for construction – as such it would have to minimise such possessions to only when it is required.</p> <p>The time period within which the closure will be required will not be able to be confirmed until detailed design, when the Contractor will be able to work up its detailed construction programme.</p> <p>Given that the closure will be a critical path issue (given this is a bridge project), restricting the</p>

ExA Question Ref.	ExA directed question to	ExA Question	Response	Applicant's comment
				closure to November to March may potentially delay the programme by 6-9 months
2.29	The Applicant	How and who will measure the height of yacht masts before allowing them through without the bridge being raised?	Lowestoft Cruising Club's (LCC) response NWG3 discussed measuring the height of yacht masts, but no solution was offered.	As noted in the Applicant's response to the written questions submitted at Deadline 3, a real-time clearance display will be incorporated with the navigational markers on the bridge, pursuant to the requirements of the preliminary Navigation Risk Assessment (Document Reference 6.7, PINS Reference APP-208) and Scheme of Operation (Document Reference SCC/LLTC/EX/41, PINS Reference REP3-033). The Applicant also notes that the navigation working group will have a role in the ongoing development of the NRA pursuant to Requirement 11 of the dDCO (Document Reference SCC/LLTC/EX/63). As set out in the Scheme of Operation, the assessment of an individual vessels' height will be for the Master to determine.
2.38	The Applicant	i. What mitigation measures is the Applicant able to put in place to mitigate the closure of the western harbour to recreational and cruising craft over	Lowestoft Cruising Club's (LCC) response Questions i., ii. & iii. LCC remain opposed to a three week summer closure of the western part of Lake Lothing. The Applicant agreed with our estimate of about 400 vessel	Whilst the Applicant continues to consider whether any physical mitigation is feasible during the period of any closure, it has amended the draft DCO (Document Reference SCC/LLTC/EX/63) at Deadline 4 to provide for 3 months' notice of any closure of the Lake within the Order limits that will take place for more than

ExA Question Ref.	ExA directed question to	ExA Question	Response	Applicant's comment
		<p>the summer closure period?</p> <p>ii. Do such measures include modifications to the programme to minimise the closure period, reducing the current three week closure period?</p> <p>iii. Has consideration been given to temporary berthing facilities below the proposed bridge location for the duration of the closure period?</p>	<p>movements being curtailed by the closure. BAM Nuttall, the appointed engineering contractors for the scheme, were present at NWG3, but were unable to provide any indication of the seasonal timing or duration of the proposed closure. It was empathised that as much warning as possible should be given of the timing and duration of the closure, if it is permitted, to allow businesses and marina occupants sufficient time to plan to attempt to mitigate the serious impacts of the closure. There was a discussion at NWG3 of possible alternative berthing arrangements during the closure, but no satisfactory solutions were forthcoming.</p>	48 hours.

10.2 Response to Relevant Reps

Relevant Rep Reference	Issue	Comment from Interested Party	Applicant's response
EN30/RR-022 & MP7/RR-016 & 035.	<p>ABP (h) Failed to provide a properly and correctly formulated Navigation Risk Assessment.</p> <p>Lowestoft Cruising Club Royal Yachting Association While the Vessel Simulation Report (APP-198) only modelled larger commercial vessel movements, the LCC conclude that the navigation risks to recreational vessels when the bridge is operational are only marginally increased. However, the navigation risks are significantly increased during the construction phase, and all recommended mitigation measures should be undertaken, along with those defined in APP-208 Navigation Risk Assessment. See also APP-136, page331.</p>	At NWG3 an update on the drafting of the NRA was given, and the minutes record that the overriding concern of the maritime community (including LCC) remains the risks associated with the construction period, rather than the operating period.	The Applicant is committed to continuing development of the NRA (Document Reference 6.7, PINS Reference APP-208) and implementation of all recommended mitigation measures identified within it. Further updates to the NRA will be undertaken, in consultation with the NWG, as further information is developed and construction methodology is refined, as secured through Requirement 11 of the dDCO (Document Reference SCC/LLTC/EX/63).
MP5/RR-016 & 035.	<p>Lowestoft Cruising Club Royal Yachting Association Welcome the setting up by Suffolk County Council (SCC) of the Navigation Working Group (NWG),</p>	LCC consider that the NWG will have an ongoing role that needs to be perpetuated throughout the working life of the LLTC, not just the construction of the scheme. There is a need to	The dDCO submitted at Deadline 3 (Document Reference SCC/LLTC/EX/11, PINS Reference REP3-030) provides for the NWG to have an on-going role in relation to the Scheme of Operation for the bridge

Relevant Rep Reference	Issue	Comment from Interested Party	Applicant's response
	<p>which Lowestoft Cruising Club (LCC) attended and contributed. The minutes of the NWG meetings (APP-090) form an important discussion of the navigation issues for recreational vessels. We agree with the overall conclusions and expect them to be implemented, and welcome a later meeting for a discussion with contractors regarding risks and mitigation measures during the construction process.</p>	<p>formalise the existence and role of the NWG for the future operation of the LLTC, and this should be reflected in the DCO.</p>	<p>(Article 40) and in the development of the NRA (Requirement 11).</p>

11 Marine Management Organisation (MMO) [REP3-014]

11.1 Comments on ExA's Written Questions

ExA Question Ref.	ExA directed to	Question	Response	Applicant's Response
2.76	MMO	Can the Marine Management Organisation explain the extent to which there is agreement between the Applicant and themselves on the approach and findings of the updated version of the HRA Report [AS-003] submitted by the Applicant?	<p>The MMO wishes to highlight that no discussions have been held between ourselves and the Applicant with respect to the approach and conclusions of the updated HRA Report (AS-003). Thus, no formal agreement has been reached in this regard.</p> <p>The MMO would welcome any future discussion with both the Applicant and Natural England with respect to the approach and conclusions of the updated HRA Report.</p>	<p>The Applicant understands that Natural England is the relevant body which needs to determine the acceptability of the HRA.</p> <p>The Applicant understands that the MMO will defer to Natural England's conclusions on the HRA (see SoCG), but that any mitigation measures noted in the HRA should be captured by the conditions of the DML.</p> <p>The Applicant considers that the mitigation measures referred to in the HRA with respect to the marine environment are adequately accounted for through the operation of the DML (e.g. piling, and all construction methods to be approved by the MMO), or are included in the CoCP.</p>
1.4	The Applicant	The ES makes reference to the potential need for cofferdams and temporary piers in relation to both north and south quays. Can the Applicant confirm the	<p>MMO Comment</p> <p>Whilst this question was not directed at the MMO, we wish to highlight that the temporary installation of cofferdams and piers within the UK</p>	The Applicant notes this response, and confirms that the need or otherwise for cofferdams and piers would form part of the construction method statement submitted to the MMO pursuant to the

ExA Question Ref.	ExA directed to	Question	Response	Applicant's Response
		necessity for such temporary infrastructure?	Marine Area (Section 42, Marine and Coastal Access Act) are licensable activities and must therefore be captured included within the DML, should one be granted.	DML.
2.33, 2.37 and WR paras 3.3.2 - 3.3.8	The Applicant	<p>Sediment</p> <p>The MMO expressed a number of points in respect of dredging effects on sediment and the disposal of sediment, noting that the acceptability of disposing at the TH005 disposal site would be dependent on the Applicant carrying out sediment sampling at a MMO validated laboratory and submitting the results to the MMO.</p> <p>It also expressed concern that there was a lack of clarity as to whether disposal at sea had been assessed within the ES.</p>		<p>The Applicant confirms that this process is understood (see for example Appendix C to the Response to the Examining Authority's Questions (REP3-029)); and is provided for within the DML.</p> <p>Further information on how the Applicant has considered sediment disposal within the ES and HRA is set out in the appendix A to the SOCG (SCC/LLTC/EX/53) with the MMO – this information has been provided to the MMO.</p> <p>The SoCG with MMO records that the MMO are agreed that sediment disposal has been considered in the application, but notes (to which the Applicant agrees), that further sediment testing will be required pursuant to the DML.</p>

11.2 Response to Relevant Reps

Reference	Question	Comment	Applicant's response
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Reference	Question	Comment	Applicant's response
2.1 in letter	Historic England	The MMO note Historic England's (HE) requirement for the draft DCO to include provision for delivery of a project specific Written Scheme of Investigation (WSI). The MMO wish to advise that if this advice was received under a standard marine licence application, a condition would be added to ensure the Applicant follows the advice of HE. 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.	Further to discussions between MMO and Historic England and between the MMO and the Applicant, the DML has been amended at Deadline 4 to reference the WSI.
2.2 in letter	Royal Yachting Association & Lowestoft Cruising Club	The MMO note the issues raised by the Royal Yachting Association (RYA) and Lowestoft Cruising Club in relation to the maintenance of existing navigation rights and the timings of the proposed three week closure window. The MMO wish to advise that if this advice was received under a standard marine licence application, a condition would be added to ensure the provision of an agreed programme of works. To this end, the MMO would welcome engagement with the Applicant and both Interested Parties, should they wish to discuss the inclusion of conditions within the DML, or any other matters within the remit of the MMO.	The DML already provides for a programme of works to be included in the Applicant's submission of a construction method statement to the MMO. As such, no changes to the DML are necessary in this regard.
2.3 in letter	Environment Agency	The MMO note the Environment Agency's reference to the protective provisions under Schedule 13, Part 3 of the dDCO. Whilst it is recognised that this issue remains under consideration, the MMO wishes to highlight that any "specified works" captured within Schedule 13, Part 3 of the dDCO may have their own requirements for marine licensing, should they be undertaken within the	The Applicant has discussed this matter with the MMO and noted to them that the definition of 'licensed activity' within the DML is far broader than the definition of 'specified work' in the Environment Agency's Protective Provisions being that it refers to the authorised development as a whole.

Reference	Question	Comment	Applicant's response
		UK Marine Area (Section 42, Marine and Coastal Access Act). Such activities, may therefore also hold relevance under the DML. The MMO would welcome further engagement with both the EA and the Applicant over this matter.	As such any specified work under the Protective Provisions that is a licensable activity will be caught by the requirements of the DML.
3.4 in letter	General Comments	<p>Chapter 11 (Nature Conservation)</p> <p>The MMO highlights that whilst the ES considers the impact on benthic ecology in relation to dredge activities, consideration of temporary/permanent habitat loss is lacking. The MMO therefore advises that Table 11-6 be updated to capture the likely impacts of temporary/permanent habitat loss.</p> <p>In relation to Section 11.5, the MMO advises that due to the limited temporal nature of the fish trawl surveys (Appendix 11F) it cannot be concluded that "the scheme will have no effect upon migratory fish", as there is insufficient evidence to support this. Accordingly, the MMO advises that the ES be revised to acknowledge the temporary nature of the baseline beam trawl survey the magnitude of the likely impact of the project to migratory fish.</p> <p>The MMO notes that a number of Invasive Non-Native (INN) species were identified during the benthic surveys. Specifically, the benthic survey report lists several other non-native benthic invertebrate species that were recorded within the footprint of the proposed development, namely the bivalve <i>Theora lubrica</i>, tube worm <i>Hydroides ezoensis</i>, the bryozoan <i>Bugula</i></p>	These changes were made to Chapter 11 at Deadline 3 (Document Reference SCC/LLTC/EX/26, PINS Reference REP3-058), with further clarity provided in a further amended version at Deadline 4 (Document Reference SCC/LLTC/EX/70); and this is now agreed with the MMO.

Reference	Question	Comment	Applicant's response
		neritina, and the barnacle Austrominius modestus. The MMO wishes to highlight that the INN species identified listed in this paragraph are notably absent from the proposed mitigation measures detailed within Table 11-6 and are not mentioned elsewhere within the ES. The Applicant is therefore advised to update Chapter 11 and Table 11-6 of the ES to recognise all identified INN species and to consider the appropriate mitigation measures required to prevent their further spreading.	
3.5 in letter	MMO	<p>Development Consent Order</p> <p>In relation to Part 2(15), the MMO advises that the installation, or alteration, of pipes may have their own requirements for marine licensing should the activities in question be undertaken within the UK Marine Area (Section 42, Marine and Coastal Access Act). The MMO advise that any such activities to be undertaken within the UK Marine Area must be included within the DML.</p>	This is understood by the Applicant. As noted above, the wide definition of licensed activity under the DML covers all aspects of the authorised development that are potentially licensable.
3.6 in letter	MMO	<p>Deemed Marine Licence</p> <p>The MMO notes that a Statement of Common Ground (SoCG) was agreed with the Applicant on 20 November 2018 (reference: SCC/LLTC/EX/5). Whilst it is agreed within the SoCG that the MMO and the Applicant will continue discussions regarding the content and wording of the DML, those issues which remain outstanding from our Relevant Representation are reiterated below.</p>	<p>The Applicant continues to discuss the DML with MMO, and it notes that a number of drafting changes were made at Deadline 3 which sought to deal with MMO's concerns.</p> <p>Further drafting changes have been made at Deadline 4; although matters still remain under discussion. Any other agreed changes will be made in further iterations of the draft DCO.</p>

12 Network Rail [REP3-020 and REP3-021]

12.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's Response
n/a Summary provided	<p>Network Rail have raised concern as to the:</p> <ul style="list-style-type: none"> • nature and extent of temporary possession, compulsory acquisition, and compulsory acquisition of land proposed by the Applicant; • limits of deviation for the new bridge as it crosses the railway; • the interaction of the bridge with the railway and ensuring that Network Rail is adequately protected; and • the wording of the Protective Provisions contained within the draft DCO. 	<p>The Applicant notes that the land use powers it seeks in the draft DCO in respect of Network Rail's land would, if the DCO was made in the form applied for, be – by virtue of the operation of the protective provisions for the benefit of Network Rail – subject to Network's Rail's consent; and that such consent may be subject to reasonable conditions.</p> <p>The Applicant is working with Network Rail to reach a formal agreement to address the detail of these matters, but in any event, controls are already built into the draft DCO to ensure that the scope for negative impacts to the railway can be managed.</p> <p>The protective provisions (and Network Rail's proposed amendments to them) also perform an asset protection function which ensures that Network Rail's approval is required for any part of the authorised development within 15 metres of railway property.</p> <p>The Applicant is working with Network Rail to agree a 'Bridge Agreement' prior to the end of the Examination, but if that is not able to be achieved, such an Agreement would in any event be likely to be the form of approval which the Applicant would be required to seek through the operation of the protective provisions – and Network Rail would be in control of this.</p>

		<p>With respect to the protective provisions, the Applicant's revised draft DCO submitted at Deadline 4 includes the amendments requested by Network Rail.</p> <p>With regard to Network Rail's concerns regarding the limits of deviation for the new bridge as it passes over the railway, the Applicant confirms that the Scheme is being designed to provide minimum headroom of 4.9 metres above Network Rail's operational assets. This commitment is secured through the DCO, article 5 of which requires the Scheme (the authorised development) to be constructed in accordance with the levels shown on the Engineering Section Drawings and Plans, which include the Mainline Long Section Sheet 2 of 2 (Document Reference 2.9, PINS Reference APP-041, updated at Examination Deadline 4 to Document Reference SCC/LLTC/EX/66) ('the Mainline Long Section drawing'). The Mainline Long Section drawing shows a minimum headroom allowance of 4.9 metres for Network Rail.</p>
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13 Howes Percival LLP on behalf of Overseas Interests Inc, Waveney Fork Trucks Limited, Lift Truck Rentals Limited, Nexen Lift Trucks Limited, Oakes Recruitment Limited, Team Oakes Limited and Hitech Grand Prix Limited [REP3-018 and REP3-019]

13.1 Summary and response to Written Representations

Reference	Extract	Applicant's Response
Section 5, Summary WR and Section 10 of WR	<p>Impact on Interested Parties' Businesses - Access during construction and operational phase of proposed project</p> <p>The Interested Parties have raised the following concerns in relation to access during the construction phase of the proposed project:</p> <ul style="list-style-type: none"> • The project will cut off the Land from the highway network unless it also provides a suitable access solution. • Their operations depend on meeting delivery deadlines for orders received and customers having confidence in the ability to achieve these. • Their businesses will be severely - if not irreparably - affected by the scheme. • The proposed access to the Land is over third party land to which the Interested Parties have no access rights and no comfort these shall be provided. 	<p>The Applicant is mindful of the Interested Parties' concerns with regards access to their site both during the construction and operation of the Scheme and reassurances have been provided to the Interested Parties' representative, with confirmation given of a second permanent access strategy together with a commitment that uninterrupted access from the public highway will be maintained and available to the Interested Parties' main operational facility at all times both during construction and operation of the scheme.</p> <p>The Applicant's commitment to providing uninterrupted access to the Land during the construction phase is to be documented in the proposed Land and Works Agreement. The heads of terms for this agreement, issued several months ago, contained a clause confirming that SCC will construct a new access road from Waveney Drive, prior to the construction of the Permanent Works to Riverside Road. The new access road will ensure continued vehicular access to Riverside Business Park and to the Land, from Waveney Drive.</p>

Reference	Extract	Applicant's Response
	<ul style="list-style-type: none"> In addition to access to and from the land, they have concerns about access within the Land and for the construction and operation of any development carried out on land identified as Plot 3-56 ("Development Land"). 	<p>The Applicant has and will continue assure the landowner that access to their land will continue by way of dedicated adopted highway and this will be documented in the proposed Land and Works Agreement.</p> <p>The Applicant also advises that the interim CoCP (Document Reference SCC/LLTC/EX/61) imposes a requirement on the Contractor to maintain access to the Interested Parties' premises during the construction phase (paragraph 2.7.1). The Applicant considers that this matter will best be resolved through continued dialogue during the construction process to coordinate the Scheme works with the businesses' requirements. To this end, the Applicant has also updated the interim CoCP at Deadline 4 to provide for the establishment of an engagement group with local businesses.</p> <p>With regards Plot 3-56, the Statement of Reasons (Document Reference 4.1, PINS Reference APP- 007) confirms the purpose of this plot is to provide working space for the construction of the new A12 Lake Lothing Third Crossing, and to provide temporary additional operational space for adjoining business premises during the construction period. The Applicant has sought, pending further discussions with the affected Interested Parties, flexibility in the Land Plans to provide compensatory space for Lings to mitigate the effects of additional land take from them during construction.</p> <p>Plot 3-56 is currently unused scrubland, though the Applicant understands that the Interested Parties have ambitions to bring forward development on this land. However, no planning</p>

Reference	Extract	Applicant's Response
		<p>application or planning permission exists and, as such, the Applicant does not consider the use of this land temporarily in the short term would compromise development aspirations for this site. Indeed, dependent on any works necessary to support Lings' use of this land, temporary occupation of the land could be advantageous to the Interested Parties by virtue of the condition in which the land is returned to them. This matter remains under discussion.</p>
<p>Section 6 Summary WR and Paragraph 11.2- 11.3 in WR</p>	<p>Impact on Interested Parties' Businesses - Consideration of alternatives</p> <p>The Interested Parties state that alternatives of access to the east of the current Motorlings site or moving the alignment of the project 8m further west have not been properly considered by the Applicant.</p> <p>They believe the Applicant should have considered a wider range of factors than when considering this option, particularly given that it intends to temporarily acquire part of the Land to accommodate Motorlings during the construction period.</p> <p>The Interested Parties acknowledged that this alternative would still need to provide a suitable underpass (or underpasses) to allow suitable access to and from the Land. They state the proposed alternative demonstrates that the</p>	<p>As per the Applicant's response to the Relevant Representation (Document Reference SCC/LLTC/EX/2, PINS Reference AS-013), the Applicant has considered and has evidenced, through provision of information to the Interested Parties, the access proposals to the site, particularly in respect of height clearances and turning movements which are considered to be adequate and appropriate to support the Interested Parties' current business operations.</p> <p>For this reason, potential alternative permanent access arrangements through neighbouring third-party land which would interfere with those business operations are considered to be a disproportionate use of DCO powers.</p> <p>The Interested Parties' suggested realignment of the Scheme and new permanent access road to the east of the Lings' site has been given due consideration.</p> <p>The Applicant attaches an explanatory paper setting out how it envisages the Interested Parties' site co-existing with the neighbouring Lings site during construction of the Scheme and throughout its operation. See Appendix D to this report.</p>

Reference	Extract	Applicant's Response
	compulsory acquisition of Plots 3-29 and 3-30 are not required for the proposed project to which the DCO relates, or is required to facilitate, or is incidental to, the development and given the concerns expressed about the current arrangements there is no compelling case in the public interest for this compulsory acquisition.	The Applicant has also given due consideration to the proposed compulsory acquisition of land in connection with the Scheme, in the context of the statutory tests and Government policy guidance, and is of the view that, for the reasons set out in the Statement of Reasons (Document Reference 4.1, PINS Reference APP-007), Plots 3-29 and 3-30 are required for the Scheme and that there is a compelling case in the public interest for the compulsory acquisition of these plots.
Section 7 and 8 Summary WR and Paragraph 12.1-12.4 in WR	<p>Impact on Interested Parties' Businesses - Ongoing discussions regarding the suitability of the access arrangements and Access during the operational phase of the proposed project</p> <p>The Interested Parties' state the draft DCO needs revising to remove vertical limits of deviation for proposed underpasses to the Land and secure minimum clearance height of 6.5m for the originally proposed underpass.</p> <p>The Interested Parties state the Applicant has yet to provide access solutions which are acceptable to them.</p> <p>They have concerns that the HGVs are required to turn left immediately upon entering the Land and to pass the west side of the building to use the weighbridge. HGVs do not pass to the south side of the building as the car park and main personnel</p>	<p>In response to paragraph 7.1, the Applicant does not consider there is a need for the draft DCO to be revised as suggested by the Interested Parties. As proposed in its response to the Examining Authority's First Written Questions (Q1.1.), the Applicant has revised the Engineering Section Drawing Mainline Long Section Sheet 2 of 2 (Document Reference SCC/LLTC/EX/66)</p> <p>As a result of ongoing and detailed discussions with the Interested Parties, proposals for a new Private Means of Access ('PMA') have been developed. This revised proposal is captured in the Applicant's Non-Material Changes Application (Document Reference SCC/LLTC/EX/69), and it is noted that the highway authority has agreed that such access proposals should, in principle, be adequate to serve both current and proposed future users within the site.</p> <p>As detailed in the Applicant's Non-Material Changes Application, this new PMA is to the north of, and in addition to, the revised access arrangement already proposed in the Application, and would allow separate access to the northernmost part of the Nexen</p>

Reference	Extract	Applicant's Response
	<p>access are situated here.</p> <p>They also state that the Land required for permanent acquisition of land and rights and the current design show a satisfactory solution for vehicular movements to, from and within the Land will not be provided.</p>	<p>site via its western side, together with increased headroom where the new PMA would pass beneath the southern approach to the new bridge.</p> <p>This new PMA would provide access from the north side of Riverside Road, where it runs east-west in parallel with the lake, and would then turn eastwards, passing to the south of the control tower (and the related limits of deviation of Work No.6).</p> <p>This proposal should also mean that access within the site should operate in a similar fashion to the site's current clockwise arrangement for the passage of HGV's.</p> <p>The Applicant received a delayed response from the Interested Parties to its opening proposals in respect of a second access strategy and the Applicant has since been in the process of carrying out further swept path analysis in respect of a revised design of the strategy, taking into consideration the Interested Parties' concerns.</p> <p>This matter remains under discussion and the Applicant remains confident that a revision of the second access strategy will mitigate the Interested Parties' concerns.</p>
Section 9 Summary WR and Paragraph 19.1- 19.4 WR	<p>Impact on Interested Parties' Businesses - Acquisition of rights over the Land</p> <p>The Interested Parties state there is no clarity as to the nature of the proposed acquisition of rights over Plot 3-29 and the proposed restriction of</p>	<p>The Statement of Reasons (Document Reference 4.1, PINS Reference APP- 007) sets out the requirement in relation to Plot 3-29 as being the 'acquisition of new rights (including the imposition of restrictive covenants) to construct, use, access, maintain and protect the new A12 Lake Lothing Third Crossing, and for the diversion protection and maintenance of and access to statutory</p>

Reference	Extract	Applicant's Response
	<p>development here.</p> <p>In addition, the proposed area (Plot 3-29) on which rights are proposed to be acquired permanently represents a substantial part of the operational area of the Land which for the reasons set out above is crucial for the continued operation of the Interested Parties' businesses.</p> <p>There concerns include (as set out by the Interested Parties' representatives):</p> <ul style="list-style-type: none"> We note that Table 15-4 of the Environmental Statement submitted by the Applicant envisages a 1,562 sqm easements strip which would restrict the forms of development which could be undertaken within it. We have not seen any further information about the nature of the proposed restriction on development in this strip. The provision in Article 25 of the draft DCO regarding the acquisition of rights is extremely broad and given the importance of this area of Land to the operation of our clients' businesses our clients are particularly concerned about this. Our clients would welcome further information about the precise nature of the rights that the Applicant is seeking to acquire over Plot 	<p>undertakers' apparatus, and for new access to premises.</p> <p>Provision for the acquisition of new rights over the land has been included to allow the Applicant, in its future capacity as the highways authority in relation to the Scheme, access over the land to inspect, maintain and repair the Lake Lothing Third Crossing. Rights are also sought to allow for the diversion of existing utilities that are currently located within Riverside Road. The elevation of Riverside Road on an embankment as part of the Scheme means that if retained in its current location, utilities apparatus would otherwise become inaccessible for the purposes of inspection and repair.</p> <p>The Applicant notes the Interested Parties' concerns in relation to perceived restrictions on the development potential of this plot. The Applicant would like to draw attention to the fact that there are existing rights over most of this plot and that these rights are for the benefit of existing apparatus owned by statutory undertakers.</p> <p>This apparatus includes two 33kv cables owned by UKPN and a long-distance fibre optic National Network Cable owned by Virgin Media. These cables need to connect into the UKPN tunnel beneath Lake Lothing that is situated to the north of the Interested Parties' Land. Surveys indicate that they already pass through most the length of plot 3-29 but their alignment may need to be altered as part of the diversions of apparatus associated with the changes which are proposed to be made to Riverside Road as part of the Scheme.</p> <p>The existence of this apparatus means that development of this</p>

Reference	Extract	Applicant's Response
	<p>3-29.</p> <ul style="list-style-type: none"> As will be appreciated, the proposed DCO may only authorise compulsory acquisition if the land in question is required for the development to which the DCO relates, or is required to facilitate, or is incidental to, the proposed project (or is replacement land given in exchange) and there is a compelling case in the public interest for the compulsory acquisition. Given the information that our clients have received to date, these tests are not met for the whole extent of Plot 3-29. 	<p>land is already likely to be restricted in line with the easement restrictions of each statutory undertaker. This will typically include restrictions such as on the construction of buildings and planting of trees. Based on the current configuration of the site, the rights required for the scheme should have limited further effect on the operations of the businesses and the current use of the plot as circulation space.</p> <p>The Interested Parties' proposed alternative realignment of the crossing fails to take into account the fact that, in combination, the existing rights relating to statutory undertakers' apparatus and the position of the tunnel mean that the new rights sought by the Applicant over the land in plot 3-29 are an absolute requirement of the Scheme. Also, in terms of the land within which the utilities are proposed to be relocated, the underlying presence of utilities apparatus is likely to have a negligible further effect on its continued or future use.</p>
Section 10 Summary WR and Paragraph 20.1- 20.3 WR	<p>Impact on Interested Parties' Businesses - Rights to access the Land during the construction and operational phases</p> <p>The Interested Parties state that insufficient details have been provided as to how permanent rights for our clients to access the Land shall be secured in perpetuity.</p>	<p>The Applicant has and will continue to reassure the Interested Parties that access to their land will continue by way of a dedicated adopted highway providing public rights of access to the Land and that this access will be maintained and available at all times during construction and throughout the operation of the Scheme.</p> <p>This commitment is documented in the heads of terms for the proposed Land and Works agreement, stipulating that the Applicant will construct a new access road from Waveney Drive to Riverside Road, prior to the construction of the Permanent Works that would otherwise sever the property. The heads of terms</p>

Reference	Extract	Applicant's Response
		containing this clause detailing the replacement access arrangements were issued to the Interested Parties several months ago.
Section 11, 12 and 13 of Summary WR and Paragraph 21.4-21.5 and 22.3-22.5 of WR	<p>Impact on Interested Parties' Development Aspirations - Access and use of the Development Land during the construction and operational phases of the proposed project</p> <p>The Interested Parties state they have no information as to the precise nature, extent or timeframe for the temporary acquisition of its Development Land.</p> <p>There concerns are outlined as:</p> <ul style="list-style-type: none"> • A right of access for our clients over land in the ownership of PFK Ling Limited was reserved for the Land in a transfer of that site. This right will be extinguished by the project. • Our clients have development aspirations for the Development Land and have previously secured planning permission for this. • Development plan policies are supportive of our clients' intended development, the Development Land is within an Enterprise Zone and informal discussions with Waveney District Council have indicated support for 	<p>With regards to Plot 3-56, the Statement of Reasons (Document Reference 4.1, PINS Reference APP- 007) confirms the purpose for which this plot is required is to provide working space for the construction of the new A12 Lake Lothing Third Crossing, and to provide temporary additional operational space for adjoining business premises during the construction period. The Applicant has sought, pending further discussions with the affected landowners, flexibility in the Land Plans to provide compensatory space for Lings to mitigate the effects of additional land take from them during construction.</p> <p>The access rights referred to by the Interested Parties are acknowledged. The Applicant notes the Interested Parties' concerns surrounding long term access to plot 3-56 and the Applicant refers the Interested Parties to its second access strategy providing a new improved dedicated access to the Interested Parties' main operational facility, whilst freeing up the site's existing access point to be reconfigured to serve the Interested Parties' purported 'development land.</p> <p>The Applicant's second access strategy for the Nexen site is presented in the Applicant's Non-Material Changes Application (Document Reference SCC/LLTC/EX/69), and it is noted that the highway authority has agreed that such the access proposal should, in principle, be adequate to serve both future and proposed users of the site.</p>

Reference	Extract	Applicant's Response
	<p>developing the Development Land.</p> <ul style="list-style-type: none"> • Continuity of access is also a concern here in addition to the Development Land being sterilised for development during the period of temporary acquisition. • The Development Land shall be severed due to gating and access requirements of our clients' businesses. • The intended acquisition of rights over the Development Land reduces the extent of land that may be developed. 	<p>Plot 3-56 is currently unused scrubland, though the Applicant understands that the landowner has ambitions to bring forward development on this land. However, no planning application or planning permission exists and, as such, the Applicant does not consider the use of this land temporarily in the short term would compromise development aspirations for this site. Indeed, dependent on any works necessary to support Lings' temporary use of this land during the construction of the Scheme, temporary occupation of the land could be advantageous to Nexen/the Interested Parties by virtue of the condition in which the land is returned to Nexen. This matter remains under discussion.</p> <p>The Applicant notes the Interested Parties' comments in relation to the proposed acquisition of rights over the Development Land and their expectation that it will reduce the extent of land that can be developed.</p> <p>The Applicant considers this impact will be outweighed by the betterment of the site arising from a new dedicated access to the site from an adopted highway proposed as part of the new PMA, since this provides the Interested Parties with greater certainty and control than they currently have as beneficiaries of rights over third-party land.</p> <p>Furthermore, a planning policy compliant scheme is unlikely to have absolute site coverage and therefore a developer would simply work around this area under normal circumstances and allocate it to ancillary development compatible with the easement restrictions, such as parking or circulation space and still retain the</p>

Reference	Extract	Applicant's Response
		<p>same density and viability of development.</p> <p>If the Interested Parties can demonstrate that the new rights sought by the Applicant would restrict the redevelopment of their land, then compensation would be assessed in accordance with the Compensation Code.</p>
Paragraphs 10.5 – 10.15 in WR	<p>Code of Construction Practice (CoCP)</p> <p>The Interested Parties have raised concerns that although the interim CoCP provides that access from the highway to the Interested Parties must be maintained:</p> <ul style="list-style-type: none"> • Insufficient information has been provided that this will be achievable in practice or is technically possible; • It is expressed to be 'except in exceptional circumstances', when access must be maintained at all times, and that if it was closed, the Applicant should provide alternative temporary access; • Part 2 of Schedule 2 enables deemed discharge of requirements within 6 weeks, meaning there is a risk that the relevant documents will not be suitably scrutinised; and • The final CoCP would only be able to be enforceable by the discharging authority. 	<p>Requirement 4 of the DCO requires that any relevant full Code of Construction Practice must be developed in accordance with the provisions of the interim CoCP.</p> <p>This means that the principle of ensuring access to the Interested Parties' premises is secured as it must be followed through to the full CoCP stage. The detail of how the Contractor will achieve this will not be set out in the full CoCP as it will be a matter for the Contractor to manage on a day to day basis.</p> <p>As expressed elsewhere in this response, this will be achievable and practically possible, and, in addition, the Applicant is endeavouring to enter into a side agreement with the Interested Parties to facilitate the provision of more information where necessary.</p> <p>Furthermore, the Applicant has updated the CoCP at Deadline 4 to provide for the creation of an engagement group with local businesses on the south side of the Scheme, which will include the Interested Parties, so that details of the construction methodology can be shared with them.</p>

Reference	Extract	Applicant's Response
		<p>In practical terms, continued access (during the construction period) is expressed as being at all times 'save for in exceptional circumstances' to reflect the practical reality of construction - e.g. that the installation of the bridge deck over the access to the Interested Parties' Land will require equipment to be placed on that access road for a short period of time. The Applicant is working on an agreement with the Interested Parties to set out how the effects of this will be managed. It should also be noted, that should the Applicant's proposed non-material change application be accepted, a second access to the site would be provided which would mean that interruption to the Interested Parties' site access was much less likely.</p> <p>The creation of a bespoke process for the discharge of requirements is well-precedented in DCOs made to date and reflects the fact that DCOs provide consents for nationally significant infrastructure projects and that such infrastructure projects should not be delayed unreasonably by third parties. The process is primarily in place in order to streamline the appeals process, thus minimising the risk to timely delivery of the Scheme. As set out in many of the Applicant's submissions, the Scheme is working to a efficient construction timeline thus the bespoke process allows the programme to progress in the time frames envisaged. Examples of this process in other DCOs, including deemed discharge, include the Eggborough and Wrexham Power Station projects.</p> <p>However, the Applicant has considered this issue and at Deadline 4 has amended the draft DCO to refer to a discharge decision period of 8 weeks rather than 6 weeks.</p>

Reference	Extract	Applicant's Response
		As compliance with the final CoCP is a requirement of the DCO, enforcement of its terms would become the duty of East Suffolk Council as the local planning authority, pursuant to Part 8 of the Planning Act 2008.
Paragraph 10.16 in WR	The Interested Parties require confirmation that the Applicant shall be required to relocate our clients' businesses at the Applicant's cost during the construction phase and until a suitable access solution for the Land is provided. An obligation should be placed on the Applicant in the DCO to do this. Our clients would also require the loss of confidence of customers in a compromised business operation to be compensated.	<p>The Applicant proposes to address the Interested Parties' principal point of concern, namely suitable access to the site for current and future operations through the provision of a second access to the site, as detailed in the Non-Material Changes Application submitted at Deadline 4 (Document Reference SCC/LLTC/EX/69). The Applicant is also engaging with the Interested Parties regarding proposed Heads of Terms for a Land & Works Agreement that identifies and proposes mitigation to address the concerns of the Interested Parties.</p> <p>Reassurances have been provided in respect of access during construction and operation of the Scheme and have also been provided to the landowners' representatives, confirming that fair and reasonable compensation will of course be due to landowners in accordance with the Compensation Code.</p>
Paragraphs 13.8.4-13.8.5 in WR	<p>The alternative access arrangement proposals</p> <p>The Interested Parties state the alternative arrangement does not provide a new and separate access to the Development Land.</p> <p>They state the alternative remains unsuitable for the following reasons:</p>	<p>The Applicant's second access strategy provides an improved dedicated access point for the Interested Parties' main operational facility, freeing up the existing reconfigured access point to serve and be dedicated to the development Plot 3-56, should the Interested Parties choose to do so.</p> <p>The Applicant has provided further swept path analysis in respect of a newly designed second access strategy as shown in the Non-</p>

Reference	Extract	Applicant's Response
	<ul style="list-style-type: none"> The drawings setting out this alternative arrangement provide a swept path analysis for a low-loader vehicle entering the warehouse and factory part of the Land at two access points but this is based on an 18m long low-loader with trailer steering. This is not the type of vehicle used by our clients' businesses and a swept path analysis using a low-loader without trailer steering is required. Without such information the alternative arrangement proposals are technically flawed. The Applicant has not provided a swept path analysis for usual HGVs or for vehicles entering or leaving the Land when a HGV is being unloaded at the "goods inward" door to the west of the existing buildings. However, it appears from drawing 1069948-SCC-HGN-LL-DR-KK-0008 that such a vehicle could only enter or leave the Land when another vehicle is already at the "goods inward" door. The current layout of the Land does allow for one HGV to pass another HGV parked at the "goods inward" door. The alternative arrangement would only allow use of the new proposed additional northern access when the "goods inward" door was not in 	<p>Material Changes Application submitted at Deadline 4 (Document Reference SCC/LLTC/EX/69) that takes into consideration the Interested Parties' concerns and all types of vehicles confirmed as being used by the Interested Parties. The analysis addresses concerns raised by the Interested Parties, notwithstanding, the Interested Parties' delay in sharing with the Applicant their representative's analysis of the Applicant's opening proposals. This is the subject of ongoing discussion.</p> <p>As confirmed above, the Applicant has reassured the Interested Parties that access to their main site will be maintained and available during both construction and operation of the scheme (on the basis outlined above) from the public highway, without any reliance on access over a third party's land. Clearly, acceptance by the Examining Authority of the proposed non-material change to the Application, which seeks to provide a second access for the Nexen site, would assist the Applicant in delivering this commitment to the Interested Parties.</p> <p>The Applicant has provided traffic management and vehicular tracking information to demonstrate that current vehicle movements could continue to be made within the site post-implementation of the Scheme. The Applicant also advises that the interim CoCP (Document Reference SCC/LLTC/EX/61) imposes a requirement on the Contractor to maintain access to Nexen's site during the construction phase (paragraph 2.7.1).</p>

Reference	Extract	Applicant's Response
	<p>use. The Applicant has not properly considered the current operational use of the Land.</p> <ul style="list-style-type: none"> • The Applicant's alternative arrangement will also mean that the weighbridge on the Land is no longer on the principle access/egress route for HGVs and such vehicles would either need to perform a new forward-then-reverse manoeuvre or make use of the originally proposed access set out in the submitted scheme (subject to the concerns with that approach summarised above). • The alternative arrangement, like the access proposals submitted with the scheme, does nothing to demonstrate access arrangements during the construction period of the proposed project. 	
Paragraphs 16-18 WR	<p>The Interested Parties believe the Applicant does not appear to fully understand the potential impacts on our clients' businesses.</p> <p>They state this is reinforced by the nature of the alternative access proposal that has been provided and the conclusion in Table 16-10 of the Environmental Statement it submitted that the proposed project will "not adversely affect the viability of the business and hence will not affect employment".</p> <p>They state the Applicant has not provided any</p>	<p>The Applicant received a delayed response from the Interested Parties to its opening proposals in respect of a second access strategy. Subsequently, the Applicant has been in the process of carrying out further swept path analysis in respect of a revised design of the second access strategy, taking into consideration the Interested Parties' concerns; a duly revised solution has now been provided to them.</p> <p>This revised access proposal remains under discussion and the Applicant remains confident that the second access strategy as presented in the Non-Material Changes Application submitted at Deadline 4 (Document Reference SCC/LLTC/EX/69) will provide a solution which addresses the Interested Parties' concerns.</p>

Reference	Extract	Applicant's Response
	realistic solutions to ensure that constant access to and movements within the Land for the operation of the existing businesses will be maintained both during the construction and operational phases of the proposed project.	
Section 14 Summary WR	<p>Impact of the construction of a new mooring on Plot 3-52</p> <p>The Interested Parties claim that the construction of a mooring on Plot 3-52 shall affect their clients' ability to lease areas of the quayside and offer this access to their clients.</p>	<p>Inspection of the bathymetry (underwater depth of lake) indicates that the bed of the lake in front of the Nexen site is silted to such an extent that it dries at low water therefore the ability to use it as a marine facility is severely restricted. Consultation with ABP as the Statutory Harbour Authority confirmed that this area has not been dredged for more than 10 years.</p> <p>The extinguishing of navigation rights is limited to areas where the presence of the bridge structures would make navigation impracticable. These powers will not remove the right to navigate over the full length of the lake nor limit a vessel's ability to navigate safely within the vicinity of the bridge.</p>
Impact on Access and Operation Report 1 September 2018	<p>The Interested Parties have instructed a consultant to review the proposals provided by the Applicant. They submitted alongside their WR a technical Report from September 2018.</p> <p>In summary it stated:</p> <ul style="list-style-type: none"> The traffic capacity of the roundabout junctions at the northern and southern ends of the LLTC is not proven as being satisfactory. Traffic flows and capacity 	<p>The capacity assessments of the roundabout junctions at the northern and southern ends of the Scheme are reported in sections 8.18 and 8.19 of the Transport Assessment (APP-093). The capacity analysis was subsequently re-assessed following an audit by SCC Highways and the revised results reported in section 8.18 and 8.19 on the updated Transport Assessment (REP3-056). The detailed outputs of the models are included as Appendix H (REP4-055).</p> <p>The vertical design geometry of the northern roundabout junction is shown on the Engineering Section Drawings and Plans, Side</p>

Reference	Extract	Applicant's Response
	<p>analyses (Arcady / Roads 9) has not been provided by SCC.</p> <ul style="list-style-type: none"> The vertical geometry of the northern roundabout junction has not been proven. The roundabout is shown on SCC drawings to sit some 3m above existing ground levels. There is no satisfactory vertical design geometry presented for the roundabout arms which connect to existing roads (ground level). SCC has not undertaken appropriate or adequate assessment of the vehicular access or movement arrangements for the existing Nexen factory / warehouse premises. There has been no consideration of the actual types of vehicles that are in regular use at the property. There has been no consideration of the of the operational use of the site; e.g. access doors and their use, vehicle circulation and routeing, vehicle turning, weighbridge location, separation of hgvs and car traffic. The full impact of the LLTC structure and maintenance access have not been adequately assessed or presented. The SCC drawing which shows rights of way and access suggests a far greater impact in terms of land take from the Nexen parcels than might be inferred from the LLTC road and bridge scheme layout plans. 	<p>Roads Sheets 1 to 4 (Document Reference 2.9, PINS Reference APP-043 – APP-046).</p> <p>The Applicant provided proposals for an alternative access as reviewed in the technical report at Appendix 2 of the Interested Parties Written Representation.</p> <p>The Applicant notes and has considered the proposed re-alignment of the Scheme presented by the Interested Parties in their report. Following further discussions with the Interested Parties the Applicant believes the proposed re-alignment proposal has been superseded by the second access strategy and proposed new Private Means of Access ('PMA') that has been developed. The Applicant believes this new PMA resolves the concerns which are the basis for the Interested Parties' proposed realignment.</p> <p>This revised proposal is captured in the Applicant's Proposed Non-Material Changes Application (Document Reference SCC/LLTC/EX/69), and it is noted that the highway authority has agreed that such access proposals should, in principle, be adequate to serve both future and proposed users within the site.</p> <p>As detailed in the Proposed Non-Material Changes Application and the Explanatory Paper attached at Appendix D this new PMA is to the north of, and in addition to, the revised access arrangement already proposed in the Application, and would allow separate access to the northernmost part of the Nexen site via its western side, together with increased headroom where the new PMA would pass beneath the southern approach to the new bridge.</p>

Reference	Extract	Applicant's Response
	<ul style="list-style-type: none"> The LLTC proposals provide only a restricted new access proposal for the Nexen northern parcel. There is no new access arrangement shown for the southern parcel development area. The new access proposed to the northern parcel has a headroom limited to that of 'standard' height vehicles. This does not accommodate movement on/off site of the large forklift and container loader vehicles that Nexen use. A proposal is presented for a re-alignment of LLTC which removes any requirement to take up land from Nexen. This arrangement would allow the operational use of the Nexen factory and warehouse premises to be maintained as existing (hgv circulation, weighbridge use, separation of hgv and car traffic, access to factory entrance doors). The LLTC re-alignment sets the continued operational use of the Nexen factory and warehouse against removal of the SCC Registrar's Office. It is considered that the value of the unchanged and continued operational use of the Nexen premises would outweigh the value or cost of keeping the Registrar's Office building. The LLTC severs the development area of the Nexen southern parcel from the highway network and provides no 	<p>This new PMA would provide access from the north side of Riverside Road, where it runs east-west in parallel with the lake, and would then turn eastwards, passing to the south of the control tower (and the related limits of deviation of Work No.6). This proposal should also mean that access within the site should operate in a similar fashion as the current clockwise arrangement for the passage of HGVs within the site.</p> <p>This new access would free up the site's existing access point, enabling it to serve the Development Land which should resolve the Interested Parties' further concerns expressed in relation to this land.</p> <p>The Applicant's proposed alignment of the Scheme includes permanent acquisition of land and rights over land within the curtilage of the Registrar's Office. This alignment and the second access strategy allow for the continued use of the Interested Parties Land and the Registrar's Office in a similar way to the current configuration of the two sites.</p> <p>The Applicant therefore considers the Interested Parties' proposed realignment requiring the neighbouring Registrar's Office to be relocated would be a disproportionate use of DCO powers.</p> <p>The Applicant also considers the Interested Parties' proposed permanent access arrangements through the neighbouring third-party land of Lings would be a disproportionate use of DCO powers.</p>

Reference	Extract	Applicant's Response
	<p>alternative means of access.</p> <ul style="list-style-type: none"> • A proposal is presented for a new access road to be provided, running north from Waveney Drive, to give access to the development area of the Nexen southern parcel and to the adjacent Lings property. This road should be provided in order to preserve the development potential of the Nexen land. • Overall, it is considered that the LLTC proposals as presented will have a severe and damaging impact on the operational use of the existing Nexen factory and warehouse premises on their northern parcel. Insufficient and inadequate consideration has been given to the way that the site currently operates and of the vehicles that enter and are used at the site. The land to be taken and the alternative means of access presented do not allow the site to continue to be operated as Nexen currently so do. The LLTC proposals as presented will sever the development area of the Nexen southern parcel from the road network. No alternative means of access is presented as being provided. A new means of access is required for the development of the parcel to be undertaken as currently envisaged. 	

Reference	Extract	Applicant's Response
Impact on Access and Operations Report 2 January 2019	<p>After the Applicant provided a proposal for an alternative access arrangement the Interested Parties instructed their technical consultant to review the proposals. The Report is submitted alongside their WR</p> <p>In summary the report states:</p> <ul style="list-style-type: none"> • SCC has not undertaken appropriate or adequate assessment of the vehicular access or movement arrangements for the existing Nexen factory / warehouse premises. There has been inadequate consideration of the actual types of vehicles that are in regular use at the property. There has been limited consideration of the of the operational use of the site; e.g. access doors and their use, vehicle circulation and routeing, vehicle turning, weighbridge location, separation of hgvs and car traffic. • The full impact of the LLTC structure and maintenance access have not been adequately assessed or presented. The SCC proposals do not show rights of way and maintenance access requirements. A far greater impact in terms of land take from the Nexen parcels might be inferred from the LLTC road and bridge scheme layout plans. • The LLTC Option 2 proposals provide for a 	<p>Taking account of the vehicles specified in the Impact on Access and Operations Report 2 provided in the Written Representation, the Applicant has put forward a proposal for a revised access arrangement as part of its package of proposed non material changes at Deadline 4. Updated swept path analysis and minimum headroom clearances are shown in Appendix G.</p> <p>The impact of the rights sought over plot 3-29 for the inspection, maintenance and repair of the Scheme have been fully considered by the Applicant. As indicated in the heads of terms and throughout discussions, these rights will be over the areas shaded in blue on the Land Plans (Document Reference 2.3, PINS Reference APP-017 to APP-021) accompanying the application and appended to the heads of terms. The impact of these new rights is expected to be negligible in the context of the existing rights to which most of this plot is subject, such rights being for the benefit of existing apparatus owned by statutory undertakers such as Virgin Media and UKPN. Even if the Scheme was re-aligned, rights for diversions of apparatus to link into the tunnel would still be required to cross the Interested Parties' land as part of the Application due to the proximate location of the tunnel which carries UKPN's apparatus beneath Lake Lothing.</p> <p>As detailed above, the second access strategy would free up the site's existing access point to be reconfigured to serve the Development Land which should resolve the Interested Parties' further concerns expressed in relation to this land.</p>

Reference	Extract	Applicant's Response
	<p>new access proposal for the Nexen northern parcel. There is no new access arrangement shown for the southern parcel development area.</p> <ul style="list-style-type: none"> • The new access shown for the Nexen northern parcel, comprising the warehouse and factory site, is inadequate and does not accommodate the vehicles and operations currently employed. • In particular, the access arrangement illustrated on the LLTC Option 2 proposals does not allow for free movement of heavy goods vehicles on to or off the site when other vehicles are already present. • The LLTC severs the development area of the Nexen southern parcel from the highway network and provides no alternative means of access. • It is noted that the above observations are made with regard to a finished scheme. No consideration has been given or shown by SCC with regard to arrangement for access to the Nexen properties during the lengthy LLTC construction stage. • Overall, it is considered that the LLTC proposals as presented will have a severe and damaging impact on the operational use of the existing Nexen factory and warehouse premises on their northern parcel. Insufficient and inadequate 	<p>The Applicant received a delayed response from the Interested Parties to its opening proposals in respect of a second access strategy and the Applicant has since been in the process of carrying out further swept path analysis in respect of a revised design of the strategy taking into consideration the Interested Parties' concerns expressed in their second report.</p> <p>This matter remains under discussion and the Applicant remains confident that a revision of the second access strategy taking into account the points in this second report will mitigate the Interested Parties' concerns.</p>

Reference	Extract	Applicant's Response
	<p>consideration has been given to the way that the site currently operates and of the vehicles that enter and are used at the site. The land to be taken and the alternative means of access presented do not allow the site to continue to be operated as Nexen currently so do.</p> <ul style="list-style-type: none"> • The LLTC proposals as presented will sever the development area of the Nexen southern parcel from the road network. No alternative means of access is presented as being provided. A new means of access is required for the development of the parcel to be undertaken as currently envisaged. 	

14 Northumbrian Water Limited [REP3-011, REP3-012, REP3-013]

14.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's Response
WR paragraph 3.5.4	<p>Compensation</p> <p>NWL raised concerns that the compensation for loss of connectivity from the services provider is limited to a small percentage of the connection charges for that period and does not extend to wider associated losses incurred by NWL as a result of the loss of connectivity.</p> <p>It stated that where such disruption is a direct result of the construction of the Scheme pursuant to the DCO, such losses would not be recoverable under the Statutory Compensation Code.</p>	<p>The Applicant has provided reassurances in respect of compensation being payable for the permanent acquisition of land and temporary possession of land, with any additional business disturbance to be assessed according to the Compensation Code and relevant articles within the DCO.</p> <p>In addition to this the Applicant is engaged with the landowner in a collaborative effort to identify, capture and agree all necessary mitigation measures within a Land & Works Agreement, the concept of which is to provide reassurances to the landowner in respect of their more specific concerns about traffic, parking, road layouts, noise, the effects of the Scheme on an existing planning permission over adjacent expansion land, a potential shortfall in business interruption indemnity etc. both during construction and operation of the Scheme. These discussions are ongoing and the applicant will keep the ExA updated on progress in discussions.</p> <p>The Applicant notes that the DCO includes a number of protective provisions for the benefit of utility companies including electronic communications operators.</p> <p>As such, the effects of the Scheme on their apparatus will be able to be managed by the utility providers in accordance with their standard procedures.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>The Applicant is not responsible for the fulfilment of these companies' obligations to maintain a constant connection to their customers' premises – this is their statutory duty.</p> <p>Further to the protective provisions, if NWL did make a claim for loss of profits arising from a loss of connection against the utility companies, the utility companies would be able to co-join the Applicant to those proceedings if it considered that the Applicant was responsible for the interruption to service.</p> <p>It is the Applicant's position, therefore, that no separate indemnity is required.</p> <p>With regard to the Environmental Statement NWL is mentioned (as Essex and Suffolk Water) in Table 15-4 and a Slight adverse effect on their business is identified in the construction stage and a negligible impact in the operational stage. This is attributable the loss of land being non-operational land and therefore the use of that land is not prejudicial to the business.</p>
WR paras 4.1.1, 4.1.3 – 4.1.15 Transport Appendix part 1.2	Level of Detail NWL has serious concerns about the lack of detail provided in the application documents as to the design proposed works and the implications that this has on its ability to provide an informed response. It is also far from clear from the application documents whether the Applicant has properly assessed the worst case	<p>The Applicant considers that the level of detail provided in the Application is appropriate to the current stage of development of the design and construction methodology for the Scheme. It follows a well preceded approach and has provided enough information for NWL to consider the suitability of the design of the Scheme.</p> <p>This position is summarised in the Applicant's response to the</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	development scenario for the Scheme in its Environmental Statement ("ES").	<p>ExA's section 51 advice (Document Reference SCC/LLTC/EX/3, PINS Reference AS-009); which notes that:</p> <ul style="list-style-type: none"> the Applicant has brought forward and assessed a reference design; the Applicant has recently appointed a Design and Build contractor for the Scheme whose role it is to prepare 'detailed technical plans and elevations' as part of the detailed design process. The detailed design process will not be concluded until some time after the close of the Examination, as such the precise details of the Scheme would not be confirmed until that time; and that the design and ES have been brought forward within the 'Rochdale Envelope' approach which is supported by PINS' advice note 9. <p>The Applicant notes that it is also important to ensure that a DCO and its accompanying plans are drafted to allow for a level of flexibility in detailed design to accommodate unforeseeable physical site circumstances such as, for example, geological and ground composition complications, which can give rise to unexpected issues on civil engineering projects at the project implementation stage. It is prudent to plan for a consent which can accommodate such issues, enabling implementation to proceed without the scheme promoter having to have recourse to additional consenting procedures, such as applications for material or non-material DCO changes, which inevitably have undesirable budgeting and programming implications with the potential to derail a</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>project.</p> <p>As set is set out in AS-009 and in the DCO, the design of the Scheme is controlled through the limits of deviation in article 5 of the DCO, the Design Guidance Manual (Document Reference SCC/LLTC/EX/17, PINS Reference REP3-036) ("DGM") secured through Requirement 3 of the DCO, and the obligation in the latter requirement for the Scheme to be designed in general accordance with the general arrangement plans (Document Reference 2.2, PINS reference APP-013, REP3-042 and APP-015); which provide an illustration of how the Scheme could look.</p> <p>The extent of land use powers permitted by the DCO is also a constraint on the design of the Scheme, as permanent highways could not be built within land that is not proposed for compulsory acquisition by the Applicant.</p> <p>In light of NWL's concerns as to the detailed design of the New Access Road and Canning Road, including their ability to meet future development in the vicinity, the Applicant would particularly note that page 19 of the DGM requires that the New Access Road 'must provide an adaptable design to accommodate adjacent development in the future' and page 21 asserts that the detailed design for the New Access Road must consider its appropriateness in accordance with the guidance provided in the SUN Development Brief policy document.</p> <p>The Applicant has, however, considered the points raised by</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>NWL on this issue, and considers that although flexibility must be maintained for the reasons given above, it is appropriate that the final design is able to be scrutinised, to ensure that it meets the aspirations of the DGM and that it performs to the standards established to be possible through the design process to date.</p> <p>As such, the Applicant has amended the draft DCO at Deadline 4 (Document Reference SCC/LLTC/EX/63) to provide for the detailed design of the highways constructed and improved by the Scheme to be approved by the county planning authority.</p>
WR paragraph 4.1.2	<p>Scope of Assessment</p> <p>In addition to its concerns about the assessment of transport and noise impacts in the application documents (discussed further below), NWL does not consider that the Applicant has properly assessed the likely impact of the Scheme upon its business operations at Trinity House. Paragraph 6.3.35 of the ES claims that <i>"To aid the assessment process the Applicant has engaged with ABP and land owners and businesses within the Order limits to further understand the nature of their operations and how the Scheme would impact them"</i>. NWL does not consider that the Applicant has made genuine efforts to understand the nature of its operations or the potential impact of the Scheme upon its business and operations at Trinity</p>	<p>As stated in Table 15-4 of the Environmental Statement, the permanent and temporary land take from NWL does not prejudice the use of the land, and the assessment has assumed that access will be available.</p> <p>With regard to the Environmental Statement, NWL is mentioned (as Essex and Suffolk Water) in Table 15-4 and a Slight adverse effect on their business is identified in the construction stage and a negligible impact in the operational stage. This is attributable to the loss of land being non-operational land and therefore the use of the land is not prejudicial to the business. Further reference to the operations of NWL are made in Table 13-12 of the ES where noise monitoring location C is considered to be representative of the</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>House. Nowhere does the ES mention that the Trinity House operations are particular sensitive to noise and disruption to access which they are.</p> <p>Despite NWL being a significant employer in Lowestoft, there is no mention of the potential for adverse impacts on NWL in the socio-economic chapter of the ES (chapter 16). Chapter 15 of the ES purports to assess the impacts of construction and operation of the Scheme on private assets including businesses. It identifies NWL (referred to as Essex and Sussex Water) as a receptor (see paragraph 15.4.8) but the only impact that it identifies relates to the loss of a strip of rough grassland that will be subject to compulsory acquisition (see Table 15.4). Chapter 15 entirely fails to acknowledge the effect of construction noise or access concerns that are pivotal to NWL's successful operation. In a Scheme that is predicated on the promotion of economic development, the failure properly to consider adverse impacts on an existing business is particularly concerning and is it odds with one of the underlying objectives of the Scheme to promote economic development.</p>	<p>noise sensitive operations at Trinity House.</p> <p>Table 13-13 of the ES further clarifies the sensitivity that has been assigned to NWL (by reference to Trinity House) in line with guidance within BS5228-1 as a non-residential receptor and Paragraph 13.5.18 concludes that, without mitigation secured through the CoCP, the impact upon Trinity House from construction noise is "around the LOAEL" (see Table 13-3 for a definition).</p> <p>A noise level around the LOAEL does not constitute a significant effect and, furthermore, Trinity House will benefit from the mitigation secured through the CoCP. As confirmed in footnote 46 to Table 13-18, this mitigation is predicted to result in a NOEL at Trinity House (again see Table 13-3 for a definition) during all phases of the construction works.</p> <p>With regard to operational noise, Appendix I provides further information on the impacts upon Trinity House in response to NWL's written representation, and Figures 13-3 to 13-5 show contour plots of the operational change in traffic noise level in the short term, long term and the long term night time respectively. The location of Trinity House can be identified from these figures.</p> <p>With regard to air quality, please refer to Table 2 of Appendix 8F which identifies the modelled concentration of nitrogen dioxide, PM10 and PM2.5 in the opening year of the Scheme in 2022. This shows that concentration of all determinants is</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		far below the objective level within Schedule 2 of the Air Quality Standards Regulations 2010. Context to the assessment within Appendix 8F is included in paragraph 8.4.14 of the ES.
WR paragraph 4.2.2	<p>Phasing</p> <p>NWL considers that insufficient detail with regard to construction has been provided; and that it is not clear what is proposed for Canning Road from the Rights of Way and Access Plans.</p> <p>It requires that the DCO should provide that the New Access Road and alterations to Canning Road must be completed before the Canning Road junction with Riverside Road is stopped up.</p>	<p>The Applicant has amended the interim CoCP at Deadline 4 (Document Reference SCC/LLTC/EX/61) to explicitly provide that the Contractor must phase the construction of the Scheme such that access to Riverside Business Park is maintained. Additionally, it has been updated to make reference to an engagement forum that will be required to be set up with local businesses to ensure that information on the construction phase can be imparted.</p> <p>Compliance with this principle is secured through Requirement 4 of the draft DCO.</p> <p>The Applicant clarifies that although as a result of the Scheme traffic from Canning Road will be unable to join Riverside Road directly, this cannot be shown as a stopping up on the Rights of Way and Access Plan, as the affected land still forms part of the highway (part of Canning Road and part of Riverside Road).</p>
WR part 4.3.3(a) and Traffic Appendix section 4.4	<p>Access to Trinity House</p> <p>There is currently no mechanism to ensure that vehicular, pedestrian and cycle access to Trinity House is maintained at all times during the construction period and this must be secured through the DCO.</p>	<p>The Applicant has amended the interim CoCP at Deadline 4 (Document Reference SCC/LLTC/EX/61) to add NWL to the list of premises to which access must be maintained through construction except in exceptional circumstances notified in advance to NWL.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
		<p>Compliance with this principle is secured through Requirement 4 of the draft DCO.</p> <p>As stated in Table 15-4 of the ES, the permanent and temporary land take from NWL does not prejudice the use of the land, and the assessment has assumed that access will be available. For further information on the effect of noise and air quality changes upon the operations at Trinity House and how this has been assessed in the ES, please see the Applicant's response above to paragraph 4.1.2 of NML's Written Representation.</p>
WR paragraph 4.3.3(d) and Transport Appendix section 4.5 and 4.14	<p>Crossings</p> <p>Given the substantial increase in traffic volumes as a result of the Scheme, further mitigation should be provided in the form of additional pedestrian crossings on Waveney Drive both during the construction and operational phases of the development. These should be secured through the DCO and provided prior to the start of construction of the Scheme.</p>	<p>As the Applicant noted in its Response to Relevant Representations (Document Reference SCC/LLTC/EX/2, PINS Reference AS-013) at HT13 <i>"The Applicant notes that SCC/WDC has agreed "that the type of control used at crossings should be determined at the detailed design stage taking account of the requirements set out in the Design Guidance Manual."</i> Notwithstanding the above, the Applicant has amended the draft DCO (Document Reference SCC/LLTC/EX/63) at Deadline 4 to provide for the detailed design of the highways constructed and improved by the Scheme be approved by the county planning authority, and this approval process would include the provision/location/type of crossings</p>
4.3.3(e) in Written Rep and Transport	<p>Traffic Counts</p> <p>The traffic counts informing the Transport Assessment's (TA) assumptions as to movements to</p>	<p>The forecasts of traffic using the New Access Road as presented in the TA (Document Reference SCC/LLTC/EX/23, PINS Reference REP3-056) were based upon TEMPRO growth for car trips and NTM growth applied to the LGV / HGV</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
Appendix section 4.7	<p>Riverside Business Park were based on a single day in July (which is not a neutral month) and additional survey work completed by PBA indicates that Applicants TA underestimates existing movements. The TA does not appear to take into account the future growth of Riverside Business Park, and as such underestimates traffic that will use the New Access Road. Furthermore, the TA does not account for the allocation of the Jeld Wen site for employment purposes in the area adjacent to the New Access Road. It assumes that no vehicles will load onto the New Access Road from that site. Given that the limits of deviation in the Works Plans allow for the provision of a new link into the Jeld Wen site, the approach in the TA is unrealistic and results in an underestimation of traffic using the New Access Road. The form of the proposed New Access Road / Waveney Drive priority ghost island junction should be reconsidered given the future growth allocated in this area and the actual trips associated with Riverside Business Park;</p>	<p>trips. This takes some account of future traffic growth at Riverside Business Park since TEMPRO is based on projected traffic growth across Waveney District. However, in the Applicant's written response to NWL (Document Reference SCC/LLTC/EX/2, PINS Reference AS-013), the Applicant accepted the need for a sensitivity test to assess the capacity of the junction of New Access Road and Waveney Drive, with updated assumptions regarding development in this area having regard to the progression of developments in the locality.</p> <p>The Applicant has now considered forecasts of future growth from Kirkley Waterfront and Riverside Business Park using the most recent assumptions relating to future land use. This has formed the basis for the production of revised traffic flow forecasts for the New Access Road that have been used to consider the capacity of the proposed junction of the New Access Road and Waveney Drive.</p> <p>This required the production of revised forecasts using the SATURN traffic model that were based upon a detailed consideration of the land use proposals in relation to the developments which comprise the Kirkley Waterfront Sustainable Urban Neighbourhood (SUN), as well as future additional development at the Riverside Business Park.</p> <p>Revised forecasts were prepared for 2022 and 2037 and demonstrated that the priority junction operated well within capacity in both forecast years. A further capacity review was carried out with the New Access Road as the sole point of</p>

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		<p>access for both the Jeld Wen development and expanded Riverside Business Park. This also demonstrated that the junction operated well within capacity.</p> <p>The results of this work, including the detailed assumptions relating to the land use developments are reported in Appendix H.</p>
WR 4.3.3 (f) and Transport Appendix section 4.15 and 4.2	<p>Car Parking</p> <p>The reduction in on-street car parking within the Riverside Business Park will be detrimental to the efficient operation of Trinity House and is likely to push vehicles onto nearby residential streets that are not able to accommodate the additional vehicles. The rationale for reducing on-street car parking is not clear and should not be introduced through the DCO. Consideration should be given to alternative on-street car parking arrangements on the New Access Road, to reduce the likelihood of non-residential parking in neighbouring residential streets (as suggested in the TA).</p>	<p>The Applicant has brought forward amended parking proposals at Deadline 4 as part of its application for proposed non material changes to the Scheme. This proposed change includes additional on-street parking which would be available to users of the Riverside Business Park, as requested by NWL. Overall 36 parking spaces would be retained, compared to an existing provision of 51 (allowing for 6m bays).</p>
WR paragraph 4.4.1 – 4.4.4 and Noise Assessme	<p>Noise</p> <p>NWL provided a Noise Assessment as part of NWL's Written Representation.</p> <p>The report considers the responses to the Relevant Representations that have been provided by the</p>	<p>The Applicant considers that:</p> <ul style="list-style-type: none"> The arguments submitted by NWL (and their advisors PBA) for treating Trinity House as a receptor that is especially sensitive to noise and vibration are invalid and that Trinity House should not be treated as a

Written Rep Ref.	Summary / Extract	Applicant's Response
nt Supporting Evidence	<p>Applicant and concludes: Consequential failure, in both construction and operational phases, to detail appropriate mitigation measures to protect the noise environment within Trinity House</p> <p>The concerns are associated principally with the:</p> <ul style="list-style-type: none"> • Lack of clarity in assessment methodology leading to concerns over the adequacy of the assessment; • Failure to identify Trinity House as a sensitive receptor with respect to operational impacts resulting in a failure to assess operational noise impacts on Trinity House operations; • Inadequate assessment of potential construction noise impacts on Trinity House; and • Consequential failure, in both construction and operational phases, to detail appropriate mitigation measures to protect the noise environment within Trinity House. 	<p>sensitive receptor;</p> <ul style="list-style-type: none"> • The assessment methodology, as detailed in the ES, is clear and meets the requirements of the relevant regulations relating to Environmental Impact Assessment; and • The assessment of potential noise impacts at Trinity House during the construction period is adequate, taking into account the relevant sensitivity of Trinity House. <p>Further technical detail on these points is given in Appendix I.</p>
WR paragraph s: 4.5.12 – 4.5.18	<p>Habitat Condition</p> <p>NWL expresses its view that the Applicant is not empowered by section 120(5) of the Planning Act 2008</p>	<p>The Applicant continues to discuss this matter with NWL but disagrees in principle with its position.</p> <p>Firstly, in granting development consent on land in which other</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>to include article 3(3) in the DCO. It also considers that WDC cannot state that a breach of a planning condition is permitted through a SoCG. As such, and without replacement land being provided, NWL will be in breach of a planning condition. NWL argues that the Applicant should therefore facilitate a section 73 application of the existing planning permission to vary it to take account of the effects of the Scheme.</p>	<p>planning permissions are existent, the land will be subject to a new page in the planning history of the site; one in which multiple permissions exist.</p> <p>Secondly, any enforcement for a 'breach of planning' control by a local planning authority needs to be 'expedient' having regard to the provisions of the development plan and any other material considerations. Given the policy support for the Scheme in the latest Waveney Local Plan, the potential existence of the DCO, and the comments of WDC in the SoCG, one cannot fathom a position where WDC could enforce a 'breach' of condition in this scenario.</p> <p>This is particularly the case as one of the grounds of appeal of an enforcement notice under s.174 of the TCPA 1990 is that the matters in breach should be granted planning permission. In this scenario, it would be simple for NWL to make that argument.</p> <p>Finally, the Applicant considers that sections 120(3) and (5)(c) of the Planning Act 2008 enable the inclusion of article 3(3) in the DCO as it relates to a matter which relates to the development for which consent is granted, and enables full effect to be given to the Applicant's powers to construct Riverside Road granted by the Order.</p> <p>The Applicant continues to discuss this matter with NWL, and has made an amendment to DCO article 3(3) at Deadline 4 further to these discussions.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
WR paragraph s 4.6.4 – 4.6.7	<p>Article 16</p> <p>Specifically, NWL considers the extension of powers for access to third party buildings and land outside the Order Limits, and in particular the inclusion of rights to secure temporary exclusive possession to be excessive and unreasonable given the potential for significant financial and operational impacts to its business if such powers are used.</p> <p>NWL argues that should such powers be included in the DCO:</p> <p>(a) the period for advance notice should be increased to at least 3 months on the basis that this impacts on property owners and occupiers who have not had the benefit of prior notification as is the case for land within the order Limits;</p> <p>(b) the period for issue of a counter-notice should also be extended to at least 28 days to enable recipients of the notice to properly consider the proposals and specifications for the protective works and the effects these might have on their property (and their use of their property);</p> <p>(c) provisions are included for affected property owners to review and approve proposed protective works, including timing and access arrangements; and</p> <p>(d) provisions to enable agreement to be reached with owners in relation to such protective works.</p>	<p>The Applicant notes that the geographical extent of Article 16 is precededented in the DCOs made for the A14 Cambridge to Huntingdon and the A19/A1058 schemes, and reflect the fact that until the detailed construction methodology is known, the identification of which buildings may require some form of protection is not known.</p> <p>The power is essentially of benefit to interested parties; and the provisions for notice and the provisions of information (including time periods) are precededented in Orders such as the Silvertown Tunnel Order 2018 and the M20 Junction 10a Development Consent Order 2017. They reflect the fact that as construction is a constantly moving activity, issues of subsidence and settlement may not become predictable until nearer the time that the activity is to be carried out.</p> <p>Similar logic applies to Article 17, which is also well precededented, including in the most recent DCO for Eggborough Power Station. The extent that the power will be required outside the Order limits will be dependent on the details of construction which will change as the project is built out, but given the results of the ES and works to date, it is considered that the scope of the use of this power will be limited.</p> <p>As such, the Applicant does not propose to make any changes to these articles at the present time and suggests that it is for NWL to suggest why there should be a departure from precedent.</p>
WR Paragraph	<p>Article 17 (authority to survey and investigate land) 4.6.8 SCC seek the power to enter onto any land within</p>	

Written Rep Ref.	Summary / Extract	Applicant's Response
s 4.6.8 – 4.6.9	<p>the Order limits, and where reasonably necessary, any land adjacent to, but outside the Order limits, for the purposes of carrying out surveys, investigations, excavations regarding the nature of the surface layer and subsoil, ecological and archaeological investigations (including excavations and trial holes), to leave apparatus on land as part of such activities.</p> <p>NWL considers that:</p> <p>(a) on the basis that these powers extend to land outside the Order limits, the exercise of these powers through service of a notice should include the ability for owners and occupiers to issue a counter notice that requires the question as to whether the specific purpose for which the powers are being sought under Article 17(1) are reasonably necessary and justified be referred to arbitration; and</p> <p>(b) the notice provisions be amended to increase the period to at least 3 months, with counter-notices period to be at least 28 days to enable the recipients consider the impact of the proposed activities and to take such steps as are necessary to either challenge or prepare for such activities (and thereby mitigate losses).</p>	Notwithstanding the points made above, the Applicant continues to discuss matters of detail on this point with NWL with the hope of entering into a side agreement that can address their remaining concerns.
WR paragraph s 4.1.15 and 4.6.10 – 4.6.11	<p>Schedule 2 Requirements</p> <p>NWL has concerned with the deemed discharge of requirements proposed at paragraph 15(2) of Part 2 of Schedule 2. The effect of the provision is that if the discharging authority does not determine an application to discharge a requirement within the period set out in para 15(1), "the discharging authority is taken to have</p>	The creation of a bespoke process for the discharge of requirements is well preceded in DCOs made to date and reflects the fact that DCOs provide consent for nationally significant infrastructure projects which should not be delayed unreasonably by third parties. The process is primarily in place as it streamlines the appeals process, thus minimising the risk to timely delivery of the Scheme. As set out in many of the

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>granted all parts of that application (without any condition or qualification) at the end of that period". SCC's Response to Relevant Representations (Issue DCO13) claims that it is "appropriate to include deemed discharge provisions as they are necessary to ensure that this nationally significant infrastructure project is delivered without undue delay."</p> <p>4.6.11 NWL does not agree with this position. The proposed arrangements would fail to ensure that the impacts of the activities for which discharge is sought have been adequately considered by the discharging authority. Part 2 of Schedule 2 contains appeal procedures at paragraph 17 which are well established in the context of DCOs. These include (as set out in para 17(1)(b) the ability to appeal for non-determination within the required time period. The inclusion of this arrangement is not consistent with the deemed approval provision referred to above and in any event it provides sufficient recourse for SCC to resolve applications where determination is not made as required. It obviates the need for the deemed consent provisions at paragraph 15(2).</p> <p>4.6.12 NWL further considers that the period of 6 weeks for determining applications under this Schedule to be insufficient, particularly in relation to such crucial elements such as the final Code of Construction Practice (Requirement 4), where the potential impacts on local businesses and residents are great, and where additional consultation with the EA and WDC is required. A period of at least 8 weeks would be more</p>	<p>Applicant's submissions, the Scheme is working to a quick construction timeline thus the bespoke process allows the programme to progress in the time frames envisaged.</p> <p>The reference in Requirement 17(1)(b) to non-determination is included in error, and has been removed from the draft DCO (Document Reference SCC/LLTC/EX/63) at Deadline 4.</p> <p>Examples of this process in other DCOs, including deemed discharge, include the Eggborough and Wrexham Power Station projects.</p> <p>However, the Applicant has considered the issue and at Deadline 4 has amended the draft DCO to refer to a discharge decision period of 8 weeks rather than 6 weeks, to bring this in line with the period of time within which the County Planning Authority is accustomed to discharging planning conditions. The Applicant also notes that this has not been raised as a concern by the County Planning Authority.</p> <p>As noted above, the DCO has also been amended at Deadline 4 to provide for the approval of the details of the highways, including at the Riverside Business Park.</p> <p>A requirement is not needed for phasing details given the short timescales of the project. In any event, as noted above, the CoCP (Document Reference SCC/LLTC/EX/61) has been amended at Deadline 4 to provide for the phasing that NWL has requested in respect of the New Access Road and Canning Road.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>appropriate. There should also be a mechanism whereby interested land owners should be consulted on the draft Code prior to it being approved in order to ensure that it contains provisions sufficient to mitigate impacts that would otherwise be experienced by them.</p> <p>4.6.13 NWL considers that additional requirements should be included to deal with the following:</p> <p>(a) submission and approval of a phasing programme for the authorised works to ensure that specific works are undertaken and completed prior to closure or re-direction of public highways and access routes; and</p> <p>(b) approval of design details relating to all permanent structures and highway junctions (in lieu of the blanket compliance position set out at requirement 2 which lacks detail and certainty).</p>	<p>The Applicant continues to discuss matters of detail on this point with NWL.</p>
Transport Appendix		
Transport Appendix 4.3	<p>Location and Design of the New Access Road PBA's Review</p> <p>PBA agrees with the Applicant that a suggested more easterly aligned New Access Road would adversely affect visibility splays from the access road, encroaching on neighbouring third party land. The report states that this would only be the case in relation to a proposed priority T junction form on Waveney Drive, as shown on the illustrative General Arrangement Plan and is likely not to be the case should an alternative junction form be considered, such as a signalised T junction.</p>	<p>A signalised junction was considered, and notwithstanding that it is not required it was, as set out in paragraph 3.7.23 of the Environmental Statement (Document Reference 6.1, PINS Reference APP-136) "<i>discounted due to safety issues in relation to residential property accesses opposite the former Jeld Wen site. Traffic leaving these properties would have become isolated between the signal stop lines and would have been unable to see the signal heads to safely exit. It was also considered to be inappropriate to stop the traffic on Waveney Drive in advance of the new crossing to allow priority to a minor access road.</i>"</p> <p>The Applicant has put forward a proposal for a revised layout</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	PBA queries how the proposed alternative arrangement would affect the findings of the Environmental Statement, and Transport Assessment technical work or the proposed order limits contained within the draft Development Consent Order.	<p>for the New Access Road, as part of its application, submitted at Deadline 4, for proposed non-material changes to the Scheme. The proposed change to the New Access Road remains within the Order limits and limits of deviation already applied for, and is thus still within the scope of the Environmental Statement. An appraisal of the environmental effects associated with this change is included in the Proposed Non-Material Changes Application (Document Reference SCC/LLTC/EX/69).</p> <p>Any further minor refinement of the New Access Road would be constrained by the limits of deviation provided for in the DCO and related plans and drawings, and by guidance provided in the Design Guidance Manual (Document Reference SCC/LLTC/EX/17, PINS Reference REP3-036) .</p>
Transport Appendix 4.6	<p>Waveney Drive link capacity PBA's Further Review</p> <p>The report suggests that given the significant forecast increase in traffic on Waveney Drive, it is considered that link capacity assessments should also supplement the assessment work.</p> <p>It is noted the Applicant has undertaken a link capacity assessment in their Response, making reference to DMRB TA 79/99, and demonstrated that the predicted doubling of traffic flow on Waveney Drive is within the design standard guidance for this type of road. The report states that the predicted situation directly affects the ability of NWL employees to exit the New Access</p>	<p>The acknowledgement by PBA that junction capacity assessments should be the principal assessment in urban areas is duly noted. It is the Applicant's view that the link capacity assessment presented in its Responses to Relevant Representations (AS-013) demonstrates that predicted traffic flows on Waveney Drive are not of sufficient volume that crossings additional to those already proposed to be provided on Waveney Drive are required. The Applicant also notes that with the proposed parking changes set out in its non-material changes application at Deadline 4, additional to existing on site car parking spaces, staff at Trinity House are in any event unlikely to require to cross Waveney Drive from parking locations south of Waveney Drive</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	Road and finding safe gaps in the traffic to exit.	
Transport Appendix 4.8	<p>Rail level crossing on B1531 Victoria Road</p> <p>The Applicant's response is acknowledged. However, they state it is unclear from the Transport Assessment documentation how traffic on the same road (B1531) over a 2km stretch is forecast to significantly reduce on the western end, but significantly increase on the eastern end. If available, traffic model 'difference plots' between the Do Minimum and Do Something scenarios should be provided to clarify this point.</p>	<p>The application acknowledges that while traffic flows are significantly reduced on the western end of the B1531 (Victoria Road), flows at the eastern end of the B1531 (Waveney Drive) will significantly increase with the Scheme. This is due to traffic re-routing onto the A12 Tom Crisp Way from the A1117 Elm Tree Road / A146 as a result of the new direct route which the Scheme provides. Traffic transferring from A146 Bridge Road / Mutford Lock crossing to the Scheme leads to a decrease in flow on the B1531 Victoria Road. This also includes traffic associated with the Kirkley Waterfront Sustainable Urban Neighbourhood which also transfers from B1531 Victoria Road to the Scheme.</p> <p>The changes in flow can best be illustrated by a plot from the SATURN model in Appendix J present flow difference bandwidths in passenger car units (pcus) between the 2037 Do Minimum (Without Scheme) and Do Something (With Scheme) for the AM and PM peak hour. The green bandwidths represent increases in flow as a result of the Scheme, blue bandwidths signify decreases in flow with the Scheme in place.</p>
Transport Appendix 4.9	<p>Proposed New Access Road / New Canning Road Priority Junction</p> <p>PBA's state there is a safety concern is that the vast majority of vehicles will turn in and out of Canning Road to access Suffolk County Council offices,</p>	<p>The junction is designed in accordance with DMRB standards having regard to the demand on its respective arms.</p> <p>Adopting the suggestion of PBA would require a bend of large radius which would require significant land take from the car park of the Council offices. Such land is not within the Order</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>Waveney District Council offices, Trinity House, etc. Since there will be minimal traffic accessing the Nexen unit, there is the concern that over time, drivers exiting Canning Road may become complacent and not look right when exiting resulting in a collision.</p> <p>They state that the proposed layout requires further review in the interests of highway safety, or alternatively, the priority should be changed with the Nexen access arm becoming the minor arm. This then responds to the dominant traffic flow movements.</p>	<p>limits, and the Applicant considers that the compulsory acquisition case for such land could not be made when an alternative design that works without such acquisition is available.</p> <p>It would be likely that such a bend would increase speeds in this area which would also be undesirable.</p>
Transport Appendix 4.10	<p>Junction visibility splays at the Proposed New Access Road / New Canning Road Priority Junction</p> <p>PBA acknowledged that the visibility plan contained within Appendix F of the Response to Relevant Representations shows a small element of the visibility envelope outside of the Order Limits. They state that changing the priority with the Nexen access arm becoming the minor arm would resolve this issue.</p>	
Transport Appendix 4.11	<p>New Access Road 90 degree bend</p> <p>PBA recommends the New Access Road design is subject to a Road Safety Audit process.</p>	<p>The design will be subject to a safety audit at the relevant time.</p>
Transport Appendix 4.12	<p>Stopping up of Canning Road junction with Riverside Road</p> <p>PBA still considers that a formal turning area should be provided, regardless of the Registry Office access which is private.</p>	<p>The Applicant has put forward a proposal for a turning head as part of its application for proposed non material changes to the Scheme at Deadline 4.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
Transport Appendix 4.13	<p>Canning Road accessibility</p> <p>PBA state it is still unclear how pedestrian and cycle accessibility (for all abilities) will be maintained for existing staff at the Riverside Business Park along the western side of Riverside Road due to the rise in gradient.</p> <p>They request further information on this issue and raise the concern that pedestrians and cyclists entering and leaving Riverside Business Park from the east and north may potentially be forced to access from Waveney Drive and through the frontage of Trinity House and its associated private car park. The Applicant acknowledges that NWL has a suitable access on to Waveney Drive opposite its main entrance. The concern is that other Business Park uses will use this access.</p>	<p>Due to the presence of the bridge structure in this location, it is not possible to retain the current pedestrian/cycle facility at ground level. Pedestrians and cyclists can continue to use the access located east of the South Lowestoft Children's Centre to walk/cycle to the Riverside Business Park.</p>
Transport Appendix 4.16	<p>4.16 Issue Number HT15 – HGV Impact (During Construction)</p> <p>PBA seek further clarity from the Applicant as to the interpretation of the number of HGVs likely, since there is some ambiguity and conflicting information in the DCO application documents.</p> <p>In particular, PBA's interpretation of paragraphs 5.6.12 of the ES and 19.5.2 of TA imply that there is forecast to be an average of 108 two-way HGVs per day (i.e.,</p>	<p>As noted in paragraph 5.6.12 of the Environmental Statement (Document Reference 6.1, PINS Reference APP-136) and paragraph 19.5 of the TA (Document Reference SCC/LLTC/EX/23, PINS Reference APP-093) there are three construction compounds and deliveries would be split 50/50 between the north and the south of Lake Lothing. Based upon a 50/50 split of movements there would be 54 two way movements a day at the peak of construction through Station Square and along Waveney Drive to access the north and south construction compounds respectively.</p> <p>The increase of HGVs along Waveney Drive is therefore</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>54 HGVs arriving, and 54 HGVs leaving) to the southern compound, which enter via Waveney Drive (a compound located off Riverside Road). This is not 54 two-way movements as suggested in the response. Paragraph 5.6.12 states these are 'one-way movements associated where a one-way movements is a single access to or egress from a site'. Therefore, by definition, a two-way movement is double.</p> <p>Based on PBA's interpretation of the numbers, for a working day (12 hours), this equates to an average of 9 HGVs per hour (e.g., 4 HGVs in, 5 HGVs out) – or 1 HGV entering or departing every 6-7 minutes.</p> <p>The Guidelines for the Environmental Assessment of Road Traffic published by The Institute of Environmental Assessment in 1993 (now the Institute of Environmental Management and Assessment – IEMA) suggest that for environmental impact, traffic flow increase (or heavy vehicle increases) of 30% or more represent a reasonable threshold for inclusions within the assessment process.</p> <p>Paragraph 19.5.3 of the Environmental Statement states that this HGV generation (108 HGVs) "does not require detailed assessment as it will not constitute a change in traffic of greater than 30% on any link within the study area...therefore further assessment is scoped out of the assessment".</p>	<p>54/127 = 43% and therefore the interpretation by PBA of an 85% increase is incorrect.</p> <p>With regard to the assessment of HDVs in the construction phase, the guidelines state that an environmental assessment may need to address the different phases of a scheme but the guidelines are not specific that this has to include construction, and it is accepted that this should be complemented by professional judgement (see 1.16 of the guidelines). Therefore, given the error in the figures presented by PBA and the short term and temporary nature of the HDV construction traffic along Waveney Drive, it was concluded that a construction phase assessment was not appropriate.</p>

Written Rep Ref.	Summary / Extract	Applicant's Response
	<p>However, based on PBA's interpretation of the HGV numbers, this would be incorrect since the number of HGVs will increase by more than 30% on Waveney Drive. With reference to paragraph 10.1.9 of the Transport Assessment June 2018 (document Reference 7.2), there are approximately 8,500 vehicles per day using Waveney Drive of which approximately 1.5%, or 127, are HGVs. This would equate to a HGV increase of 85%, well in excess of 30%.</p> <p>Furthermore, based on this interpretation, 10-11 months of the 2 year construction programme would have >30% HGV increase on Waveney Drive – which is almost half of the construction programme.</p>	
Transport Appendix 4.17	<p>HGV Trip Distribution and Assignment (during construction)</p> <p>PBA's noted that Waveney District Council's (WDC) and SCC's relevant representation submitted on September 21st 2018 following a Planning Committee meeting on September 18th 2018 stated that "the impact of construction traffic will require further consideration."</p>	<p>As noted above, the ES has concluded that no significant effects arise from the HGV movements expected from the Scheme.</p> <p>The Applicant notes that the interim CoCP provides for any full CoCP to include traffic management measures that will be applied during the course of the construction phase, so the Local Planning Authority and the County Planning Authority will be able to give further consideration to these matters.</p>
Transport Appendix 4.18	<p>Abnormal HGV loads (during construction)</p> <p>The Applicant's response is acknowledged.</p>	Comments are noted.

15 NWES [REP3-009]

15.1 Summary and response to Written Representations

Written Rep Ref.	Summary / Extract	Applicant's response
n/a summary provided	<p>Summary</p> <p>NWES state in its Written Representation that they did not receive a link to the appropriate plans demonstrating how the proposed development would affect their site until 20th December 2018. They believe the late availability of that information has impacted their ability to develop a full and detailed representation.</p> <p>Since receipt of the information they have sought views from the Riverside Business Centre's existing tenants. The outcome of this consultation are summarised below:</p> <ul style="list-style-type: none"> • Proximity: 50% of the respondents indicated that the elevated roadway will have a highly negative impact to both the Centre and their businesses. • Traffic: 58% of respondents feared a highly negative impact. • Noise: 50% of respondents indicated increased noise will have a highly negative impact. • Access: 50% of the respondents indicated reduced ease of access will have a highly negative impact. The 3rd Crossing proposals identify a fundamental change to the existing vehicle access route to the effect that the current prime location / vehicular access route would be removed. • Visibility/Visual Impacts: 42% of respondents fear 	<p>The Applicant has engaged in numerous meetings, telephone discussions and email correspondence with the Interested Party since June 2016, during which the location of project information, documents and plans were reiterated</p> <p>Statutory notices and other correspondence were addressed to the Interested Party's registered address and the Interested Party informs the Applicant that that the post has failed to reach their property team. In response the Applicant has added a secondary postal address to their distribution list for the Interested Party.</p> <p>The Applicant met with the Interested Party and issued Heads of Terms for a Land & Works Agreement in May 2018, providing at that time and in all subsequent meetings and correspondence, reassurances in respect of the Applicant's commitment to gaining a fuller understanding of the Interested Party's business and their tenant's businesses with a view to identifying concerns and agreeing necessary mitigation measures.</p> <p>Reassurances were also provided in respect of the Applicant maintaining access to the Interested Party's property throughout construction of the Scheme, together with confirmation of the Interested Party's rights to compensation in respect of business disturbance under the compensation</p>

	<p>reduced visibility will have a highly negative impact. The visibility of such a business centre is proven to be key to its success.</p> <ul style="list-style-type: none"> • Concerns over Car Parking • Concerns over Fumes <p>Closure of the Centre will be hugely disruptive not only to Nwes, but to the business community of the Riverside Business Centre and wider Lowestoft economy.</p> <p>The consultation results suggest a drop in occupancy which would result in the centre no longer be financially and operationally sustainable.</p>	<p>code.</p> <p>Similar reassurances have been reiterated in all subsequent meetings, telephone calls and email correspondence with the Interested Party.</p> <p>The Applicant regrets, however, that there was a technical issue that only recently came to light and that this did result in the Interested Party not receiving copy documents and plans as requested. This issue has since been rectified and the Applicant remains committed to engaging with the Interested Party to better quantify the likely effects of the Scheme during both construction and operation.</p> <p>The Applicant remains committed to working with the Interested Party to identify, capture and agree measures of mitigation in respect of any such concerns and the Applicant reiterates its pledge to adhere to the Code of Construction Practice, which now includes provisions for engagement with local businesses in which affected parties can liaise with and provide feedback to the Applicant's contractor.</p>
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Appendix A - Extract from APP-018 - 2.3 Land Plans (Sheet 2 of 5)

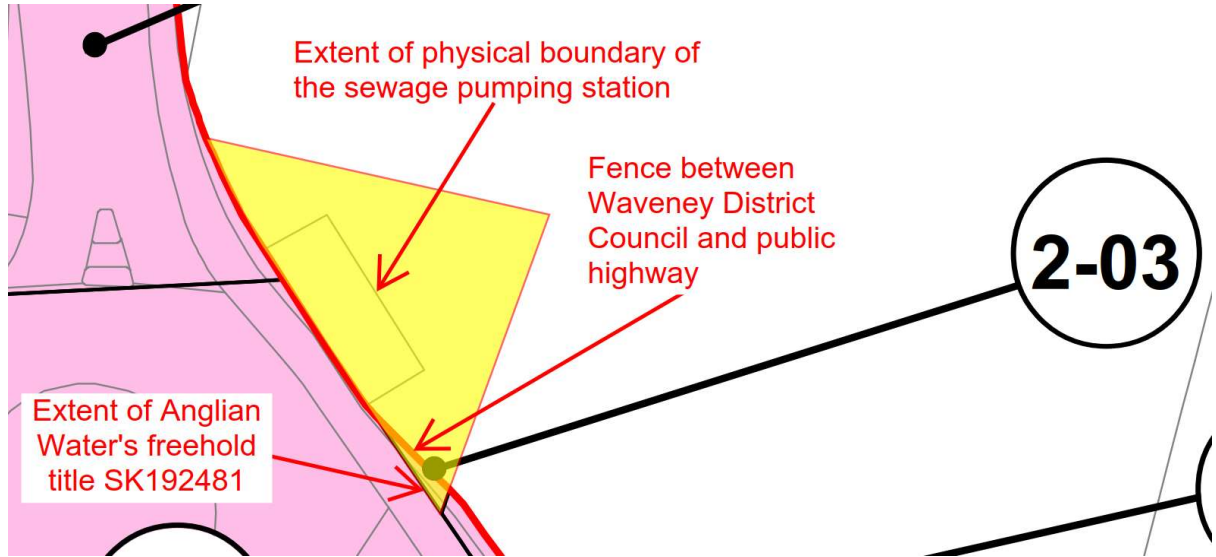


Figure A-1 Extract from APP-018 - 2.3 Land Plans (Sheet 2 of 5)

Appendix B - Review of Central and Western Bridge Options



Suffolk County Council

LAKE LOTHING THIRD CROSSING

Technical Report: Review of central and western bridge options





Suffolk County Council

LAKE LOTHING THIRD CROSSING

Technical Report: Review of central and western bridge options

TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 62240712

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Suffolk County **Council**

LAKE LOTHING THIRD CROSSING

Technical Report: Review of central and western bridge options

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CONTENTS

1.	INTRODUCTION	1
1.1.	PURPOSE OF REPORT	1
1.2.	BACKGROUND	1
	THE SCHEME	1
	OPTION ASSESSMENT AND OUTLINE BUSINESS CASE	1
	FURTHER DEVELOPMENT OF THE SCHEME	1
1.3.	APPROACH	2
1.4.	OPTIONS CONSIDERED IN THE OAR AND OBC	2
	ROUTE CORRIDORS	2
	INITIAL ROUTE OPTIONS WITHIN CORRIDORS	4
	OPTION ASSESSMENT – THE “FIRST SIFT”	7
	REFINING AND ASSESSING THE SHORT-LISTED OPTIONS – THE “SECOND SIFT”	9
1.5.	THE SCHEME	14
	DEVELOPMENT OF THE PREFERRED SCHEME	14
1.6.	FURTHER CONSIDERATION OF THE WESTERN OPTION	16
1.7.	COMPARING THE WESTERN OPTION WITH THE SCHEME	18
	APPROACH	18
	DESIGN REVIEW	18
	CONNECTION TO WAVENEY DRIVE	19
	UPDATED COST OF THE CENTRAL AND WESTERN OPTIONS	20
	UPDATED TRAFFIC MODELLING	21
	UPDATED ECONOMIC ASSESSMENT OF THE CENTRAL AND WESTERN OPTIONS	26
	UPDATED ENVIRONMENTAL ASSESSMENTS	27
	IMPACT ON PORT OF LOWESTOFT	29
	CONCLUSION	29

1. INTRODUCTION

1.1. PURPOSE OF REPORT

- 1.1.1. This report reviews the process and rationale that was undertaken for selecting a central alignment as the preferred option for the Lake Lothing Third Crossing (the Scheme), as opposed to a more westerly alignment (as preferred by Associated British Ports (ABP)).

1.2. BACKGROUND

THE SCHEME

- 1.2.1. Lake Lothing is a large saltwater lake which flows into the North Sea at Lowestoft. The lake is up to 180m wide, and forms the inner harbour of the Port of Lowestoft. There are two road bridges, one at each end, but no road crossing over the middle part of the lake. As a result, the lake physically divides the town. The Scheme is for an additional (i.e. third) road crossing of the lake, between the existing crossings.

OPTION ASSESSMENT AND OUTLINE BUSINESS CASE

- 1.2.2. The selection of a preferred option for the scheme is described in the Option Assessment Report (OAR) (Document Reference APP-108). The OAR described the systematic assessment of many options and concluded that a central alignment should be the preferred scheme. This recommendation informed the Outline Business Case (OBC) (Document Reference APP-107) for the scheme, which set out the case for investment in a central alignment, based on the preferred scheme. The OAR forms Appendix A of the OBC which was submitted to the Department for Transport for scrutiny in December 2015.
- 1.2.3. This note should therefore be read in conjunction with the OAR and OBC.

FURTHER DEVELOPMENT OF THE SCHEME

- 1.2.4. Following scrutiny of the OBC, the scheme was awarded Programme Entry and the Secretary of State allocated £73.5m of provisional funding for a scheme with a central alignment. In February 2016, Suffolk County Council requested that the Secretary of State direct that the scheme be treated as a development for which development consent is required (under Section 35 of the 2008 Planning Act). The Secretary of State's decision letter confirmed the scheme by itself is Nationally Significant.
- 1.2.5. Since submission of the OBC and acceptance of the scheme as a Nationally Significant Infrastructure Project (NSIP), the scheme has been subject to further design and investigation in preparation for the application for development consent, now being examined.
- 1.2.6. Some minor changes and improvements have been made to the scheme described in the OAR, but it remains essentially the same scheme. The process by which the Scheme evolved from the OAR to that for which development consent is sought is set out in the Environmental Statement, specifically sections 3.7 and 3.8.
- 1.2.7. Should the scheme be granted development consent, a Full Business Case (FBC) will be prepared in 2019 for submission to the Department for Transport (DfT).

- 1.2.8. In accordance with the requirements of the Planning Act, statutory consultation was undertaken on the scheme in 2017. As is set out in the Consultation Report, in particular pages 257 to 268 of Appendix 34 to the Consultation Report, some feedback was received on alternative options to the Scheme. This included ABP suggesting that “W1 [a western alignment option] remains the optimum and most appropriate option”, while a small number of section 47 consultees also suggested a western alignment was preferable. ABP repeated its view in its Relevant Representation that the assessment of alternatives for the Scheme was inadequate, and in its Written Representation stated “In failing properly to assess the alternative routes for the crossing, the Applicant has rejected a western option for the bridge. Such an option – if appropriately designed and located – would in fact have been supported by ABP because it would not have detrimentally impeded port operations”.
- 1.2.9. The implication therefore is that either:
- the original 2015 option assessment reached the wrong conclusion, or
 - changes to the scheme and new information mean that a different conclusion would be reached in 2018.
- 1.2.10. While the Applicant maintains that its approach to optioneering and assessment of alternatives is robust, comprehensive and legally compliant, it has nonetheless produced this technical note to reflect on whether any refinements to the Scheme in its central location since the OBC stage, and/or changes in local circumstances could subsequently cause earlier conclusions to be brought into doubt.

1.3. **APPROACH**

- 1.3.1. This note:
- Describes the central and western options which were considered in the OAR and OBC
 - Reviews each part of the option assessment process
 - Considers whether it is still correct that the central (rather than a western) bridge option is preferable.

1.4. **OPTIONS CONSIDERED IN THE OAR AND OBC**

ROUTE CORRIDORS

- 1.4.1. At the outset of the option assessment process, indicative corridors were considered for the new bridge. Of relevance to this report are the western and central corridors:
- A western crossing, linking Peto Way with Waveney Drive
 - A central crossing, linking Peto Way with Waveney Drive
- 1.4.2. These two corridors are illustrated in Figure 1.



Figure 1 – Corridor options (west and central)

Public and stakeholder opinions on route corridors

- 1.4.3. The OAR refers to two opinion surveys which indicate the relative acceptability of different corridors to the public and local businesses. The first, in 2014, was a public consultation. The second, in 2015 was amongst local businesses, and involved ranking options. The results are set out below:

Table 1 – Public and stakeholder opinions

Preferred location of crossing	Public support (2014)	Business support (2015)		
		First choice	Second choice	Least preferred
West	24%	40%	40%	13%
Central	61%	48%	44%	3%
East	8%	12%	6%	66%
Other	4%	-	-	-
No response	3%	0	9%	17%
Total	100%	100%	100%	100%

- 1.4.4. Although these two surveys did not consider any of the options in detail, they did indicate a clear preference amongst the public for a central corridor. A central corridor was also the most acceptable

(and the least unacceptable) option amongst the businesses who responded in 2015, although their preference was rather less clear cut.

INITIAL ROUTE OPTIONS WITHIN CORRIDORS

Initial route options for the western corridor

- 1.4.5. Three indicative routes (W1, W2 and W3) were considered for the western corridor, representing different ways of connecting to the existing road network. These are illustrated in the following figures:

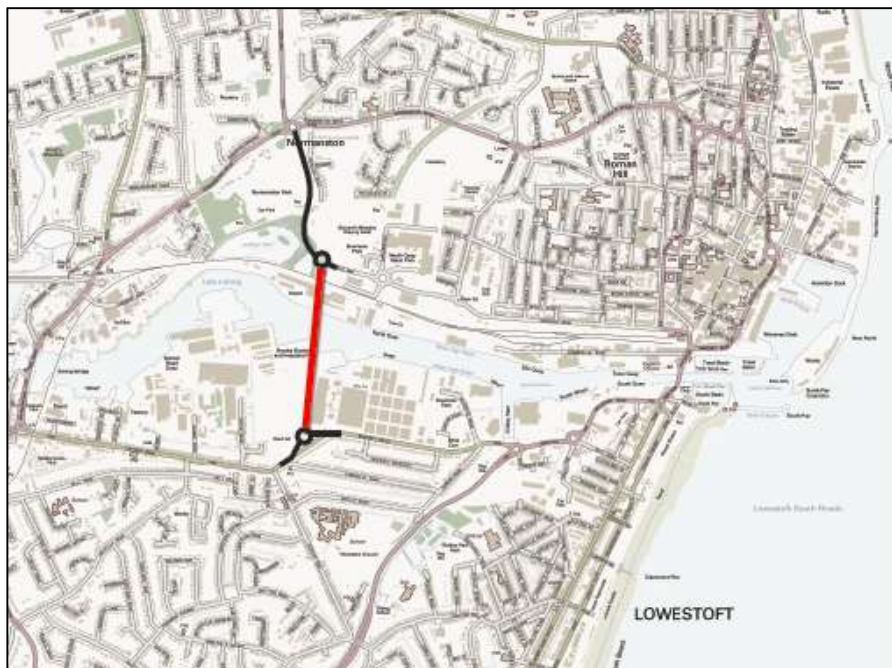


Figure 2 – Option W1

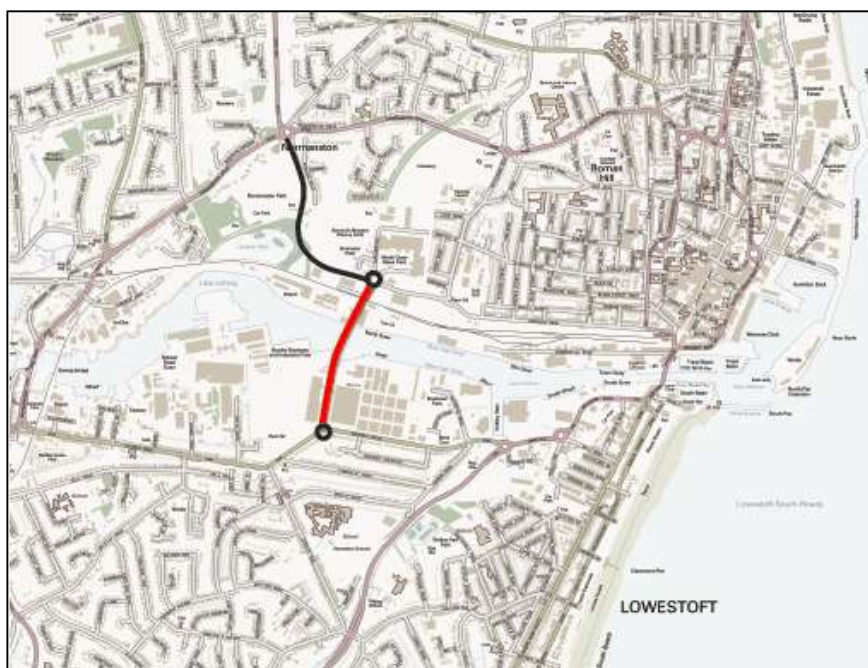


Figure 3 – Option W2

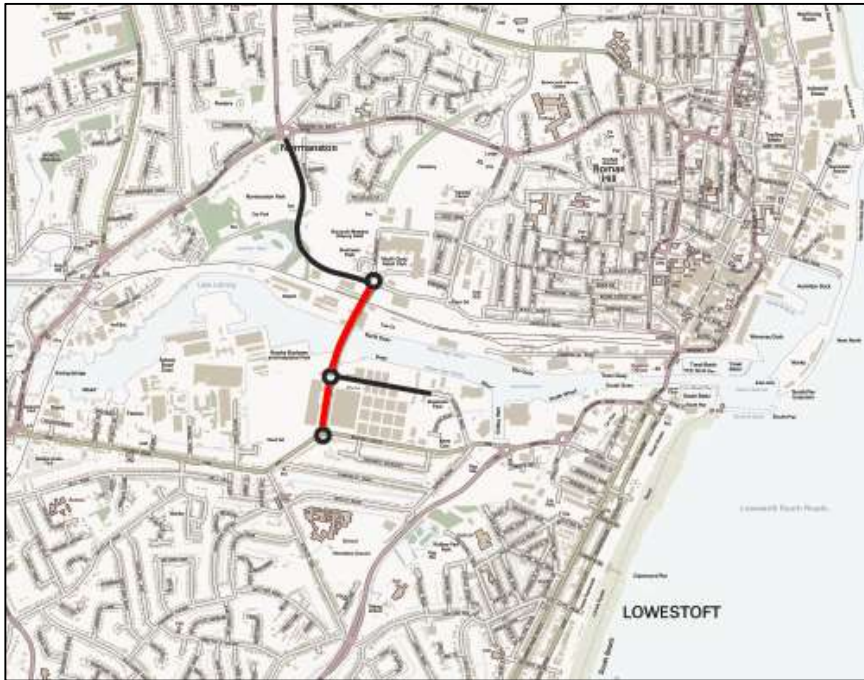


Figure 4 – Option W3

Initial route options for the central corridor

Three indicative routes (C1, C3 and C4) were considered for the central corridor, again representing different ways of connecting to the existing road network. These are illustrated in the following figures:

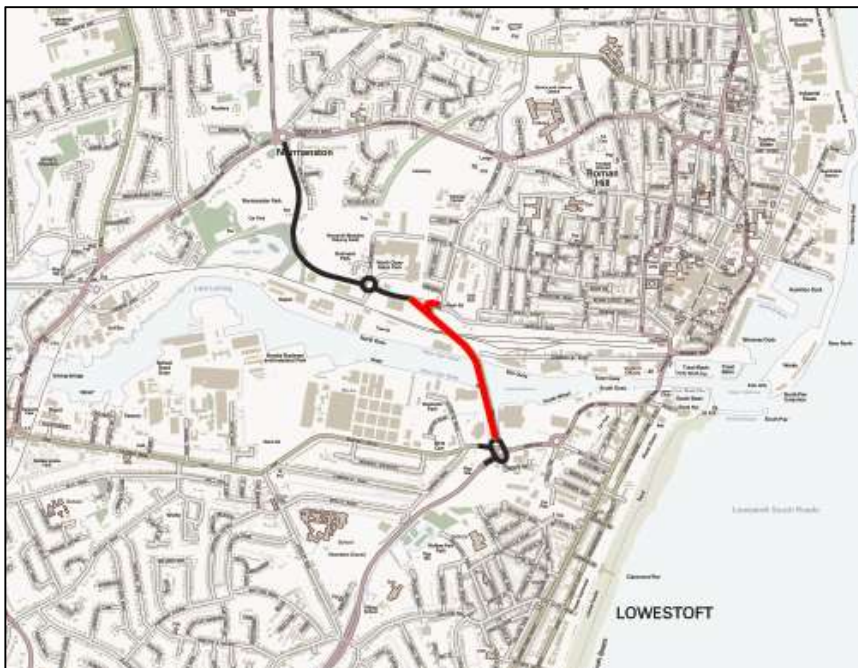


Figure 5 - Option C1

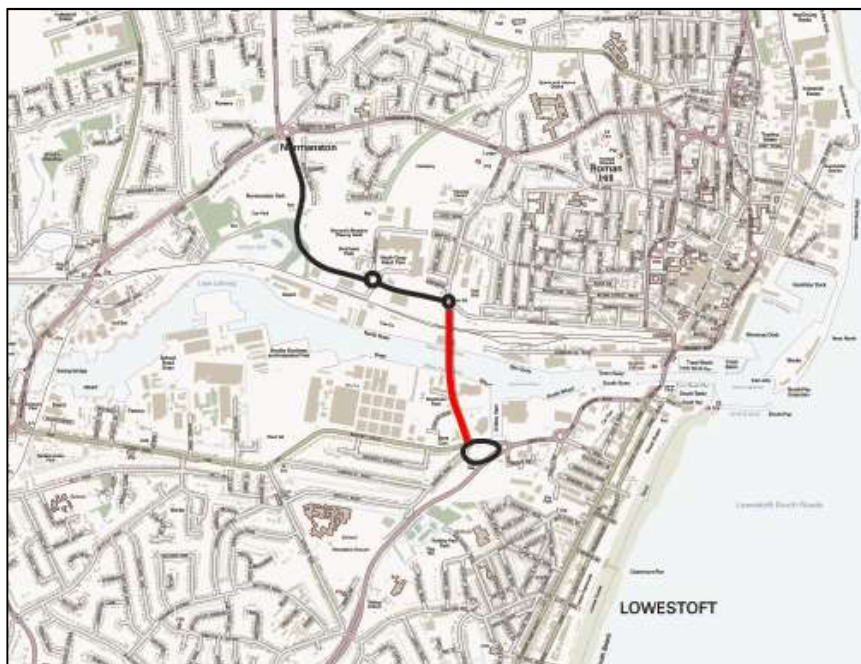


Figure 6 – Option C3



Figure 7 – Option C4

1.4.6. All of the above options assumed construction of a new Bascule bridge over the lake.

OPTION ASSESSMENT – THE “FIRST SIFT”

- 1.4.7. The OAR describes how these indicative route options, together with tunnelled and eastern options (not considered in this note), were assessed to determine which should be taken forward for more detailed assessment. This was referred to as the “first sift” and involved two stages¹.
- A subjective assessment of each option against the scheme objectives
 - Discarding any options which:
 - did not fit with scheme objectives, or local/national strategies and priorities
 - would be likely to have severe adverse impacts
 - were unlikely to be technically sound
 - were unlikely to be affordable
 - were unlikely to be acceptable to stakeholders and the public.
- 1.4.8. Western options W1 and W2 were eliminated from the assessment at this stage, as it was considered that they could not be connected in a satisfactory way to the existing road network on the southern side of Lake Lothing. Both these options would require a tie-in to Waveney Drive which, although forming part of the A146, is also a residential street with numerous homes having frontage access. Option W1 and, to a lesser extent W2, was also considered likely to increase traffic on Kirkley Run, another residential street which also gives access to a school, and this was considered unacceptable, given these land uses. Option W1, the most westerly of the options, could also have an adverse environmental impact on the Leathes Ham recreation area to the north of Lake Lothing and on the County Wildlife site to the south.
- 1.4.9. Western option W3, which included a link through the potential regeneration area, connecting to Riverside Road, avoided some of these problems, and was taken forward to the next stage of the option assessment, together with the three central options C1, C3 and C4 and a tunnel option.
- 1.4.10. For the purposes of this note, the relative assessments of the western and central options which successfully passed the first sift are as set out in Table 2 below:

Table 2 – First sift (western and central options only)

Objective:	W3	C1	C3	C4
To open up opportunities for regeneration and development	●	●	●	●
To provide the capacity needed to accommodate planned growth.	●	●	●	●
To reduce community severance between north and south Lowestoft.	●	●	●	●
To reduce congestion and delay on the existing bridges over Lake Lothing.	●	●	●	●

¹ The methodology is consistent with the Department for Transport ‘Transport Appraisal Process’ guidance (May 2018), see Figure 1.

To reduce congestion in the town centre and improve accessibility.	●	●	●	●
To encourage more people to walk and cycle, and reduce conflict with other traffic.	●	●	●	●
To improve bus journey times and reliability.	●	●	●	●
To reduce accidents.	-	-	-	-
Achieves 5 or more objectives (yes/no)	Yes	Yes	Yes	Yes
Sifting criteria:	W3	C1	C3	C4
Achieves key objectives (see detail above)	●	●	●	●
Strategic fit	●	●	●	●
Impacts	●	●	●	●
Technically sound	●	●	●	●
Affordability	●	●	●	●
Stakeholders	●	●	●	●
Public opinion (where known)	●	●	●	●
Retain for further analysis?	Yes	Yes	Yes	Yes

1.4.11. As the above table illustrates, the only discrimination between the western and central options at the end of the first sift was in:

- The number of options taken forward (three central and only one western)
- The subjective view that a western option would be less effective in
 - encouraging more people to walk and cycle
 - reducing conflict with other traffic

1.4.12. These issues are discussed below.

The number of initial options taken forward

1.4.13. Three central options were taken forward to the next stage of the assessment, because without more detailed design it was not possible to determine which represented the most appropriate junction configuration at the tie-ins to the existing network.

1.4.14. Only one of the western options (W3) was taken forward for the reasons discussed in paragraphs 1.4.8 and 1.4.9 above. However, when the scheme was examined in more detail, it was found to be impossible to create a simple new connection into the northern part of the regeneration site south of

Lake Lothing and Riverside Road due to the height of the embankment required. Despite this, rather than discard the western option, it was taken forward without this link, i.e. with a layout similar to the initial option W2.

The effectiveness of a western option in encouraging more people to walk and cycle, and in reducing conflict with other traffic.

1.4.15. This subjective judgment was made for the following reasons:

- A western crossing was considered likely to be less useful as a walking or cycling link from south of Lake Lothing to destinations such as the town centre and railway station, the large residential area north of Denmark Road and the sea front, given the distances involved.
- A western crossing was considered more likely to increase through traffic on Waveney Drive and Kirkley Run, thereby increasing severance for pedestrians crossing these roads. In contrast, a central crossing would work better as a strategic connection between the Northern Spine Road (Peto Way) and Tom Crisp Way which are more modern, purpose built, roads.

1.4.16. Despite the above, both western and central options came through the first sift, and this meant that their relative merits could then be assessed using more objective criteria, in particular the traffic model. Also, both western and central options were subject to a process of design refinement before the next stage of the assessment: the second sift.

REFINING AND ASSESSING THE SHORT-LISTED OPTIONS – THE “SECOND SIFT”

1.4.17. Section 3.4 of the OAR describes in some detail how the designs of both central and western options were reviewed and refined to produce just one “best” route in each corridor. Whilst this does not (and did not) preclude further design improvements at a later stage, it does mean that the final stage of option appraisal gave a fair comparison between the different locations for a new crossing, since each was developed and assessed at a similar level of detail.

The central option as refined for the second sift assessment

1.4.18. The refined central bridge option considered at this second sift stage is illustrated in Figure 8 and described below.

1.4.19. The new road starts from a new roundabout on Denmark Road, located between the existing Denmark Road / Peto Way roundabout and the Denmark Road / Rotterdam Road roundabout on the northern side of Lake Lothing. It gains height on an embankment and curves to the right in order to cross the railway line, and continues to gain in height over the lake towards the central, lifting, section of the main bridge.

1.4.20. On the southern side of the lake, the bridge structure continues at a high level to avoid isolating the commercial site nearest to the lake (Nexen), and to enable an existing access road to pass underneath. From here the new road descends to connect with Riverside Road. Access is maintained into the car showroom (Lings) on the north side of Kirkley Ham. A new roundabout is provided at the junction of Riverside Road with Waveney Drive. To minimise the number of accesses onto the bridge approach, a new access is proposed from Waveney Drive into the Kirkley Waterfront site (not shown).



Figure 8 – Refined central option (OAR second sift) – viewed from the east

The western option as refined for the second sift assessment

- 1.4.21. The refined western option (also referred to as W4) is illustrated in Figure 9 and described below.
- 1.4.22. The new road starts from a new roundabout on Peto Way, on the north side of Lake Lothing. It rises on an embankment, curving to the right and crossing Peto Way on a flyover. The bridge then curves to the left and crosses the railway line and waterfront obliquely, then curves again to the right to cross the lake. The central, lifting section is perpendicular to the main channel across a relatively narrow section of the lake.
- 1.4.23. The bridge is longer than had been envisaged in the first sift of preliminary options (W3) and the horizontal alignment involves an additional flyover at the junction with Peto Way and curves to minimise the impact on existing development north and south of the railway line. This arrangement enables the new road to gain sufficient height to clear the railway line with a gradient of than 5% and was considered the most satisfactory way of linking a western bridge option to Peto Way.

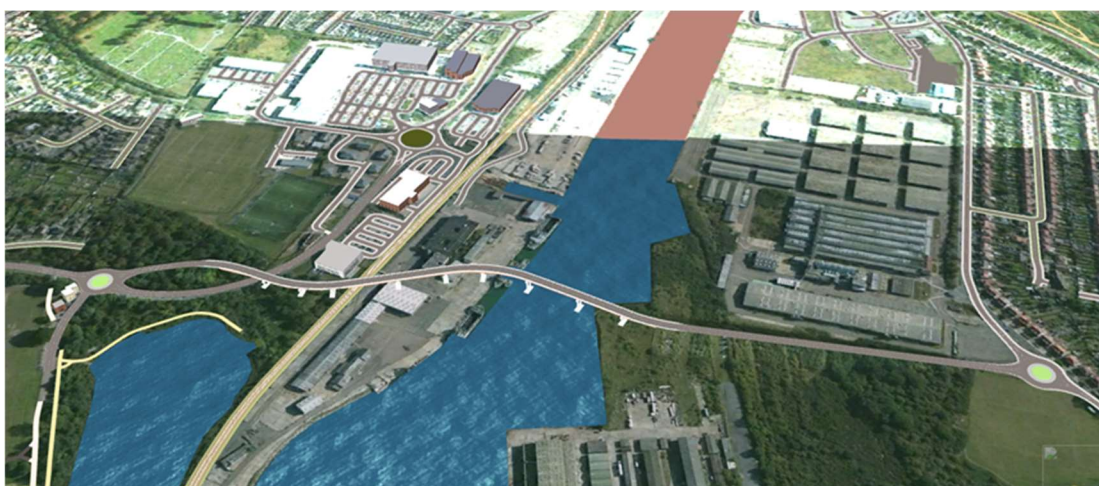


Figure 9 – Refined western option (OAR second sift) viewed from the west

- 1.4.24. On the southern side of the Lake, the new road descends on an embankment, running between the former Jeld Wen timber yard and the Mosaic County Wildlife Site – part of the Kirkley Waterfront and

Sustainable Urban Neighbourhood identified in the Area Action Plan (Paragraph 2.4.3 in the Outline Business Case).

- 1.4.25. The scheme also differs from that envisaged in the initial sift of preliminary options, in that it was found to be impossible to form a simple new connection into the northern part of the regeneration site, due to the height of the embankment required at this point. The new road connects to Waveney Drive at a new roundabout, although this would not easily allow access to the residential properties near this junction.
- 1.4.26. The refined Western bridge option is therefore different from, and – as the OAR notes – is in some ways less satisfactory than, the initial options from which it was developed. Nevertheless, in this form, it was considered a technically feasible option within the western corridor.

The second sift – design review

- 1.4.27. The refined designs were compared in the OAR and their key advantages and disadvantages (as understood at that stage of the design development) are summarised in Table 3 below:

Table 3 – Design review of refined western and central options (OAR, second sift)

	Central option (refined)	Western option (refined)
Advantages	<ul style="list-style-type: none"> Good connectivity to the existing road network: Denmark Road on the north side and, indirectly, A12 Tom Crisp Way on the south side. Provides simple link between Southern Relief Road and Northern Spine Road; Improves access to existing development and regeneration areas; Location and height of bridge means fewer closures to allow ships to pass through, compared with the existing bridges; Provides for segregated footways and cycle tracks, connecting into existing networks; Utilises existing corridor along Riverside Road to minimise direct impact on existing property; Low impact on the railway during construction, as the railway bridge supports can be constructed with minimal impact and with short possessions to lift bridge deck. 	<ul style="list-style-type: none"> Good connection to Peto Way; Relatively short, perpendicular span across the channel; Location and height of bridge means fewer closures to allow ships to pass through, compared with the existing bridges; and Provides for segregated footways and cycle tracks, connected into existing networks.
Disadvantages	<ul style="list-style-type: none"> Requires re-organisation of parking and access roads in the commercial area served by Riverside Road, including a new access onto Waveney Drive; New junctions on Waveney Drive will have some impact on residential properties (mainly gardens). 	<ul style="list-style-type: none"> Requires significant volume of imported fill for embankments; Relatively long structure overall;

		<ul style="list-style-type: none"> ▪ Northern approach impacts on woodland and SW corner of Leathes Ham Wildlife Site; ▪ Southern approach affects recreational area and Mosaic County Wildlife Site; ▪ Northern roundabout may affect existing buildings; ▪ Requires reconstruction of Peto Way (north of new roundabout) to achieve an acceptable gradient; ▪ New roundabout on Waveney Drive will affect residential properties; ▪ Poor connectivity to major routes on south side; ▪ May increase traffic flow on Kirkley Run, south of Waveney Drive, affecting local school; ▪ Impacts on port buildings on N. waterfront and dock area; ▪ Proposed road alignment within flood zone.
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1.4.28. Section 3.5 of the OAR describes how the short-listed options were subjected to a range of tests. These included the use of the available traffic modelling and economic assessment tools to determine objectively how well each option would perform in terms of traffic and economic efficiency.

1.4.29. The results are set out in detail in the OAR and summarised here, focusing on the differences which were found between the western and central options.

Delivery of scheme objectives

1.4.30. This was updated from the earlier assessment. Three areas were identified where the western option was considered likely to be less effective than the central option, as indicated in Table 4 (based on Table 3.6 of the OAR):

Table 4 –Assessment against objectives – west and central differences only (second sift)

Objective	Western bridge option	Central bridge option
To encourage more people to walk and cycle, and reduce conflict with other traffic.	●	●
To reduce congestion and delay on the existing bridges over Lake Lothing.	●	●

To reduce congestion in the town centre and improve accessibility.	●	●
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- 1.4.31. The reasons for the first assessment (walking and cycling) have been explained in paragraph 1.4.15 above.
- 1.4.32. The second assessment (reducing congestion on the existing bridges) was supported in the second sift by results from the traffic model, which forecast a greater reduction on the A47 Bascule bridge (which is located on the A47, a strategic corridor that Highways England consider problematic for network performance (due to congestion and delay), and which is also problematic from an air quality perspective by Waveney District Council), with the Central Option, as shown in Table 5.

Table 5 - Forecast traffic reductions on existing bridges (second sift)

	Traffic reduction on A47 Bascule Bridge		Traffic reduction on Mutford Lock bridge	
	a.m. peak	p.m. peak	a.m. peak	p.m. peak
With western bridge option	15%	13%	30%	22%
With central bridge option	34%	33%	34%	22%

Based on Table 3.10 and 3.11 of OAR

- 1.4.33. The modelling showed that a central crossing would provide significantly more relief to the A47 Bascule Bridge than a western crossing, meeting a key objective of the scheme more effectively.
- 1.4.34. The third assessment (reducing congestion in the town centre and improving accessibility) follows on from the greater reduction in traffic on the A47 Bascule Bridge, the better link between the town centre and the seafront, and the more effective link between the northern distributor road and southern link road with by the central option.
- 1.4.35. Overall it was concluded that the central option was a better fit to the scheme objectives than the western option.

Scheme costs and benefits

- 1.4.36. The cost, and present value of cost (PVC), was determined for each option in the second sift. The western option was found to be more expensive, as shown in Table 6 below.
- 1.4.37. The user benefits, as present value of benefits (PVB), were determined for each option in the second sift, based on the traffic model outputs and TUBA economic appraisal tool assessment. The benefits derive mainly from the value of journey time savings forecast by the traffic model. The western option was found to produce lower benefits, as shown in Table 6 below. This is consistent with the lower level of relief offered to the existing bridges.
- 1.4.38. The benefit-cost ratio (BCR) highlights these differences and is significantly better for the central option than the western option, as shown in Table 6 below.

Public and stakeholder support

- 1.4.39. The assessment of public and stakeholder support for the second sift was based on the assessments detailed in Table 1, which indicated greater support for the central option.

Environmental impacts

- 1.4.40. The assessment of environmental impacts for the second sift was based on the Environmental Options Appraisal Report (Appendix J to the OBC). It concluded that the environmental impacts of the central option were likely to be less than those of the western option.

Second sift – overall results and conclusions

- 1.4.41. The overall results of the second sift for the western and central options are shown in Table 6 below.

Table 6 – Overall assessment of western and central options (second sift)

Assessment areas	Western Bridge option		Central Bridge option	
Delivery of scheme objectives	Less relief to existing bridges	●	Significant contribution	●
User benefits (PVB)	£338.7 million	●	£453.3 million	●
Cost (£ million)	£85 million	●	£79 million	●
Benefit-cost ratio (BCR)	5.90	●	8.50	●
Traffic impacts A47 Bascule Bridge Mutford Bridge	a.m. / p.m. -15% / -13% -30% / -22%	●	a.m. / p.m. -34% / -33% -34% / -22%	●
Environmental impacts	Moderate/severe adverse	●	Slight/moderate adverse	●
Public support	23.9%	●	60.6%	●
Stakeholder support	40%	●	48%	●

- 1.4.42. The above analysis demonstrates that, based on the information available at the time of the second sift described in the OAR, the central bridge option was clearly the more attractive option. It was therefore adopted as the preferred scheme. This conclusion was based not just on one factor but on a range of indicators, all of which point to the same conclusion.
- 1.4.43. The decision to take forward a central option is therefore considered very robust.

1.5. THE SCHEME

DEVELOPMENT OF THE PREFERRED SCHEME

- 1.5.1. Development of the scheme has continued since the OBC, leading to confirmation of the Scheme for which development consent is sought.
- 1.5.2. The Scheme is illustrated in the General Arrangement Plans and shown in Figure 10.

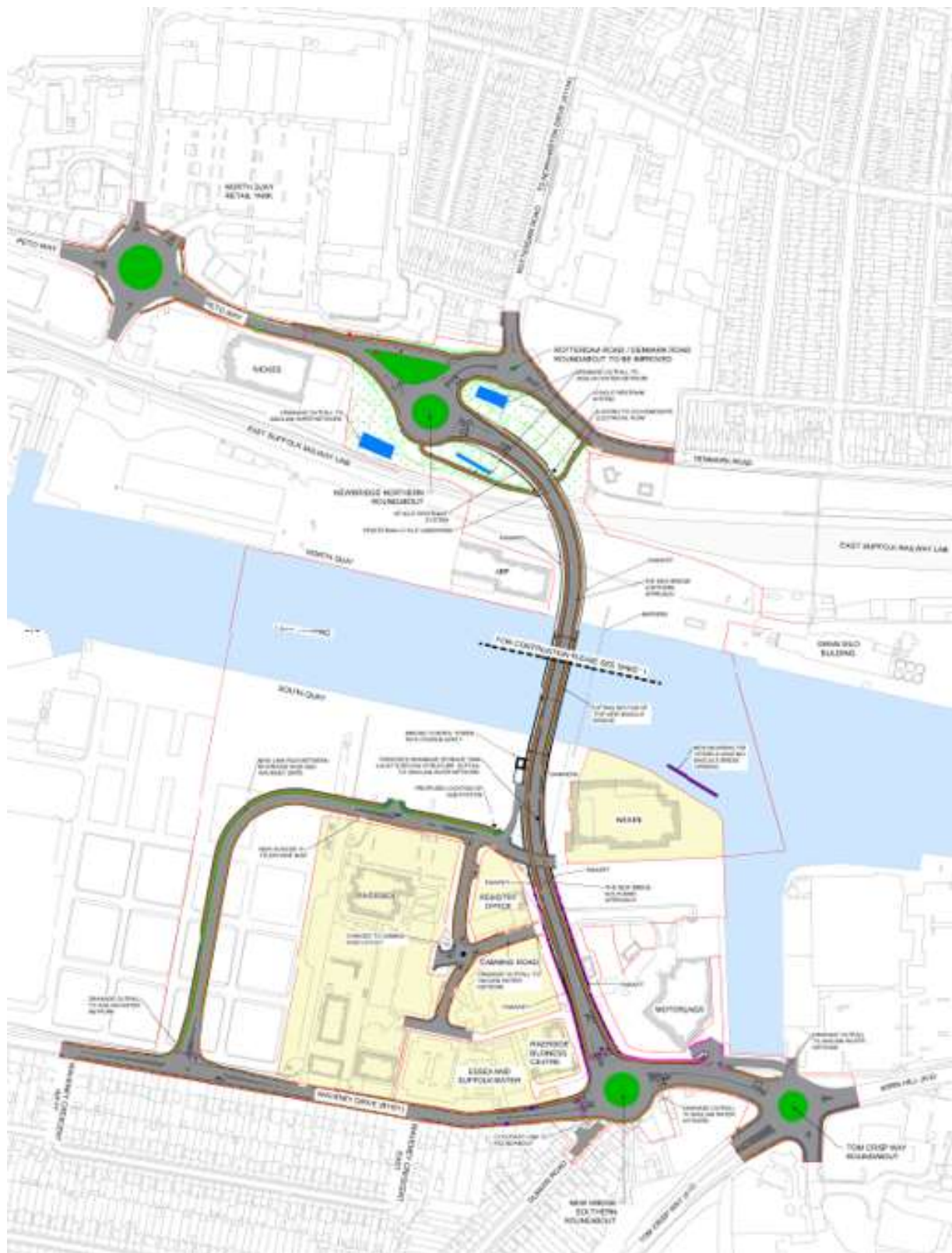


Figure 10 – The Scheme

1.6. FURTHER CONSIDERATION OF THE WESTERN OPTION

- 1.6.1. The western option was not developed further after the completion of the option assessment process, as the central option had by then been confirmed as the preferred scheme, and the allocation of Government funding for the scheme was based on a scheme with a central alignment. Consequently, a western-aligned scheme neither has Programme Entry and thus any allocation of Government Funding, nor it has not been designated an NSIP and is thus not a realistic alternative to the Scheme for which development consent is sought. The Applicant notes paragraph 4.27 of the National Networks National Policy Statement in this regard².

Reasons for re-considering a western option

- 1.6.2. Nevertheless, in discussion with ABP, as part of the Development Consent Order (DCO) process, it has been suggested that the relative merits of western and central locations for the new bridge should be re-visited. The reasons for this are understood to be:
- The design of the central option has evolved since the OAR (when it was last compared to the western option) but the western option has not been developed in the same way. It is no longer possible to make a fair comparison between them.
 - The traffic modelling and economic assessment have been updated since the OAR and OBC but a western option has not been re-assessed.
 - The comparative impacts of a central and western option on the Port of Lowestoft have not been properly considered.
 - There may have been other recent changes (e.g. to land use) which could affect the impacts of the two options.

Scope of the Review of a western option

- 1.6.3. To address these concerns:
- An updated design for a western option has been prepared by the Applicant. The general alignment and layout of junctions in this design represent an evolution of previous western alignments taking into account how similar constraints regarding vertical and horizontal alignment have been addressed on the central alignment. This iteration of the western alignment has particularly sought to minimise impacts on ABP, as the lead protagonist of this option.
 - The cost of the updated western option has been calculated on a similar basis to that for the Scheme.
 - The traffic impacts of the updated western option have been assessed using the updated traffic model and compared with the Scheme.

² "Where projects have been subject to full options appraisal in achieving their status within Road or Rail Investment Strategies or other appropriate policies or investment plans, option testing need not be considered by the examining authority or the decision maker. For national road and rail schemes, proportionate option consideration of alternatives will have been undertaken as part of the investment decision making process.⁶¹ It is not necessary for the Examining Authority and the decision maker to reconsider this process, but they should be satisfied that this assessment has been undertaken".

- The economic costs and benefits of the updated western option have been assessed on a comparable basis with the assessment of the Scheme.
- The impacts of the updated western option on property, the environment and the Port of Lowestoft have been assessed, to enable a fair comparison with the Scheme.

Design of the suggested new western option

- 1.6.4. The updated western option is illustrated in Figure 11 and described below.
- 1.6.5. The new road would form a simple roundabout junction with Peto Way, located on the curve where Peto way turns to run alongside Lake Lothing. From here, it would pass over the railway line before crossing the Lake on a diagonal alignment. The new road would then descend to meet Waveney Drive at a new roundabout, located at the existing bend.



Figure 11 – Updated western option

1.7. COMPARING THE WESTERN OPTION WITH THE SCHEME

APPROACH

1.7.1. This section compares the updated western option and the Scheme. The approach has been to update the key elements of the assessment undertaken in the OAR. For this new comparison:

- The review of the advantages and disadvantages of the design has been updated for both options
- The costs of both options have been reviewed on a comparable basis
- The two options have been modelled using an updated version of the traffic model
- The updated traffic model has been used to assess the traffic impacts of both options
- The economic assessment has been updated for both options

DESIGN REVIEW

1.7.2. The review of the advantages and disadvantages of the central option (Scheme) and the suggested western option has been updated, as set out in Table 7 below.

Table 7 – Comparative review of Scheme and suggested western option

	Central option (Scheme)	Western option (suggested)
Advantages	<ul style="list-style-type: none"> ▪ Good connectivity to the existing road network: including A12 Tom Crisp Way on the south side. ▪ Provides simple link between Southern Relief Road and Northern Spine Road; ▪ Improves access to existing development and regeneration areas via new Access Road; ▪ Provides for segregated footways and cycle tracks, connecting into existing networks; ▪ Utilises existing corridor along Riverside Road to minimise direct impact on existing property; ▪ Low impact on the railway during construction, as the railway bridge supports can be constructed with minimal impact and with short possessions to lift bridge deck. 	<ul style="list-style-type: none"> ▪ Good connection to Peto Way; ▪ Provides for segregated footways and cycle tracks, connected into existing networks. ▪ West of commercial port activity and therefore likely to open less frequently ▪ Less interference with existing business operations
Disadvantages	<ul style="list-style-type: none"> ▪ Requires re-organisation of parking and access roads in the commercial area served by Riverside Road, including a new access onto Waveney Drive and a specific impact on Lings Car Showroom; ▪ Southern roundabout on Waveney Drive will have some impact on residential properties. ▪ Closure of Durban Road 	<ul style="list-style-type: none"> ▪ Requires significant volume of imported fill for embankments; ▪ Relatively long structure overall; ▪ Large footprint within Kirkley waterfront development site; ▪ Diagonal span across the channel;

		<ul style="list-style-type: none"> ▪ Northern approach impacts on woodland and SW corner of Leathes Ham Wildlife Site; ▪ Southern approach affects Jeld Wen Mosaic County Wildlife Site, while northern approach affects Leathes Ham Local Nature Reserve; ▪ Northern roundabout may affect existing buildings; ▪ Requires reconstruction of Peto Way (north of new roundabout) to achieve an acceptable gradient; ▪ New roundabout on Waveney Drive will affect residential properties – difficult to resolve; ▪ Poor connectivity to major routes on south side; ▪ Will increase pressure of traffic on Kirkley Run, south of Waveney Drive, affecting local school; ▪ Impacts on ABP development land at Shell Quay.
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CONNECTION TO WAVENEY DRIVE

- 1.7.3. One problem with a western alignment that has proved difficult to resolve successfully is the layout of its junction with Waveney Drive/Victoria Road. These are residential streets. Whilst the geometry of the approaches suggests a roundabout as the most suitable form of junction, it would be difficult to provide acceptable accesses to the private drives of houses located on the roundabout, unless the roundabout was moved further north and developable land lost. Traffic signals would lead to similar problems, with queueing across private drives.



Figure 12 – Tie in of western option to Waveney Drive/Victoria Road

- 1.7.4. A solution involving service roads would add to the cost and could still present difficulties where the service road ties back into the main road.

UPDATED COST OF THE CENTRAL AND WESTERN OPTIONS

- 1.7.5. The estimated costs of the Scheme and the alternative western option as described above are set out in Table 8 below.

Table 8 – Updated cost estimates (2018)

	Central option (Scheme)	Western option
Cost at November 2017 price base	£91.74 million	£107.54 million

- 1.7.6. Both options have been costed on an equivalent basis – i.e. using the same rates to build up the estimates, and the same figures for professional fees, utilities, land, and inflation. Both estimates include an allowance for risk; the risk allowance for the central option is 16.4%, based on a quantified risk assessment (QRA), and a slightly higher risk allowance of 20% has been used for the western option. This is because the western design is less developed, especially in regard to the viaduct foundations where a greater length will need to be constructed in water.
- 1.7.7. The suggested western alternative would therefore be about 17% more expensive than the Scheme, requiring an additional £15.8 million (at 2017 prices).
- 1.7.8. In its Funding Statement, the Applicant has acknowledged that as of June 2018, it had identified an upward pressure of £8m on the original Property Cost Estimate. Even accounting for this, the Scheme remains £8m less expensive than the western option.

UPDATED TRAFFIC MODELLING

- 1.7.9. A brief description of the main similarities and changes that have been made to the traffic model since the OAR and OBC were produced in 2015 are provided below.
- 1.7.10. The underlying traffic model has changed between the 2015 OBC and DCO application. The former utilised a strategic model which covered Lowestoft only. The DCO application has used the Suffolk County Transport Model (SCTM) which includes all urban areas and the strategic road network within Suffolk.
- 1.7.11. In terms of forecast traffic growth, the underlying Uncertainty Log has been updated since the 2015 OBC. The Uncertainty Log was updated to reflect the latest available assumptions from the Waveney District Council Local Plan in 2017, as shown in Appendix E of the Lake Lothing Third Crossing Transport Assessment (TA)³. As discussed in paragraph 5.3.25 of the TA, sensitivity tests were undertaken following a DfT review of the SCTM in February 2018. These tests resulted in revised trip rates being applied to the developments within the Uncertainty Log. These sensitivity tests did not fully incorporate the Variable Demand Model (VDM) element of the SCTM.
- 1.7.12. The VDM was later run utilising the revised trip rates applied in the sensitivity test. The resultant highway matrices from this post-VDM run were used to determine the benefits of the central crossing and revised western crossing alignment discussed within this note. Therefore the same forecast traffic demand has been used to test both the central crossing and western crossing.
- 1.7.13. An average of 6 minutes per hour for closure of the crossing to highway traffic has been assumed for the western option which is consistent with how the central crossing has been modelled. While it is the case that bridge openings for commercial traffic would be less frequent for the western option, the number of openings for recreational traffic would remain the same, as recreational vessels still need to transit the entirety of the operational quays within the Inner Harbour. Given that the draft Scheme of Operation proposes to restrict openings in the peak hours for the Scheme in any event, it is considered that the benefit of relocating the bridge to the western end of the Lake would have a limited bearing on the respective economic assessments of the two options.
- 1.7.14. The western crossing scheme design has changed compared to when it was previously tested for use within the 2015 OAR, to reflect the design changes described above. The current version of the western crossing option assumes a higher design capacity for the roundabout which connects to Peto Way compared to that modelled for the OAR. Additionally, the junction onto Waveney Drive was previously assumed to be a signalised junction in the OAR tests. In the latest version of the model it has been assumed to be a roundabout with a level of capacity which is similar to the southern roundabout junction connecting with Waveney Drive for the central crossing.
- 1.7.15. A minor difference between how the two schemes have been modelled is the loading point for the Jeld Wen development within Kirkley Waterfront, which accommodates 80 dwellings in 2022 and 157 dwellings in 2037. In the Do Minimum model scenario, this portion of the development loads onto an existing access on Waveney Drive, whereas the Waveney Drive roundabout for the western

³ Document SCC/LLTC/EX/23 Revision 1, January 2019

scheme option would result in this access being removed. The western scheme “Do Something” model scenario therefore shifts the loading point for this element of the Jeld Wen development onto the New Access Road on Waveney Drive, via a priority junction adjacent to Riverside Business Park.

- 1.7.16. The central and western crossing options have been modelled in a way which allows direct comparison of the impacts and benefits. The same Do Minimum model has been used as the basis for deriving traffic impacts and user benefits. The same forecast traffic demand has been assigned in the model, therefore the only changes between the models relate specifically to the highway network associated with the crossing infrastructure for each scheme option. This provides a suitable basis from which to be able to compare the impact of the two schemes.
- 1.7.17. The updated model has been used to re-forecast the amount of traffic that would use the new crossing.

Table 9 – Forecast traffic using the new bridge

	Traffic using the new bridge (2022)	
	a.m. peak	p.m. peak
With western bridge option	2130	2254
With central bridge option	2256	2479

- 1.7.18. As Table 9 shows, the Scheme (central option) is forecast to carry more traffic than the alternative western option. Over the whole day (AADT⁴) the central option would attract about 8% more traffic. This shows that the Scheme location is generally more attractive to users.
- 1.7.19. The updated model has also been used to re-forecast the impact of the Scheme (central option) and the alternative western option on the existing bridges. The forecast impacts on these bridges for the scheme opening year (2022) are shown in Table 10 below.

Table 10 – Forecast traffic reductions on existing bridges (new traffic model)

	Traffic reduction on A47 Bascule Bridge		Traffic reduction on Mutford Lock bridge	
	a.m. peak	p.m. peak	a.m. peak	p.m. peak
With western bridge option	-33%	-32%	-42%	-31%
With central bridge option	-46%	-44%	-33%	-26%

⁴ Annual Average Daily Traffic

- 1.7.20. Table 10 shows very clearly that, whilst both alignments for the new crossing would reduce traffic on both existing bridges, the Scheme would be much more effective than the western alternative in removing traffic from the A47 Bascule Bridge in the town centre. The western option would however remove more traffic from the Mutford Lock bridge.
- 1.7.21. The higher level of traffic relief to the A47 Bascule Bridge is considered to be a significant advantage of the Scheme, as it more effectively addresses the objective: “To reduce congestion in the town centre and improve accessibility”. The relief to the A47 Bascule Bridge, as part of the Strategic Road Network, is a principal reason for the Scheme being designated nationally significant and why it is strongly supported by Highways England⁵.
- 1.7.22. One of the concerns about the western option is that it would put additional traffic onto Kirkley Run, which is a residential street. This impact is examined in Table 11 below.

Table 11 - Forecast traffic changes on Kirkley Run (new traffic model)

	Traffic using Kirkley Run		Increase in traffic on Kirkley Run	
	a.m. peak	p.m. peak	a.m. peak	p.m. peak
Without a third river crossing	484	622	-	-
With western bridge option	1263	1323	165%	113%
With central bridge option	617	718	28%	15%

- 1.7.23. Table 11 shows very clearly that the western option would attract a very significant amount of extra traffic to Kirkley Run, which is a residential street linking Victoria Road/Waveney Drive with the A12 Tom Crisp Way. This is a very undesirable impact. As noted in the OAR, Kirkley Run is a residential street which also gives access to a school. It also has parking on both sides which restricts its capacity, and it is likely that restrictions would have to be imposed on parking if traffic demand were to be accommodated to the forecast extent. Together with the increased traffic, which would be seen as rat-running, this is likely to generate opposition from residents.

⁵ The A47 Bascule bridge is noted to be a “bottleneck causing congestion and delays”, which leads to “delay and journey time unreliability” (Highways England, East of England Route Strategy, 2017). Additionally, in the Statements of Common Ground Report (Document SCC/LLTC/EX/5) “It is agreed that the Scheme will have a significant benefit to traffic conditions on the existing Bascule Bridge, and thus improvement to journeys on the Strategic Road Network and as such Highways England strongly supports the need for the Scheme.”



Figure 13 - Kirkley Run

- 1.7.24. The issues on Kirkley Run highlight a significant strategic disadvantage of the suggested western option, compared with the Scheme. The Scheme creates an attractive new link road, built to modern standards, between the northern spine road (Peto Way) and the southern relief road (Tom Crisp Way). It will strengthen the town's network of purpose built, high standard roads.
- 1.7.25. The suggested western option does not fit in as well to the town's major road network. It picks up traffic from the southern end of Peto Way, but delivers it to the junction of Waveney Drive and Victoria Road which are residential roads. This makes less sense strategically and, as evidenced in Kirkley Run, adds extra traffic to unsuitable roads.
- 1.7.26. The different impacts of the Scheme and the suggested western option on the whole of Lowestoft's road network may be seen by comparing Figure 14 and Figure 15.
- 1.7.27. Roads where traffic increases are shown in green, with the width of the band representing the increase in traffic, roads where traffic reduces are shown in blue, with the width of the band representing the reduction in traffic. The new bridge in each case is shown in red. The total number of trips on the network is the same in each case; only the routes taken change.
- 1.7.28. The bandwidth diagram for the central option illustrate the way the Scheme will encourage traffic to make use of the more modern, purpose-built roads, Peto Way and Tom Crisp Way. As a result, traffic levels around the A47 Bascule Bridge are generally reduced.
- 1.7.29. The bandwidth diagram for the western options shows how this option does not connect with the Tom Crisp Way in the south, instead drawing traffic through Kirkley Run and, to a lesser extent, Long Road, which runs parallel to the A12. Traffic levels around the Bascule Bridge are reduced, but not to such a great extent as with the Scheme.

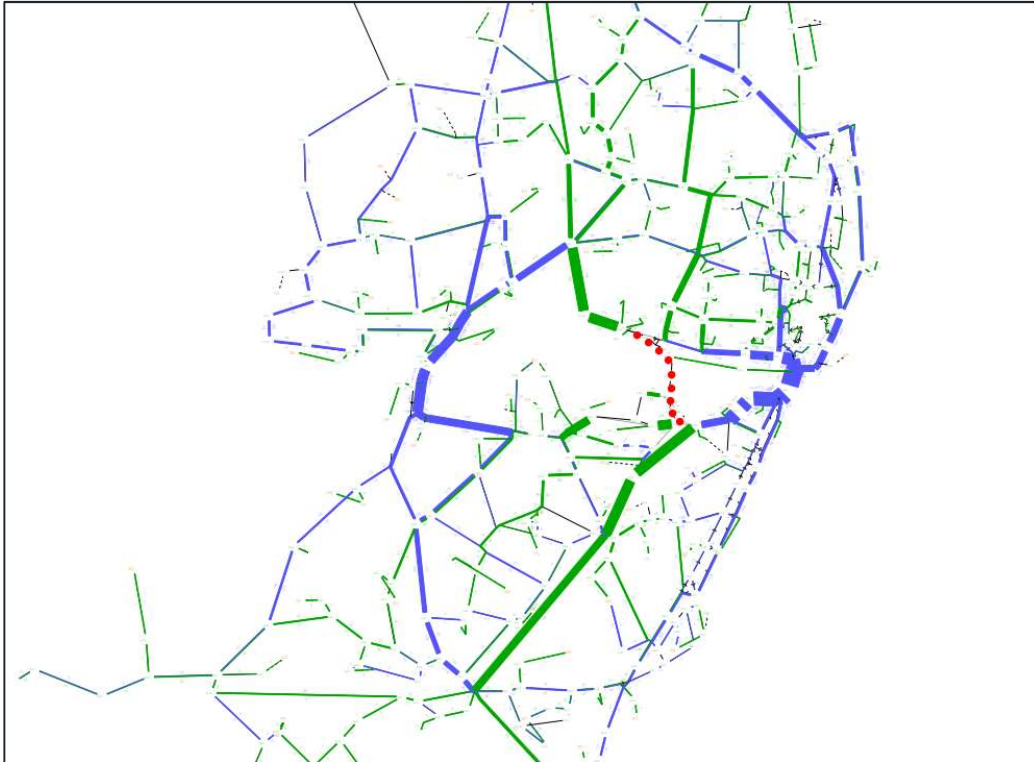


Figure 14 - Impact of Scheme, 2022 p.m. peak

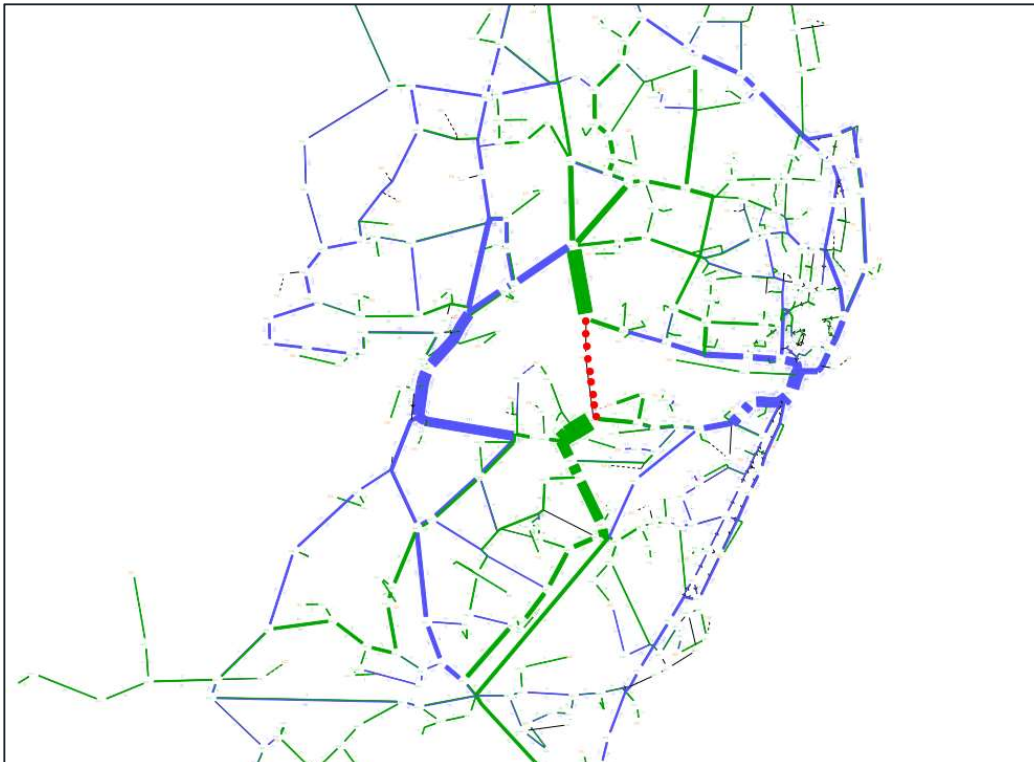


Figure 15 - Impact of proposed western option, 2022 p.m. peak

UPDATED ECONOMIC ASSESSMENT OF THE CENTRAL AND WESTERN OPTIONS

- 1.7.30. The economic assessment of the two options has been updated, based on the updated costs and the outputs from the new traffic model.
- 1.7.31. The results of the economic assessment of the Scheme (the central option) and the western alternative are set out in Table 12 below.

Table 12 – Updated economic assessment of the Scheme and alternative western option

	Central option (Scheme)	Western option
Initial present value of benefits (PVB)	298.26	262.38
Present value of costs PVC	80.47	93.63
Initial BCR	3.71	2.80
Wider impacts – reliability	23.07	23.07
Adjusted PVB	321.33	285.45
Adjusted BCR	3.99	3.05
Value for money category	High	High

- 1.7.32. Some of the component benefits of the PVB (accidents and active modes benefits) were not re-calculated and are assumed to be the same for the new western option as for the preferred scheme. This is a conservative assumption (favouring the western option) as these benefits are likely to be slightly lower, given the generally lower level of benefits with the western option.
- 1.7.33. Similarly, the reliability impacts were not recalculated, so were assumed to be the same for both options, and this is also considered a conservative assumption (favouring the western option).
- 1.7.34. The results of the economic assessment are very clear. Although both options offer “high” value for money (because there is a strong traffic demand for a third river crossing) the Scheme provides significantly better value for money with a BCR of 3.99, compared with 3.05 for the western alternative⁶.
- 1.7.35. As noted above, it is acknowledged that the Applicant has identified in its Funding Statement an £8m upward pressure on its Property Cost Estimate. Accounting for that, the initial BCR would be

⁶ It should be noted the inclusion of wider impacts (using the Wider Impacts Transport Appraisal), which would increase business user benefits by 10%, would push the central option (Scheme) BCR above 4, and into the Very High value for money category, but the western option would remain within the High category. The exclusion of these wider benefits mean the figures differ to those quoted in Table 10 of the Economics Report (7.2a)

3.37 and the adjusted BCR 3.63, evidencing the Scheme is still much higher value for money than the western option.

UPDATED ENVIRONMENTAL ASSESSMENTS

- 1.7.36. A high-level review of the environmental impacts associated with a western bridge alignment compared to a central alignment are considered below. This is based upon the most up to date information available and uses the same chapter format as the Environmental Statement. It has been assumed that the form of any western structure would be of a similar design and scale (acknowledging that it is longer) to the central option that was submitted for the DCO.

Table 1-13 – Review of environmental effects of western bridge option compared with the central (proposed) Scheme

Chapter 8 – Air Quality	<p>Construction – During the construction phase the impacts on receptors are likely to be of the same magnitude.</p> <p>Operation - Without detailed modelling it cannot be determined if the western option is preferable to the central option in terms of air quality, however, the western option results in greater flows on the A47 Bascule Bridge and therefore any benefit in this area, which has the worst air quality in Lowestoft, would be reduced.</p>
Chapter 9 – Heritage	<p>Construction – The potential for impacts upon buried archaeology are the same for both proposals as there is uncertainty associated with both crossing locations without excavations starting.</p> <p>Operation – Whilst the western option is further west and would therefore have lesser impacts upon those built heritage assets closer to the central crossing (such as the Grade II listed Port House), it is much closer to Oulton Broad Conservation Area and would likely greater adverse impacts than the central crossing.</p>
Chapter 10 – Townscape and Visual Impact	<p>Construction – The potential townscape impact during construction is considered to be the same for both proposals.</p> <p>Operation – It is considered that there could be an increased level of visual impact from the western option due to its siting within Leathes Ham Local Nature Reserve and its associated public footpaths. Impacts on views from the Broads National Park are likely to be greater for the western option due to it being closer and hence more prominent due to the flat landscape and the absence of significant topography that could screen the views. Impacts from east of Lake Lothing are conversely likely to be less.</p>
Chapter 11 – Nature Conservation	<p>Construction – The western option will require land from Leathes Ham Local Nature Reserve and from the Brooke Yachts and Jeld Wen County Wildlife site which is a known habitat for bats and reptiles. There would likely be a loss of supporting habitat for these species as well as potential severance created by the road. The magnitude of effect upon nature conservation is therefore likely to be greater for the western option compared to the central option.</p> <p>Operation – Similarly to construction, land take from the County Wildlife Site and Local Nature Reserve would result in a greater impact than the central option.</p>
Chapter 12 – Geology, Soils and Contamination	<p>Construction – During the construction phase the impacts on geology and soils are likely to be of the same magnitude as both are located on land with historical land uses that could have associated contamination.</p> <p>Operation – During the operational phase the impacts on geology and soils are likely to be of the same magnitude.</p>

Chapter 13 – Noise and Vibration	<p>Construction – The western option could cause a negative impact on nearby receptors, especially those sensitive receptors in residential areas in proximity to the construction works. However, without further assessment work it is considered that the impacts are likely to be of the same magnitude but different properties are likely to be the most adversely affected.</p> <p>Operation – The western option would increase traffic flows on Kirkley Run, which is a residential street, which will increase road traffic noise. Conversely, there would be fewer vehicles in the Riverside Road/Waveney Drive junction area and there would be associated reductions in noise to residents in this area. Accordingly, impacts associated with noise and vibration during operation are likely to be of the same magnitude but different properties are likely to be the most adversely affected.</p>
Chapter 14 – Materials	<p>Construction – Without further quantification of the material required to construct the western option, it is estimated that this would require more materials than the central option, albeit this difference is expected to be relatively minimal. Accordingly, the impact upon materials would likely be of the same magnitude for the two options.</p> <p>Operation – Materials required to maintain the western option are considered likely to be of a similar order to that of the central option. Accordingly, the impact upon materials would be likely to be the same magnitude.</p>
Chapter 15 – Private Assets	<p>Construction – The western option requires greater land take than the central option, would continue to cross the operational port in particular the Shell Quay which ABP is promoting as an offshore energy hub, and would result in the loss of development land at Brooke Yachts and Jeld Wen that has outline planning permission for a mixed-use development. The western option is therefore likely to result in increased effects on land use when compared to the central option.</p> <p>Operation – Similarly to the construction assessment, the land take is greater for the western option and therefore it is likely to have a greater effect. However, the western option is considered likely to need to open on fewer occasions for commercial vessels than the central option and therefore this would have a lesser impact upon restricting vessels in the peak hours on the road network.</p>
Chapter 16 – Socio-economics including recreation	<p>Construction – At 2018 prices, the western option would cost £7.8 to 15.8 million more than the central option .</p> <p>Operation – Using the Department for Transport model for assessing transport scheme benefits, the western option had a 3.05 benefit to cost ratio, compared to the central option's of 3.63-3.99. As such, the central option would have a greater positive impact than the western option. With regard to recreation, the western option would have to open for recreational vessels on the same number of occasions as the central option as there is no destination for such vessels between the respective crossing alignments.</p>
Chapter 17 – Road Drainage and the Water Environment	<p>Construction and Operation – The western option would create disturbance and land take to a protected water body, Leathes Ham Local Nature Reserve. Construction within the water body would be likely to have a greater adverse impact on water quality and the water environment than the central option.</p>
Chapter 18 – Flood Risk	<p>Construction and Operation – 1km of the western route would be built in floodplain and would require mitigation through structural or sustainable flood management measures. Accordingly, the western option would be likely to have a greater adverse impact than the central option.</p>
Chapter 19 – Traffic and Transport	<p>Construction – During the construction phase the impacts on traffic and the surrounding highway network are likely to be of the same magnitude.</p>

	Operation – Greater traffic congestion would be likely at Victoria Road as a result of the western option, albeit fewer vehicles would access the new Waveney Drive junction. The central option is more effective than the western option at reducing peak traffic flow on the A47 Bascule Bridge and thus the strategic road network. Notwithstanding this, the impacts on traffic and the surrounding highway network are likely to be of the same magnitude.
Chapter 20 – Cumulative Effects	Construction and Operation– The western option would have an impact on Brooke Yachts and Jeld Wen development, as well as the Sanyo site and there is the potential for likely significant cumulative effects. With regard to the other developments considered in the ES (Great Yarmouth Third River Crossing, East Anglia ONE, the Lowestoft Tidal Barrier and Sizewell C), there are no significant differentiators between the western and central options.

IMPACT ON PORT OF LOWESTOFT

- 1.7.37. While the western option increases the proportion of the inner harbour that could be accessed with a single bridge operation, increasing the berth length between bridges by around 40%, it also results in an overall greater loss of berth length than the central option. The western option passes directly through the Shell Quay which has been identified and marketed by ABP as the location for the Lowestoft Energy Hub⁷, construction of a bridge through this location would directly affect their ability to deliver and operate this facility. Due to the increased width of operational land at this location (i.e. landwards from the quay), construction of a bridge on this alignment would also increase the area of Port land that would need to be acquired, in fact as the Shell Quay has the deepest quay margin of anywhere within the inner harbour, this location would require the maximum amount of land acquisition and therefore have the greatest detriment to the Port's land holdings.

CONCLUSION

- 1.7.38. The clear conclusion of this review is that the choice of a central option for the Scheme is still justified.
- 1.7.39. An alternative western alignment for the bridge would be less satisfactory for several key reasons:
- It would be up to 17% more expensive than the Scheme
 - It would attract about 8% less traffic to the new bridge than the Scheme
 - It would not connect effectively to A12 Tom Crisp Way and would therefore not work so well as part of Lowestoft's main road network
 - It would be difficult to resolve the issue of access to properties where the Western option connects to Waveney Avenue
 - It would provide less traffic relief to the A47 Bascule Bridge and roads within the town centre
 - It would lead to a very large increase in traffic using Kirkley Run – more than 100%.
 - It would offer lower economic value for money, as measured by the benefit-cost ratio

⁷ <https://www.4coffshore.com/NEWS/abp-invests-in-lowestoft-for-energy-hub-vision-nid8801.html>
<http://www.abports.co.uk/newsarticle/723/>

- 1.7.40. These findings supplement the evidence from the original assessment that
- A western option would have significantly less support amongst local people
 - A western option would have a greater environmental impact.
- 1.7.41. Taken together, these reasons explain why – with the availability of a more attractive central option for a proposed third crossing – it is still right to rule out a western option for the scheme.



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Appendix C – Rebuttal of matters raised by ABP in Section 20 of their Written Representation (Inadequacies of the Environmental Statement)

- C.1. The Written Representation submitted on behalf of the Association of British Ports (ABP) ("The ABP Written Representation") asserts that the Environmental Statement (ES) accompanying the DCO application for the Lake Lothing Third Crossing ("the Scheme") "is inadequate in respect of its assessment of the effects on the Port of Lowestoft". Taking in turn each of the matters raised, this response strongly refutes the alleged inadequacies and reconfirms that the ES provides a robust assessment of the environmental effects associated with the Scheme.
- C.2. Paragraph 21.2 of the ABP Written Representation acknowledges that, in formal terms, the LLTC ES needs to be prepared in accordance with the European Directive 85/337/EEC as implemented into UK law by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) ("the 2009 Regulations"). Paragraph 21.3 goes on to acknowledge the Secretary of State's advice in the LLTC Scoping Opinion to consider the effect of the implementation of the European Union 2014/52/EU Directive ("the 2014 Directive"), which is reflected in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("the 2017 Regulations"), in terms of the production and content of the Environmental Statement (ES)(Document Reference 6.1, PINS Reference APP-136). Paragraphs 21.4 and 21.5 then suggest that the Applicant has failed to address the requirement of Regulation 5(2) of the 2017 Regulations which is to undertake the identification, description and assessment of significant effects in an appropriate manner, with specific reference to the Port of Lowestoft.
- C.3. As acknowledged in paragraph 21.2 of the ABP Written Representation, the ES has been prepared correctly in accordance with the 2009 Regulations, as provided for under the transitional provisions set out in Article 3 of the 2014 Directive. Implementation of the 2017 Regulations strictly has no effect on the production or content of the LLTC ES. Notwithstanding this, in the interests of best practice environmental assessment, the substantive requirements of the 2017 Regulations were considered in relation to the subject matter of each environmental topic.
- C.4. The consideration of alternatives, monitoring of significant effects, coordination with the Habitat Regulations Assessment process, inclusion of the 'do nothing scenario' within assessments, inclusion of new environmental factors (e.g. climate change), inclusion of new sources of environmental effects and confirmation of the relevant expertise and qualifications of the document authors would have been pertinent had the Scheme fallen within the remit of the 2017 Regulations. Paragraphs 1.3.9 to 1.3.18 of the ES, as well as Appendix 1A (Potential Health Impact Assessment) and Appendix 1B (Statement of Authority), elaborate on how these elements are incorporated where appropriate. On this basis, it is considered that the Secretary of State's advice in the Scoping Opinion regarding the consideration of the 2014

Directive has been adhered to during the preparation of the ES in relation to the Scheme, including in relation to impacts concerning the Port of Lowestoft.

- C.5. Taking specifically the assessment of the effects of the Scheme on the Port of Lowestoft set out within Chapter 15 (Private Assets) of the ES, paragraph 21.8 of the ABP Written Representation asserts that the assessment approach taken differs from usual practice because no attempt has been made in the methodology to define the magnitude of impact, or sensitivity of the receptor receiving the impact, which is “not best practice and is inadequate”. It is alleged that, as a result, the conclusions drawn in the assessment are “at best questionable”, particularly in relation to the conclusion that the demolition of two private garages would result in an overall ‘Substantial Adverse’ effect whereas the impact of the Scheme on the significant Port of Lowestoft would have an overall ‘Slight Adverse’ effect.
- C.6. The ABP Written Representation offers a different conclusion as to the significance of the impact of LLTC upon the Port of Lowestoft. It is argued that, “in terms of value and sensitivity, having regard to the evidence relating to the Port and its future prospects”, the Port would be a receptor of High Value’ and that the magnitude of impact upon it would be ‘major’. As a result, it is ABPs assertion that LLTC would have an adverse effect on the Port of Lowestoft of ‘Large or Very Large’ significance. Paragraphs 21.14 to 21.16 also argue that that the Applicant has misapplied its own assessment methodology, set out in Table 15-2 of the ES, in deriving the conclusion that the LLTC will have a ‘Slight Adverse’ effect on the Port of Lowestoft. Rather, in ABPs view, the impact of the LLTC on the Port is “more aligned with the description given in respect of a ‘Substantial Adverse’ effect within Table 15-2 of the ES”.
- C.7. The assessment of significance provided in Chapter 15 of the ES considers not only the type and amount of land at risk of demolition or land-take as a result of the Scheme, but also the probable effect of such losses. In relation to businesses and commercial operations within the study area, such as the Port of Lowestoft, the ES considers potential operational impacts arising due to temporary or permanent loss of land and any constraints during construction and operational phases. The significance criteria set out in Table 15-2 of the ES, takes this rationale into account in stating that landtake that is not essential to existing or intended use, or would only cause a temporary compromise to its use, would result in ‘slight adverse’ impact whereas landtake that would preclude existing or intended use would have a ‘significant adverse’ impact.
- C.8. It is acknowledged In Table 15-4 of the ES that land in the ownership of ABP, and the marine area for which they have a statutory duty to manage, will be required in both the construction and operational phases of the Scheme, however, it is concluded that the landtake is not essential to the continued operation of the Port for the reasons set out below.
- C.9. As per paragraph 15.5.9 of the ES, vessel navigation through the construction area will not be impeded except for specific occasions when possession of the channel, or a restriction on navigation (such as narrowing of vessel size), is required to facilitate construction. The ES concludes that, given the existing A47 Bascule Bridge has a

width restriction of 22m and the majority of vessels do not navigate to the west of the Scheme, and the short time scale of the impact, any temporary narrowing is unlikely to adversely affect Port operations. The loss of berthing space west of the Scheme resulting from short term closures of the channel to facilitate construction (estimated to be around 3 weeks) is considered to constitute a 'slight adverse' impact in accordance with the criteria set out in Table 15-2 due to its short, temporary nature.

- C.10. In terms of the impact of the Scheme upon quay and land-based Port operations during construction, berth occupancy data has not been made available to the Applicant, however, ABP has noted that occupancy fluctuates and that commercial activities in the Port has grown over recent years and the expectation is that this will continue. To the Applicant's knowledge, at the time of the assessment being carried out, there are no detailed development proposals or timescales associated with ABP's vision to grow operations within the Port in line with the 'East of England Energy Hub' on land to the west of the Scheme, and little detail has been provided on this proposal since. In the absence of confirmed information regarding current and future anticipated occupancy rates, the assessment in Chapter 15 of the ES is based on the Applicant's knowledge of berth occupancy, which is informed by the vessel survey (Document Reference SCC/LLTC/EX/44, PINS Reference REP3-060), site visits and historical aerial photography.
- C.11. As stated in paragraphs 15.5.14 to 15.5.16 of the ES, the construction compound would result in the loss of 8% of total operational quay length and four berths would be temporarily removed from use. On the basis that occupancy within the Port is low (on the basis of the vessel survey and in the absence of any information to the contrary from ABP); that the affected berths do not specifically impact upon any one individual but rather slightly reduces the flexibility of the Port as a whole; and that vessels will continue to be able to navigate east to west along Lake Lothing through the construction area for the overwhelming majority of the construction phase, the conclusion reached in Chapter 15 is that the impact to the Port will be no greater than 'slight adverse'. Chapter 15 does not seek to contest the value or significance of the Port in its entirety but rather considers the impacts upon its continued operation, based on known information, as a direct result of the LLTC.
- C.12. The ABP Written Representation also state that the description of the baseline environment given in the ES, in respect of the Port of Lowestoft, is inadequate. They argue that it is "very unclear" what study area the assessment in Chapter 15 is based and go on to claim that the Applicant has failed to address the points raised by the SoS in respect of defining the study area. The study area is defined in Chapter 15 as "the Order limits of the Scheme and adjacent land parcels (see Figure 5.1)". This is considered to represent a clear and precise definition of the study area. The impact of the Scheme on all private assets within the Order limits, and within land parcels directly adjacent to the Order limits, has been considered in the assessment provided in Chapter 15.
- C.13. ABP further claim that the existing baseline environment description in respect of the Port of Lowestoft "is both limited and general in nature". Contrary to these assertions, it is considered that the content set out in Section 15.4 in Chapter 15 of the ES

provides an adequate description of the relevant aspects of the current state of the environment, both in respect of the Port and other land uses within the study area. Table 15-3 identifies the key terrestrial and marine assets within the Port whilst paragraph 15.4.6 summarises the vessel movements in Lake Lothing during a survey from the 13th June 2017 to the 30th September 2017 in order to determine the likely opening frequency of the LLTC for purposes of the ES. The absence within the ABP Written Representation of any suggested additions to the description of the baseline environment (building on their general lack of provision of information provided by ABP to the Applicant during the preparation of the application) in respect of the Port is notable.

- C.14. The ABP Written Representation goes on to contend that, in respect of the Port, the likely evolution of the baseline environment in the absence of the Scheme is inadequately addressed in Chapter 15 of the ES. ABP consider it surprising that the “assessment does not seek to grapple with the likely future evolution of the Port of Lowestoft”, particularly the role it is expected to play in the delivery of offshore wind farms and in the delivery of Sizewell B. Schedule 4 of the 2017 Regulations requires the inclusion of an outline of the likely evolution of the baseline environment “without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge”. Adequate consideration of the potential cumulative effects arising from the concurrent delivery of the Scheme together with Sizewell B and the East Anglia ONE and East Anglia THREE wind farms is provided in Chapter 20 of the ES. It is acknowledged that the Port of Lowestoft will play a role in facilitating the delivery of these projects, however, in the absence of detailed development proposals or timescales relating to the evolution of the Port in fulfilling this role, it is not possible for any identifiable and reasonably likely potential future development of the Port to be incorporated within the baseline environment.
- C.15. The ABP Written Representation asserts that Chapter 15 of the ES fails to have regard to the fact that the Port of Lowestoft benefits from extensive permitted development rights enabling relevant development to take place within the Port without the need for an express grant of planning permission. Whilst it is acknowledged that permitted development rights do apply to certain development by the statutory undertaker on operational land, it is unclear how the Applicant can be expected to account for potential future piecemeal development pursuant with these rights in the baseline for assessment of the Scheme without any indication from ABP of its development proposals for the Port as a whole.
- C.16. As stated in paragraph 15.5.13 of the ES, ABP considers business plan predictions for growth/development in the Port to be commercially confidential and therefore no details have been provided for inclusion in the Applicant's assessment. It is also important to note that Article 3 (10) of the Town and Country Planning (General Permitted Development) Order 2015 prevents development falling within the criteria of Schedule 1 or 2 of the EIA Regulations from taking place unless a screening opinion has been issued by the Local Planning Authority, or a direction from the

Secretary of State, confirming the development is either not EIA development or is exempt from the application of the Regulations. In the case of port development the applicable criteria for Schedule 2 development is a works area of 1 hectare. The Applicant has not been made aware of any screening opinions or screening directions being issued in respect of future development within the Port exceeding 1 hectare in area.

- C.17. In 21.34 of the ABP Written Representation the scheme of operation for the bridge is referenced and ABP claim that until such a scheme is finalised “the reader of the ES cannot be certain that the likely effects of the bridge during its operation have been correctly identified and assessed”. In the absence of a scheme of operation at the time of the assessment, the assumption has been made that the bridge will not lift during the AM or PM peak periods (paragraph 5.7.1 of the ES) as a reasonable worst case assessment. The assumption has been made for the purposes of consistent assessment of environmental impacts throughout the ES. On this basis the reader of the ES can be assured, contrary to the claims in the ABP Written Representation, that the likely effects of the bridge during its operation have been correctly identified and assessed and that any material changes to assumptions made would require fresh assessment.
- C.18. Paragraph 21.35 of the ABP Written Representation raises concerns regarding the powers sought under Articles 20 and 41 of the draft DCO (Document 3.1) and states that effects relating to powers have not been considered in the environmental assessment. Article 20 concerns the temporary suspension of navigation within Lake Lothing for the purposes of constructing, maintaining or inspecting the new bridge. The detailed need, extent, duration and disturbance of such works cannot reasonably be predicted at this stage and thus the assessment of environmental impacts arising from such works have been considered in the ES to the extent specified in paragraph 15.5.9.
- C.19. Notwithstanding this, Article 20 of the application draft DCO included provisions, such as requirements to minimise obstruction, delay and interference and to provide at least 14 days notice prior to works taking place, in order to ensure disturbance arising from the Scheme is mitigated as far as reasonably possible.
- C.20. Article 41 of the application draft DCO concerns the extinguishment of existing public rights of navigation within Lake Lothing in the areas accommodating the new bridge piers and fenders to the north of the south quay and to the south of the north quay. Public rights of navigation would remain in place where no conflict with built development relating to the Scheme exists, although impacts upon recreational vessel users are acknowledged and assessed in Chapter 16 of the ES. Table 16-9 in Chapter 16 of the ES concludes that the Scheme would have a ‘minor adverse’ impact on leisure-related vessels during construction and a ‘moderate adverse’ impact during operation due to predicted delays to their passage along the lake whilst waiting for the bridge to open. Paragraphs 16.6.7 and 16.6.8 in Chapter 16 of the ES set out mitigation, such as the provision of floating pontoons for waiting purposes and publication of the opening regime for the Scheme Bascule Bridge, which seek to minimise the potential impacts arising from the Scheme.

- C.21. For the reasons set out above it is considered that, contrary to the assertions made by ABP in their Written Representation of 8th January 2019, the ES represents an adequate assessment of the effects of the LLTC scheme on the Port of Lowestoft.

Appendix D – Explanatory Paper on the Applicant's Proposals for Land owned by Lings and Nexen

D.1. Introduction

- D.2. This paper is intended to provide additional explanatory detail on how the Applicant's Scheme will have an impact on land in the ownership of Nexen and Lings, which is shown edged red and black respectively on the figure below.



Figure D-1 Overview of Lings and Nexen land, including reconfigured access points to both, as presented in the Proposed Non-Material Changes Application.

- D.3. Hatched pink on the plan is the applicant's proposed maximum extent of permanent acquisition of land for constructing the Scheme; hatched blue is the proposed permanent acquisition of rights over land to allow the installation of utilities and future inspection and maintenance of the Scheme, and; hatched green is the proposed temporary possession and works on land.
- D.4. Save for exceptional circumstances, access and egress to both sites will be available for use at all times during construction of the scheme.

D.5. Locality

- D.6. The Nexen and Lings properties are situated adjacent to the A12 Tom Crisp Way Roundabout, with Lake Lothing immediately to their north, Kirkley Ham inlet to the east, Waveney Drive to the south and Riverside Road to the west.

D.7. Nexen Site Description and Scheme Impacts

- D.8. Nexen's ownership includes two distinct areas; an industrial warehouse facility on the south shore of Lake Lothing that extends to approximately 1.03 hectares (2.55 acres), together with a 0.54 hectare (1.34 acre) plot of development / expansion land to its south. Nexen's entire ownership extends to approximately 1.57 hectares (3.89 acres).
- D.9. The industrial warehouse facility currently uses a single point of access from Riverside Road. The development land to its south has rights of access over Lings' land, albeit those rights of access are not currently exercised.
- D.10. The Applicant's permanent acquisition of Plot 3-30 is required for the construction of the new bridge structure and this acquisition amounts to approximately 112 sq m (1,205 sq ft). This equates to 0.71% of Nexen's total land holding.
- D.11. The Applicant will construct a new access road from Waveney Drive to access Riverside Road and the site from the west. This will be undertaken prior construction of the Applicant's permanent works to Riverside Road, which will sever the current Waveney Drive access from the south. However, the new access road from the west will ensure continued access to the existing site access point and provide not less than 5.3m vertical clearance beneath the new Bridge Structure.
- D.12. The provision of a second access (as shown in Figure E-1) from the improved Riverside Road would take place before the reconfiguration of Nexen's existing access to ensure uninterrupted access is maintained throughout construction of the Scheme. The second access point would have a minimum clearance of 6.5m therefore accommodating the type of vehicles said to be accessing the site. In order to ensure there is sufficient space available for large vehicles to make the necessary manoeuvres in to the site, the Applicant is discussing the nature and extent of rights Nexen may require over Plot 3-13.
- D.13. The consequence of the provision of a second access is that the current access point can therefore accommodate traffic that be associated with the undeveloped parcel of Nexen's land, minimising conflict between different types of highway users.
- D.14. The acquisition of a permanent corridor of rights of access over Plot 3-29, which crosses both the industrial warehouse facility and vacant development land, is proposed in respect of utilities and future inspections and maintenance of the new bridge structure. This land will continue to be capable of use as external hard standing areas and roadways during operation of the Scheme. Until detailed design is complete, the exact configuration of utilities cannot be known, therefore flexibility of a proportionate nature is required and this is reflected in the drafting of the rights

which are currently sought over this plot. When, in due course, more detail becomes available, it will be possible to identify more specific requirements and the Applicant intends to implement any powers granted through the DCO on that basis..

- D.15. The Applicant's temporary possession of Nexen's development land (Plot 3-56) is proposed to facilitate the construction of hardstanding for Lings to use during the phased reconfiguration of their own site. Access to and from this land is provided for from Lings ownership as set out below.

D.16. Lings Site Description and Scheme Impacts

- D.17. The Lings site extends to approximately 1.59 hectares (3.93 acres) and comprises a large multi-franchise motor dealership, alongside a used car sales business and an independently operated car rental business (Enterprise Rent a Car) with a lease that they can terminate on 3 months' notice at any time. All three buildings extend to a gross internal area of approximately 3,534 sq m (38,035 sq ft).
- D.18. The site fronts Waveney Drive and has return frontage along Riverside Road, which contains Lings' and Enterprise's single point of access to the site.
- D.19. The Applicant's permanent acquisition of Plots 3-31, 3-49, 5-11, 5-13, 5-29 and 5-30 is required for construction of the new bridge structure. This acquisition amounts to 1,354 sq m (14,572 sq ft), which equates to 8.51% of Lings total land holding.
- D.20. The Applicant will construct a new permanent access point from Waveney Drive to access the site from the south east and this will be undertaken prior to construction of the Applicant's permanent works to Riverside Road, which will sever the site's current access. The new access from Waveney Drive will ensure continued access to the site and an additional right of access for Lings to exit their land in front of the Kirkley Ham with the acquisition of permanent rights of access over Asda's Plot 5-15 also being provided for in the application.
- D.21. The access point in to the site has been revised (and is presented as a non-material change to the Application) following discussion with Lings, who preferred vehicles to travel north on entry, rather than bear left, which would have appropriated additional forecourt space.
- D.22. The Applicant's permanent works will cut off access to the Lings site from Riverside Road and will require the demolition of their used car sales building, which straddles Plots 5-11, 5-10 and 5-28. The proposed temporary possession of Plot 5-28 is required to facilitate that demolition.
- D.23. The Applicant is seeking to assist the relocation of the current tenant, Enterprise Rent-A-Car, to alternative premises. The Enterprise building could then be refurbished to provide a replacement for the demolished Lings' used car facility.
- D.24. The Applicant's temporary works upon Nexen's development land (Plot 3-56) to the north will take place in advance of Lings main site being reconfigured. This will minimise operational disruption throughout construction of the Scheme.

- D.25. The temporary possession of Plot 3-56 (in Nexen's ownership) and construction of hardstanding thereon is proposed to facilitate Lings' use of that land during a phased reconfiguration of their site. The temporary possession of Lings' Plot 3-57 is proposed to provide access for that temporary construction upon Plot 3-56.
- D.26. The acquisition of a permanent corridor of rights of access over Plots 3-32, 3-50, 5-10, 5-14 and 5-31 is proposed in respect of utilities and future inspections and maintenance of the new bridge structure. This land will continue to be capable of use as external car display space during the operation of the Scheme.
- D.27. The permanent acquisition of land will result in a loss of external car display spaces and, to mitigate the effects of this, a reconfiguration of the Lings site is proposed. That reconfiguration will be phased so as to cause as little disruption as possible to the operation of Lings' business.

Appendix E – Section 151 Officer's letter

Our Ref:
Date: 29 January 2019
Enquiries to:
Tel: 01473 264347
Email: louise.aynsley@suffolk.gov.uk



The Examining Authority, The Planning Inspectorate
National Infrastructure
Temple Quay House
2 The Square
Bristol
BS1 6PN

Dear Mr Morgan

Lake Lothing Third Crossing Lowestoft

As Section 151 Officer for Suffolk County Council, I can confirm that the Council is prepared to underwrite the local contribution for the Lake Lothing Crossing scheme, as referred to in the Outline Business Case for that scheme, should 3rd party contributions not be forthcoming.

Given the importance of this scheme to the Council, as noted in recent reports to Cabinet, the Council would use prudential borrowing if necessary, for this contribution.

The additional £8 million budget pressure identified and reported to Cabinet in June 2018 has already been accounted for in the Council's future capital budget should it be required.

The Lake Lothing Third Crossing remains a priority project for Suffolk County Council and its delivery is essential for the future of Lowestoft.

Yours sincerely,

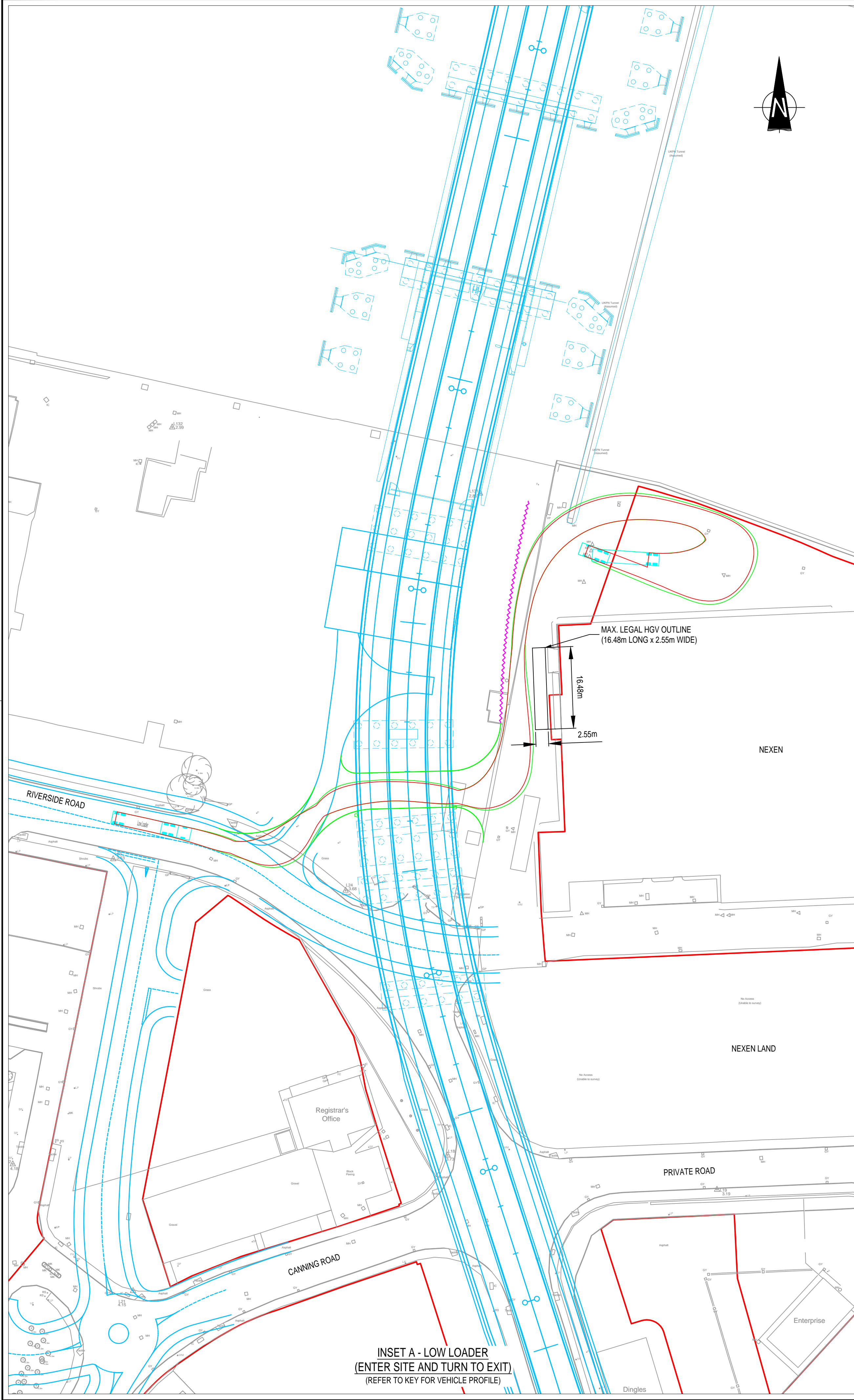


Louise Aynsley
Head of Finance (S151 Officer)

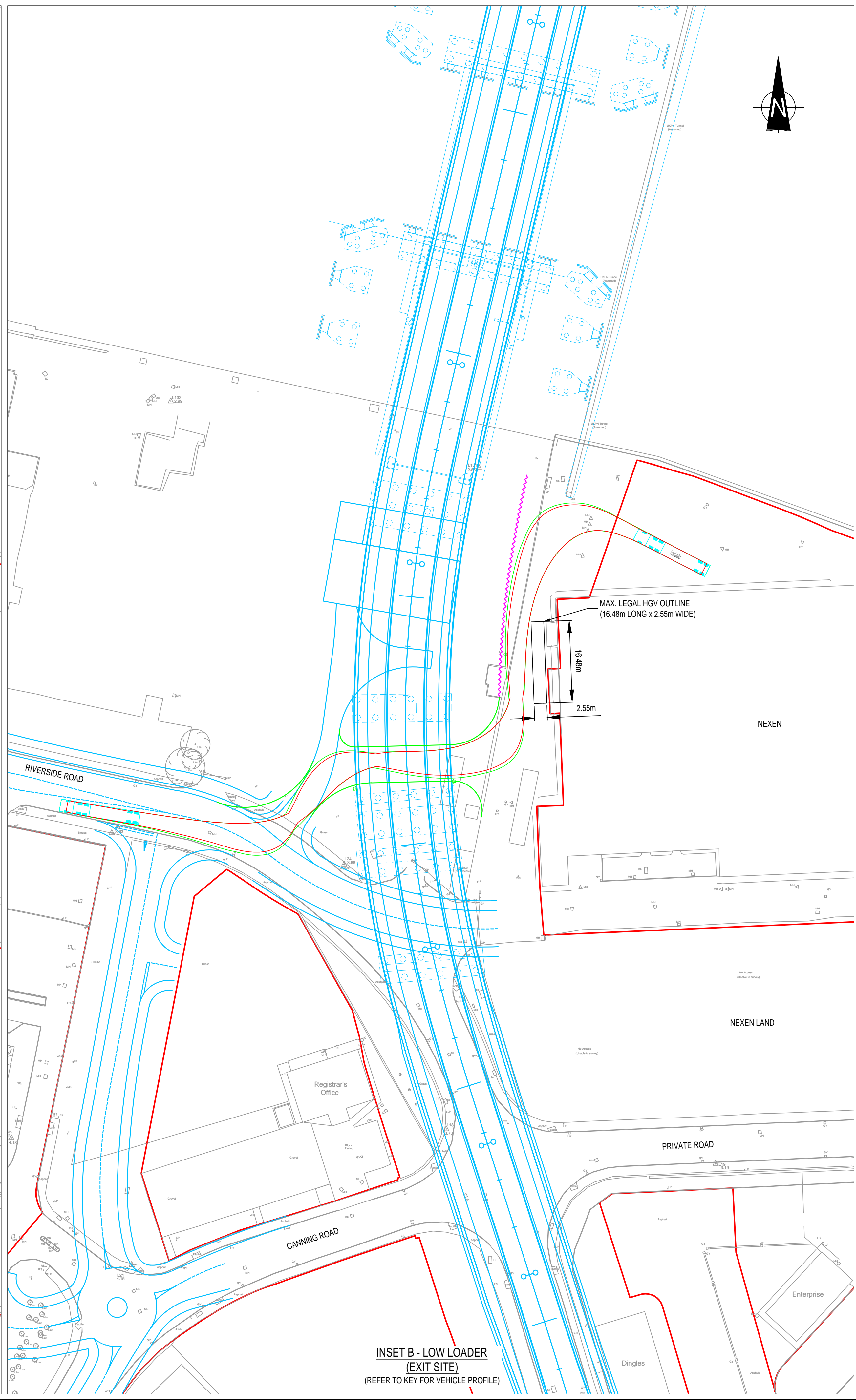
Appendix F - Applicant's motortrade specialist report

See separate document

Appendix G – Swept Path Analysis Drawings



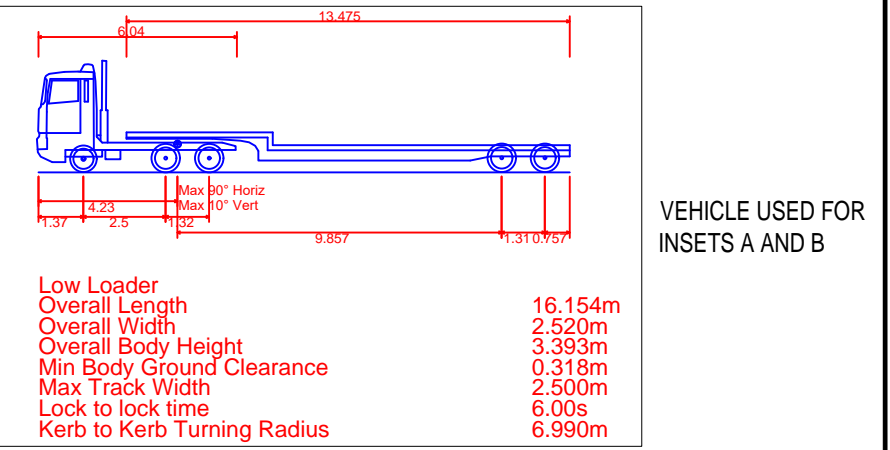
INSET A - LOW LOADER
(ENTER SITE AND TURN TO EXIT)
(REFER TO KEY FOR VEHICLE PROFILE)



INSET B - LOW LOADER
(EXIT SITE)
(REFER TO KEY FOR VEHICLE PROFILE)



- KEY**
- REFERENCE DESIGN (OPTION C19 - REV P06 ALIGNMENT)
 - ALTERNATIVE ALIGNMENT. SEE NOTE 1
 - POTENTIAL REALIGNED BOUNDARY
 - ORDER LIMITS



- NOTES**
- ALTERNATIVE ALIGNMENT OPTION SHOWN IS ILLUSTRATIVE ONLY AND IS SUBJECT TO CHANGE AS DESIGN IS PROGRESSED.

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P01	CC	SC	AP	JB	24.01.2019

REVISION	DRAWN	CHECKED	APPR'D	AUTH'D	DATE



PROJECT TITLE

Lake Lothing
THIRD CROSSING

DRAWING TITLE

NON MATERIAL CHANGE
NEXEN ACCESS
SWEEP PATH ANALYSIS

DRAWING STATUS

FOR INFORMATION

DRAWN	CHECKED	APPROVED	AUTHORISED	SUITABILITY
CC	SC	AP	JB	S2
SCALE @ A1 SIZE		DATE	REVISION	
1:500		24.01.2019	P01	
DRAWING NUMBER				
Project		Originator	Volume	
1069948-SCC-HGN-LL-DR-KK-0006				
Location	Type	Role	Number	

Appendix H – Sensitivity Test to re-assess capacity of Access Road / Waveney Drive Priority Ghost Island Junction

- H.1. A sensitivity test has been undertaken using the strategic SATURN model focusing on updated assumptions in relation to the Kirkley Waterfront Sustainable Urban Neighbourhood (SUN) and Riverside Business Park. This sensitivity test involved revised access arrangements for the various developments, increased vehicular trip generation and focuses on the additional traffic which has subsequently been modelled on the New Access Road.
- H.2. This note describes the results of a sensitivity test relating to the capacity of the proposed junction of the New Access Road and Waveney Drive for an opening year of 2022 and design year of 2037.
- H.3. The sensitivity test was carried out as a response to the representation provided by Northumbrian Water Limited (NWL) submitted online on 21st September 2018. It was intended to address the specific concerns expressed by NWL that forecast traffic from the Kirkley Waterfront SUN as well as future changes in land use at Riverside Business Park, had been underestimated. Similar points were raised by the Highway Authority as recorded in the Statement of Common Ground submitted prior to the Preliminary Meeting (AS-007).
- H.4. The modelling that underpinned the forecasts for the New Access Road is based upon the application of TEMPRO growth for car trips and NTM growth for the LGV / HGV trips. Hence the assessment of the capacity of the proposed junction of the New Access Road and Waveney Drive as presented in the both the original Transport Assessment and revised version takes partial account of future traffic growth, based upon future traffic growth at Riverside Business Park based on projected traffic growth across Waveney District.
- H.5. The assessment presented in this note has been derived from revised forecasts using the SATURN traffic model that are based upon an updated and detailed consideration of the land use proposals in relation to the developments which comprise the Kirkley Waterfront SUN, as well as future additional development at the Riverside Business Park.
- H.6. The Kirkley Waterfront SUN is detailed under policy reference WLP2.4 in the Waveney Local Plan. This projects 1,380 dwellings will be completed within the Kirkley Waterfront SUN by the end of the Local Plan period in 2036.
- H.7. The housing trajectory in WLP2.4 shows 130 dwellings will be completed by 2022, representing 9% of the full residential land use quantum. This 9% completion assumption has been applied to all of the various developments comprising the Kirkley Waterfront SUN, resulting in the following inputs to the sensitivity test:
- Former Sanyo Site, School Road (DC/15/2004/RG3): 27 dwellings

- Brooke Peninsula (DC/13/3482/OUT): 77 dwellings
- Jeld Wen site: 27 dwellings

H.8. It has been assumed the employment land uses associated with the Brooke Peninsula would not be in place by 2022. However, it has been assumed that 25% of the employment associated with the Jeld Wen site will be in place by 2022, equating to 216 jobs. The number of jobs was calculated using employment density assumptions for B1a General Office, B1c/B2 Industry and B8 Distribution land uses consistent with values specified within the WDC Employment Land Needs Assessment (Update 2017).

H.9. By 2037 all land uses associated with the Kirkley Waterfront SUN have been assumed to be fully developed. This is considered a robust assumption as the trajectory associated with WLP2.4 suggests a full completion date for the Kirkley Waterfront SUN later than 2037.

H.10. The full Kirkley Waterfront development is assumed to comprise the following land parcels / associated planning applications:

- Former Sanyo Site, School Road: 300 dwellings
- Brooke Peninsula: 850 dwellings, 1774sqm ancillary A1 land uses, 1.5 form primary school
- Jeld Wen site: 300 dwellings, 862 jobs (the method for calculating the number of jobs is as per paragraph 1.1.8 above, based on 6ha of employment land)

H.11. The assumptions relating to the Kirkley Waterfront SUN are summarised in Table H-1 below by forecast year. The dwelling and job assumptions were used to adjust the planning data for Waveney within TEMPRO to generate revised background car growth factors.

Table H-1 Kirkley Waterfront SUN – Projected Land Uses

	2022	2037
Residential (Dwellings)	108	1450
Employment (Jobs)	216	862
Other		1.5 FTE Primary School 1744sq m A1 Land use

H.12. The trip generation for the various land uses within the Kirkley Waterfront SUN utilised trip rate assumptions from Transport Assessments (TAs) associated with the planning applications for Brooke Peninsula and Former Sanyo Site. Trip rates within the Brooke Peninsula TA for the residential land use were applied to 300 dwellings at

the Jeld Wen site. For the b-class employment land within the Jeld Wen site, trip rates were derived from TRICS

H.13. The Applicant has identified four significant development sites at Riverside Business Park, summarised as follows:

- Site 1: Land owned by Waveney District Council; earmarked for port related uses
- Site 2: Nexen
- Site 3: Waveney District Council office expansion (land adjacent to the Registry Office)
- Site 4: Northumbrian Water Limited (NWL)

H.14. Estimates of the number of jobs associated with each of the future developments within Riverside Business Park were derived by the Applicant in order to ensure the appropriate adjustment to TEMPRO planning data was made. These assumptions were based on applying a plot ratio to the overall site area for the WDC sites (Site 1 and 3) of 0.35 and 0.4 respectively to derive a gross floor area, and then multiplying this gross floor area by the number of storeys. It was assumed Site 1 involves two storeys, and Site 3 includes three storeys.

H.15. For the Nexen site (Site 2), the gross floor area was measured from Nexen's plans for the proposed site (as included with in its Written Representation), with this gross floor area multiplied to represent three storeys.

H.16. This total gross floor area for Sites 1 to 3 was divided by employment density values (FTE per sqm) consistent with those in the WDC Employment Land Needs Assessment (Update 2017) in order to determine an estimate of the number of jobs at these locations.

H.17. It is noted within the existing NWL site (Site 4) there is the potential to expand capacity from the current 240 jobs to 263 jobs according to their written representation. For the sensitivity test it has been assumed these additional 23 jobs (expansion from 240 jobs to 263 jobs) will occur. It has also been assumed the NWL site will double in size with the addition of a further 263 jobs. This means a total increase of 286 jobs has been considered, leading to 526 jobs at the NWL site. The forecast increase of 286 jobs was used to adjust Waveney planning data within TEMPRO.

H.18. In total it was calculated 241 additional jobs would be in place at Riverside Business Park by 2022, with 964 additional jobs in 2037. TEMPRO planning data was adjusted by these figures to avoid double counting this proposed employment growth and calculate adjusted background car traffic growth factors.

H.19. The number of car park spaces for each of the four development sites was used to drive the trip generation for the expansion of all sites within Riverside Business Park using trip rates derived from TRICS 7.5.3. The number of car park spaces has been derived from the Suffolk Guidance for Parking (November 2015) produced by Suffolk County Council for Sites 1-3. Following this guidance leads to the assumption of 1 parking space per 30 m². For the NWL site, it was assumed the existing provision of 106 car parking spaces specified in the NWL representation would also double,

therefore providing an additional 106 car parking spaces. In total it was been estimated there would be an additional 526 parking spaces at Riverside Business Park by 2037, 132 additional parking spaces in 2022.

H.20. Table H-2 presents the changes in two-way traffic flows for the AM and PM peak hour, comparing the following scenarios:

- 2017 observed data
- 2016 base year validation
- 2022 & 2037 Transport Assessment (TA) flows
- 2022 & 2037 Sensitivity test flows

H.21. It should be noted the traffic flows to/from Riverside Road are split into two separate accesses with the Scheme in place. A proportion of the traffic relates specifically to the Lings car showroom. The Lings traffic utilises the left in / left out access east of the crossing and does not use the New Access Road.

	Riverside Business Park / New Access Road ¹		Lings Access ²		Total ³	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Observed 5th July 2017 (Riverside Road)	294	205	-	-	294	205
2016 Base Year	292	206	-	-	292	206
2022 Do Something (TA)	282	183	40	44	322	227
2037 Do Something (TA)	326	211	40	45	366	256
2022 Do Something (Sensitivity Test)	364	250	38	43	402	293
2037 Do Something (Sensitivity Test)	611	429	38	43	649	472

Table H-2 Riverside Business Park / New Access Road traffic flows changes

H.22. The approach for applying the future traffic growth to the Riverside Business Park is considered to represent a more accurate forecast of potential future flows to/from the

¹ Flows from Riverside Road without the Scheme in place, flows on the New Access Road with the Scheme

² Traffic from Lings car showroom is included within the traffic for Riverside Business Park in the 2016 base year, 2022 and 2037 Do Minimum

³ Sum total of traffic to/from New Access Road and Lings car showroom

business park, rather than applying generic growth in traffic derived from TEMPRO and NTM. This can be demonstrated by reference to [Table H-2](#). This shows a significant increase in flow has been modelled on the New Access Road compared to the 2017 observed data.

- H.23. Revised forecasts that included the revised projections of vehicular trips from Kirkley Waterfront and Riverside Business Park were prepared for 2022 and 2037 for AM peak (0800-0900) and PM peak (1700-1800) hours.
- H.24. Turning flows from the revised forecast were output from the SATURN model and were input into a PICADY junction model to test the impact of the increased flows at this junction.
- H.25. The results from the PICADY junction model in the Do Something (With the Scheme scenario for both 2022 and 2037 are presented in Table H-2.

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2022 (DS – with Scheme)							
New Access left turn	0.08	6.55	0.07	A	0.23	7.06	0.19	A
New Access right turn	0.04	11.03	0.04	B	0.28	11.79	0.22	B
Waveney Drive WB right turn	0.23	7.72	0.19	A	0.03	5.33	0.03	A
	2037 (DS – with Scheme)							
New Access left turn	0.42	10.62	0.30	B	0.73	11.36	0.43	B
New Access right turn	0.14	21.31	0.12	C	0.80	22.59	0.45	C
Waveney Drive WB right turn	0.97	15.28	0.50	C	0.15	6.25	0.13	A

Table H-3 - New Access Road / Waveney Drive Junction Capacity Analysis using revised land-use assumptions

H.26. Table H-3 demonstrates that the priority junction operates well within capacity in both forecast years.

H.27. A further capacity assessment was carried out with the New Access Road as the sole point of access for both the Jeld Wen development and expanded Riverside Business Park. The results of this assessment are presented in Table H-4.

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	KW RBP Single Access - 2022 DS							
New Access left turn	0.09	6.76	0.08	A	0.25	7.41	0.20	A
New Access right turn	0.06	11.28	0.06	B	0.39	12.71	0.28	B
Waveney Drive WB right turn	0.24	7.88	0.19	A	0.03	5.36	0.03	A

*Table H-4 - New Access Road / Waveney Drive (with New Access Road as main entry/exit)
Capacity Analysis using revised land-use assumptions*

H.28. Table H-4 shows that assuming the New Access road will be the single point of access for traffic to/from Jeld Wen and Riverside, there would be little or no change in capacity compared to the results presented in Table 3, with the junction operating well within capacity by 2022.

Appendix I – Response to Northumbrian Water Limited's Written Representation - Noise and Vibration Appendix

MEMO

SUBJECT	Lake Lothing – Northumbrian Water Consultee Response – Noise and Vibration		

INTRODUCTION

Acting on behalf of Essex & Suffolk Water and Northumbrian Water Limited (NWL), and in response to letters sent by Suffolk County Council (SCC) under Section 42 of the Planning Act 2008, Bryan Cave Leighton Paisner LLP (BCLP) has issued a Written Representation with regard to the proposed Lake Lothing Third Crossing (“the Scheme”).

NWL is the owner of Trinity House (and associated car parking and adjacent land) which is located off Canning Road, Lowestoft. The representation, with respect to noise and vibration, is concerned with potential impacts upon this facility.

The representation issued by BCLP makes reference to noise and vibration, drawing upon the findings of a report titled *Acoustic Supporting Evidence on behalf of Northumbrian Water Limited* with an appended *Environmental Sound Survey Report*, both of which were prepared by Peter Brett Associates LLP (PBA). The *Environmental Sound Survey Report* details the results of noise measurements undertaken inside and outside Trinity House.

The BCLP representation also makes reference to the Environmental Statement (ES) submitted by SCC as part of the application for Development Consent for the Scheme.

The key concerns relating to noise and vibration that are raised in the BCLP representation (at Section 4.4 of the representation) are that:

- BCLP consider that SCC has failed to identify Trinity House as a sensitive receptor with respect to its operations and that this has resulted in a failure to adequately address likely operational noise impacts on Trinity House;
- BCLP consider that there is a lack of clarity in the assessment methodology undertaken by the Applicant (SCC) and that this raises concerns over the adequacy of the assessment; and
- BCLP consider that there has been inadequate assessment of potential noise impacts on Trinity House during the construction of the Scheme.

SUMMARY OF OUR RESPONSE TO BCLP’S CONCERNS

We consider that:

- The arguments submitted by BCLP (and their advisors PBA) for treating Trinity House as a receptor that is especially sensitive to noise and vibration are invalid and that Trinity House should not be treated as a sensitive receptor;
- The assessment methodology, as detailed in the ES, is clear and meets the requirements of the relevant regulations relating to Environmental Impact Assessment; and
- The assessment of potential noise impacts at Trinity House during the construction period is adequate, taking into account the relevant sensitivity of Trinity House.

Further technical detail on these points is given below.

SENSITIVITY OF TRINITY HOUSE TO NOISE AND VIBRATION

The report prepared by PBA, presented as an Appendix to the representation from BCLP, attempts to designate Trinity House as being a sensitive receptor based on the building use as a call centre and taking into account the relevant internal ambient noise criteria for such a building use, the existing ambient noise levels within the building and the existing environmental noise levels exterior to the building. Our review of the arguments put forward in the PBA reports is detailed below.

Internal Ambient Noise Criteria

Section 2.3 of the PBA report seeks to identify appropriate internal noise criteria applicable to the call centre with reference to British Standard (BS) 8233:2014 *'Guidance on sound insulation and noise reduction for buildings'* and the British Council for Offices *Guide to Specifications, Chapter 8: Acoustics*. PBA conclude that the appropriate criterion is 35-40dB $L_{Aeq,T}$. However, the approach adopted by PBA is at fault because this criterion, as defined in BS 8233: 2014, is in relation to an executive office rather than an open plan office within a call centre. It is also subsequently identified in the PBA report that the current noise levels as measured within the facility when operational, and which are then sought to be protected (suggesting their acceptability for purpose) are significantly higher than this criterion, which confirms the unreasonableness of the assessment criterion proposed by PBA.

Notwithstanding consideration to the current operational noise levels within the facility, the correct approach to the selection of a target criterion is to adopt the guidance from Table 2 of BS 8233 for an open plan office, given that the call centre is predominantly an open plan space (see Figure 1, below). Therefore, the correct criterion to adopt in this case is 45–50dB $L_{Aeq,T}$, not 35-40dB $L_{Aeq,T}$ as suggested within the PBA report. The PBA report correctly identifies (at Section 2.3.1) that *'Workers within a call centre generally require an environment which has a sufficiently high background sound level to mask intruding speech'*, but the correct reference for this within BS 8233: 2014 is in relation to open plan offices, for which the applicable criterion is 45-50 dB $L_{Aeq,T}$. Quoting BS 8233: 2014 *"in some cases, such as open-plan offices..., a moderate noise level might provide making for acoustic privacy in shared spaces without causing disturbance, so upper and lower noise levels should be considered (see Table 2)."*

Table 2 **Indoor ambient noise levels in spaces when they are unoccupied and privacy is also important**

Objective	Typical situations	Design range $L_{Aeq,T}$ dB
Typical noise levels for acoustic privacy in shared spaces	Restaurant	40 – 55
	Open plan office	45 – 50
	Night club, public house	40 – 45
	Ballroom, banqueting hall	35 – 40
	Living room	35 – 40

NOTE See Noise control in building services [28] and BS EN ISO 3382.

Research (Kjellberg and Landstrom 1994)¹ shows the optimum level of steady background noise to preserve acoustic privacy is between 45dBA and 50dBA. This provides a good degree of speech masking, but is not so high as to be intrusive.

Publicly available information supports the assumption that Trinity House is dominated by open plan spaces as shown in Figure 1. Our review is therefore based upon the assumption that the internal operations shown in Figure 1 are typical of the area of the noise survey undertaken by PBA.

¹ Kjellberg, A., & Landström, U. (1994). Noise in the office: Part II - The scientific basis (knowledge base) for the guide. International Journal of Industrial Ergonomics, 14, 93-118.



Official Opening of Trinity House, Lowestoft. Heidi Mottram, Chief Executive of Essex & Suffolk Water. Officially opens the new building.

Figure 1: Inside Trinity House

It is noted that the criteria set out in BS 8233: 2014 apply to unoccupied spaces. Although there is no design range for internal noise levels within an occupied office, studies have been carried out on typical noise levels within occupied offices. Landström et al (1998)² measured L_{Aeq} levels with an average of 53 dB in offices. In Hong Kong, Tang and Wong (1998)³ surveyed workstations in six air-conditioned, landscaped offices, and found that the average L_{Aeq} levels in the six offices ranged from 52 to 58 dB.

In conclusion, the 35-40dB(A) target criterion proposed by PBA is not appropriate for open plan offices, even those used as a call centre. The correct target criterion is significantly higher, circa 45-50 dB(A) which takes into account the benefit of sound masking as appropriate in the interest of speech privacy within such spaces.

Measured Internal Ambient Noise Levels at Trinity House

The PBA report states that noise measurements were carried out within the call centre over two periods, i) in the evening when no staff were present and ii) during a typical working day. Reported measured noise levels were 33 dB $L_{Aeq,T}$ and 51 dB $L_{Aeq,T}$ respectively.

Section 3.3.11 of the PBA sound survey report states that *“The measurements were paused to exclude extraneous noise events occurring within the call centre (e.g. door closings, elevated speech).”* It is unclear whether this relates to the measurements taken during the evening (when no staff were present) or a typical working day. It is unlikely that this exclusion of events relates to the evening given that elevated speech would occur when staff are present. Therefore, assuming that these exclusions relate to measurements taken during the working day it is unclear why the decision was made to remove these events given that they form part of the typical noise climate within the call centre. It is therefore assumed that the actual noise levels are higher than reported and subsequently that the reported noise levels cannot be relied upon as being representative of the conditions at the time.

² Landström, U., Kjellberg, A., & Soderberg, L. (1998). Noise annoyance at different times of the working day. *Journal of Low Frequency Noise, Vibration and Active Control*, 17(1), 35-41.

³ Tang, S. K., & Wong, C. T. (1998). Performance of Noise Indices in Office Environment Dominated by Noise from Human Speech. *Applied Acoustics*, 55(4), 293-305.

The reported internal noise level of 33 dB $L_{Aeq,T}$ when no staff were present is well below the design range for an unoccupied open plan office (45 – 50dB $L_{Aeq,T}$). It is not clear from the PBA report whether this measured level includes operational air conditioning. As noted above, BS 8233: 2014 recognises that open plan offices require a moderate level of noise for acoustic privacy in shared spaces without causing disturbance, so upper and lower noise levels should be considered. Given that the measured noise level is some 12 to 17dB below the design range required to preserve acoustic privacy, one has to question whether the existing internal noise climate is appropriate for the maintenance of acoustic privacy (although it is noted that, given the operators within the call centre use headsets to make and receive calls (see Figure 1), the low ambient noise levels for privacy may be less relevant).

The PBA reported noise level of 51dB $L_{Aeq,T}$ within the occupied office at Trinity House is slightly lower than those found in previous studies of comparable office spaces. However, it is expected that the measured noise level would be higher had 'extraneous noise events' (as identified in the PBA report) been correctly included.

Measured External Ambient Noise Levels

It is unclear why external noise level measurements have been undertaken by PBA given that employees at the call centre are only subject to internal occupation. This facility is a modern office with air conditioning and ventilation provision, and staff work in a regulated environment, with sealed windows, and therefore benefit from the noise attenuation afforded by the fabric of the building façade. The acoustic weak point in the external façade will be the windows and this will determine the overall sound insulation performance of the façade. For double glazed windows, the sound insulation performance is assumed to be at least 30 to 35dB insulation as a minimum (30dB would be a very worst case). Given that the internal noise criterion (based on our analysis) is 45 to 50dB, it would take an external noise level of 75 to 80dB to exceed this criterion. Predicted noise levels from the Scheme are well below these levels.

At Measurement Locations P1 and P2 identified in the PBA report, unattended continuous measurements were undertaken above the roof of the facility. These locations are not representative of the potential impact at the facility (i.e. at the façades of Trinity House behind which are internal working areas). As noted above, the value of using the existing external noise level to consider noise impact within a modern office/call centre is questionable and the results of these surveys add nothing to the assessment of impacts at Trinity House.

In summary, it is clear that the arguments submitted by PBA for treating Trinity House as a receptor that is especially sensitive to noise do not hold water. The arguments are based on an incorrect interpretation of the internal noise criteria set out in BS 8233: 2014 and the measured internal and external noise levels at Trinity House do not provide any support to an argument for treating Trinity House as a sensitive receptor.

ASSESSMENT METHODOLOGY

The BCLP comments regarding clarity of the assessment procedures appear to be based on comments in the PBA report that query why construction noise, but not operational noise, was assessed at Trinity House, and also on comments relating to the presentation of traffic data.

The noise assessment methodology is clearly set out in both the scoping report and the ES. For clarification, the assessment methodologies are described below.

Scoping Report - Identification of Noise Sensitive Receptors

The operational traffic noise assessment reported in the ES has been undertaken following the methodology for a detailed assessment, as described in the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 7, HD 213/11 Revision 1 (2011). Impacts have been assessed to gain an overall appreciation of the noise climate, both with (Do-Something (DS)) and without (Do-Minimum (DM)) the Scheme. These results are used to identify where noise impacts occur and to determine where mitigation to reduce these impacts is required as well as qualifying the effects and whether significant or not.

In accordance with DMRB, the Scoping Report identifies potentially sensitive receptors on the basis of whether they are classed as 'Dwellings' or 'Other Receptors'. Other receptors are defined in DMRB as those that are particularly

sensitive to noise and include hospitals, schools, community facilities (such as places of worship, educational buildings and hospitals) etc.) Offices do not fall under any of the categories of sensitive receptors defined in DMRB and on that basis Trinity House has not been included as a sensitive receptor within the operational noise assessment detailed in the ES.

With regard to construction noise impacts, BS 5228-1: 2009+A1: 2014: *Code of Practice for Noise and Vibration Control on Construction and Open Sites*. Part 1: *Noise* provides a methodology for the estimation of likely construction noise levels. Within BS 5228-1 separate threshold criteria are provided for residential dwellings compared to offices and the limits for offices are higher to account for their reduced sensitivity to noise. To ensure that previous comments during statutory consultation raised by NWL (which were concerned solely with construction phase impacts) were fully accounted for, the construction noise assessment was revised to include Trinity House.

Operational and Construction Traffic Data

It is stated by PBA that construction traffic data is not provided within the ES. However, this is provided in Table 13-21 of the ES.

Table 13-21- Construction Traffic Data

Road Link	Pre-construction		During construction	
	Traffic Flow (18-hour AAWT)	Percentage Heavy Vehicles	Traffic Flow (18-hour AAWT)	Percentage Heavy Vehicles
Commercial Road	2,400	2%	2,487	6%
Waveney Drive	8,598	1.5%	8,652	2.1%

A substantial amount of operational traffic data is presented in Chapter 19 of the ES: Traffic and Transport. In particular, operational AADT traffic flows are presented in Figure 19.4 of the ES.

In summary, the assessment, including the identification of sensitive receptors, has been undertaken in accordance with the DMRB. The assessment methodology is clearly set out in both the Scoping Report and the ES. Traffic data is presented in the ES.

ASSESSMENT OF POTENTIAL IMPACTS AT TRINITY HOUSE

The BCLP comments regarding the adequacy of the assessment of impacts at Trinity House appear to be based on comments in the PBA report that the ES did not include an assessment of noise and vibration from the operation of the Bridge, or from operational traffic noise, at Trinity House and that the construction noise assessment was, in the view of PBA, inadequate. The PBA report also includes details of their own outline calculations and assessment, and comments on SCC's previous response to representations made by NWL. Each of these points is addressed below.

Operational Noise and Vibration from the Bridge

It is stated in the PBA report that no assessment of the potential noise and vibration impact of the proposed bascule bridge has been carried out within the ES.

DMRB states that for new roads and for existing roads maintained in good condition ground-borne vibration is very unlikely to be an issue. Groundborne vibration is generated by a sudden impart of energy into the ground, e.g. as associated with a wheel or axle dropping into a road defect such as a pothole or similar. By contrast, the Scheme would be new with smooth road surfaces, eliminating the potential for the generation of significant groundborne vibration, even in close proximity. The DMRB recognises that low frequency noise can cause light-weight elements of a structure to vibrate (known as 'airborne vibration'), and this has been fully assessed within the ES (sections 13.3.17, 13.5.72, and Appendix 13D), based on the predicted operational noise levels. The potential for airborne vibration impacts is limited to relatively close proximity to the scheme and if it does occur it tends only to be superficial and whilst it may be noticeable by occupiers, it is very unlikely to cause any structural or even cosmetic damage. The



DMRB provides an assessment method (which has been followed) limited to consideration of receptors within 40 metres from the source.

By contrast Trinity House is located at a distance of approximately 240m from the proposed bridge, 200m beyond the required distance for consideration of airborne vibration annoyance. At such distances, or where buildings are screened from the source, it is extremely unlikely that there would be any vibration impact through airborne or groundborne transmission.

A bascule bridge uses counterweights for operation and requires very little energy to operate – using small motors, generating little noise. On this basis, and given that the distance is 240m to Trinity House, noise from the operation of the bridge is not anticipated to give rise to a significant effect.

Similarly, the distance of 240m between Trinity House and the bridge means that noise from any warning signals are anticipated to have no significant effect at Trinity House. Highways standards require that warning signals are set at a level that is 10dB higher than the prevailing ambient noise level at the location of the signals. Propagation losses over a distance of 240m will mean that any noise from the warning signals will be substantially lower than the prevailing background at Trinity House.

Construction Effects

With the appropriate mitigation in place, including compliance with a full Code of Construction Practice (CoCP), a noise reduction of as much as 10dB can be achieved and a level below the Lowest Observed Adverse Effect Level (LOAEL) is anticipated externally to Trinity House. For all other activities predicted construction noise levels with mitigation are anticipated to be below the No Observed Adverse Effect Level (NOEL). Greater information is provided in Table 13-18 of the ES where these conclusions are presented.

Operational Effects

WSP is largely in agreement with the predicted noise level changes detailed in Table 4.1 of the PBA report, as associated with the introduction of the scheme. The actual predicted increases are 3.4dB in the long-term on the Waveney Road façade and 9.0dB in the long-term on the rear façade. However, in the case of an office facility, especially a modern facility with a sealed façade etc. (as in this case – see Figure 2 below), external noise level changes are not considered a good reflection of the likely impacts on the facility given that its use is centred on internal operations which benefit from the noise reduction associated with building façade. It is considered more appropriate to consider the resulting internal noise levels in absolute terms. This is confirmed through the approach of the PBA report to seek to determine appropriate internal target criteria and the undertaking of internal noise monitoring at the existing facility.

It is however of note that, after accounting for the predicted noise level changes (which are greatest at the rear façade), the resulting noise levels (in absolute terms) remain considerably lower at the rear façade than those which currently prevail on the front façade. It can therefore be concluded that during the operational phase of the Scheme, the internal noise levels on the rear façade will be lower than those which currently prevail on the front façade. It is therefore difficult to argue that Trinity House will be adversely affected.



Figure 2: Trinity House Featured in the 2015 RICS Awards

PBA's Response to Suffolk County Council's Comments

EN35

It is stated by PBA that mitigation measures have not yet been proposed to protect Trinity House. However, the Interim CoCP sets out the range of measures that will be included in the full CoCP to control and limit unacceptable noise and vibration and no additional operational phase mitigation is considered necessary.

EN36

The report states that there is no CRTN (Calculation of Road Traffic Noise) criterion that screens out road links where flows are modelled to be less than 1,000 vehicles in an 18-hour period. However, for flows between 50-200 veh/hr and between 1000-4000 veh/18-hour the CRTN road traffic noise level calculation method (as required to be applied by the DMRB) applies a 'low flow' correction. The lower limits of validity for this method are therefore 50 veh/h or 1000 veh/18-hour day. Below these flows predicted levels become unreliable because there is insufficient traffic volume to dictate the $LA_{10,18hr}$ road traffic noise index. Regardless, for flows below these volumes, traffic noise levels are sufficiently low not to be a significant interest to the completed study. It is therefore reasonable to screen out such routes a) because the associated levels are low, and b) because the ability to predict noise levels accurately is compromised.

Existing access to the Riverside Business Park, including Trinity House, is via Riverside Road and Canning Road. The Scheme would include the closure of Canning Road at its junction with Riverside Road, and the construction of a replacement road between Riverside Road and Canning Road and a new access road from Waveney Drive west of Riverside Road to provide access to property at Riverside Business Park. The report states that the dominant noise source at Trinity House is from vehicle movements on Waveney Drive, with distant traffic noise from the A12 dominating in the absence of movements on Waveney Drive, with no mention of traffic noise from Riverside Road. The traffic noise model has excluded Riverside Road from the assessment in the Do Minimum scenario due to low flow but has included this route for the Do Something scenario (with the Scheme). Noise levels at Trinity House in the model will therefore be influenced mainly by Waveney Drive in the DM scenario (with Riverside Road excluded), but including the contribution of both in the DS scenario. The result is therefore that the methodology used within the ES provides an overstated (worst case) change in noise level for Trinity House.

EN38

PBA is broadly in agreement with the previous response from SCC, however, the issue of operational noise associated with the proposed bridge is again raised. Reasons why this not a material issue are provided earlier in this report.

OTHER ISSUES

Noise Survey

With regard to the noise environment at Trinity House the Applicant has a number of concerns with the survey data presented by PBA. These points are summarised as follows:

- As discussed previously, PBA paused internal noise measurements “*to exclude extraneous noise events occurring within the call centre (e.g. door closings, elevated speech)*.” It is unclear why the decision was made to remove these events given that they form part of the typical noise climate within the call centre. It is assumed therefore that the actual noise levels with call centre activity are significantly higher than reported.
- Based on the full details of the attended survey within the call centre with general activity, the logarithmic average is 1dB higher than quoted in Table 4.4 of the PBA report, i.e. 52dB $L_{Aeq,T}$.
- Simultaneous façade and internal measurements:
 - These were carried out at various points around the building. At each location a 5-minute measurement period was used and this is not considered of sufficient length to provide a representative figure.
 - Internal noise levels within the open plan area are broadly similar, (at PBA reference locations A, B, C, G, H), with a range of 35-37dB. Whilst in the stairwell and meeting room the internal noise levels are much lower at 30-31dB. Given the modern design it is unlikely that the sound insulation of the building envelope differs to such a degree and therefore noise levels within the open plan area are likely to be influenced by other internal sources such as air conditioning extraction noise.
 - Measurement D was taken on a façade which is non-sensitive as it has no windows.
 - Measurements E and F were undertaken inside/outside a stairwell (non-sensitive areas) of Trinity House. It is unclear why such internal measurements were undertaken, and these are of little to no value in quantifying the noise environment within areas of the building that are subject to work related activities.
- The noise levels reported or the CRTN measurements within Appendix D of the report appear inaccurate and inconsistent. The quoted L_{A90} levels are higher than the L_{A10} levels, and the L_{AFmax} levels are lower than the L_{Aeq} levels. This is mathematically impossible and brings into question the accuracy of the reported data.

CONCLUSION

BCLP, acting on behalf of NWL, have raised the following concerns relating to noise and vibration:

- BCLP consider that SCC has failed to identify Trinity House as a sensitive receptor with respect to its operations and that this has resulted in a failure to adequately address likely operational noise impacts on Trinity House;
- BCLP consider that there is a lack of clarity in the assessment methodology undertaken by the applicant (SCC) and that this raises concerns over the adequacy of the assessment; and
- BCLP consider that there has been inadequate assessment of potential noise impacts on Trinity House during the construction of the Scheme.

The information presented in this memorandum demonstrates that:

- The arguments submitted by BCLP (and their advisors, PBA) for treating Trinity House as a receptor that is especially sensitive to noise and vibration are invalid and that Trinity House should not be treated as a sensitive receptor;



- The assessment methodology, as detailed in the ES, is clear and meets the requirements of the relevant regulations relating to Environmental Impact Assessment; and
- The assessment of potential noise impacts at Trinity House during the construction period is adequate, taking into account the relevant sensitivity of Trinity House.

The Applicant believes that the assessment presented within the ES is comprehensive and followed an appropriate methodology that was agreed with Waveney District Council and Suffolk County Council. However, additional consideration has been given to the points raised by NWL.

Comments on any potential for construction noise impact have previously been addressed, but notwithstanding this, Trinity House was added as a receptor within the completed assessment as reported within the ES and there will be no significant effect in the construction phase. Additional information has been provided to confirm that there would be no significant effect on the operation of Trinity House during the operational phase.

Keith Jefferson

Associate Director – Acoustics

Appendix J - B1531 Figures



Figure J-2 AM 2037 flow difference Do Something (With LLTC Scheme) vs Do Minimum (Without LLTC scheme)



Figure J-3 PM 2037 flow difference *Do Something (With LLTC Scheme)* vs *Do Minimum (Without LLTC scheme)*

