

# A63 Castle Street Improvement, Hull

## DCO Documents Errata

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5 August 2019

# A63 Castle Street Improvement, Hull

## DCO Documents Errata

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P01	10 May 2019	A Sadler	C Stott	J McKenna	S4	Shared
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# 1 Introduction

- 1.1.1 This Errata lists amendments to the Development Consent Order (DCO) documents which formed the A63 Castle Street Improvement, Hull application submitted to the Planning Inspectorate in September 2018. The Errata focuses upon corrections as opposed to typographical errors. Documents are presented in the order with which they were submitted for DCO.

## 2 6.1 Environmental Statement Volume 1 Main Text (APP-023)

Table 2.1: Environmental Statement Volume 1 Main Text

Page	Paragraph/ Table	Published text	Correction
37	2.5.2	<u>In totality the areas measure approximately: Option A 332,534m<sup>2</sup> (Arco) and Option B 332,157m<sup>2</sup> (Staples), which is around 33 hectares (see Sections <b>Error! Reference source not found.2.9.14 to Error! Reference source not found.2.9.15</b> for more details).</u>	<u>In totality the areas measure approximately: Option A 330,430m<sup>2</sup> (Arco) and Option B 332,157m<sup>2</sup> (Staples), which is around 33 hectares (see Sections <b>Error! Reference source not found.2.9.14 to Error! Reference source not found.2.9.15</b> for more details).</u>
37	2.5.3	<u>The permanent area of land required for the footprint of the Scheme (excluding the land needed temporarily during construction) measures approximately 79.926m<sup>2</sup>. The current land use for the permanent footprint for the Scheme is primarily the existing road, associated footways, cycleways, roadside verges and central reserve. The realignment of Mytongate Junction and the addition of slip roads however require additional permanent land take from the following sites as shown on Volume 2, Figure 2.3 Scheme Site Boundary. The approximate areas are as follows:</u> <ul style="list-style-type: none"> <li><u>· Arco Ltd - 3,501m<sup>2</sup></u></li> <li><u>· Staples - 10m<sup>2</sup></u></li> <li><u>· Kingston Retail Park - 937m<sup>2</sup></u></li> <li><u>· Trinity Burial Ground - 2,632m<sup>2</sup></u></li> <li><u>· Holiday Inn - 2,249m<sup>2</sup></u></li> </ul>	<u>The permanent area of land required for the footprint of the Scheme (excluding the land needed temporarily during construction) measures approximately 79.704m<sup>2</sup>. The current land use for the permanent footprint for the Scheme is primarily the existing road, associated footways, cycleways, roadside verges and central reserve. The realignment of Mytongate Junction and the addition of slip roads however require additional permanent land take from the following sites as shown on Volume 2, Figure 2.3 Scheme Site Boundary. The approximate areas are as follows:</u> <ul style="list-style-type: none"> <li><u>· Arco Ltd - 3,502m<sup>2</sup></u></li> <li><u>· Staples - 10m<sup>2</sup></u></li> <li><u>· Kingston Retail Park - 822m<sup>2</sup></u></li> <li><u>· Trinity Burial Ground - 2,632m<sup>2</sup></u></li> <li><u>· Holiday Inn - 2,249m<sup>2</sup></u></li> </ul>
38	2.5.4	<u>Land requiring permanent rights of access for maintenance and easement on land other than the public highway (in the vicinity of the Arco site and at Humber Dock Marina), totals approximately 23,551m<sup>2</sup>.</u>	<u>Land requiring permanent rights of access for maintenance and easement on land other than the public highway (in the vicinity of the Arco site and at Humber Dock Marina), totals approximately 5,138m<sup>2</sup>.</u>
38	2.5.5	<u>The Scheme Site also includes the land required temporarily to construct the Scheme. This land measures approximately 232,420m<sup>2</sup>. It includes the sites of the Myton Centre (approximately 4,400m<sup>2</sup>), Earl de Grey public house and Castle Buildings (approximately 968m<sup>2</sup>) and an area within the Humber Dock Marina (approximately 8,463m<sup>2</sup>).</u>	<u>The Scheme Site also includes the land required temporarily to construct the Scheme. This land measures approximately 233,291m<sup>2</sup>. It includes the sites of the Myton Centre (approximately 4,312m<sup>2</sup>), Earl de Grey public house and Castle Buildings (approximately 961m<sup>2</sup>) and an area within the Humber Dock Marina (approximately 8,463m<sup>2</sup>).</u>
49	2.6.38	<u>The bridge deck width would be 3m to allow for un-segregated foot and cycle use.</u>	<u>The bridge deck width would be 3m between parapets to allow for un-segregated foot and cycle use.</u>

Page	Paragraph/ Table	Published text	Correction				
53	2.6.50	<p><u>A combined footway and cycleway along the length of both sides of the A63 would be provided as shown on Volume 2, Figure 2.5 Sheets 2, 3 and 5 The Scheme proposals. The shared facility would generally be 3m wide, however there are some locations where space is restricted and the width would be reduced to a minimum of 2m as follows:</u></p> <ul style="list-style-type: none"> <li><u>· between Castle Buildings and Princes Quay car park on the north side of the A63 for approximately 55m</u></li> <li><u>· in front of Warehouse No. 6 (Ask restaurant) on the north side of the A63 for approximately 25m</u></li> <li><u>· in front of Humber Dock Marina, Holiday Inn and Trinity Burial Ground on the south side of the A63 for approximately 400m</u></li> <li><u>· adjacent to Kingston Retail Park and in front of Arco on the south side of the A63 for approximately 450m</u></li> </ul>	<p><u>A combined footway and cycleway along the north side of the A63 and along Blackfriargate would be provided as shown on Volume 2, Figure 2.5 Sheets 2, 3 and 5 The Scheme proposals. The shared facility would generally be 3m wide, however there are some locations where space is restricted and the width would be reduced to a minimum of 2m as follows:</u></p> <ul style="list-style-type: none"> <li><u>· in front of Castle Buildings for approximately 25m</u></li> <li><u>· from Castle Buildings east to the rear of Princes Quay car park for approximately 122m</u></li> <li><u>· from Castle Buildings west to the end of the Earl de Grey public house for approximately 55m</u></li> </ul>				
66	2.9.6	There is no traffic management requirement for phase 0.	Delete text				
317	Table 10.4 Non-statutory designated sites (row 13)	<table border="1"> <tr> <td>SNCI</td> <td>Foredyke stream cycle track - south of Chamberlain Road (177)</td> <td>No information provided</td> <td>1.6km northeast</td> </tr> </table>	SNCI	Foredyke stream cycle track - south of Chamberlain Road (177)	No information provided	1.6km northeast	Remove row 13 from table
SNCI	Foredyke stream cycle track - south of Chamberlain Road (177)	No information provided	1.6km northeast				
335	Table 10.8 Summary of valuation of ecological receptors, Ecological receptor column (row 3)	Trinity Burial Ground SNCI, River Hull SNCI	Trinity Burial Ground SNCI, River Hull SNCI, Mudflats to the south of Sammy's Point SNCI				
340	10.7.17	<p><u>River Hull SNCI</u>  Direct impacts to the River Hull SNCI are unlikely.</p>	<p><u>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</u>  Direct impacts to the River Hull SNCI and Mudflats to the south of Sammy's Point SNCI are unlikely.</p>				
347	10.7.54	<p><u>River Hull SNCI</u>  Road drainage would not discharge to the River Hull during the Operation Phase and there would therefore be no risks to water quality within the river.</p>	<p><u>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</u>  Road drainage would not discharge to the River Hull during the Operation Phase and would not impact upon the River Hull SNCI or Mudflats to the south of Sammy's</p>				

Page	Paragraph/ Table	Published text	Correction
			Point SNCI. There would therefore be no risks to water quality within the river.
351	Table 10.9 Characterisation process of ecological impacts	n/a	Replace Table 10.9 with revised Table 10.9 below. Impacts are separated into a column for construction and a column for operation as requested in WQ1.2.6 (new/revised text in red). Replacement table also takes into account changes arising from mudflats to the south of Sammy's Point SNCI as requested in WQ1.2.2 (new/revised text in red).
366	10.8.11	<i>River Hull SNCI</i> Neutral residual impacts are predicted to the River Hull SNCI during the Construction Phase, following the implementation of pollution protection mitigation measures.	<i>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</i> Neutral residual impacts are predicted to the River Hull SNCI and Mudflats to the south of Sammy's Point SNCI during the Construction Phase, following the implementation of pollution protection mitigation measures.
369	10.8.31	<i>River Hull SNCI</i> · With no increase in noise or air pollution and no water discharges into this river, there is predicted to be neutral residual impacts to the SNCI during operation.	<i>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</i> With no increase in noise or air pollution and no water discharges into this river, there is predicted to be neutral residual impacts to these SNCIs during operation.
372	Table 10.10 Summary of ecological receptors, Ecological receptor column (row 4)	River Hull SNCI	River Hull SNCI and Mudflats to the south of Sammy's Point SNCI
378	Table 10.10 Summary of ecological receptors, Ecological receptor column (row 11)	Aquatic Invertebrates Humber Estuary SSSI  River Hull SNCI	Aquatic Invertebrates Humber Estuary SSSI  River Hull SNCI  Mudflats to the south of Sammy's Point SNCI
<a href="#">385</a>	<a href="#">11.1.6</a>	<u>Impacts ranging from large / very large beneficial to very large adverse significance during construction include the alteration of ground elevations, which has the potential to alter flood routes depending on the scale and source of the flooding and the phase of construction. Impacts can be of adverse or beneficial significance depending on the location. Management of flood risk</u>	<u>Impacts ranging from very large beneficial to very large adverse significance during construction include the alteration of ground elevations, which has the potential to alter flood routes depending on the scale and source of the flooding and the phase of construction. Impacts can be of adverse or beneficial significance depending on the location. Management of flood risk during construction would be</u>

Page	Paragraph/ Table	Published text	Correction
		<u>during construction would be outlined in the OEMP and would include use of the Environment Agency’s Flood Warning service.</u>	<u>outlined in the OEMP (including the Flood Emergency Plan (FEP)) and would include use of the Environment Agency’s Flood Warning service</u>
386	11.1.10	<u>Alteration of ground elevations as a result of the Scheme result in a complex pattern of flooding impacts on the Humber floodplain primarily related to the presence of the underpass and the raising of road levels to the east and west of the underpass. Operation flood risk impacts range from large / very large beneficial to very large adverse significance depending on the location on the floodplain and the source and extent of the flooding.</u>	<u>Alteration of ground elevations as a result of the Scheme result in a complex pattern of flooding impacts on the Humber floodplain primarily related to the presence of the underpass and the raising/lowering of road levels to the east and west of the underpass. Operation flood risk impacts range from very large beneficial to very large adverse significance depending on the location on the floodplain and the source, extent and severity of the flooding.</u>
	11.1.11	<u>There is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team who consider an appropriate response, for example, the closure of the underpass. This response would be implemented by the local emergency services. This procedure has been updated and amended to reflect the particular requirements of flooding of the underpass. The revised procedure was written in consultation with relevant stakeholders including Highways England, the emergency services and the Humber Local Resilience Forum.</u>	<u>There is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team who consider an appropriate response, for example, the closure of the underpass. This response would be implemented by the local emergency services. This procedure has been updated and amended to reflect the particular requirements of flooding of the underpass. The revised procedure was written in consultation with relevant stakeholders including Highways England, the emergency services and the Humber Local Resilience Forum. The updated procedures include measures to enable physical closure of the underpass during flood events, including those events with minimal or no warning, such as a flood defence breach.</u>
	11.4.9	<u>. The Environment Agency, to discuss existing flood risk information including flood models; agree the approach to, and discuss the outcomes of, the flood risk assessment (FRA) (including the agreement on which flood scenarios to assess) and the water quality impact assessment; and to consult on the mitigation measures for flood risk and water quality impacts from the proposed discharge into the Humber. The Environment Agency was also consulted on the approach to and findings of the groundwater assessment, as well as the groundwater modelling approach. Following a meeting in August 2018 subsequent to a review of the draft</u>	<u>. The Environment Agency, to discuss existing flood risk information including flood models; agree the approach to, and discuss the outcomes of, the flood risk assessment (FRA) (including the agreement on which flood scenarios to assess) and the water quality impact assessment; and to consult on the mitigation measures for flood risk and water quality impacts from the proposed discharge into the Humber. The Environment Agency was also consulted on the approach to and findings of the groundwater assessment, as well as the groundwater modelling approach. Following a meeting in August 2018 subsequent to a review of the draft</u>



Page	Paragraph/ Table	Published text	Correction
		<u>FRA, the Environment Agency requested additional information on flood risk to be provided at a later date. These additional requirements are summarised in Volume 3, Appendix 11.9 Additional flood risk assessment information requirements.</u>	<u>FRA, the Environment Agency requested additional information on flood risk to be provided at a later date. These additional requirements are summarised in Volume 3, Appendix 11.9 Additional flood risk assessment information requirements. Detailed and regular consultation with the Environment Agency was ongoing prior to and during the DCO Examination process, the Statement of Common Ground<sup>1</sup> provides details of all consultation with the Environment Agency including the provision of additional information as outlined in Volume 3, Appendix 11.9 Additional flood risk information.</u>
<u>402</u>	<u>11.4.19</u>	<u>Consultation has taken place with HCC and the Environment Agency throughout the FRA to agree the scope of the assessment, the flood scenarios to be considered and to review the results of the impact assessment and discuss mitigation measures including emergency procedures.</u>	<u>Consultation has taken place with HCC and the Environment Agency prior to the DCO application and during the subsequent DCO Examination process to agree the scope of the assessment, the flood scenarios to be considered and to review the results of the impact assessment and discuss mitigation measures including emergency procedures. The consultation with the Environment Agency also highlighted the requirement to consider extreme (H++)<sup>2</sup> and the recently released UKCP18<sup>3</sup> climate change allowances. Furthermore, the Environment Agency requested specific consideration of the impacts of flood defences breaches on the Scheme. Details of this consultation are provided in the relevant Statement of Common Ground<sup>1</sup> and a list of the additional information provided is given in ES Volume 3, Appendix 11.9 Additional flood risk information.</u>
<u>403</u>	<u>11.4.20</u>	<u>The Environment Agency requested additional information on flood risk to be provided at a later date; these requirements are summarised in Volume 3, Appendix 11.9 Additional flood risk assessment information requirements.</u>	<u>The Environment Agency requested additional information on flood risk to be provided following the publication of the FRA with the DCO application. These requirements are summarised in Volume 3, Appendix 11.9 Additional flood risk assessment information requirements.</u>

<sup>1</sup> [Highways England's A63 Castle Street Improvement, Hull, TR010016, Statement of Common Ground \(SoCG\) with the Environment Agency](#)

<sup>2</sup> [Environment Agency \(2016\). Adapting to Climate Change: Advice for Flood and Coastal Erosion Risk Management Authorities](#)

<sup>3</sup> [Met Office \(2019\).UK Climate Projections \(UKCP18\). https://www.metoffice.gov.uk/research/collaboration/ukcp](https://www.metoffice.gov.uk/research/collaboration/ukcp)

Page	Paragraph/ Table	Published text	Correction						
403	<a href="#">Table 11.4: Flooding scenarios considered in the FRA</a>	<table border="1"> <tr> <td>Tidal (undefended) from Humber Estuary</td> <td>These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.</td> <td>1 in 200 1 in 200 plus climate change<sup>1</sup></td> </tr> </table>	Tidal (undefended) from Humber Estuary	These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.	1 in 200 1 in 200 plus climate change <sup>1</sup>	<table border="1"> <tr> <td>Tidal (undefended) from Humber Estuary</td> <td>These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.</td> <td>1 in 200 1 in 200 plus climate change 1 in 200 plus H++ climate change</td> </tr> </table>	Tidal (undefended) from Humber Estuary	These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.	1 in 200 1 in 200 plus climate change 1 in 200 plus H++ climate change
Tidal (undefended) from Humber Estuary	These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.	1 in 200 1 in 200 plus climate change <sup>1</sup>							
Tidal (undefended) from Humber Estuary	These scenarios consider tidal flooding from the Humber Estuary if the existing Humber flood defences were not in place.	1 in 200 1 in 200 plus climate change 1 in 200 plus H++ climate change							
403	<a href="#">Table 11.4: Flooding scenarios considered in the FRA</a>	n/a	<p><b>Add row:</b></p> <table border="1"> <tr> <td>Humber north bank defence breaches</td> <td>These scenarios consider breaches of the existing Humber north bank tidal flood defences at four locations within the study area. These scenarios are based on information supplied by Hull City Council</td> <td>1 in 200 plus climate change</td> </tr> </table>	Humber north bank defence breaches	These scenarios consider breaches of the existing Humber north bank tidal flood defences at four locations within the study area. These scenarios are based on information supplied by Hull City Council	1 in 200 plus climate change			
Humber north bank defence breaches	These scenarios consider breaches of the existing Humber north bank tidal flood defences at four locations within the study area. These scenarios are based on information supplied by Hull City Council	1 in 200 plus climate change							
417	<a href="#">11.5.38</a>	<p>According to the SFRA, the city of Hull, and the Scheme are protected from flooding by the existing Humber Estuary and River Hull flood defences. The Humber Estuary defences generally provide a standard level of protection to a 1 in 200-year event, but in some areas, for example, to the east of Albert Dock East the level of protection falls to a 1 in 5-year event. New flood defences have been installed in Albert Dock (completed in November 2015) which provide a standard level of protection to a 1 in 200-year event. The River Hull defences generally provide a standard level of protection greater than a 1 in 200-year event.</p>	<p>According to the SFRA, the city of Hull, and the Scheme are protected from flooding by the existing Humber Estuary and River Hull flood defences. The Humber Estuary defences generally provide a standard level of protection to a 1 in 200-year event, but in some areas, for example, to the east of Albert Dock East the level of protection falls to a 1 in 5-year event. New flood defences have been installed in Albert Dock (completed in November 2015) which provide a standard level of protection to a 1 in 200-year event. The River Hull defences generally provide a standard level of protection greater than a 1 in 200-year event. The Environment Agency currently have a scheme under construction (the Humber Hull Frontages<sup>4</sup>) to install and upgrade 7km of flood defences on the north bank of the Humber at Hull from St. Andrew's Quay to Victoria Dock. This scheme will improve the standard of protection to the defences in the study area to 1 in 200 years plus an allowance for climate change to 2040. Climate change effects beyond 2040 will be addressed through a 'managed adaptive' approach with the defences designed and constructed to facilitate easier upgrades in the future. The Humber Hull Frontages scheme is scheduled for completion in March 2021.</p>						
418	<a href="#">11.5.42</a>	<p>Predictions from the flood risk model developed for Volume 3 Appendix 11.2 Flood risk assessment confirm that under baseline conditions:</p> <ul style="list-style-type: none"> <li>There are some isolated areas of minor surface water flooding to the north and east of the Scheme. There</li> </ul>	<p>Predictions from the flood risk model developed for Volume 3 Appendix 11.2 Flood risk assessment confirm that under baseline conditions:</p> <ul style="list-style-type: none"> <li>There are some isolated areas of minor surface water flooding to the north and east of the Scheme. There</li> </ul>						

<sup>4</sup> <https://consult.environment-agency.gov.uk/yorkshire/humber-hull-frontages/>

Page	Paragraph/ Table	Published text	Correction
		<p><u>was no predicted surface water flooding within the Scheme area.</u></p> <ul style="list-style-type: none"> <li><u>· In the vicinity of the Scheme Site, predicted flooding under a 1 in 200-year return period wave overtopping event from the Humber Estuary reaches the periphery of the Scheme area resulting in flooding to the west and south of Mytongate Junction and parts of Kingston Retail Park. This assumes the existing Humber flood defences are in place and the Albert Dock gate is closed.</u></li> <li><u>· Without the Humber north bank flood defences, the extent of flooding under a 1 in 200-year return period tidal event is widespread with significant areas of Hull affected. Flood depths reach a maximum of 1.2m along the existing A63.</u></li> <li><u>· The failure of the Hull Tidal Surge Barrier to close would result in extensive flooding west of the River Hull (the flood risk model does not consider the area to the east of the River Hull) under a tidal event with a return period of 1 in 200-years. The A63 east of Mytongate Junction is flooded up to a maximum of 1m in places with flooding extending north of Mytongate Junction to Ferensway and Anlaby Road. It is noted that the failure of the Hull Tidal Surge Barrier to close during a high tide event is extremely unlikely as it is fitted with a system to automatically close the barrier if the power fails.</u></li> </ul>	<p><u>was no predicted surface water flooding within the Scheme area.</u></p> <ul style="list-style-type: none"> <li><u>· Predicted flooding under a 1 in 200-year return period wave overtopping event from the Humber Estuary reaches the Scheme area resulting in flooding of the A63 to the east of Mytongate Junction and parts of Kingston Retail Park. During such an event, the underpass would be flooded. This assumes the existing Humber flood defences are in place and the Albert Dock gate is closed.</u></li> <li><u>· Without the Humber north bank flood defences, the extent of flooding under a 1 in 200-year return period tidal (i.e. undefended) event is widespread with significant areas of Hull and all of the Scheme site area affected. Flood depths reach a maximum of 0.38m along the existing A63.</u></li> <li><u>· The failure of the Hull Tidal Surge Barrier to close would result in extensive flooding west of the River Hull (the flood risk model does not consider the area to the east of the River Hull) under a tidal event with a return period of 1 in 200-years. The A63 to east of Mytongate Junction is flooded up to a maximum of 0.47m in places with flooding extending north of Mytongate Junction to Ferensway and Anlaby Road. It is noted that the failure of the Hull Tidal Surge Barrier to close during a high tide event is extremely unlikely as it is fitted with a system to automatically close the barrier if the power fails.</u></li> </ul>
439	11.6.17	<p><u>Mitigation of extreme flooding impacts from tidal, fluvial and pluvial sources during construction should be considered in the OEMP. The construction of the underpass would create excavations where construction workers and plant would be at risk. Standby temporary pumping arrangements may be required to remove any flood water and this would be subject to best practice guidance to control discharges to sewer or surface waters. Emergency and evacuation procedures would be incorporated into the OEMP in response to all sources of flooding and would include use of the Environment Agency Flood Warning service.</u></p>	<p><u>Mitigation of extreme flooding impacts from tidal, fluvial and pluvial sources during construction should be considered in the OEMP and detailed in a Flood Emergency Plan (FEP) prior to construction. The construction of the underpass would create excavations where construction workers and plant would be at risk. Standby temporary pumping arrangements may be required to remove any flood water and this would be subject to best practice guidance to control discharges to sewer or surface waters. Emergency and evacuation procedures would be incorporated into the OEMP and FEP in response to all sources of flooding and would include use</u></p>

Page	Paragraph/ Table	Published text	Correction
			of the Environment Agency Flood Warning service.
442	11.6.35	<p>For extreme tidal flooding events such as those witnessed on 5 December 2013, there is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team at the North East Regional Control Centre (NERCC) who consider an appropriate response, for example, the closure of the underpass. This procedure is currently being reviewed for the Scheme. The Flood Emergency Evacuation Plan Report is appended to Volume 3, Appendix 11.2 Flood risk assessment. A summary of the key aspects of the Plan are provided below:</p> <ul style="list-style-type: none"> <li>Upon receipt of a flood alert, personnel from the Area Maintenance Team (AMT) and key assets (including a high-volume pump owned by Highways England) will be put on 'standby' for deployment.</li> <li>Upon receipt of a flood warning, the NERCC will monitor the underpass via CCTV, variable message signs (VMS) will be activated to direct traffic away from the underpass and personnel from the AMT will be moved closer to the underpass to put in place a physical road closure, if required.</li> <li>Upon receipt of a severe flood warning, the high-volume pump will be moved to the underpass and a physical road closure will be put in place by the AMT personnel. VMS will direct traffic away from the underpass and long pre-agreed strategic diversion routes. The underpass will be monitored via CCTV.</li> <li>All relevant measures outlined above would remain in place until a 'Warnings no longer in force' notification is issued by the Environment Agency.</li> <li>The underpass pumping station would have high volume alarms to alert the NERCC to pump failure, which would trigger the above closure responses, if required. This would only be required in the event of a failure of all other warnings and</li> </ul>	<p>For extreme tidal flooding events such as those witnessed on 5 December 2013, there is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team at the North East Regional Control Centre (NERCC) who consider an appropriate response, for example, for the closure of the underpass. This procedure has been reviewed and revised (in consultation with the Environment Agency, Hull City Council, the emergency services and Highways England) for the Scheme. The Flood Emergency Evacuation Plan Report is appended to Volume 3, Appendix 11.2 Flood risk assessment. A summary of the key aspects of the Plan are provided below:</p> <ul style="list-style-type: none"> <li>Upon receipt of a flood alert, personnel from the Area Maintenance Team (AMT) and key assets (including a temporary, mobile, high-volume pump owned by Highways England) will be put on 'standby' for deployment.</li> <li>Upon receipt of a flood warning, the NERCC will monitor the underpass via CCTV, variable message signs (VMS) will be activated to direct traffic away from the underpass and personnel from the AMT will be moved closer to the underpass to put in place a physical road closure, if required.</li> <li>Upon receipt of a severe flood warning, the high-volume pump will be moved to the underpass and a physical road closure will be put in place by the AMT personnel. VMS will direct traffic away from the underpass and long pre-agreed strategic diversion routes. The underpass will be monitored via CCTV.</li> <li>The FEEP also includes procedures to be rapidly put in place and the underpass closed, in the event of a minimal or no warning flood event such as a defence breach.</li> <li>All relevant measures outlined above would remain in place until a 'Warnings no longer in force' notification is issued by the Environment Agency. During the recovery phase, the temporary, high-</li> </ul>

Page	Paragraph/ Table	Published text	Correction
		<p><u>would provide a last chance warning of flooding of the underpass.</u></p> <ul style="list-style-type: none"> <li><u>The plan would be under the ownership of Highways England with a review every 2 years.</u></li> </ul>	<p><u>volume pumps will be deployed in combination with the underpass surface water pumping station to drain the underpass of flood waters. Following this, the AMT will clear the carriageway and an assessment will be made as to whether the underpass can safely be re-opened to traffic.</u></p> <ul style="list-style-type: none"> <li><u>The underpass pumping station would have high volume alarms to alert the NERCC to pump failure, which would trigger the above closure responses, if required. This would only be required in the event of a failure of all other warnings and would provide a last chance warning of flooding of the underpass.</u></li> <li><u>The plan would be under the ownership of Highways England with a review every 3 years.</u></li> </ul>
443	11.6.36	<p><u>The flood defences at Albert Dock have been upgraded by the Environment Agency in 2015 which provides a 1 in 100 to 1 in 200-year standard of protection. Furthermore, there are current proposals to upgrade remaining sections of the Humber North Bank flood defences as part of the £42m Humber Hull Frontages projects. The standard of protection of the Scheme would be for a return period of 1 in 200 years with an allowance for climate change to the 2040s. The remaining climate change allowance would be accounted for with a 'managed adaptive approach' which would allow for easier upgrading of the defences in the future. Further details will be provided in line with Volume 3, Appendix 11.9 Additional flood risk information requirements.</u></p>	<p><u>The flood defences at Albert Dock have been upgraded by the Environment Agency in 2015 which provides a 1 in 100 to 1 in 200-year standard of protection. Furthermore, the Humber Hull Frontages<sup>4</sup> defence upgrade scheme is currently under construction and scheduled for completion in 2021. The standard of protection of the Scheme would be increased to a return period of 1 in 200 years with an allowance for climate change to the 2040s. The remaining climate change allowance would be accounted for with a 'managed adaptive approach' which would allow for easier upgrading of the defences in the future. Further details are provided in line with Volume 3, Appendix 11.2 Flood risk assessment.</u></p>
455	Table 11.15: Significance of potential residual impacts on surface water features during construction	n/a	<p><u>Amend Table 11.15 row "Changes in flood flow routes due to alteration of ground elevations and construction of structures" as below. (New text in red).</u></p>
486	11.7.68	<p><u>A summary of the impacts is provided in Table 11.16 for scenarios with the greatest impact for a given flooding</u></p>	<p><u>A summary of the impacts is provided in Table 11.18 for scenarios with the greatest impact for a given flooding</u></p>

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		<u>source. The magnitude of the impact is defined in Table 11.2 and significance in Table 11.3. Climate change impacts are discussed in Section 11.8.</u>	<u>source. The magnitude of the impact is defined in Table 11.2 and significance in Table 11.3. Climate change impacts are discussed in Section 11.8. Furthermore, the spatial pattern and magnitude of impact is dependent on the inclusion or exclusion of the central vertical concrete barrier (VCB) along the mainline within the Scheme. Table 11.18 presents a summary of impacts for both scenarios, i.e. VCB included in the Scheme and VCB excluded from the Scheme. The assessment provided in the paragraphs below is based on scenarios with the VCB included.</u>
487	Table 11.18 Summary of magnitude of peak	n/a	Replace Table 11.18 with revised Table 11.18 below, <del>in accordance with comments on WQ1.10.9</del>
<u>489</u>	<u>11.7.70</u>	<u>Flooding to the Scheme from a 1 in 200-year return period wave overtopping event from the Humber is predicted to reach the periphery of the Scheme study area, which would result in some increased flooding in Queen's Gardens resulting in an impact of moderate adverse magnitude (Table 11.18).</u>	<u>During a 1 in 200-year return period wave overtopping event from the Humber flooding is predicted to reach the Scheme area and flood the A63 carriageway east of Mytongate Junction as well as flooding the underpass itself. Areas to the north and south of the eastern extent of the Scheme as well as Queen's Gardens and Kingston Retail Park would have increased flooding resulting in an impact of major adverse magnitude (Table 11.18).</u>
<u>490</u>	<u>11.7.71</u>	<u>Conversely to the above, the Scheme decreases maximum predicted flood depths within the boundary of the Scheme Site resulting in an impact of minor beneficial magnitude (Table 11.18).</u>	<u>Conversely to the above, the Scheme decreases maximum predicted flood depths within the boundary of the Scheme Site as well as in areas to the north of Mytongate Junction resulting in an impact of major beneficial magnitude (Table 11.18).</u>
<u>490</u>	<u>11.7.72</u>	<u>Flooding from a wave overtopping event from the Humber for a 1 in 1000-year event is predicted to extend north of the Scheme Site beyond Hull Royal Infirmary and to flood the proposed underpass. Under this scenario, predicted maximum flood depths in the underpass structure and westbound exit slip road are 6m and 2.05m respectively; an impact of major adverse magnitude (Table 11.18). There is a predicted increase in flood depth in the Kingston Retail Park car park under the Scheme scenario of 0.40m; an impact of minor adverse magnitude (Table 11.18). The proposed underpass would prevent some flood water extending northwards</u>	<u>Flooding from a wave overtopping event from the Humber for a 1 in 1000-year event is predicted to extend north of the Scheme Site beyond Hull Royal Infirmary and to flood the proposed underpass. Under this scenario, predicted maximum flood depths in the underpass structure and westbound exit slip road are 5.8m and 2.05m respectively; an impact of major adverse magnitude (<b>Error! Reference source not found.</b>Table 11.18). There is a predicted increase in flood depth in the Kingston Retail Park car park under the Scheme scenario of 0.30m; an impact of major adverse magnitude (<b>Error! Reference source not found.</b>Table 11.18). Increases in flood</u>

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		<p><u>past Mytongate Junction resulting in a decrease in predicted flood depth by up to 0.1m in the area between Anlaby Road and Castle Street; an impact of moderate beneficial magnitude (Table 11.18). Impacts of minor beneficial magnitude also occur within the Scheme Site Boundary (not including the underpass and westbound exit slip road) due to an increase in ground levels. Impacts of minor beneficial magnitude also occur in areas to the north-west of St Stephen's Shopping Centre.</u></p>	<p><u>depth of a major adverse magnitude are also present south of the Scheme to the west of the underpass (around Waverley Street and Kingston Retail Park) and moderate to major adverse magnitude to the south of the eastern extent of the Scheme (around Blanket Row and Blackfriargate). The proposed underpass would prevent some flood water extending northwards past Mytongate Junction resulting in a decrease in predicted flood depth by up to 0.2m in the area around Myton Street; an impact of major beneficial magnitude (Error! Reference source not found.Table 11.18). Impacts of major beneficial magnitude also occur within the Scheme Site Boundary (not including the underpass and westbound exit slip road) due to an increase in ground levels. Impacts of major beneficial magnitude also occur in areas to the of the Scheme including Princes Dock, Market Place and the surrounding streets.</u></p>
490	11.7.73	<p><u>Tidal flooding of the Scheme from the River Hull could occur in the event of the Hull Tidal Surge Barrier failing to close. This is unlikely as it incorporates a system to automatically close the barrier in the event of a power failure. However, if the barrier failed to close, under a 1 in 200-year event the underpass structure would be flooded to a predicted maximum depth of 3.4m and the westbound diverging slip road would be flooded to a maximum depth of 0.65m; both impacts of major adverse magnitude (Error! Reference source not found.Table 11.18). Consequently, the presence of the underpass has the effect of preventing flood flows reaching the area north and west of Mytongate Junction, particularly around the Junction of Ferensway and Anlaby Road as well as the area south of Mytongate Junction (Kingston Retail Park car park and Trinity Burial Grounds) removing flood waters in both of these locations, resulting in an impact of moderate beneficial magnitude (Error! Reference source not found.Table 11.18). There would be a predicted increase in maximum flood depths in the Humber and Railways Docks resulting in an impact of minor adverse magnitude (Error! Reference source not found.Table 11.18). Consequently,</u></p>	<p><u>Tidal flooding of the Scheme from the River Hull could occur in the event of the Hull Tidal Surge Barrier failing to close. This is unlikely as it incorporates a system to automatically close the barrier in the event of a power failure. However, if the barrier failed to close, under a 1 in 200-year event the underpass structure would be flooded to a predicted maximum depth of 3.4m and the westbound diverging slip road would be flooded to a maximum depth of 0.65m; both impacts of major adverse magnitude (Error! Reference source not found.Table 11.18). Consequently, the presence of the underpass has the effect of preventing flood flows reaching the area north and west of Mytongate Junction, particularly around the Junction of Ferensway and Anlaby Road as well as the area south of Mytongate Junction (Kingston Retail Park car park and Trinity Burial Grounds) removing flood waters in both of these locations, resulting in an impact of major beneficial magnitude (Error! Reference source not found.Table 11.18). There would be a predicted increase in maximum flood depths in Princes Dock resulting in an impact of major adverse magnitude although levels in the Humber and Railway Docks would be reduced resulting in an impact of major beneficial magnitude (Error! Reference source not</u></p>

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		<u>flood flows are diverted towards the Princes Quay water body, with a predicted maximum flood depth of 0.60m in the water body; an impact of moderate adverse magnitude (Error! Reference source not found.Table 11.18).</u>	<u>found.Table 11.18). Streets to the north and south of the eastern Scheme extent would see flood depth increases ranging from moderate to major adverse magnitude.</u>
<u>490</u>	<u>11.7.74</u>	<u>The predicted impact of the Scheme on tidal flooding from the River Hull under a 1 in 1000-year event with the Hull Tidal Surge Barrier failing to close results in the same impact magnitudes as described above for the 1 in 200-year event. The more extensive flooding (greater predicted flood depths) in this event result in the flooding of Humber and Railway docks, with an increase in predicted flood depth of 1.03m under the Scheme scenario; an impact of major adverse magnitude (Error! Reference source not found.Table 11.18). Under this scenario, the proposed underpass is completely flooded with flood waters beginning to extend westwards along the A63. However, the extent of beneficial effects is greater south of the existing A63, in Kingston Retail Park and areas to the north of the A63 around St Luke's Street and Osborne Street resulting in an impact of moderate beneficial magnitude.</u>	<u>The predicted impact of the Scheme on tidal flooding from the River Hull under a 1 in 1000-year event with the Hull Tidal Surge Barrier failing to close results is similar to that described above for the 1 in 200-year event. Impacts of moderate and major adverse magnitude are predicted in areas to the south-east and south-west of the underpass respectively (Error! Reference source not found.Table 11.18). Under this scenario, the proposed underpass is completely flooded with flood waters beginning to extend westwards along the A63. However, the extent of beneficial effects is greater in areas to the north of the A63 around St Luke's Street and Osbourne Street resulting in an impact of major beneficial magnitude. Under this scenario, there is no beneficial impact at Humber Dock Marina. The magnitude of the adverse impact is reduced to moderate adverse at Princes Dock compared to large adverse for the 1 in 200-year event.</u>
<u>495</u>	<u>Table 11.20: Significance of potential residual impacts on surface water features during operation</u>	<u>n/a</u>	<u>Amend Table 11.20 row "Alteration of flood flow routes due to the changes in ground levels and construction of structures" as below. (New text in red).</u>
<u>503</u>	<u>11.8.1</u>	<u>Conversely, the impact of climate change on rising sea levels and wave height has significant effects on the flooding in Hull. Sea levels are predicted to increase by 1.125m between 2011 and 2125 and wave heights are expected to increase by 10%. When incorporating climate change impacts into the flood risk predictions for the 1 in 200-year return period wave overtopping from the Humber Estuary, the area of the flooding extends well beyond the</u>	<u>Conversely, the impact of climate change on rising sea levels and wave height has significant effects on the flooding in Hull. Sea levels are predicted to increase by 1.125m between 2011 and 2115 and wave heights are expected to increase by 10%. When incorporating climate change impacts into the flood risk predictions for the 1 in 200-year return period wave overtopping from the Humber Estuary, the area of the flooding extends well beyond the</u>



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		<u>boundaries of the Scheme Site reaching depths of up to 1.20m in the study area.</u>	<u>boundaries of the Scheme Site reaching depths of up to 1.20m in the study area.</u>
<u>504</u>	<u>11.8.1</u>	<u>n/a</u>	<p>Add as follows:</p> <ul style="list-style-type: none"> <li><u>Extreme (H++)<sup>2</sup> allowances for the effects of climate change on sea level rise were considered for 'undefended' tidal flooding from the Humber Estuary. The extent of flooding and magnitude of impacts as a result of the Scheme were similar to those for the 1 in 200-year undefended tidal flooding from the Humber Estuary.</u></li> <li><u>Revised climate change allowances for mean sea level rise were released in December 2018, known as UKCP18<sup>3</sup>. Further information on these allowances is provided in Volume 3 Appendix 11.2 Flood Risk Assessment.</u></li> </ul>
<u>507</u>	<u>11.10.1</u>	<u>An exception to this is that alterations of ground elevations during construction would alter flood flow routes and result in potential residual impacts ranging from very large adverse in some areas to large / very large beneficial significance in other areas on the Humber floodplain.</u>	<u>An exception to this is that alterations of ground elevations during construction would alter flood flow routes and result in potential residual impacts ranging from very large adverse in some areas to very large beneficial significance in other areas on the Humber floodplain.</u>
<u>508</u>	<u>11.10.6</u>	<u>There is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team who consider an appropriate response, for example, the closure of the underpass. This response would be implemented by the local emergency services. This procedure has been updated and amended to reflect the particular requirements of flooding of the underpass. The revised procedure was written in consultation with relevant stakeholders including Highways England, the emergency services and the Humber Local Resilience Forum.</u>	<u>There is an existing procedure in place whereby flood alerts from the Environment Agency are issued to the Highways England Emergency Planning team who consider an appropriate response, for example, the closure of the underpass. This response would be implemented by the Area Maintenance Team on behalf of Highways England. This procedure has been updated and amended to reflect the particular requirements of flooding of the underpass. The revised procedure was written in consultation with relevant stakeholders including Highways England, the emergency services and the Humber Local Resilience Forum. These revised procedures, known as the Flood Emergency and Evacuation Plan, include measures to enable the safe and rapid physical closure of the underpass in the event of a minimal or no warning flood event, such as a flood defence breach.</u>
<u>592</u>	<u>Table 14.8 Private property</u>	<u>1A. Arco Ltd</u>	<u>1A. Arco Ltd</u>

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	<u>and associated land take – predicted effects/row 2</u>	<u>Temporary land take at Arco Ltd (Option A):</u> <u>Option A would involve the site currently held by Arco Ltd being used as a bentonite farm / concrete batching plant / materials treatment / jet grouting compound. In this scenario, a total of 14,407m<sup>2</sup> temporary land take is likely to be required. This is the preferred site for the compound.</u>	<u>Temporary land take at Arco Ltd (Option A):</u> <u>Option A would involve the site currently held by Arco Ltd being used as a bentonite farm / concrete batching plant / materials treatment / jet grouting compound. In this scenario, a total of 14,409m<sup>2</sup> temporary land take is likely to be required. This is the preferred site for the compound.</u>
592	<u>Table 14.8 Private property and associated land take – predicted effects/row 4</u>	<u>Permanent land take at Arco Ltd (Option A): If the Arco site is used, it is anticipated that there will be approximately 3,501m<sup>2</sup> of permanent land take at Arco Ltd and 1,764m<sup>2</sup> of 'permanent rights' required.</u>	<u>Permanent land take at Arco Ltd (Option A): If the Arco site is used, it is anticipated that there will be approximately 3,502m<sup>2</sup> of permanent land take at Arco Ltd and 1,766m<sup>2</sup> of 'permanent rights' required.</u>
592	<u>Table 14.8 Private property and associated land take – predicted effects/row 5</u>	<u>Temporary land take at Staples site (Option A):</u> <u>Option A: If the Arco site is used, the Staples site would experience 71m<sup>2</sup> of temporary land take and the buildings would not be demolished.</u>	<u>Temporary land take at Staples site (Option A):</u> <u>Option A: If the Arco site is used, the Staples site would experience 108m<sup>2</sup> of temporary land take and the buildings would not be demolished.</u>
594	<u>Table 14.8 Private property and associated land take – predicted effects/row 20</u>	<u>Temporary land take at the Myton Centre: Land take would be required at the Myton Centre of 3,994m<sup>2</sup>.</u> <u>It is proposed the site will be used as a temporary car park for contractor staff working. It will be used for the full 5-year construction period.</u> <u>Current land use: HCC property.</u>	<u>Temporary land take at the Myton Centre: Land take would be required at the Myton Centre of 4,312m<sup>2</sup>.</u> <u>It is proposed the site will be used as a temporary car park for contractor staff working. It will be used for the full 5-year construction period.</u> <u>Current land use: HCC property.</u>
595	<u>Table 14.8 Private property and associated land take – predicted effects/row 24</u>	<u>Temporary land take at Kingston Retail Park (Option A): It is anticipated that 6,737m<sup>2</sup> will be acquired for the project from the Kingston Retail Park under Option A (Arco). This would involve the loss of parking spaces impacting on retail outlets ability to trade</u>	<u>Temporary land take at Kingston Retail Park (Option A): It is anticipated that 6,733m<sup>2</sup> will be acquired for the project from the Kingston Retail Park under Option A (Arco). This would involve the loss of parking spaces impacting on retail outlets ability to trade</u>
595	<u>Table 14.8 Private property and associated land take – predicted effects/row 26</u>	<u>Permanent land take at Kingston Retail Park (Option A): 937m<sup>2</sup> likely to be acquired. Due to the constraints of the Scheme corridor, land-take from Kingston Retail Park is unavoidable.</u> <u>The Scheme footprint has been reduced as much as possible but operational and safety requirements dictate that some parking spaces would be permanently</u>	<u>Permanent land take at Kingston Retail Park (Option A): 822m<sup>2</sup> likely to be acquired. Due to the constraints of the Scheme corridor, land-take from Kingston Retail Park is unavoidable.</u> <u>The Scheme footprint has been reduced as much as possible but operational and safety requirements dictate that some parking spaces would be permanently</u>

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		<u>lost, potentially impacting on the ability of the retail outlets located there to trade as before.</u>	<u>lost, potentially impacting on the ability of the retail outlets located there to trade as before.</u>
609	15.1.4	<u>Provisions for NMUs as part of the operational scheme include new combined footway and cycleway facilities, pedestrian, cycle and disabled user bridges at Porter Street and Princes Quay, signalised crossings at Mytongate Junction and a reconfigured ramp from the A63 to High Street.</u>	<u>Provisions for NMUs as part of the operational scheme include new combined footway and cycleway facilities to the north of the A63 and along Blackfriargate, improving the footway to the south of the A63, pedestrian, cycle and disabled user bridges at Porter Street and Princes Quay, signalised crossings at Mytongate Junction and a reconfigured ramp from the A63 to High Street.</u>
631	15.7.4	<u>To the east of Mytongate Junction, existing signalised crossings close to Humber Dock Street and at Market Place would be maintained until phase 3, whilst improvements would be made to High Street for NMUs (as detailed in 15.6.8 below) during phase 0.</u>	<u>To the east of Mytongate Junction, existing signalised crossings across the A63 close to Humber Dock Street and at Market Place would be maintained until phase 3, whilst improvements would be made to High Street for NMUs (as detailed in 15.6.8 below) during phase 0.</u>
632	15.7.4	<u>A free 'shuttle bus' service would also be provided during construction, and this would pick up and drop off NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</u>	<u>A free 'shuttle bus' service would also be provided if feasible during construction, and this would pick up and drop off NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</u>
632	15.7.6	<u>A combined footway and cycleway would be provided on both sides of the A63, along its length. This is shown on Volume 2, Figure 15.2. The shared facility would generally be 3m wide, however there are some locations where space is restricted and the width would be reduced to a minimum of 2m as follows:</u> <ul style="list-style-type: none"> <li><u>· between Castle Buildings and Princes Quay car park on the north side of the A63 for approximately 55m</u></li> <li><u>· in front of Warehouse No. 6 (Ask restaurant) on the north side of the A63 for approximately 25m</u></li> <li><u>· in front of Humber Dock Marina, Holiday Inn and Trinity Burial Ground on the south side of the A63 for approximately 400m</u></li> <li><u>· adjacent to Kingston Retail Park and in front of Arco on the south side of the A63 for approximately 450m</u></li> </ul>	<u>A combined footway and cycleway would be provided to the north of the A63 and along Blackfriargate, whilst the footway to the south of the A63 would be improved. This is shown on Volume 2, Figure 15.2. The shared facility would generally be 3m wide, however there are some locations where space is restricted and the width would be reduced to a minimum of 2m as follows:</u> <ul style="list-style-type: none"> <li><u>· in front of Castle Buildings for approximately 25m</u></li> <li><u>· from Castle Buildings east to the rear of Princes Quay car park for approximately 122m</u></li> <li><u>· from Castle Buildings west to the end of the Earl de Grey public house for approximately 55m</u></li> </ul>
634	Table 15.9: Construction – views from the road	<u>Travelling east, there would be direct views of construction. This would include views of works to create footways and cycleways on either side</u>	<u>Travelling east, there would be direct views of construction. This would include views of works to create shared footways and cycleways to the north of the Scheme</u>

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	<u>assessment : Location Hessle Road (A63 between St James Street and the Mytongate Junction, including the Junction/Commentary</u>	<u>of the Scheme as well as soft landscaping.</u>	<u>and along Blackfriargate to the south of the A63 as well as soft landscaping.</u>
645	15.8.8	Mitigation such as the provision of a free 'shuttle bus' and signed diversion routes would minimise effects for NMUs.	Mitigation such as the provision of a free 'shuttle bus' if feasible and signed diversion routes would minimise effects for NMUs.
645	<u>Table 15.11: Construction stage (temporary) effects for the main NMU journeys: Location 1/Commentary</u>	<u>During construction, temporary diversions are likely to be required whilst works are undertaken to upgrade the footway to a combined footpath/cycleway, which would result in a significant effect due to journey time increases and also a reduction in journey experience/amenity due to the presence of construction plant and construction noise/dust for the full duration of construction.</u>	<u>During construction, temporary diversions are likely to be required whilst works are undertaken to upgrade the footway to a combined footpath/cycleway to the north of the A63 and to realign or improve the footway to the south of the A63, which would result in a significant effect due to journey time increases and also a reduction in journey experience/amenity due to the presence of construction plant and construction noise/dust for the full duration of construction.</u>
646	<u>Table 15.11: Construction stage (temporary) effects for the main NMU journeys: Location 3/Commentary</u>	<u>During construction, temporary diversions are likely to be required whilst works are undertaken to upgrade the footway to a combined footpath/cycleway.</u>	<u>During construction, temporary diversions are likely to be required whilst works are undertaken to upgrade the footway on the north side of the A63 to a combined footpath/cycleway and to realign or improve the footway to the south of the A63.</u>
647	<u>Table 15.11: Construction stage (temporary) effects for the main NMU journeys: Location 8/Commentary</u>	<u>The crossing adjacent to Humber Dock Street is anticipated to remain open for the first 2 phases of construction, which would ensure that journey times are unaffected. During phase 3 the signal controlled crossings at Humber Dock Street and Market Place are anticipated to be closed, and NMUs diverted towards the underpass at High Street, which would result in a temporary significant effect due to journey time increases.</u>	<u>The crossing adjacent to Humber Dock Street is anticipated to remain open for the first 2 phases of construction, which would ensure that journey times are unaffected. During phase 3 the signal controlled crossings at Humber Dock Street and Market Place across the A63 are anticipated to be closed, and NMUs diverted towards the underpass at High Street, which would result in a temporary significant effect due to journey time increases.</u>

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648	Table 15.11: Construction stage (temporary) effects for the main NMU journeys: Location 17/Commentary	Upgrades to the existing footway the A63 to provide a continuous combined footway cycleway would be the permanent solution and is therefore considered within the operational stage assessment.	Upgrades to the existing footway along the south of the A63 would be the permanent solution and is therefore considered within the operational stage assessment.
657	Table 15.13: Permanent impacts of the Scheme on NMUs: Location 1/Commentary	The provision of a combined footway and cycleway for the full length of the Scheme to the north of the A63, and footway to the south, would be considered beneficial for NMUs, as the new pavement has potential to improve journey quality.	The provision of a combined footway and cycleway for the full length of the Scheme to the north of the A63, along Blackfriargate to the south and improved footway to the south of the A63, would be considered beneficial for NMUs, as the new pavement has potential to improve journey quality.
662	Table 15.13: Permanent impacts of the Scheme on NMUs: Location 17/Change in facilities	Vehicular access stopped up. NMU access maintained. With the combined footway and cycleway to the south of the A63.	Vehicular access stopped up. NMU access maintained with the footway to the south of the A63.
662	Table 15.13: Permanent impacts of the Scheme on NMUs: Location 17/Commentary	The removal of vehicle access at this location, whilst maintaining access for NMUs for the Holiday Inn, would be of benefit for NMUs by removing the potential for conflict with vehicular traffic, and subsequently improving amenity through the continuation of the combined footway and cycleway.	The removal of vehicle access at this location, whilst maintaining access for NMUs for the Holiday Inn, would be of benefit for NMUs by removing the potential for conflict with vehicular traffic, and subsequently improving amenity through the continuation of the footway.
663	Table 15.13: Permanent impacts of the Scheme on NMUs: Location 19/Change in facilities	No access between the A63 and Humber Dock Street. Combined cycleway and footway provided along the A63 (3m wide here). Ramped access to Princes Quay Bridge also provided in this location.	No access between the A63 and Humber Dock Street. Footway provided along the A63 (3m wide here). Ramped access to Princes Quay Bridge also provided in this location.
663	Table 15.13: Permanent impacts of the Scheme on NMUs: Location	The combined footway and cycleway along the A63 would be continued in this location.	The footway along the A63 would be continued in this location.

Page	Paragraph/ Table	Published text	Correction
	<a href="#">19/Commentary</a>		
684	Table 16.7 Significance of combined effects	n/a	Replace Table 16.7 with revised Table 16.7 below as discussed in comments on WQ1.10.10. (new/revised text in red).

**ES Table 10.9: Characterisation process of ecological impacts (revised)**

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
Humber Estuary Value: International  Conservation of Habitats and Species Regulations 2017	Potential impacts from piling into Humber Dock Marina during construction of Princes Quay footbridge would include noise, vibration, dust, sedimentation, groundwater contamination and silting. Potential air quality impact small % of NOx increase on existing amounts. Potential death, injury or disturbance to marine fauna during construction of Princes Quay footbridge.	Potential discharge of pollution from A63 to enter the Estuary through drainage system. Unknown impact on tidal mud and shales.  (Drainage design has since changed and surface water will be entering the existing Yorkshire Water system). Potential pollution impacts during operation from spillages in underpass due to higher drainage area. Potential air quality impact small % of NOx increase on existing amounts.	SI: -ve	Drainage design would ensure that adequate surface water interceptors are incorporated. Surface water would discharge onto existing rock armour in the Estuary.  Trained marine fauna ecologists would act as observers to check that the dock area and up to 500m beyond the dock gates is clear of marine animals.  The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.  A soft start-up of machinery to disperse any potential fish, birds or mammals present in the dock.  Impacts from piling fully assessed in AIES. Temporary protection during construction detailed in CEMP.	Risk of accidental indirect impact. Small and unlikely to be Significant (Design must ensure no residual impact) Scheme certain to be insignificant in terms of air quality Noise levels in parts of the site during operation would reduce. Water quality would not be significantly impacted during operation. Probable. Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.
			PO: unlikely		
			CO: indirect		
			EC: small		
			SZ: not assessed		
			RE: not assessed		
			DU: Permanent		
			TF: N/A		

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
				<p>Current amounts of NOx already exceed environmental standards. Very small negligible increase.</p> <p>Water quality would not be impacted by operational discharges and spillages as underpass drainage system would incorporate a shut-off valve and below-ground attenuation units to allow isolation and containment of contaminants.</p>	
<p>Trinity Burial Ground SNCI  Value: County-/Unitary Authority Area   Hull City Council designation</p>	<p>Permanent loss of 36 veteran mature trees (additional 36 to facilitate disinterment) and woodland understorey.  Lighting of SNCI during construction at night and light pollution from new <del>junction</del> <u>Junction</u> during operation.</p>	<p>Light pollution from new <del>junction</del> <u>Junction</u> during operation.</p>	<p>SI: -ve  PO: certain  CO: direct  EC: large 0.7ha  SZ: complete loss  RE: not reversible  DU: permanent   TF: avoid breeding bird season</p>	<p>Root protection zones on remaining trees.  Compensation includes replanting 55 larger native trees (&gt;30cm diameter) close to Trinity Burial Ground. The understorey in the remaining area of Trinity Burial Ground is to include some native shrubs and plants.  Lighting during construction to directed away from remaining trees.</p>	<p>Certain permanent loss of large area of habitat and mature trees. Significant.  Certain significant permanent extra light pollution during operation.</p>
River Hull SNCI			<p>SI: -ve  PO: unlikely</p>		



Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Mudflats to the south of Sammy's Point SNCI</p> <p>Value: County/  Unitary Authority Area</p> <p>Hull City Council designation</p>	<p>Indirect impacts from pollution during construction.</p>		CO: indirect	<p>Mitigation by standard pollution prevention measures.</p>	<p>Unlikely, very small indirect pollution incident during construction. Not significant. No impacts expected during operation.</p>
			EC: v small		
			SZ: not assessed		
			RE: not assessed		
			DU: Permanent		
TF: N/A					
<p>UKBAP (NERC Act 2006 S41) Priority Habitats –</p> <p>Value: National</p> <p>'deciduous woodland' and broad-leaved woodland' – Trinity Burial Ground SNCI.</p> <p>'mudflats', 'saltmarsh', 'intertidal substrate foreshore –</p>	<p>Trinity Burial Ground as in SNCI above.</p> <p>Indirect and direct impacts from pollution spillages during construction.</p>		Based on highest impacts which are to woodland habitats SI: -ve	<p>'deciduous woodland' and broad-leaved woodland' – mitigation and compensation as in Trinity Burial Ground SNCI above.</p>	<p>Certain, permanent loss of large area of habitat and mature trees. Significant. Operational impacts from lighting pollution.</p>
			PO: certain		
			CO: direct	<p>'mudflats', 'saltmarsh', 'intertidal substrate foreshore – mud – Mitigation by standard pollution prevention measures.</p>	<p>Unlikely, very small indirect pollution incident in Construction Phase only. Not significant.</p>

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>mud' Princes Dock; Humber Dock basin; Adjacent to site compounds at Neptune Street, Wellington Street Island Wharf and Livingstone Road.</p> <p>'Intertidal substrate foreshore – man made – Humber Dock Marina; Princes Dock.</p> <p>Section 41 of the NERC Act 2006</p>	<p>Humber Dock Marina would be directly impacted by piling to create supports for the deck that would carry the proposed Princes Quay footbridge (noise, vibrations, and disturbance of sediments).</p> <p>Impacts from the moving of Spurn Lightship could include additional disturbance of sediments.</p>		<p>EC: large 0.7ha</p> <p>SZ: complete loss</p> <p>RE: not reversible</p> <p>DU: permanent</p> <p>TF: avoid breeding bird season</p>	<p>No mitigation for habitats within Humber Dock Marina.</p> <p>The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.</p>	<p>Certain, direct, temporary, large, reversible impacts of noise, vibration and sediment disturbance. Significant.</p> <p>No adverse impacts during operation expected and no residual impacts</p> <p>Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.</p>
<p>Scattered Amenity Trees</p> <p>Value: Local – main site</p> <p>Hull City Council Local Biodiversity Action Plan</p>	<p>245 amenity trees (outside of Trinity Burial Ground) are to be removed to accommodate the Scheme.</p>		<p>SI: -ve</p> <p>PO: certain</p> <p>CO: direct</p> <p>EC: not assessed</p> <p>SZ: loss</p> <p>RE: reversible</p> <p>DU: temporary</p> <p>TF: avoid breeding bird season</p>	<p>Compensation by 307 x native tree planting incorporated into landscape plan. Trees to be managed.</p>	<p>Certain, direct loss of the majority of trees within the Scheme Site. Would take time for compensation to replace maturity of trees lost. Significant.</p> <p>No significant operational impacts.</p> <p>Residual impacts – no loss of trees overall, slight gain.</p>

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Standing Water</p> <p>Value: Regional – Humber Dock Marina; Railway Dock</p> <p>‘regularly occurring populations of species which may be considered at an International level’ (IAN 130/10)</p>	<p>Humber Dock Marina would be directly impacted by piling to create supports for the deck that would carry the proposed new Princes Quay Bridge (noise, vibrations, and disturbance of sediments).</p> <p>Impacts from moving of Spurn Lightship could include additional disturbance of sediments.</p> <p>Impacts from indirect pollution during construction.</p>		SI: -ve	<p>No mitigation for habitats within Humber Dock Marina or Railway Dock during piling.</p> <p>The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.</p> <p>All docks - Mitigation by standard pollution prevention measures.</p>	<p>Certain, direct, temporary disturbance to standing water habitat of Humber Dock Marina. Significant.</p> <p>Both docks - Unlikely, very small indirect pollution incident.</p> <p>No impacts during operation. No residual impacts.</p> <p>Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.</p>
			PO: certain		
			CO: direct		
			EC: not assessed		
			SZ: disturbance		
			RE: reversible		
			DU: temporary		
TF: N/A					
<p>Ephemeral <del>+/</del>short Perennial</p> <p>Value: Local - site compounds at Wellington Street Island Wharf, Livingstone Road and Neptune Street</p>	<p>Impacts from loss of vegetation during site clearance.</p>		SI: -ve	<p>Small area of habitat to be left in each site compound. Compounds to be left to regenerate after use.</p>	<p>Certain, direct, temporary loss of habitat which would regenerate quickly.</p> <p>No impacts during operation or residual impacts. Not significant.</p>
			PO: certain		
			CO: direct		
			EC: 100%		
			SZ: complete loss		

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
Section 41 of the NERC Act 2006 Hull City Council Local Biodiversity Action Plan			RE: reversible DU: temporary TF: avoid breeding bird season		
Hedgerows  Value: Local - site compounds at Livingstone Road, A63 eastbound recovery base and Staples site; car park site at the Myton Centre.  Section 41 of the NERC Act 2006	Loss of 5 x species-poor intact hedgerows, four of which are not connected to the wider surrounds or act as a green corridor. One is (A63 eastbound recovery base) connected to the wider area as it runs alongside the verge of the A63.		SI: -ve PO: certain CO: direct EC: 100% SZ: loss RE: reversible DU: temporary TF: avoid breeding bird season	The species-poor hedgerows present in site compound – Myton Centre is approximately 45m in length and is to be compensated with 104m length of hedgerow containing species of native hedgerow woody plants . This would be managed during operation. The hedgerow in site compound – Livingstone Road, the one in Staples site and the one in site compound – A63 eastbound recovery base are to be re-instated only.	Temporary, certain loss of habitats that would benefit over time in Operation Phase from compensatory measures and management. Not significant.
Terrestrial Invertebrates	Woodland in Trinity Burial Ground has potential to support UKBAP and Hull		SI: -ve PO: certain CO: direct	Woodland in Trinity Burial Ground – mitigation and	Certain, permanent loss of large area of habitat and mature trees. Significant.

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Value: Local - Trinity Burial Ground SNCI; site compounds at Wellington Street Island Wharf, Livingstone Road and Neptune Street</p> <p>Section 41 of the NERC Act 2006 Hull City Council Local Biodiversity Action Plan</p>	<p>BAP species. Habitat to be lost.</p> <p>Ephemeral/short perennial habitat in other two compounds has potential to support UKBAP and Hull BAP species. Habitat to be lost.</p>		EC: 0.7ha of woodland; 100% of ephemeral/short perennial	<p>compensation as in Trinity Burial Ground SNCI above.</p> <p>Small area of ephemeral/short perennial habitat to be left in each site compound. Compounds to be left to regenerate after use.</p>	<p>Less habitat during operation.</p> <p>Certain, direct, temporary loss of habitat which would regenerate quickly. No impacts during operation. Not significant.</p>
			SZ: All animals in these areas		
			RE: Not reversible (woodland) reversible (ephemeral/short perennial)		
			DU: Temporary		
			TF: N/A		
<p>Aquatic Invertebrates</p> <p>Value: National – Humber Estuary SSSI</p> <p>The Wildlife and Countryside Act 1981 as amended (primarily by the Countryside and Rights of Way Act 2000)</p> <p>Value: Local – River Hull SNCI; <b>Mudflats</b></p>	<p>Potential impacts from pollution events during construction (death or injury), disturbance from piling to install Princes Quay Bridge including noise, vibration, disturbance of sediments.</p> <p>Potential impacts (death or injury) from pollution</p>		SI: -ve	<p>The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.</p> <p>A soft start-up of machinery to disperse any potential animals present in the dock.</p> <p>Full assessment of impacts is to be undertaken in the AIES.</p>	<p>Unlikely, indirect, temporary impacts from piling and pollution events.</p> <p>No impacts during operation. Not significant.</p>
			PO: Unlikely		
			CO: indirect		
			EC: not assessed		
			SZ: not assessed		
			RE: reversible		

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
to the south of Sammy's Point SNCI Section 41 of the NERC Act 2006	events during construction.		DU: temporary TF: N/A	Mitigation by standard pollution prevention measures.	
Fish (Sea and river lamprey) Value: International - Humber Dock Marina; Railway Dock; site compounds at Neptune Street, Wellington Street Island Wharf and Livingstone Road; Conservation of Habitats and Species Regulations 2017  Fish (European eel, salmon, sea trout) Value: Local - Humber Dock Marina; Railway Dock; site compounds at Neptune Street,	Direct impacts (injury, death or injury) to fish are likely during the piling works to construct Princes Quay Bridge. Indirect disturbance impacts from noise, vibration and sediment disturbance.  Impacts (death, injury) from indirect pollution during construction.		SI: -ve PO: probable CO: direct EC: not assessed SZ: disturbance RE: reversible	Trained marine fauna ecologists would act as observers to check that the dock area and up to 500m beyond the dock gates is clear of marine animals. The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary. A soft start-up of machinery to disperse any potential fish, birds or mammals present in the dock. Full assessment of impacts undertaken in the AIES.  Mitigation by standard pollution prevention measures.	Probable direct and indirect impacts during piling. Temporary and reversible. No impacts during operation. Not significant. Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
Wellington Street Island Wharf and Livingstone Road Section 41 of the NERC Act 2006 Eels (England and Wales) Regulations 2009			DU: temporary  TF: N/A		
Reptiles  Value: Local - site compound at the A63 eastbound recovery base  The Wildlife and Countryside Act 1981 as amended	Impacts from loss and severance of habitats. Potential killing or injury during site clearance.		SI: -ve PO: probable CO: direct EC: 0.3ha in A63 Eastbound layby SZ: loss of habitat RE: reversible DU: temporary TF: avoid site clearance in hibernation season	Ecological Clerk of Works (ECoW) being present prior to vegetation clearance to search the area where vegetation is to be removed first.  Habitats to be reinstated.	Certain temporary loss of habitat that would be reinstated with no operational or residual impacts. Not significant.

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Birds</p> <p>Value: International - site compounds at Neptune Street, Wellington Street Island Wharf and Livingstone Road</p> <p>Conservation of Habitats and Species Regulations 2017</p> <p>Wildlife and Countryside Act 1981 (as amended)</p> <p>Value: Local - Main site; Trinity Burial Ground SNCI; site compounds at land south east of Mytongate Junction, A63 eastbound recovery base, Arco site and Staples site; car park site at the Myton Centre</p> <p>Section 41 of the NERC Act 2006</p>	<p>International - In all three site compounds, bird species the Humber Estuary was designated for were observed either adjacent to the site compounds in the mudflats or flying over the site compounds. Impacts to these bird species are likely to be from pollution or noise, vibration and sight disturbance during construction.</p> <p>Local – loss of breeding habitat. Lighting of Trinity Burial Ground SNCI during construction at night.</p>	<p>Light pollution from new junction during operation due to lack of trees.</p> <p>Lighting of Trinity Burial Ground SNCI during operation at night.</p>	<p>SI: -ve</p> <p>PO: probable</p> <p>CO: indirect</p> <p>EC: not assessed</p>	<p>The erection of hoardings to block the works in the site compounds from view and reduce noise emissions.</p> <p>Monitoring bird surveys are to be carried out at the site compounds during construction in order to record the species of birds present and the effects of any noise or sight pollution upon them. If it is found that the noise and sight levels are impacting the wading bird population, then changes can be put into place to make these levels acceptable.</p> <p>At site compound – Wellington Street Island Wharf, trained marine fauna ecologists would act as observers to check that the dock area and up to 500m beyond the dock gates is clear of marine birds.</p> <p>The dock gates would be closed during piling to control</p>	<p>International – probable, temporary indirect impacts during construction with no impacts during operation or residual impacts expected. Not significant.</p> <p>Local – Certain permanent loss of habitat in Trinity Burial Ground. Impacts from light pollution during operation. Significant.</p> <p>Temporary, certain loss of habitat in other site compounds that would be reinstated with no operational impacts. No impacts from light pollution during operation or residual impacts. Not significant.</p> <p>Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.</p>



Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
Hull City Council Local Biodiversity Action Plan			SZ: disturbance, loss of habitat	and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.	
			RE: Not reversible (Trinity Burial Ground) reversible (all other sites)	A soft start-up of machinery to disperse any potential birds present in the dock. Full assessment of impacts is to be undertaken in the AIES.	
			DU: permanent (Trinity Burial Ground) temporary (all other sites)	Mitigation by standard pollution prevention measures to remove habitat outside of breeding season. Habitats to be re-instated with the exception of Trinity Burial Ground. Lighting to be directed away from remaining trees during construction.	
			TF: avoid site clearance in breeding season	Mitigation planting would replace some lost habitat. Habitat enhancement would improve bird nesting and feeding opportunities.	

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Aquatic mammals</p> <p>Value: International - Humber Dock Marina; Railway Dock; site compounds at Neptune Street, Wellington Street Island Wharf and Livingstone Road</p> <p>Conservation of Habitats and Species Regulations 2017.</p> <p>Wildlife and Countryside Act 1981 (as amended)</p>	<p>Grey seals may venture onto the site and fall in trenches causing injury or death. They could be disturbed by the lighting during construction.</p> <p>Disturbance during construction of Princes Quay Bridge from noise, vibration and sediment disturbance.</p> <p>Impacts from indirect pollution and lighting during construction.</p>		<p>SI: -ve</p> <p>PO: unlikely</p> <p>CO: indirect</p> <p>EC: not assessed</p> <p>SZ: disturbance</p> <p>RE: reversible</p>	<p>Mitigation should include that trenches should be covered at night to prevent grey seal from falling in, or trenches should include an earth ramp to allow them to climb out. At night in the three site compounds, lighting should be directed away from the water. Mitigation for the construction of the Princes Quay footbridge includes:</p> <p>Trained marine fauna ecologists would act as observers to check that the dock area and up to 500m beyond the dock gates is clear of marine animals.</p> <p>The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.</p> <p>A soft start-up of machinery to disperse any potential animals present in the dock.</p>	<p>Unlikely, indirect impacts during piling and construction works. Temporary and reversible.</p> <p>No impacts during operation or residual impacts. Not significant</p> <p>Impacts to the Humber Estuary designated sites has been concluded as not significant in the HRA Screening Report for Princes Quay currently undergoing consultation.</p>

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
			DU: temporary	Full assessment of impacts is to be undertaken in the AIES. Mitigation by standard pollution prevention measures.	
			TF: N/A	Lighting not directed on water during operation.	
<p>Bats Pipistrelle bats</p> <p>Value: Local – All areas</p> <p>Conservation of Habitats and Species Regulations 2017.</p> <p>Wildlife and Countryside Act 1981 (as amended)</p>	<p>Loss of potential roosts within trees and old wall in Trinity Burial Ground.</p> <p>Small possibility of unidentified roost presence in trees in Trinity Burial Ground SNCI when felling.</p> <p>Loss of foraging area for a small number of pipistrelle bats in Trinity Burial Ground and severance of commuting route to it</p>	<p>Light pollution from new junction during operation due to lack of trees.</p>	SI: -ve	<p>Precautionary avoidance measures are to include that demolition of trees in Trinity Burial Ground SNCI would be overseen by a bat licensed ECoW. Trees would be felled sectionally and sections searched by ECoW or left overnight for bats to exit before removal from site. Compensation includes the erection of bat boxes on the remaining trees in Trinity Burial Ground SNCI.</p>	<p>Certain, direct, permanent loss of historic roost, potential tree roosts to be compensated for.</p> <p>Certain, direct, permanent loss of foraging and commuting habitat would be partially replaced over time as it matures.</p> <p>Certain, permanent extra light pollution during operation. Significant.</p>
			PO: certain		
			CO: direct		

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
	<p>across Mytongate Junction.</p> <p>Lighting of Trinity Burial Ground SNCI during construction at night</p>		<p>EC: 1 disused roost, 0.7ha foraging habitat lost for small number of bats</p> <p>SZ: disturbance</p> <p>RE: not reversible</p> <p>DU: permanent</p> <p>TF: outside of sensitive periods for bats</p>	<p>Compensation includes that the larger native trees are to be replanted on the verges at either side of the A63 in a line extending from Trinity Burial Ground to the Myton Centre. The large height of the trees would provide habitat 'hop-overs' for bats and reduce collisions with traffic. The larger trees would also be planted in the soft estate in the new Mytongate Junction. This should recreate the linear commuting route to Trinity Burial Ground.</p> <p>Lighting to be directed away from remaining trees during construction.</p> <p>During operation, mitigation would be to use covers to direct lighting where it is needed at the ground and not directly light up linear features.</p>	

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Otters</p> <p>Value – Local - Humber Dock Marina; Railway Dock; site compounds at Neptune Street, Wellington Street Island Wharf and Livingstone Road</p> <p>Conservation of Habitats and Species Regulations 2017.</p> <p>Wildlife and Countryside Act 1981 (as amended)</p>	<p>Otters may venture onto the site and fall in trenches.</p> <p>Disturbance during construction of Princes Quay Bridge from noise, vibration and sediment disturbance.</p> <p>Impacts from indirect pollution and lighting during construction.</p>		<p>SI: -ve</p> <hr/> <p>PO: unlikely</p> <hr/> <p>CO: indirect</p> <hr/> <p>EC: not assessed</p> <hr/> <p>SZ: disturbance</p> <hr/> <p>RE: reversible</p>	<p>Mitigation would include that trenches are to be covered at night to prevent otter from falling in, or trenches are to include an earth ramp to allow otter to climb out.</p> <p>At night in the three site compounds, lighting should be directed away from the water. Mitigation for the construction of the Princes Quay Bridge includes:</p> <p>Trained marine fauna ecologists would act as observers to check that the dock area and up to 500m beyond the dock gates is clear of marine animals.</p> <p>The dock gates would be closed during piling to control and contain silt and sediment and absorb noise and vibration from entering the Humber Estuary.</p> <p>A soft start-up of machinery to disperse any potential animals present in the dock.</p>	<p>Unlikely, direct and indirect impacts during piling and construction works.</p> <p>Temporary and reversible.</p> <p>No impacts during operation or residual impacts. Not significant.</p>

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
			DU: temporary	Full assessment of impacts is to be undertaken in the AIES. Mitigation by standard pollution prevention measures.	
			TF: N/A	Lighting not directed on water during operation.	
Hedgehogs Value: Local – Terrestrial areas  Section 41 of the NERC Act 2006	Woodland to be permanently lost in Trinity Burial Ground SNCI has potential to support hedgehogs. Habitats elsewhere to be temporarily lost. Impacts to individuals during vegetation clearance.		SI: -ve PO: probable CO: direct EC: 0.7ha of Trinity Burial Ground, not assessed rest of site SZ: disturbance, loss of habitat RE: not reversible DU: permanent TF: N/A	Ecological Clerk of Works (ECoW) being present prior to vegetation clearance to search the area where vegetation is to be removed first. Habitats to be re-instated with the exception of Trinity Burial Ground SNCI.	Certain, temporary loss of habitat that would be re-instated with no operational or residual impacts with the exception of permanent loss of part of Trinity Burial Ground. Potentially significant.
Invasive species	Legal impact of allowing these species to spread.		SI: N/A	Cotoneaster plants are to be removed and the arisings	Probable, direct legal impact of spreading these species to

Resource	Proposed activity, biophysical change, related to receptor structure and function (impact) during construction	Proposed activity, biophysical change, related to receptor structure and function (impact) during operation	Characterisation of impact	Mitigation proposals	Summary of characterisation
<p>Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)  cotoneaster (main site – A63 and Market Place <del>junction</del>Junction and A63 and Queen Street <del>junction</del>Junction);  land south east of Mytongate Junction</p>			<p>PO: probable</p> <p>CO: direct</p> <p>EC: not assessed</p> <p>SZ: not assessed</p> <p>RE: reversible</p> <p>DU: temporary</p> <p>TF: legal constraint</p>	<p>and topsoil in these areas to be treated as controlled waste. To be disposed of at a suitably licensed or permitted disposal facility.</p> <p>Biosecurity method statements for both species.</p> <p>The site is to be maintained during the Operation Phase and it is unlikely that the cotoneaster or false acacia would return after removal in the Construction Phase. Should this happen, it would be removed during maintenance.</p>	<p>be mitigated fully and no spread is predicted. Not significant.</p>
<p>Key</p> <p>SI (Sign): Positive (beneficial (+ve)) or Negative (adverse (-ve))</p> <p>PO (Probability of Occurring): Certain, Probable, Unlikely</p> <p>CO (Complexity): Direct, Indirect, Cumulative</p> <p>EC (Extent): Area measures and percentage of total (e.g. area of habitat/territory lost)</p> <p>SZ (Size): Description of level of severity of influence (e.g. complete loss, number of animals affected)</p> <p>RE (Reversibility): Reversible or Not Reversible (can the effect be reversed, whether or not this is planned)</p> <p>DU (Duration): Permanent (P) or Temporary (T) in ecological terms. Where differing timescales are determined in relation to the life cycle of the receptor, these should be defined.</p> <p>TF (Timing and frequency): Important seasonal and/or life cycle constraints and any relationship with frequency considered.</p>					

**ES Table 11.15: Significance of potential residual impacts on surface water features during construction (amend row)**

Potential Impact	Feature	Attribute	Quality	Importance	Mitigation	Magnitude of impact	Significance
<u>Changes in flood flow routes due to alteration of ground elevations and construction of structures</u>	<u>Humber Floodplain</u>	<u>Conveyance of flow</u>	<u>Properties within floodplain</u>	<u>Very high</u>	<u>OEMP and Flood Emergency Plan (FEP) to include emergency procedures to evacuate Scheme in the event of extreme flooding. Temporary pumping arrangements within OEMP to discharge flood waters to sewer or surface waters subject to consent, only compliant water to be discharged to Humber Estuary, non-compliant water collected and discharged off site.</u>	<u>Moderate-Major beneficial to Major adverse – depending on the location, source and scale of the flooding in relation to the Scheme area. Refer to <b>Error! Reference source not found.</b>Table 11.18 and explanatory text for further details.</u>	<u>Large/ Very Large beneficial to Very Large adverse</u>



**ES Table 11.18: Summary of magnitude of peak impact from selected sources and scenarios from the FRA (~~revised~~replaced)**

Flooding source and Flood-Risk Assessment figure reference	Scenario	Areas of adverse impact/magnitude	Areas of beneficial impact/magnitude
Pluvial (Figure 14.3)	A 1 in 100-year return period event with 30% increase in rainfall intensity for climate change impacts	Negligible change in flood depths across Scheme and study area – Neutral	Negligible change in flood depths across Scheme and study area – Neutral
Tidal – Humber Wave Overtopping (Figure 14.18)	A 1 in 200-year return period event	<p>Kingston Retail Park – increase of maximum flood depth of up to 0.2m – <b>major adverse</b></p> <p>Princes Quay – increase of maximum flood depth of up to 0.2m – <b>major adverse</b></p> <p>Blanket Row, Blackfriargate and surrounding streets – increase of maximum flood depth of up to 0.7m – <b>major adverse</b></p> <p>Market Place and surrounding streets north of the A63 – increase of maximum depth of up to 0.1m – <b>moderate adverse</b></p> <p>Queens Gardens – increase in maximum depth of up to 0.3m – <b>major adverse</b></p> <p>Wassand Street and Neptune Street – increase of maximum flood depth of up to 0.20m – <b>major adverse</b></p>	Tidal – Humber Wave Overtopping (Figure 14.18)
Tidal – Humber Wave Overtopping (Figure 14.21)	A 1 in 1000-year return period event	<p>Kingston Retail Park – increase of maximum flood depth of up to 0.4m – <b>major adverse</b></p> <p>Princes Quay – increase of maximum flood depths of up to 0.2m – <b>major adverse</b></p> <p>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass – reduction of maximum flood depth of up to 0.6m – <b>major beneficial</b></p> <p>A1079 Forensway north of underpass – reduction of maximum flood depth of up to 0.66m – <b>major beneficial</b></p>

		<p>Blanket Row, Blackfriargate and surrounding streets— increase of maximum flood depth of up to 0.74m— <b>major adverse</b></p> <p>Market Place and surrounding streets— increase of maximum flood depth of up to 0.1m— <b>moderate adverse</b></p> <p>Queens Gardens— increase of maximum flood depth of up to 0.2m— <b>major adverse</b></p> <p>Land east of Dock Office Row— increase of maximum flood depth of up to 1m— <b>major adverse</b></p> <p>Waverley Street— increase of maximum flood depth of up to 0.3m— <b>major adverse</b></p>	<p>A1079 Ferensway and surrounding streets north of A63— reduction of maximum flood depths of up to 0.3m— <b>major beneficial</b></p> <p>A1105 Anlaby Road, St Luke's Street, Osborne Street, Porter Street and surrounding roads— reduction in maximum flood depth of up to 0.1m— <b>moderate beneficial</b></p> <p>Area to the north-west of St-Stephens shopping centre— reduction of maximum flood depths of up to 0.05m— <b>minor beneficial</b></p>
<p>Tidal— Humber Wave Overtopping (Figure 14.28)</p>	<p>A 1 in 200-year return period event with a consideration of climate change</p>	<p>North end of Kingston Retail Park and Waverley Street— increase of maximum flood depth of up to 0.6m— <b>major adverse</b></p> <p>Underpass— increase of maximum flood depth of up to 6.2m— <b>major adverse</b></p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass— reduction of maximum flood depth of up to 0.5m— <b>major beneficial</b></p> <p>A1079 Ferensway— reduction of maximum flood depth of up to 0.3m— <b>major beneficial</b></p> <p>Osborne Street, Adelaide Street and surrounding roads— reduction of maximum flood depth of up to 0.1m— <b>moderate beneficial</b></p>
<p>Tidal— Humber Wave Overtopping (Figure 14.34)</p>	<p>A 1 in 200-year return period event without existing flood defences</p>	<p>Kingston Retail Park— Increase of maximum flood depth of up to 0.20m— <b>major adverse</b></p> <p>Blanket Row, Blackfriargate and surrounding streets— increase of maximum flood depth of up to 0.1m— <b>moderate adverse</b></p> <p>Queens Gardens and Dock Street— Increase of maximum flood</p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass— Reduction of maximum flood depth of up to 0.6m— <b>major beneficial</b></p> <p>A1079 Ferensway north of underpass— Reduction of maximum flood depth of greater than 0.5m— <b>major beneficial</b></p> <p>Roper Street and Myton Street— reduction of maximum flood depth of up to 0.3m— <b>major beneficial</b></p>

		<p>depth of up to 0.1m—<b>moderate adverse</b></p> <p>Underpass—Increase of maximum flood depth of up to 5.8m—<b>major adverse</b></p>	<p>Osborne Street, Carr Lane, Upper Union Street and surrounding roads—reduction in maximum flood depth of up to 0.1m—<b>moderate beneficial</b></p>
<p>Tidal—Humber Wave Overtopping (Figure 14.37)</p>	<p>A 1 in 200-year return period with consideration for climate change and without existing flood defences</p>	<p>Kingston Retail Park—Increase of maximum flood depth of up to 0.2m—<b>major adverse</b></p> <p>Blanket Row, Blackfriargate and surrounding streets—increase of maximum flood depth of up to 0.2m—<b>major adverse</b></p> <p>Waverley Street—increase of maximum flood depth of up to 0.4m—<b>major adverse</b></p> <p>Underpass—Increase of maximum flood depth of up to 5.8m—<b>major adverse</b></p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass—Reduction of maximum flood depth of up to 0.5m—<b>major beneficial</b></p> <p>A1079 Forensway north of underpass—Reduction of maximum flood depth of greater than 0.5m—<b>major beneficial</b></p> <p>Roper Street and Myton Street—reduction of maximum flood depth of up to 0.3m—<b>major beneficial</b></p> <p>Osborne Street, Carr Lane, Upper Union Street and surrounding roads—reduction in maximum flood depth of up to 0.1m—<b>moderate beneficial</b></p>
<p>Tidal from River Hull (Figure 14.44)</p>	<p>A 1 in 200-year return period event (tidal barrier fails to close)</p>	<p>Blanket Row, Blackfriargate and surrounding streets south of A63—increase of maximum flood depth of up to 0.2m—<b>major adverse</b></p> <p>Humber Dock and Railway Dock—Increase of maximum flood depth of up to 0.3m—<b>major adverse</b></p> <p>Princes Quay—Increase of maximum flood depth of up to 0.6m—<b>major adverse</b></p> <p>Market Place, Posterngate and surrounding streets—increase of maximum flood depth of up to 0.1m—<b>major adverse</b></p> <p>Dagger Lane and Fish Street—increase of maximum depth of up to 0.2m—<b>major adverse</b></p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass—Reduction of maximum flood depth of up to 0.50m—<b>major beneficial</b></p> <p>Kingston Retail Park—Reduction of maximum flood depth of up to 0.58m—<b>major beneficial</b></p> <p>A1079 Forensway, St Luke's Street, Osborne Street and surrounding roads—Reduction of maximum flood depth of up to 0.4m—<b>major beneficial</b></p>

		<p>Queen's Gardens— increase of maximum flood depth of up to 0.1m— <b>moderate adverse</b></p> <p>Underpass— Increase of maximum flood depth of up to 5.8m— <b>major adverse</b></p>	
Tidal from River Hull (Figure 14.47)	A 1 in 1000-year return period event (tidal barrier fails to close)	<p>Blanket Row, Blackfriargate and surrounding streets south of A63— increase of maximum flood depth of up to 0.20m— <b>large adverse</b></p> <p>Market Place, Posterngate, Dagger Lane, Prince's Dock Street and surrounding roads— increase in maximum flood depth of up to 0.1m— <b>large adverse</b></p> <p>Humber Dock and Railway Dock— Increase of maximum flood depth of up to 1.03m— <b>large adverse</b></p> <p>Princes Quay— Increase of maximum flood depth of up to 0.20m— <b>large adverse</b></p> <p>Underpass— Increase of maximum flood depth of up to 5.80m— <b>large adverse</b></p>	<p>Commercial Road south of underpass and A63 carriageway east of underpass— Reduction of maximum flood depth of up to 0.52m— <b>large beneficial</b></p> <p>Kingston Retail Park— Reduction of maximum flood depth of up to 0.59m— <b>large beneficial</b></p> <p>A1079 Forensway, St Luke's Street, Osborne Street and surrounding roads— Reduction of maximum flood depth of up to 0.66m— <b>large beneficial</b></p> <p>Brook Street, North Street, Prospect Street, Wright Street and surrounding roads— reduction in maximum flood depth of up to 0.2m— <b>large beneficial</b></p>
<b>Flooding source</b>	<b>Scenario</b>	<b>Areas of adverse impact \ magnitude</b>	<b>Areas of beneficial impact \ magnitude</b>
Pluvial (VCB In) Figure 13.3	A 1 in 100-year return period event with 30% increase in rainfall intensity for climate change impacts	No change in flood depths across Scheme and study area - <b>neutral</b>	No change in flood depths across Scheme and study area - <b>neutral</b>
Pluvial (VCB Out) Figure 13.73		No change in flood depths across Scheme and study area - <b>neutral</b>	No change in flood depths across Scheme and study area - <b>neutral</b>
Tidal – Humber Wave Overtopping (VCB In)	A 1 in 200-year return period event	Underpass – increase of maximum flood	A63 Castle Street east of Mytongate Junction – reduction

Flooding source	Scenario	Areas of adverse impact \ magnitude	Areas of beneficial impact \ magnitude
<p><a href="#">Figure 13.18</a></p>		<p>depth of up to 5.8m – <b>major adverse</b></p> <p>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></p> <p>Small areas of Kingston Retail Park – increase of maximum flood depth of up to 0.2m – <b>major adverse</b></p> <p>Blanket Row, Blackfriargate, High Street and surrounding streets – increase of maximum flood depth of up to 0.1m – <b>moderate adverse</b></p> <p>Finkle Street and Sewer Lane and surrounding streets north of the A63 – increase of maximum depth of up to 0.3m – <b>major adverse</b></p> <p>Queens Gardens – increase in maximum depth of up to 0.4m – <b>major adverse</b></p>	<p>in maximum flood depth of &gt;0.4m – <b>major beneficial</b></p> <p>Commercial Road south of underpass and A63 carriageway east of underpass – reduction of maximum flood depths of up to 0.4m – <b>major beneficial</b></p> <p>Myton Street and Osborne Street – reduction in maximum flood depth of up to 0.4m – <b>major beneficial</b></p> <p>Railway Dock – reduction in maximum flood depth of up to 0.10m – <b>moderate beneficial</b></p> <p>Edgar Street and Alfred Street – reduction in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></p>
<p><a href="#">Tidal – Humber Wave Overtopping (VCB Out)</a>  <a href="#">Figure 13.82</a></p>		<p>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></p> <p>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></p> <p>Small areas of Kingston Retail Park – increase of maximum flood depth of up to 0.2m – <b>major adverse</b></p>	<p>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></p> <p>Commercial Road south of underpass and A63 carriageway east of underpass – reduction of maximum flood depths of up to 0.4m – <b>major beneficial</b></p> <p>Myton Street and Osborne Street – reduction in maximum flood depth of up to 0.4m – <b>major beneficial</b></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p><u>Blackfriargate, Blanket Row and surrounding streets – increase in maximum flood depth of up to 0.10m – <b>moderate adverse</b></u></p> <p><u>Sewer Lane – increase in maximum flood depth of up to 0.20m – <b>major adverse</b></u></p> <p><u>Market Place, Lowgate, Alfred Gelder Street and surrounding streets – increase in maximum flood depth of up to 0.10m – <b>moderate adverse</b></u></p> <p><u>Posterngate – increase in maximum flood depth of up to 0.3m – <b>major adverse</b></u></p> <p><u>Princes Quay – increase in maximum flood depth of up to 0.10m – <b>moderate adverse</b></u></p> <p><u>Queens Gardens – increase in maximum depth of up to 0.4m – <b>major adverse</b></u></p>	<p><u>Railway Dock – reduction in maximum flood depth of up to 0.10m – <b>moderate beneficial</b></u></p> <p><u>Edgar Street, English Street and Alfred Street – reduction in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></u></p>
<p><u>Tidal – Humber Wave Overtopping (VCB In) Figure 13.21</u></p>	<p><u>A 1 in 1000-year return period event</u></p>	<p><u>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></u></p> <p><u>Kingston Retail Park and Waverley Street – increase of maximum flood depth of up to 0.3m – <b>major adverse</b></u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></u></p> <p><u>Princes Quay – reduction of maximum flood depths of greater than 0.4m – <b>major beneficial</b></u></p> <p><u>A1079 Ferensway north of underpass – reduction of maximum flood depth of up to 0.66m – <b>major beneficial</b></u></p> <p><u>A1079 Ferensway, A1105 Anlaby Road and surrounding streets to the west – reduction</u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p><u>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></u></p> <p><u>Lister Street, English Street, Alfred Street and surrounding streets – increase in maximum flood depth of up to 0.2m – <b>major adverse</b></u></p> <p><u>Jackson Street, Neptune Street, Daltry Street and Madeley Street – increase in maximum flood depth of up to 0.10m – <b>moderate adverse</b></u></p> <p><u>Humber Dock Marina and Railway Dock Marina – increase in maximum flood depth of up to 0.10m – <b>moderate adverse</b></u></p> <p><u>Blackfriargate and High Street surrounding streets – increase of maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p> <p><u>Blanket Row, Finkle Street, Sewer Lane and Humber Street – increase in maximum flood depth of up to 0.2m – <b>major adverse</b></u></p> <p><u>Commercial Road, Kingston Street and Railway Street – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p>	<p><u>of maximum flood depths of up to 0.1m – <b>moderate beneficial</b></u></p> <p><u>Myton Street, Osborne Street and surrounding streets – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Posterngate, Dagger Lane and Market Place – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Queens Gardens, and northern part of Market place – reduction in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></u></p>
<p><u>Tidal – Humber Wave Overtopping (VCB Out)</u>  Figure 13.84</p>		<p><u>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p><u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></u></p> <p><u>Kingston Retail Park – increase in maximum flood depth of up to 0.2m – <b>major adverse</b></u></p> <p><u>Lister Street – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p> <p><u>Queens Gardens – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p> <p><u>Blanket Row and Blackfriargate – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p>	<p><u>Humber Dock Street – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Myton Street, trundle Street and A1079 Ferensway north of Mytongate Junction – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Osborne Street, St Luke's Street, Carr Lane, A1106 Anlaby Road and surrounding streets – reduction in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></u></p>
<p><u>Tidal – Humber Wave Overtopping (VCB In) Figure 13.24</u></p>	<p><u>A 1 in 200-year return period event with consideration of climate change</u></p>	<p><u>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></u></p> <p><u>Kingston Retail Park and Waverley Street – increase of maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p> <p><u>Humber Dock Marina – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></u></p> <p><u>Osborne Street, Adelaide Street – reduction of maximum flood depth of up to 0.1m – <b>moderate beneficial</b></u></p> <p><u>A1079 Ferensway north of Mytongate Junction – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Princes Dock and Princes Dock Street – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Queen's Gardens, Guildhall Road, Alfred Gelder Street and surrounding streets – reduction</u></p>



<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p>Porter Street and Brisbane Street – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p> <p>Kingston Street and surrounding streets – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p> <p>Myton Street and Roper Street – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p>	<p>in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></p>
<p><u>Tidal – Humber Wave Overtopping (VCB Out)</u>  <u>Figure 13.88</u></p>		<p>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></p> <p>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – <b>major adverse</b></p> <p>Kingston Retail Park – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p> <p>Myton Street and Roper Street – increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p> <p>Brisbane Street and Porter Street - increase in maximum flood depth of up to 0.1m – <b>moderate adverse</b></p>	<p>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></p> <p>A1079 Ferensway north of Mytongate Junction, Adelaide Street and Osborne Street – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></p> <p>Princes Dock, princes Dock Street – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></p> <p>Queen’s Gardens, Guildhall Road, Alfred Gelder Street, Lowgate and surrounding streets – reduction in maximum flood depth of up to 0.1m – <b>moderate beneficial</b></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<u>Humber Dock Marina, Wellington Street and Railway Street - increase in maximum flood depth of up to 0.1m – moderate adverse</u>	
<u>Tidal – Humber Undefended (VCB In) Figure 13.33</u>	<u>A 1 in 200-year return period event (without existing flood defences)</u>	<u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u>  <u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – major adverse</u>  <u>Kingston Retail Park – increase in maximum flood depth of up to 0.2m – major adverse</u>  <u>Lister Street, English Street and Waverley Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u>  <u>Blanket Row, Blackfriargate, Humber Street, Finkle Street and Sewer Lane - increase in maximum flood depth of up to 0.1m – moderate adverse</u>	<u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u>  <u>Myton Street, Roper Street, Osborne Street – reduction in maximum flood depth of up to 0.3m – major beneficial</u>  <u>A1079 Ferensway, Carr Lane, West Street – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>  <u>Princes Dock, Princes Dock Street, Posterngate, Market Place and surrounding streets – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>  <u>Dock Street, Baker Street and Francis Street – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>
<u>Tidal – Humber Undefended (VCB Out) Figure 13.91</u>		<u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u>  <u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – major adverse</u>  <u>Kingston Retail Park – increase of maximum flood depth of up to</u>	<u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u>  <u>Myton Street, Roper Street, Osborne Street – reduction in maximum flood depth of up to 0.3m – major beneficial</u>  <u>A1079 Ferensway, Carr Lane, Upper Union Street and surrounding streets – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<u>0.1m – moderate adverse</u>	
<u>Tidal – Humber Undefined (VCB In) Figure 13.36</u>	<u>A 1 in 200-year return period event with consideration of climate change (without existing flood defences)</u>	<u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u>  <u>Westbound diverge slip road – increase of maximum flood depth of &gt;0.5m – major adverse</u>  <u>Kingston Retail Park – increase in maximum flood depth of up to 0.2m – major adverse</u>  <u>Lister Street, English Street and Waverley Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u>  <u>Blanket Row, Blackfriargate, Humber Street, Finkle Street and Sewer Lane - increase in maximum flood depth of up to 0.1m – moderate adverse</u>	<u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u>  <u>Myton Street, Roper Street, Osborne Street – reduction in maximum flood depth of up to 0.3m – major beneficial</u>  <u>A1079 Ferensway, Carr Lane, West Street – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>  <u>Princes Dock, Princes Dock Street, Posterngate, Market Place and surrounding streets – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>  <u>Dock Street, Baker Street and Norfolk Street – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>
<u>Tidal – Humber Undefined (VCB Out) Figure 13.93</u>		<u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u>  <u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – major adverse</u>  <u>Kingston Retail Park – increase of maximum flood depth of up to 0.1m – moderate adverse</u>	<u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u>  <u>Myton Street, Roper Street, Osborne Street – reduction in maximum flood depth of up to 0.3m – major beneficial</u>  <u>A1079 Ferensway, Carr Lane, Upper Union Street, West Street and surrounding streets – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
<p><u>Tidal Humber Undefended (VCB In) Figure 13.69</u></p>	<p><u>A 1 in 200-year return period event with consideration of extreme (H++) climate change (without existing flood defences)</u></p>	<p><u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – major adverse</u></p> <p><u>Kingston Retail Park – increase in maximum flood depth of up to 0.2m – major adverse</u></p> <p><u>Lister Street, Waverley Street and English Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u></p> <p><u>Blanket Row, Blackfriargate, Sewer Lane and Humber Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u></p> <p><u>A1079 Ferensway north of Mytongate Junction, Myton Street, Roper Street and surrounding streets – reduction in maximum flood depth of up to 0.2m – major beneficial</u></p> <p><u>A1079 Ferensway north to West Street, Carr Lane, Osborne Street, Upper Union Street and surrounding streets – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u></p> <p><u>Princes Dock, Princes Dock Street, Posterngate, Market Place, Lowgate, Alfred Gelder Street and Dock Street – reduction in maximum flood depth of up to 0.1m – moderate beneficial</u></p>
<p><u>Tidal from River Hull (VCB In) Figure 13.43</u></p>	<p><u>A 1 in 200-year return period event (tidal barrier fails to close)</u></p>	<p><u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – major adverse</u></p> <p><u>Small areas of west of Kingston Retail Park – increase in maximum flood depth of up to 0.3m – major adverse</u></p> <p><u>William Street and Porter Street – increase in maximum flood depth of up to 0.2m – major adverse</u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u></p> <p><u>Eastern and central Kingston Retail Park – reduction in maximum flood depth of up to 0.3m – major beneficial</u></p> <p><u>Railway Dock Marina and Humber Dock Marina – reduction in maximum flood depth of up to 0.2m – major beneficial</u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p><u>Princes Dock – increase in maximum flood depth of up to 0.3m – <b>major adverse</b></u></p> <p><u>Blanket Row, Sewer Lane, Finkle Street and Humber Dock Street – increase in maximum flood depth of up to 0.3m – <b>major adverse</b></u></p> <p><u>Humber Street, Queen Street and surrounding streets – increase in maximum flood depth of up 0.1m – <b>moderate adverse</b></u></p> <p><u>Posterngate, Market Place, Fish Street, Dagger Lane and Vicar Lane – increase in maximum flood depth of up 0.3m – <b>major adverse</b></u></p>	
<p><u>Tidal from River Hull (VCB Out)</u>  <u>Figure 13.99</u></p>		<p><u>Underpass – increase of maximum flood depth of up to 5.8m – <b>major adverse</b></u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – <b>major adverse</b></u></p> <p><u>Small areas of west of Kingston Retail Park – increase in maximum flood depth of up to 0.3m – <b>major adverse</b></u></p> <p><u>William Street and Porter Street – increase in maximum flood depth of up to 0.2m – <b>major adverse</b></u></p> <p><u>Princes Dock – increase in maximum</u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – <b>major beneficial</b></u></p> <p><u>Myton Street, Osborne Street, St Luke’s Street and surrounding streets – reduction in maximum flood depth of up to 0.4m – <b>major beneficial</b></u></p> <p><u>Central and eastern Kingston Retail Park – reduction in maximum flood depth of up to 0.3m – <b>major beneficial</b></u></p> <p><u>Humber Dock Marina and Railway Dock Marina – reduction in maximum flood depth of up to 0.2m – <b>major beneficial</b></u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		<p><u>flood depth of up to 0.2m – major adverse</u></p> <p><u>Blanket Row, Humber Street, Queen Street and surrounding streets – increase in maximum flood depth up to 0.1m – moderate adverse</u></p> <p><u>Market Place, Vicar Lane, Fish Street and Dagger Lane – increase in maximum flood depth of up to 0.3m – major adverse</u></p>	
<p><u>Tidal from River Hull (VCB In)</u>  <u>Figure 13.46</u></p>	<p><u>A 1 in 1000-year return period event (tidal barrier fails to close)</u></p>	<p><u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – major adverse</u></p> <p><u>Kingston Retail Park – increase in maximum flood depth of up to 0.3m – major adverse</u></p> <p><u>Waverley Street – increase in maximum flood depth of up to 0.3m – major adverse</u></p> <p><u>Edgar Street, William Street and Porter Street – increase in maximum flood depth of up to 0.2m – major adverse</u></p> <p><u>Blanket Row, Queen Street, Nelson Street and surrounding streets – increase in maximum flood depth of up to 0.1m – moderate adverse</u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u></p> <p><u>A1079 Ferensway, Osborne Street, St Luke’s Street and surrounding streets – decrease in maximum flood depth of up to &gt;0.5m – major beneficial</u></p> <p><u>Porter Street, Waterhouse Lane, West Street, Prospect Street and surrounding streets – reduction in maximum flood depth of up to 0.3m – major beneficial</u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
<p><u>Tidal from River Hull (VCB Out)</u>  <u>Figure 13.99</u></p>		<p><u>Princes Dock and Princes Dock Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u></p> <p><u>Underpass – increase of maximum flood depth of up to 5.8m – major adverse</u></p> <p><u>Westbound diverge slip road – increase of maximum flood depth of up &gt;0.5m – major adverse</u></p> <p><u>Kingston Retail Park – increase in maximum flood depth of up to 0.2m – major adverse</u></p> <p><u>Waverley Street – increase in maximum flood depth of up to 0.4m – major adverse</u></p> <p><u>Lister Street, Edgar Street and William Street – increase in maximum flood depth of up to 0.2m – major adverse</u></p> <p><u>Porter Street – increase in maximum flood depth of up to 0.1m – moderate adverse</u></p> <p><u>Princes Dock and Princes Dock Street – increase of maximum flood depth of up to 0.1m – moderate adverse</u></p> <p><u>Blanket Row, Sewer Lane, Finkle Street, Fish Street, Dagger Land and Vicar Lane – increase of maximum flood depth of up to</u></p>	<p><u>A63 Castle Street east of Mytongate Junction – reduction in maximum flood depth of &gt;0.4m – major beneficial</u></p> <p><u>Humber Dock Marina and Railway Dock Marina – decrease of maximum flood depth of up to 0.3m – major beneficial</u></p> <p><u>Osborne Street, St Luke's Street, Myton Street – reduction in maximum flood depth of greater than 0.4m – major beneficial</u></p> <p><u>Waterhouse Lane, Porter Street and A1079 Ferensway – reduction in maximum flood depth of up to 0.3m – major beneficial</u></p> <p><u>Margaret Moxon Way, West Street, North Street and Wright Street – reduction in maximum flood depth of up to 0.2m – major beneficial</u></p>

<u>Flooding source</u>	<u>Scenario</u>	<u>Areas of adverse impact \ magnitude</u>	<u>Areas of beneficial impact \ magnitude</u>
		0.1m – <b>moderate adverse</b>	
<u>Combined fluvial and tidal from River Hull</u> <u>Figure 14.53</u>	<u>A 1 in 200-year return period event (tidal barrier fails to close)</u>	<u>No change in flood depths across Scheme and study area -</u> <b>neutral</b>	<u>No change in flood depths across Scheme and study area</u> <b>- neutral</b>
<u>Combined fluvial and tidal from River Hull</u> <u>Figure 14.56</u>	<u>A 1 in 1000-year return period event (tidal barrier fails to close)</u>	<u>No change in flood depths across Scheme and study area -</u> <b>neutral</b>	<u>No change in flood depths across Scheme and study area</u> <b>- neutral</b>



**ES Table 11.20: Significance of potential residual impacts on surface water features during operation (amend row)**

Potential Impact	Feature	Attribute	Quality	Importance	Mitigation	Magnitude of impact	Significance
Alteration of flood flow routes due to the changes in ground levels and construction of structures	Humber floodplain	Conveyance of flow	Properties within the floodplain	Very high	Underpass drainage designed for 1 in 100-year, plus 30% allowance for climate change, rainfall event.  Emergency procedures in case of pump failure or extreme flooding event including no/minimal warnings in the event of a flood defence breach (Flood Emergency and Evacuation Plan (FEED)).	Ranges from <del>Moderate</del> Major beneficial to Major adverse depending on the location, source and extent of flooding and return period of event. Further detail is provided in <b>Error!</b> <u>Reference source not found.</u> Table 11.18.	Very Large adverse to <del>Large/Very Large</del> Very Large beneficial

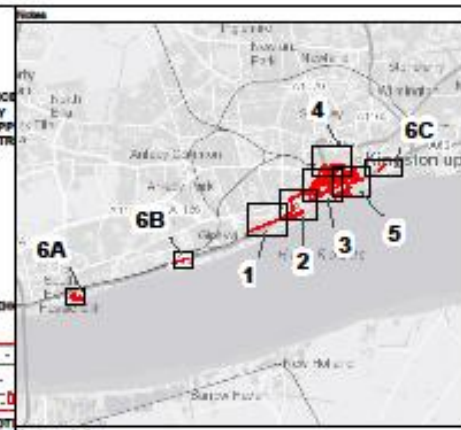
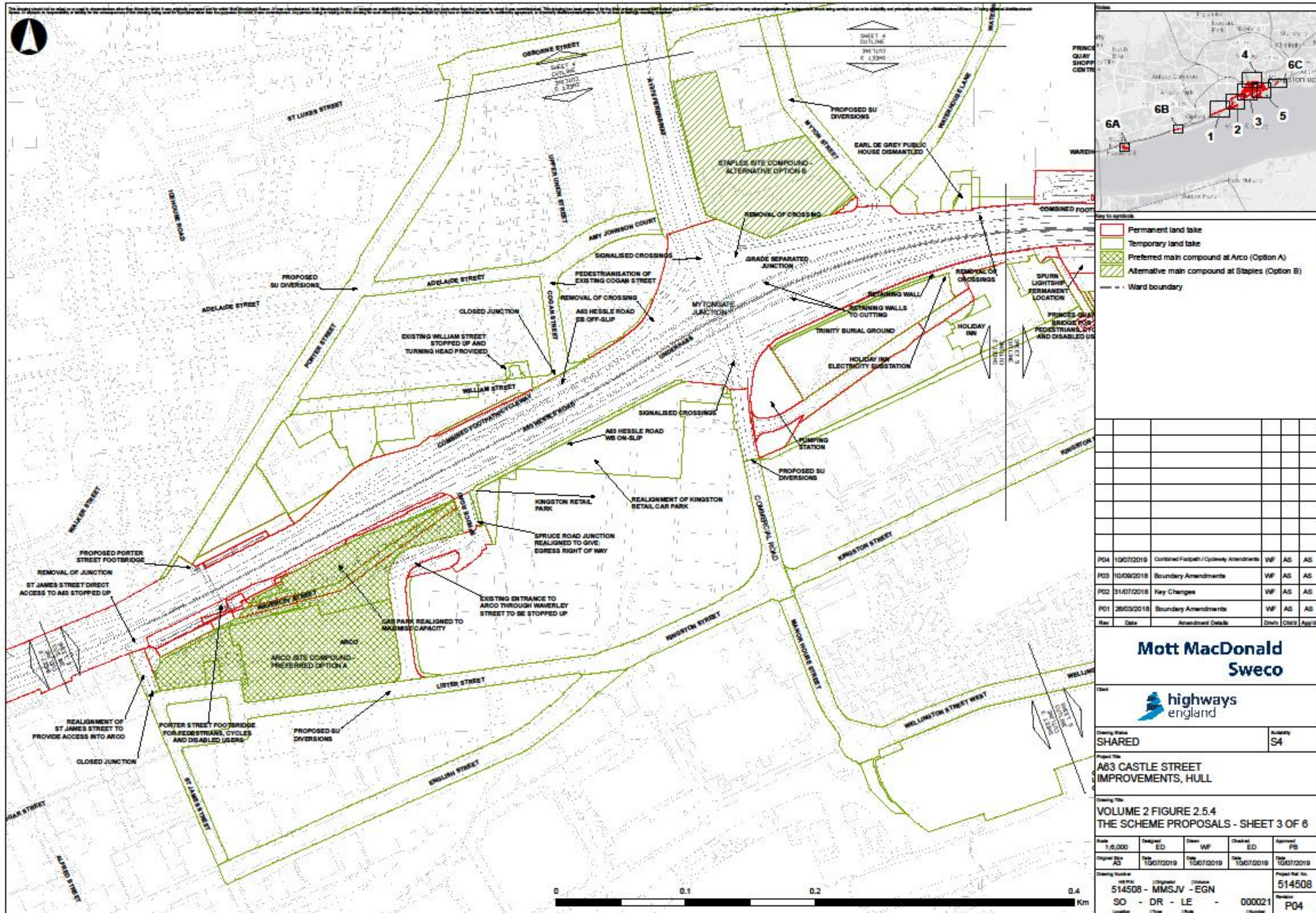
**ES Table 16.7: Significance of combined effects (revised)**

Receptor	Cultural features		Residential property		Community amenities and business	
	Construction	Operation	Construction	Operation	Construction	Operation
Air quality	-	-	Not significant adverse	Not significant adverse	Not significant adverse	Not significant adverse
Noise and vibration	Negligible increase	Not significant	Significant adverse	Significant adverse to significant beneficial	Minor increase	Not significant
Cultural heritage	Large adverse	Large adverse	-	-	Large adverse	Large adverse
Landscape	Large adverse landscape	Large adverse	Moderate adverse landscape	Significant adverse and beneficial visual	Large adverse landscape	Large adverse
Ecology and nature conservation	Large adverse	Large adverse	-	-	Large adverse	Large adverse
Road drainage and the water environment	-	-	Very large beneficial to very large adverse	Very large beneficial to very large adverse	Very large beneficial to very large adverse	Very large beneficial to very large adverse
Geology and soils	No significant adverse or beneficial residual effects					
Materials	No significant adverse or beneficial residual effects					
People and communities	Moderate adverse	Moderate adverse	-	-	Moderate adverse	Moderate adverse
Effects on all travellers	No significant adverse or beneficial residual effects					
Overall Significance of Combined Effects	Moderate adverse					

## **3 6.2 Environmental Statement Volume 2** **Figures 2.5.4 & 2.5.6 (APP-025)**

3.1.1 Replace ES Volume 2 Figure 2.5.4 The Scheme Proposals – Sheet 3 of 6 and Figure 2.5.6 The Scheme Proposals – Sheet 5 of 6 (APP-025) with the new Figures 2.5.4 and 2.5.6 below. Changes are as follows:

- . Locations of the combined footpath & cycleway have been clarified.



Key to symbols

- Permanent land take
- Temporary land take
- Preferred main compound at Arco (Option A)
- Alternative main compound at Staples (Option B)
- Ward boundary

Rev	Date	Amendment Details	Drawn	Checked	App'd
PO4	10/07/2019	Combined Footpath / Cycleway Amendments	WF	AS	AS
PO3	10/09/2018	Boundary Amendments	WF	AS	AS
PO2	31/07/2018	Key Changes	WF	AS	AS
PO1	25/03/2018	Boundary Amendments	WF	AS	AS

**Mott MacDonald Sweco**

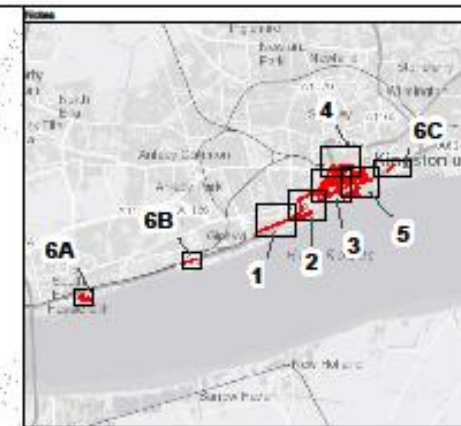
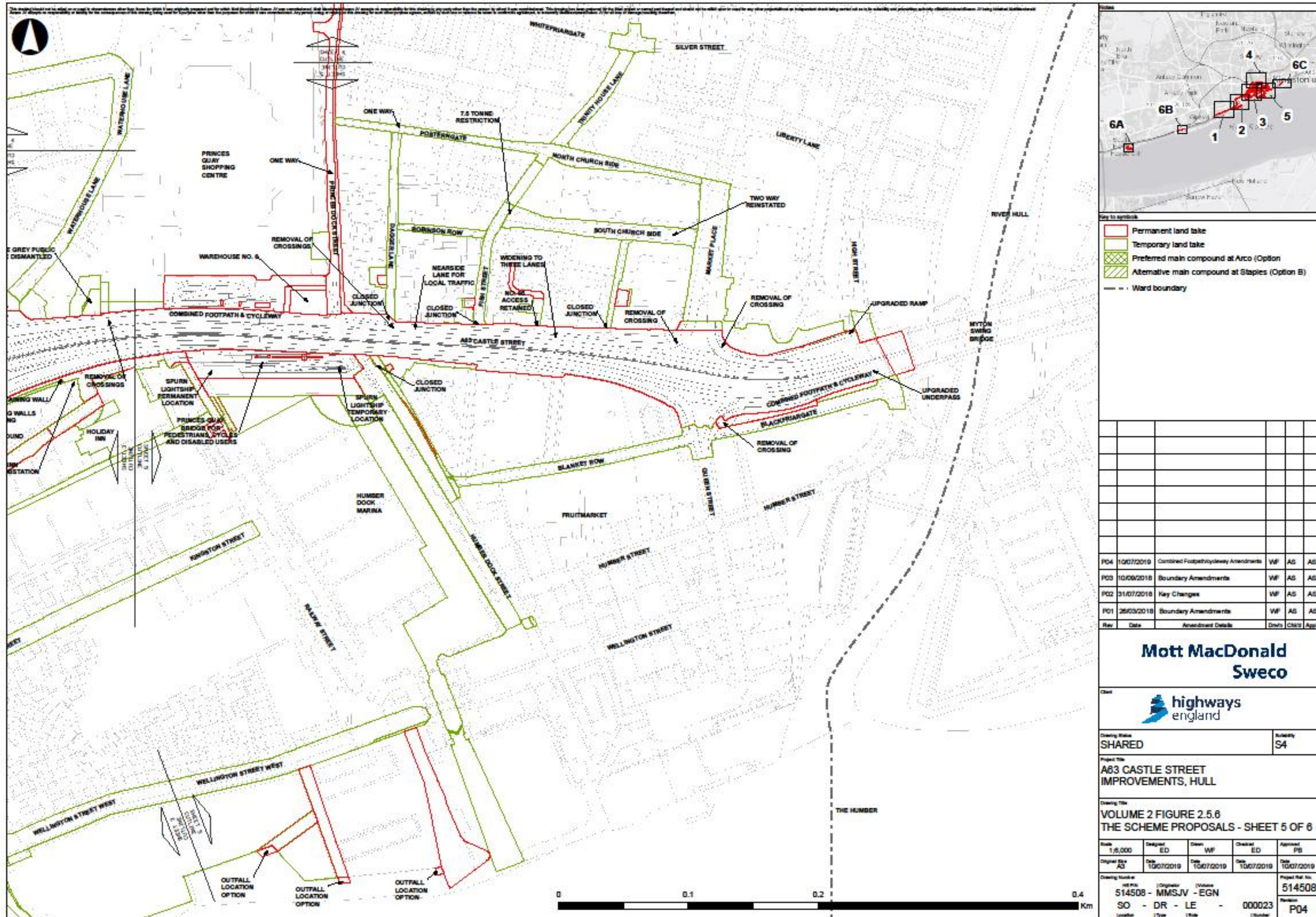


Sharing Status: SHARED Authority: S4

Project Title: A63 CASTLE STREET IMPROVEMENTS, HULL

Volume Title: VOLUME 2 FIGURE 2.5.4 THE SCHEME PROPOSALS - SHEET 3 OF 8

Scale	1:5,000	Designed	ED	Drawn	WF	Checked	ED	Approved	PB
Original Size	AD	Date	10/07/2019	Date	10/07/2019	Date	10/07/2019	Date	10/07/2019
Drawing Number	514508 - MMSJV - EGN		Project Ref. No.	514508					
Location	SO - DR - LE	Revision	000021	Number	P04				



Key to symbols

- Permanent land take
- Temporary land take
- Preferred main compound at Arco (Option)
- Alternative main compound at Staples (Option B)
- Ward boundary


PO4	10/07/2019	Combined Footpath/Cycleway Amendments	WF	AS	AS
PO3	10/09/2018	Boundary Amendments	WF	AS	AS
PO2	31/07/2018	Key Changes	WF	AS	AS
PO1	25/03/2018	Boundary Amendments	WF	AS	AS
Rev	Date	Amendment Details	Drawn	Checked	App'd

**Mott MacDonald Sweco**



Drawing Title: SHARED      Locality: S4

Project Title: **A63 CASTLE STREET IMPROVEMENTS, HULL**

Drawing Title: **VOLUME 2 FIGURE 2.5.8 THE SCHEME PROPOSALS - SHEET 5 OF 6**

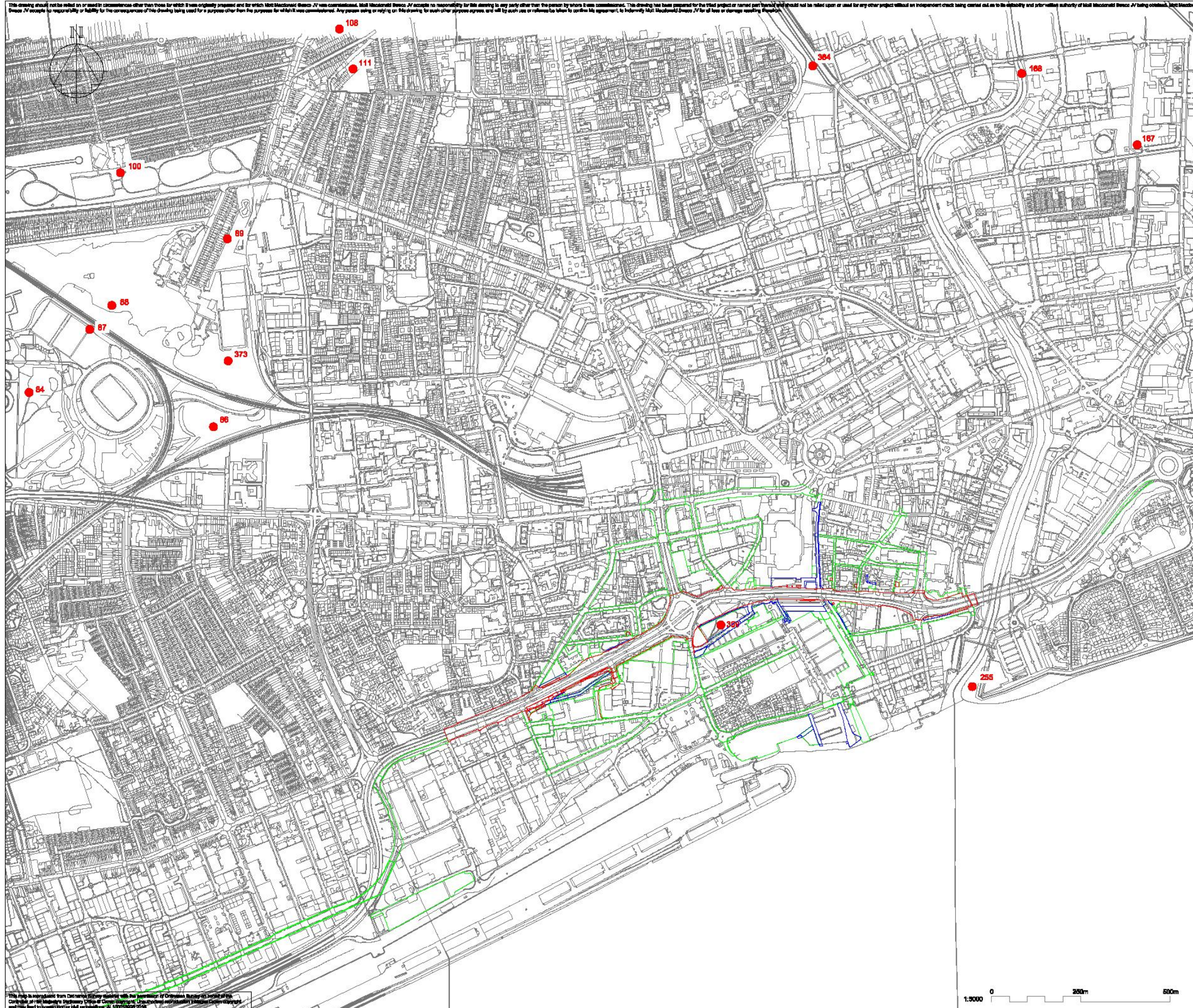
Scale	1:5,000	Designer	ED	Drawn	WF	Checked	ED	Approved	PB
Original Size	A3	Date	10/07/2019	Date	10/07/2019	Date	10/07/2019	Date	10/07/2019

Drawing Number	514508 - MMSJV - EGN	Project Ref. No.	514508
Revision	SO - DR - LE - 000023	Revision	P04
Location	(Type) (Title)	(Number)	

## **34** **6.2 Environmental Statement Volume 2 Figure 10.2 (APP-036)**

3.1.14.1.1 Replace ES Volume 2 Figure 10.2 Non-statutory designated sites (APP-036) with the new Figure 10.2 Non-statutory designated sites as below. Changes are as follows:

- The key has been replaced.
- Sammy's Point Site of Nature Conservation Interest (SNCI) has been added to Figure 10.2 as the mudflats are 250m from the Site boundary.



Notes  
**REFER TO VOLUME 1:  
CHAPTER 10:  
TABLE 10.4**

Key to symbols  
 PERMANENT LAND TAKE BOUNDARY  
 PERMANENT RIGHTS BOUNDARY  
 TEMPORARY LAND TAKE BOUNDARY  
 SNCI

Rev	Date	Amendment Details	Drawn	Checked	App'd
P04	04/04/19	T02 ADDED AND NOTE AMENDED	RE	DW	LC
P03	14/03/19	PERM LAND BOUNDARY EXTENT AMENDED	VM	DW	LC
P02	19/02/19	ISSUED FOR IFC APPROVAL	VM	DW	LC
P01	21/01/19	ISSUED FOR REVIEW & COMMENT	RE	DW	LC

**Mott MacDonald  
Sweco**

Client

Drawing Status: **SHARED**      Authority: **S4**

Project Title  
**A63 CASTLE STREET  
IMPROVEMENTS, HULL**

Drawing Title  
**NON-STATUTORY DESIGNATED SITES  
VOLUME 2 FIGURE 10.2**

Scale	Designed	Drawn	Checked	Approved
1:5000	Week, Adam	Edna, Ray	Wood, Chris	Coates, Lenny
Original Site A1	Date: 01/02/19	Date: 01/02/19	Date: 01/02/19	Date: 01/02/19
Drawing Number: <b>514508 - MMSJV - VES</b>	Originator: [Blank]	Volume: [Blank]	Project Ref. No.: <b>514508</b>	Revision: <b>P04</b>
<b>S0</b> Location	<b>DR</b> Type	<b>LE</b> Role	<b>000102</b> Number	

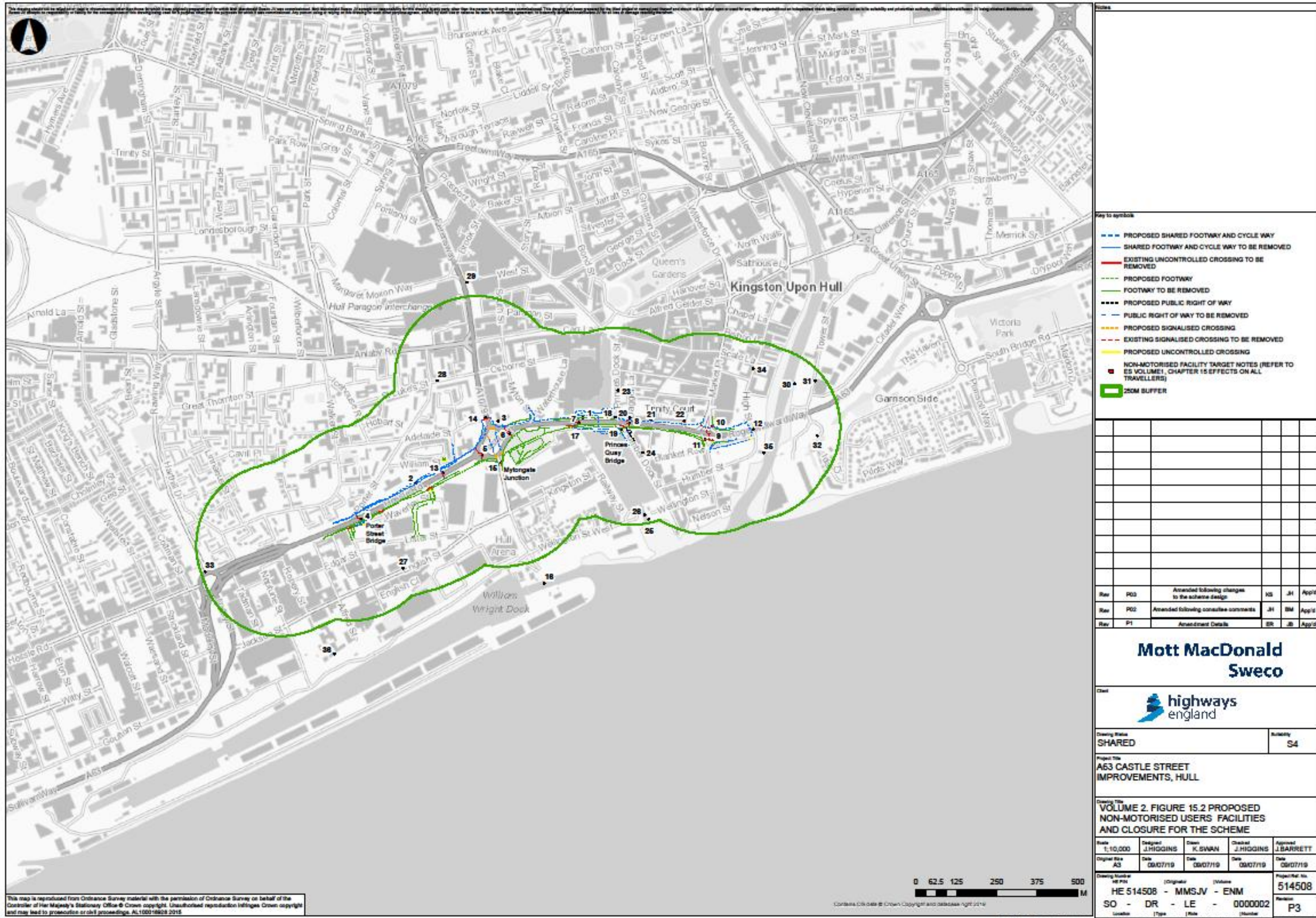
This drawing should not be relied on or used in circumstances other than those for which it was originally prepared and for which Mott MacDonald Sweco, its consultants, Mott MacDonald Sweco, its agents or its subcontractors have accepted responsibility. This drawing has been prepared for the stated project or named party and should not be relied upon or used for any other project without an independent check being carried out as to the reliability and information authority of Mott MacDonald Sweco, its consultants, Mott MacDonald Sweco, its agents or its subcontractors. Any person using or relying on this drawing for any other purpose agrees and will be held responsible for any loss or damage resulting therefrom.

## **5 6.2 Environmental Statement Volume 2 Figure 15.2 (APP-040)**

5.1.1 Replace ES Volume 2 Figure 15.2 Proposed non-motorised users facilities and closure for the Scheme (APP-040) with the new Figure 15.2 as below. Changes are as follows:

- . Locations of the combined footpath & cycleway have been clarified.





## 46 6.7 Ecology and Nature Conservation Assessment (APP-065)

Table 64.1: Ecology and Nature Conservation Assessment

Page	Paragraph/ Table	Published text	Correction				
25	Table 10.4 Non-statutory designated sites (row 13)	<table border="1"> <tr> <td>SNCI</td> <td>Foredyke stream cycle track - south of Chamberlain Road (177)</td> <td>No information provided</td> <td>1.6km northeast</td> </tr> </table>	SNCI	Foredyke stream cycle track - south of Chamberlain Road (177)	No information provided	1.6km northeast	Remove row 13 from table
SNCI	Foredyke stream cycle track - south of Chamberlain Road (177)	No information provided	1.6km northeast				
44	Table 10.8 Summary of valuation of ecological receptors, Ecological receptor column (row 3)	Trinity Burial Ground SNCI, River Hull SNCI	Trinity Burial Ground SNCI, River Hull SNCI, Mudflats to the south of Sammy's Point SNCI				
49	10.7.17	<u>River Hull SNCI</u> Direct impacts to the River Hull SNCI are unlikely.	<u>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</u> Direct impacts to the River Hull SNCI and Mudflats to the south of Sammy's Point SNCI are unlikely.				
56	10.7.54	<u>River Hull SNCI</u> Road drainage would not discharge to the River Hull during the Operation Phase and there would therefore be no risks to water quality within the river.	<u>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</u> Road drainage would not discharge to the River Hull during the Operation Phase and would not impact upon the River Hull SNCI or Mudflats to the south of Sammy's Point SNCI. There would therefore be no risks to water quality within the river.				
60	Table 10.9 Characterisation process of ecological impacts	n/a	Replace Table 10.9 with revised Table 10.9 (see above). Impacts are separated into a column for construction and a column for operation as requested in WQ1.2.6 (new/revised text in red). Replacement table also takes into account changes arising from mudflats to the south of Sammy's Point SNCI as requested in WQ1.2.2 (new/revised text in red).				
75	10.8.11	<i>River Hull SNCI</i> Neutral residual impacts are predicted to the River Hull SNCI during the Construction Phase, following the implementation of pollution protection mitigation measures.	<i>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</i> Neutral residual impacts are predicted to the River Hull SNCI and Mudflats to the south of Sammy's Point SNCI during the Construction Phase, following the				

Page	Paragraph/ Table	Published text	Correction
			implementation of pollution protection mitigation measures.
78	10.8.31	<i>River Hull SNCI</i> With no increase in noise or air pollution and no water discharges into this river, there is predicted to be neutral residual impacts to the SNCI during operation.	<i>River Hull SNCI and Mudflats to the south of Sammy's Point SNCI</i> With no increase in noise or air pollution and no water discharges into this river, there is predicted to be neutral residual impacts to these SNCIs during operation.
83	Table 10.10 Summary of ecological receptors, Ecological receptor column (row 4)	River Hull SNCI	River Hull SNCI and Mudflats to the south of Sammy's Point SNCI
87	Table 10.10 Summary of ecological receptors, Ecological receptor column (row 11)	Aquatic Invertebrates Humber Estuary SSSI  River Hull SNCI	Aquatic Invertebrates Humber Estuary SSSI  River Hull SNCI  Mudflats to the south of Sammy's Point SNCI

## 57 6.11 Register of Environmental Actions and Commitments (APP-068)

Table 75.1: Register of Environmental Actions and Commitments

Page	Reference	Published text	Correction
34	E5	Clearance of potential nesting habitat outside breeding season (in particular for bats and birds).	Clearance of potential bird nesting habitat to take place outside of the March – August (inclusive) breeding season.
34	E5	n/a	Add new bullet: <ul style="list-style-type: none"> <li>Felling of trees to be undertaken only in September/October and April to take account of the sensitive roosting periods for bats.</li> </ul>
41	W13	n/a	Add row W13 – see below for details
50	T3	<ul style="list-style-type: none"> <li>A free 'shuttle bus' service would also be provided during construction, and this would pick up and drop of NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</li> </ul>	<ul style="list-style-type: none"> <li>A free 'shuttle bus' service would also be provided if feasible during construction, and this would pick up and drop of NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</li> </ul>
50/51	Footnote 1	<ul style="list-style-type: none"> <li>Archaeological Project Design</li> <li>Arboricultural Implications Assessment</li> <li>Arboricultural Method Statement;</li> <li>Landscape and Ecology Management Plan</li> <li>Handover Environmental Management Plan</li> <li>Marine Mammal Mitigation Plan</li> <li>Groundwater Monitoring Plan</li> <li>Erosion Prevention and Sediment Control Plan</li> <li>Noise and Vibration Management Plan</li> <li>Materials Management Plan</li> <li>Site Waste Management Plan</li> <li>Foundation Works Risk Assessment</li> <li>Materials Logistics Plan</li> <li>Community Relations Strategy</li> <li>Traffic and Transport Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>Archaeological Project Design</li> <li>Arboricultural Implications Assessment</li> <li>Arboricultural Method Statement</li> <li>Landscape and Ecology Management Plan</li> <li>Handover Environmental Management Plan</li> <li>Marine Mammal Mitigation Plan</li> <li>Groundwater Monitoring Plan</li> <li>Flood Evacuation Plan</li> <li>Flood Emergency and Evacuation Plan</li> <li>Erosion Prevention and Sediment Control Plan</li> <li>Noise and Vibration Management Plan</li> <li>Materials Management Plan</li> <li>Site Waste Management Plan</li> <li>Foundation Works Risk Assessment</li> <li>Materials Logistics Plan</li> <li>Community Relations Strategy</li> <li>Traffic and Transport Management Plan</li> </ul>

**Register of Environmental Actions and Commitments (REAC) (APP68) and Outline Environmental Management Plan (OEMP), Annex B (APP-072) – Add new row W13**

Ref	ES ref.	DCO ref.	Works information ref.	Objective	Action (including any monitoring required)	Achievement criteria and reporting requirements (if applicable)	How the Action is to be implemented	Responsible Person (s)	When P = Pre-construction C = Construction O = Operation A = All	Completion record
W13	CH11			To limit impacts of flooding on construction workers and the public	<ul style="list-style-type: none"> <li>EA flood warning service to be subscribed to throughout construction. If flood alert or flood warning received, information to be shared with relevant personnel.</li> <li>Emergency procedures documented in the Flood Emergency and Evacuation Plan (FEEP) (ES Volume 3 Appendix 11.2 Appendix B) to be instigated for safe evacuation of the underpass and surrounding areas of the Scheme during operation.</li> <li>CEMP to include emergency procedures based on the FEEP to evacuate construction footprint in the event of extreme flooding. Procedures to account for all sources of flooding including tidal, pluvial and fluvial flooding.</li> </ul>	Mitigation measures should be included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor	Contractor	C O	Signature:  Date:

## 8 7.1 Planning Statement (APP-070)

**Table 8.1: Planning Statement**

Page	Paragraph/Table	Published text	Correction
27	4.4.5	<u>These include the combined footway and cycleway on either side of the A63, new signal controlled crossings at Ferensway and Commercial Road and the removal of vehicle traffic from some routes.</u>	<u>These include the combined footway and cycleway to the north of the A63, upgraded footway provision on the southern side of the A63, new signal controlled crossings at Ferensway and Commercial Road and the removal of vehicle traffic from some routes.</u>
46	6.1.6	<u>The Scheme will provide benefits to NMUs, creating a safer environment by separating NMUs from vehicle traffic and providing a combined footway and cycleway on either side of the A63, and a new signalised crossing at Mytongate Junction to improve access across the A63.</u>	<u>The Scheme will provide benefits to NMUs, creating a safer environment by separating NMUs from vehicle traffic and providing a combined footway and cycleway on the northern side of the A63, upgraded footway provision on the southern side of the A63, and a new signalised crossing at Mytongate Junction to improve access across the A63.</u>

## 69 7.3 Outline Environmental Management Plan (APP-072)

Table 69.1: Outline Environmental Management Plan

Page	Table/Reference	Published text	Correction				
16	Table 4.1 Permits, consents and licences	<table border="1"> <tr> <td>Flood Risk Activity</td> <td>Environment Agency</td> <td>Permit required if work is carried out on or near a main river, on or near a flood defence structure, in a flood plain, or near a flood defence.</td> <td>Permit is required to do any regulated flood risk activities such as activity within 16m of sea defence structure.</td> </tr> </table>	Flood Risk Activity	Environment Agency	Permit required if work is carried out on or near a main river, on or near a flood defence structure, in a flood plain, or near a flood defence.	Permit is required to do any regulated flood risk activities such as activity within 16m of sea defence structure.	Remove row from table
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18	Table 4.1 Permits, consents and licences	<table border="1"> <tr> <td>Listed Building Consent: Planning (Listed Buildings and Conservation Areas) Act 1990</td> <td>Secretary of State</td> <td>3 / 4 consents required for Earl de Grey public house and Humber Dock. 1 / 2 consents required for monitoring equipment on Castle Buildings and Warehouse No. 5.</td> <td>Earl de Grey public house – consent required in advance of dismantling; Humber Dock – consent required for alteration of northern dock wall during construction of Prince Quay Bridge Humber Dock – consent required for re-siting of the Spurn Lightship Castle Buildings and Warehouse No 5 – consent required for vibration monitoring equipment</td> </tr> </table>	Listed Building Consent: Planning (Listed Buildings and Conservation Areas) Act 1990	Secretary of State	3 / 4 consents required for Earl de Grey public house and Humber Dock. 1 / 2 consents required for monitoring equipment on Castle Buildings and Warehouse No. 5.	Earl de Grey public house – consent required in advance of dismantling; Humber Dock – consent required for alteration of northern dock wall during construction of Prince Quay Bridge Humber Dock – consent required for re-siting of the Spurn Lightship Castle Buildings and Warehouse No 5 – consent required for vibration monitoring equipment	Remove row from table
Listed Building Consent: Planning (Listed Buildings and Conservation Areas) Act 1990	Secretary of State	3 / 4 consents required for Earl de Grey public house and Humber Dock. 1 / 2 consents required for monitoring equipment on Castle Buildings and Warehouse No. 5.	Earl de Grey public house – consent required in advance of dismantling; Humber Dock – consent required for alteration of northern dock wall during construction of Prince Quay Bridge Humber Dock – consent required for re-siting of the Spurn Lightship Castle Buildings and Warehouse No 5 – consent required for vibration monitoring equipment				
18/19	Table 4.1 Permits, consents and licences	<table border="1"> <tr> <td>Scheduled Monument Consent: Ancient Monuments and Archaeological Areas Act 1979</td> <td>Secretary of State</td> <td>1 consent required for Beverley Gate and archaeological remains only if service and utility diversions are within the boundary of the Scheduled Monument.</td> <td>Beverley Gate – consent will be required in the event of any service and utility diversions excavations with the boundary of the Scheduled Monument.</td> </tr> </table>	Scheduled Monument Consent: Ancient Monuments and Archaeological Areas Act 1979	Secretary of State	1 consent required for Beverley Gate and archaeological remains only if service and utility diversions are within the boundary of the Scheduled Monument.	Beverley Gate – consent will be required in the event of any service and utility diversions excavations with the boundary of the Scheduled Monument.	Remove row from table
Scheduled Monument Consent: Ancient Monuments and Archaeological Areas Act 1979	Secretary of State	1 consent required for Beverley Gate and archaeological remains only if service and utility diversions are within the boundary of the Scheduled Monument.	Beverley Gate – consent will be required in the event of any service and utility diversions excavations with the boundary of the Scheduled Monument.				
34	E5	Clearance of potential nesting habitat outside breeding season (in particular for bats and birds).	Clearance of potential bird nesting habitat to take place outside of the March – August (inclusive) breeding season.				
34	E5	n/a	Add new bullet: <ul style="list-style-type: none"> <li>Felling of trees to be undertaken only in September/October and April to take account of the sensitive roosting periods for bats.</li> </ul>				
41	W13	n/a	Add row W13 – see above for details				
50	T3	<ul style="list-style-type: none"> <li>A free 'shuttle bus' service would also be provided during construction, and this would pick up and drop of NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</li> </ul>	<ul style="list-style-type: none"> <li>A free 'shuttle bus' service would also be provided if feasible during construction, and this would pick up and drop of NMUs at predetermined locations either side of the A63 and would also include wheelchair access facilities.</li> </ul>				
50/51	Footnote 1	<ul style="list-style-type: none"> <li>Archaeological Project Design</li> <li>Arboricultural Implications Assessment</li> <li>Arboricultural Method Statement;</li> <li>Landscape and Ecology Management Plan</li> <li>Handover Environmental Management Plan</li> <li>Marine Mammal Mitigation Plan</li> <li>Groundwater Monitoring Plan</li> <li>Erosion Prevention and Sediment Control Plan</li> </ul>	<ul style="list-style-type: none"> <li>Archaeological Project Design;</li> <li>Arboricultural Implications Assessment</li> <li>Arboricultural Method Statement</li> <li>Landscape and Ecology Management Plan</li> <li>Handover Environmental Management Plan</li> <li>Marine Mammal Mitigation Plan</li> <li>Groundwater Monitoring Plan</li> <li>Flood Evacuation Plan</li> <li>Flood Emergency and Evacuation Plan</li> </ul>				

Page	Table/Reference	Published text	Correction
		<ul style="list-style-type: none"> <li>· Noise and Vibration Management Plan</li> <li>· Materials Management Plan</li> <li>· Site Waste Management Plan</li> <li>· Foundation Works Risk Assessment</li> <li>· Materials Logistics Plan</li> <li>· Community Relations Strategy</li> <li>· Traffic and Transport Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>· Erosion Prevention and Sediment Control Plan</li> <li>· Noise and Vibration Management Plan</li> <li>· Materials Management Plan</li> <li>· Site Waste Management Plan</li> <li>· Foundation Works Risk Assessment</li> <li>· Materials Logistics Plan</li> <li>· Community Relations Strategy</li> <li>· Traffic and Transport Management Plan</li> </ul>



## 10 7.4 Transport Assessment Report (APP-073)

Table 10.1: Transport Assessment Report

Page	Paragraph/Table	Published text	Correction
47	6.1.2	<p>However, adverse effects would be partially offset through the provision of upgraded facilities such as the combined footway and cycleway on either side of the A63, a new grade separated crossing at Ferensway and Commercial Road, and the removal of vehicle traffic from some routes.</p>	<p>However, adverse effects would be partially offset through the provision of upgraded facilities such as the combined footway and cycleway to the north of the A63, upgraded footway provision on the southern side of the A63, a new grade separated crossing at Ferensway and Commercial Road, and the removal of vehicle traffic from some routes.</p>