

A63 Castle Street Improvement, Hull

Scheme Number: TR010016

6.11 Record of Environmental Actions and Commitments

APFP Regulation 5(2)(q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009



Volume 6

September
March 20189

Page Left Intentionally Blank

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Applications: Prescribed Forms and
Procedure) Regulations 2009**

**A63 (Castle Street Improvement, Hull)
Development Consent Order 20[]**

**RECORD OF ENVIRONMENTAL ACTIONS AND
COMMITMENTS**

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme Reference	TR010016
Application Document Reference	TR010016/APP/6.1
Author:	A63 Castle Street Project Team

Version	Date	Status of Version
Rev 0	September 2018	Application Issue
<u>Rev 1</u>	<u>March 2019</u>	<u>Post Acceptance Changes</u>

Page Left Intentionally Blank

A63 Castle Street Improvements, Hull

REGISTER OF ENVIRONMENTAL ACTIONS AND COMMITMENTS

TR010016/APP/6.11
HE514508-MMSJV-EGN-S0-RP-LE-000029
~~5 September 2018~~ 27 March 2019

Ref	ES ref.	DCO ref.	Works info. 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
Air Quality (AQ)										
AQ1	CH6	-	-	Minimise the release of dust and vehicle/plant emissions which may impact upon air quality.	<ul style="list-style-type: none"> Best practice methodologies to be implemented and outlined in the CEMP¹ to control the generation of dust and vehicle/plant emissions. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:
AQ2	CH6 A	-	-	Traffic pollutant complaints procedure	<ul style="list-style-type: none"> Keep a detailed log of any air quality complaints and include measures taken by contractor to address complaints. 	<p>Name and contact information of the person(s) accountable for air quality displayed on the site boundary</p> <p>During operation, detailed under Part IV of the Environment Act 1995, it is the responsibility of the Local Authority to periodically review air quality within its area and to declare and Air Quality Management Area (AQMA) and to develop and Air Quality Action Plan where air quality objectives are exceeded. Any complaints of traffic-related pollution are therefore the responsibility of the Local Authority to investigate.</p>	<p>Contractual responsibilities between Highways England and the Principal Contractor.</p> <p>Local Authority</p>	Contractor – recording of complaints Local Authority for investigation of complaints	C, O	Signature: Date:
Noise and Vibration (NV)										
NV1	CH7	-	-	The control of noise and vibration arising from the works and compounds to minimise disturbance in community.	<ul style="list-style-type: none"> Best practicable means for the control of noise and vibration to applied as a matter of course and as described in Section 79(9) of the Environmental Protection Act 1990, to reduce noise to a minimum shall be employed at all times. Procedures for noise control and the assessment of site noise shall be in accordance with BS 5228, Part 1:2009+A1:2014. Contractor requirements are set out in the Appendix 1/9 'Control of Noise and Vibration'. 	<p>Mitigation measures included in the CEMP</p> <p>Consultation with HCC Principal Environmental Health Officer with public relations managed throughout the Construction Phase.</p> <p>Noise insulation and temporary rehousing to be offered to those meeting the criteria set out in Annex E.4 of BS 5228 Part 1 2009+A1:2014</p>	<p>Contractual responsibilities between Highways England and the Principal Contractor.</p> <p>Local Authority</p>	Contractor	C, O	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<ul style="list-style-type: none"> • Measures would be set out in the CEMP to control potential noise impacts from site traffic. This may include the following: <ul style="list-style-type: none"> - Vehicles should not wait or queue up with engines running on the site or on the public highway - Manage deliveries to prevent queuing of site traffic at access points and the need for vehicles to reverse - Use of adjustable or directional audible vehicle-reversing alarms or use of alternative warning systems, e.g. white noise alarms • Other, more specific forms of construction mitigation are as follows: <ul style="list-style-type: none"> - The A63 remains in use throughout the works in order that its capacity is maximised. Right hand turns at Mytongate Junction would be maintained throughout the works. - Temporary acoustic barrier fencing to be provided along the northern carriageway edge between the Myton Centre and William Booth House when construction activities are programmed to occur along in this section of the Scheme. - Monitoring of phases would be conducted in order to verify that noise levels associated with traffic flows during construction do not cause significant adverse effects at noise sensitive receptors. - Proactive communication with local residents, businesses and road users to address their concerns and opinions on the traffic management (TM) phasing. - Safe access and egress would be maintained to all businesses and residential properties. Emergency 					

Ref	ES ref.	DCO ref.	Works info. 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
					<p>routes to be available throughout the Scheme construction programme of works at all times.</p> <ul style="list-style-type: none"> - Every effort would be made to ensure that there are no late removals of the TM after overnight lane closures. The overnight closures required are discussed below. - A minimum of 2 weeks prior notice to be given to occupiers of affected properties via letter drop and press release. - Noise mitigation measures may include procurement of low noise plant options, time restrictions on certain noisy activities, temporary noise barriers and tool box briefings to operatives on quiet working. 					
NV2	CH7	-	-	Control of road traffic noise due to the application of temporary diversion routes during the construction phase	<ul style="list-style-type: none"> • Consideration should be given to vary the diversion routes to minimise the duration of potential disturbance in individual areas. 	<p>Minimise increases in noise of 1 dB or more from traffic on diversion routes and to not exceed 40 days in any 6-month period</p> <p>Consultation with HCC Principal Environmental Health Officer with public relations managed throughout the Construction Phase.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:
NV3	CH7	-	-	Mitigation of road traffic noise affecting properties qualifying for noise insulation under the Noise Insulation Regulations 1975	<ul style="list-style-type: none"> • Operational noise impacts would be mitigated by the treatment of the new carriageway and slip roads with a thin layer of stone mastic asphalt (thin surface course). • Assessment and provision of noise insulation for all qualifying properties 	Any dwellings at which the predicted level of road traffic noise is found to satisfy the criteria for sound insulation measures in accordance with the Noise Insulation Regulations 1975 will be offered either sound insulation measures or a grant instead.	Assess by calculation within 6 months after Scheme opening	Highways England	O	Signature: Date:
Cultural Heritage (CH)										

Ref	ES ref.	DCO ref.	Works info. 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
CH1	CH8	-	-	Preservation by record of archaeological remains.	<ul style="list-style-type: none"> Undertake archaeological investigation of the archaeological trench on Princes Dock Street in line with the Archaeological Project Design. The archaeological investigation will be monitored by the Local Authority Archaeological Advisor (Humber Archaeology Partnership on behalf of HCC). A report will be produced for the results of the mitigation; the work may also feed into the final publication on the Scheme; these will require approval from the Local Authority Archaeological Advisor. 	Appointment of an archaeological subcontractor to undertake the agreed works.	Contractual responsibilities between Highways England, the Principal Contractor and the Principal Designer.	Historic England chosen Heritage Specialist.	P, C Reporting may continue into the operation phase.	Signature: Date:
CH2	CH8	-	-	Preservation by record of archaeological remains.	<ul style="list-style-type: none"> Undertake archaeological investigation of the Trinity Burial Ground in line with the Archaeological Project Design (see Volume 3, Appendix 8.7). The archaeological investigation will be monitored by the Local Authority Archaeological Advisor (Humber Archaeology Partnership on behalf of HCC). A report will be produced for the results of the mitigation; the work may also feed into the final publication on the Scheme; these will require approval from the Local Authority Archaeological Advisor. 	Appointment of an archaeological subcontractor to undertake the agreed works.	Contractual responsibilities between Highways England, the Principal Contractor and the Principal Designer.	Historic England chosen Heritage Specialist.	P, C Reporting may continue into the operation phase.	Signature: Date:
CH3	CH8	-	-	Preservation by record of archaeological remains.	<ul style="list-style-type: none"> Undertake archaeological watching brief during the construction of Princes Quay Bridge (see Volume 3, Appendix 8.8). The archaeological watching brief will be monitored by the Local Authority Archaeological Advisor (Humber Archaeology Partnership on behalf of HCC). A report will be produced for the results of the mitigation; the work may also feed into the final publication on the Scheme; these will require approval from the Local Authority Archaeological Advisor. 	Appointment of an archaeological subcontractor to undertake the agreed works.	Contractual responsibilities between Highways England, the Principal Contractor and the Principal Designer.	Historic England chosen Heritage Specialist.	P, C Reporting may continue into the Operation Phase.	Signature: Date:
CH4	CH8	-	-	Preservation by record of archaeological remains.	<ul style="list-style-type: none"> Produce Archaeological Project Design¹ (APD) and to cover archaeological watching brief during the mains works and Old Town Accommodation works. Undertake 	Consultation with the Local Authority Archaeological Advisor. Production of an APD.	Contractual responsibilities between Highways	Historic England chosen	P, C	Signature:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>archaeological watching brief as outlined in the APD.</p> <ul style="list-style-type: none"> The APD will be approved and archaeological watching brief will be monitored by the Local Authority Archaeological Advisor (Humber Archaeology Partnership on behalf of HCC). A report will be produced for the results of the mitigation; the work may also feed into the final publication on the Scheme; these will require approval from the Local Authority Archaeological Advisor. 	Appointment of an archaeological subcontractor to undertake the agreed works.	England, the Principal Contractor and the Principal Designer.	Heritage Specialist.	Reporting may continue into the Operation Phase.	Date:
CH5	CH8	-	-	Preservation by record of built heritage remains	<ul style="list-style-type: none"> Produce APD to cover archaeological recording the Earl de Grey Public House in advance of and during demolition. Undertake archaeological recording in line with the APD. The APD will be approved and archaeological watching brief will be monitored by the Local Authority Archaeological Advisor (Humber Archaeology Partnership on behalf of HCC). A report will be produced for the results of the mitigation; the work may also feed into the final publication on the Project; these will require approval from the Local Authority Archaeological Advisor. 	<p>Consultation with the Local Authority Archaeological Advisor. Production of an APD.</p> <p>Appointment of an archaeological subcontractor to undertake the agreed works.</p>	Contractual responsibilities between Highways England, the Principal Contractor and the Principal Designer.	Historic England chosen Heritage Specialist.	<p>P, C</p> <p>Reporting may continue into the Operation Phase.</p>	<p>Signature:</p> <p>Date:</p>
Landscape (L)										
L1	CH9	-	-	To limit visual intrusion and impacts upon townscape character during construction	<ul style="list-style-type: none"> Reduction of visual intrusion and impacts upon the townscape throughout construction. This should include but not be limited to: <ul style="list-style-type: none"> a well-managed and tidy site. limited stockpiles of materials and deliveries on an as needed basis wherever possible. large-scale construction plant to be positioned in the least visually intrusive 	Daily site audits.	To be implemented by the Principal Contractor.	Contractor	C	<p>Signature:</p> <p>Date:</p>

Ref	ES ref.	DCO ref.	Works info. 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
					<p>locations within construction compounds as far as practicable.</p> <ul style="list-style-type: none"> - welfare units, temporary site offices, plant and hoarding in a colour that would aid integration with the surrounding townscape where possible. - tree felling to be carried out in stages as required to maintain existing visual screening of the highway for as long as practicable. - limited use of lighting wherever possible to restrict night time impacts. 					
L2	CH9			Limit impacts upon existing trees and vegetation	<ul style="list-style-type: none"> • Works should be undertaken to limit impacts upon existing vegetation on site. Full details are presented in the Arboricultural Implications Assessment¹ (AIA) and Arboricultural Method Statement¹ (AMS). Tasks would include but are by no means limited to: <ul style="list-style-type: none"> - Prevent damage to roots, stem and branches of existing trees to be retained, as detailed in AIA and AMS. - Provide tree protection fencing in line with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. - Follow prohibitions applied within the area enclosed by the Tree Protection Fencing - as detailed in the AIA and AMS. • Any changes in circumstance in relation to trees on site to be agreed with Scheme Arboriculturalist in the first instance prior to works. • Environmental Clerk of Works to be cognisant of Arboricultural requirements and report any failures to implement actions of AIA and AMS to Scheme Arboriculturalist. 	<p>Prevention of damage to any vegetation to be retained in line with the AMS.</p> <p>Prevention of damage to existing trees and vegetation on adjoining private land during fencing or hoarding works e.g on the highway boundary south of Staples to the north east of Mytongate Junction in line with the AMS.</p>	To be implemented by the Principal Contractor.	Contractor and Scheme Arboriculturalist	C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
L3	CH9			To limit visual intrusion and impacts upon townscape character during operation	<ul style="list-style-type: none"> Works should be undertaken to reduce visual intrusion and impacts upon the landscape as a whole throughout operation by the implementation of the landscape design in accordance with detailed hard and soft landscape proposals, the environmental masterplan, and the CEMP. 	Successfully implement Environmental Masterplan design in line with the CEMP – supervision and review of planting works.	Soft landscape works to be undertaken by Contractor.	Contractor and Scheme Landscape Architect	O	Signature: Date:
L4	CH9	-	-	To limit visual intrusion and impacts upon townscape character during operation	<ul style="list-style-type: none"> Landscape works undertaken should be maintained to ensure successful establishment of the proposed landscape design. Maintenance should be undertaken in accordance with the Landscape and Ecology Management Plan¹ (LEMP) to ensure the establishment and continued growth of new plant stock to ensure proposed mitigation planting meets its objectives as presented in the Environmental Masterplan. 	Successful management of landscape planting in line with Environmental Masterplan design, and LEMP - monitoring and reporting of defects.	Management throughout Aftercare period.	Contractor and Scheme Landscape Architect	O	Signature: Date:
L5	CH9	-	-	To ensure transfer of maintenance responsibilities for the soft estate of the Scheme after handover.	<ul style="list-style-type: none"> Landscape works and improvements undertaken during the Scheme have been maintained during the Aftercare period and arrangements needs to be made for their continued upkeep after handover to HCC. HCC should be made aware of their responsibilities for the landscaped elements of the Scheme (including hard and soft landscaping adjacent to the A63 highway and the underpass, the replacement public open space at the Myton Centre, works to Trinity Burial Ground including the maintenance of paths and historic features such as monuments) in accordance with the HEMP. 	Successful completion of the Handover Environmental Management Plan ¹ (HEMP) and subsequent monitoring and reporting arrangements.	Maintenance after handover in accordance with the HEMP.	Contractor and Scheme Landscape Architect	O	Signature: Date:
L6	CH9	-	-	To ensure protection of existing trees	<ul style="list-style-type: none"> Ensure that hoardings to the Arco site compound are removed and/or moved at handover to enable tree and shrub landscape proposals to be implemented along the boundary with the A63. 	Successful management of landscape planting in line with Environmental Masterplan design, and LEMP (to be produced) - monitoring and reporting of defects.	Management throughout Aftercare period and at handover.	Contractor and Scheme Landscape Architect	O	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
						Successful completion of the HEMP and subsequent monitoring and reporting arrangements.				
Ecology and Nature Conservation (E)										
E1	CH10			To prevent airborne dust, noise, vibration and pollutant sedimentation from entering the Humber Estuary and harm to marine fauna during piling into Humber Dock Marina.	<ul style="list-style-type: none"> • Best practice methodologies to be implemented and outlined in the CEMP to control pollutants. May include silt curtain. • 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. • 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. • A soft start-up of machinery to disperse any potential fish, birds or mammals present in the dock. 	<p>Mitigation measures included in the CEMP</p> <p>Appointment of trained marine fauna ecologist.</p> <p>Production of a Marine Mammal Mitigation Plan¹ (MMMP) as specified by JNCC, 2010.</p> <p>Production of a Noise and Vibration Management Plan¹ (NVMP).</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor and marine ecologists	P, C	Signature: Date:
E2	CH10			To protect trees and flora in Trinity Burial Ground and trees around site	<ul style="list-style-type: none"> • Works should be undertaken to limit impacts upon existing vegetation on site. Full details are presented in AIA and AMS. Tasks would include but are by no means limited to: <ul style="list-style-type: none"> - Prevent damage to roots, stem and branches of existing trees to be retained, as detailed in AIA and AMS. - Provide tree protection fencing in line with BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. - Follow prohibitions applied within the area enclosed by the Tree Protection Fencing - as detailed in the AIA and AMS. • Any changes in circumstance in relation to trees on site to be agreed with Scheme Arboriculturalist in the first instance prior to works. Environmental Clerk of Works to be cognisant of Arboricultural requirements and 	Prevention of damage to any vegetation to be retained in line with the AMS and noted in the LEMP.	To be implemented by the Principal Contractor.	Contractor and Scheme Arboriculturalist	C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>report any failures to implement actions of AIA and AMS to Scheme Arboriculturalist.</p> <ul style="list-style-type: none"> Lighting during construction to directed away from remaining trees. 					
E3	CH10			Minimise the release of dust, noise, vibration and point pollution which may impact upon all other habitats	<ul style="list-style-type: none"> Standard pollution prevention measures will be used in site compounds and working areas to mitigate pollution incidents before contaminants could reach the Humber Estuary. The Scheme would retain the existing highway gullies. In addition, new water collection features would be introduced to collect surface water run-off from impermeable areas as attenuation for the additional flow rates. This would restrict surface water flows to the existing flow rates to the public sewer network, Princes Dock and the Humber Dock. Concrete mixing and washing areas would be located more than 10m from waterbodies. Wash water would not be discharged to the water environment and would be disposed of appropriately. Disposal of excavated material and trimmed excess pile and wall material would be described, documented and disposed of in accordance with relevant statutory instrument and guidance with chemical analysis being undertaken where appropriate. Best practice methodologies to be implemented and outlined in the CEMP to control pollutants. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:
E4	CH10			To retain some habitat for invertebrates	<ul style="list-style-type: none"> Site Compounds – Wellington Street Island Wharf, Neptune Street and Livingstone Road, a small amount of ephemeral/short perennial habitat is to be left undisturbed in a corner of each compound. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
E5	CH10	-	-	To limit impacts to wildlife during vegetation clearance	<ul style="list-style-type: none"> An Ecological Clerk of Works (ECoW) to be present prior to vegetation clearance to search the area where vegetation is to be removed first and move any fauna to safety. Clearance of potential nesting habitat outside breeding season (in particular for bats and birds). Destruction of nests would be avoided by sensitive timing of works. At site compounds Wellington Street Island Wharf and Livingstone Road, mitigation should include that trenches should be covered at night to prevent grey seal/otter from falling in, or trenches should include an earth ramp to allow them to climb out. At night lighting should be directed away from the Humber. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor and scheme ecologist	P, C	Signature: Date:
E6	CH10			To prevent unexpected harm to bats.	<ul style="list-style-type: none"> Precautionary avoidance measures are to include that demolition of the Earl de Grey public house and 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. Lighting at night to be directed away from linear features and the use of hoods to reduce light spill in Trinity Burial Ground. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor and scheme ecologist	P, C	Signature: Date:
E7	CH10			To prevent the spread of invasive non-native species.	<ul style="list-style-type: none"> Invasive Species have been identified on site i.e. Cotoneaster (Market Place junction and A63 and Queen Street junction); False acacia (land south of Mytongate Junction). Trees/plants are to be removed and the arisings and topsoil in these areas to be treated as controlled waste. To be disposed of at a suitably licensed or permitted disposal facility. 	CEMP and biosecurity method statements.	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
E8	CH10			Compensatory measures for loss of bat habitat	<ul style="list-style-type: none"> • Compensation includes the erection of bat boxes on the remaining trees in Trinity Burial Ground SNCI. • Compensation includes that the larger native trees are to be replanted on the verges at either side of the A63 around Trinity Burial Ground and the Myton Centre. The large height of the trees would provide habitat 'hop-overs' for bats and reduce collisions with traffic. 	Successful implementation of the Environmental Masterplan design in line with the CEMP – supervision and review of planting works.	To be undertaken by Contractor.	Contractor and Scheme ecologist	O	Signature: Date:
Road Drainage and the Water Environment (W)										
W1	CH11	-	-	To limit effects as a result of storage of materials.	<ul style="list-style-type: none"> • Where possible, storage compounds (for the storage of construction materials or temporary stockpiling of excavated materials) would be located away from surface watercourses and drains. • Drums and barrels would be stored in a designated, bund-shielded, safe area within the site compound. • All drums and barrels would be properly labelled and fitted with flow control taps. • All fuel, oil and chemicals would be stored in accordance with the requirements of the Control of Pollution (Oil Storage) Regulations 2001. • Construction plant would be refuelled in designated areas on an impermeable surface, away from drains and watercourses. If any refuelling does need to take place in other areas of the site, a prescribed safe method would be used. An emergency spill plan would be generated and spill kits would be available at appropriate locations. • Other construction best practice approaches would also be adopted, such as covering of stockpiles to avoid the mobilisation of soils, and taking care when working near existing sewers or above ground sewer diversions to 	Mitigation measures included in the CEMP Water quality monitoring plan to be carried out once agreed with Environment Agency	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					avoid damage. The CEMP would also include an erosion prevention and sediment control plan, with the aim of minimising erosion by reducing disturbance, and stabilising exposed materials.					
W2	CH11			To limit impacts of reduced flows due to earthworks and increased infiltration	<ul style="list-style-type: none"> Temporary pumping arrangements within CEMP to discharge flood waters to sewer or surface waters subject to relevant permits / consents, only compliant water to be discharged to Humber Estuary, the River Hull, Humber, Albert, Railway, and Princes Dock or Fleet Drain, non-compliant water collected and discharged off-site. Any discharges to docks / marinas would require consent from Marine Management Organisation (MMO), dock operators and the Environment Agency. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:
W3	CH11			To limit impacts of increased flows due to construction dewatering	<ul style="list-style-type: none"> Temporary pumping arrangements within CEMP to discharge flood waters to sewer or surface waters subject to relevant permits / consents, only compliant water to be discharged to Humber Estuary, the River Hull, Humber, Albert, Railway, and Princes Dock or Fleet Drain, non-compliant water collected and discharged off-site. Any discharges to docks/marinas would require consent from MMO, dock operators and the Environment Agency. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor	Contractor	C	Signature: Date:
W4	CH11			To limit impacts of increased suspended solids and reduction in water quality because of earthworks, construction dewatering, plant and vehicle washing, etc	<ul style="list-style-type: none"> Mitigation by best practice methods implemented through the CEMP, including the use of SuDS to reduce surface water runoff rates and appropriate pollution and silt control. Consents / permits to be obtained for construction dewatering – only compliant water to be discharged to Humber Estuary or other surface water bodies, non-compliant water collected and discharged off-site. Any discharges to docks / marinas 	<p>Mitigation measures included in the CEMP. This would include an Erosion Prevention and Sediment Control Plan¹ (EPSCP), with the aim of minimising erosion by reducing disturbance, and stabilising exposed materials.</p> <p>Water quality monitoring reporting to be agreed with Environment Agency.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>would require consent from MMO, dock operator and Environment Agency.</p> <ul style="list-style-type: none"> Contaminated land classed as hazardous waste to be removed from site and disposed of at licensed facility. Temporary drainage arrangements including closed drainage systems, oil separators and settlement tanks will be put in place to capture site runoff and to remove oils, chemicals and suspended solids that may be mobilised during construction. Monitoring plan to include water quality sampling prior to, during and after construction (to be agreed with Environment Agency). <p>Other construction best practice approaches would also be adopted, such as covering of stockpiles to avoid the mobilisation of soils, and taking care when working near existing sewers or above ground temporary sewer diversions to avoid damage. The CEMP would also include an erosion prevention and sediment control plan, with the aim of minimising erosion by reducing disturbance, and stabilising exposed materials.</p>					
W5	CH11			To limit impacts of changes in flood flow routes due to alteration of ground elevations	<ul style="list-style-type: none"> CEMP to include emergency procedures to evacuate construction footprint in the event of extreme flooding. Procedures to account for all sources of flooding including tidal, pluvial and fluvial flooding. Temporary pumping arrangements within CEMP to discharge flood waters to sewer or surface waters subject to permit / consent, only compliant water to be discharged to Humber Estuary, the River Hull, Humber, Albert, Railway, and Princes Dock or Fleet Drain, non-compliant water collected and discharged off-site. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	C	Signature: Date:
W6	CH11			To limit impacts of pollution due to	<ul style="list-style-type: none"> Proper use of bunding, spill kits, emergency clean up and evacuation procedures 	Mitigation measures included in the CEMP	Contractual responsibilities	Contractor	P, C	Signature:

Ref	ES ref.	DCO ref.	Works info. 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
				accidental spillages of oils, fuels, chemicals, concrete, cement or admixtures, etc	<p>through adherence to best practice approaches.</p> <ul style="list-style-type: none"> Monitoring plan to include water quality sampling prior to, during and after construction (to be agreed with Environment Agency). Temporary drainage arrangements including closed drainage systems, oil separators and settlement tanks will be put in place to capture site runoff and to remove oils, chemicals and suspended solids that may be mobilised during construction. Drums and barrels would be stored in a designated, bund-shielded, safe area within the site compound. All fuel, oil and chemicals would be stored in accordance with the requirements of the Control of Pollution (Oil Storage) Regulations 2001. Construction plant would be refuelled in designated areas on an impermeable surface, away from drains and watercourses. If any refuelling does need to take place in other areas of the site, a prescribed safe method would be used. An emergency spill plan would be generated and spill kits would be available at appropriate locations. Other construction best practice approaches would also be adopted, such as covering of stockpiles to avoid the mobilisation of soils, and taking care when working near existing sewers or above ground temporary sewer diversions to avoid damage. The CEMP would also include an erosion prevention and sediment control plan, with the aim of minimising erosion by reducing disturbance, and stabilising exposed materials. 	Water quality monitoring reporting to be agreed with Environment Agency.	between Highways England and the Principal Contractor.			Date:

Ref	ES ref.	DCO ref.	Works info. 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
W7	CH11			To limit impacts of changes to groundwater level or flow as a result of construction	<ul style="list-style-type: none"> Excavation design and piling design to mitigate groundwater dewatering and mounding risks. Groundwater monitoring plan to include water level monitoring prior to, during and after construction (to be agreed with Environment Agency). Movement assessments will assess and mitigate settlement risks at nearby buildings. Dewatering only to be undertaken with appropriate consents / permits in place: only compliant water to be discharged to Humber Estuary, the River Hull, Humber, Albert, Railway, and Princes Dock or Fleet Drain, non-compliant water collected and discharged off-site. Any discharges to docks/marinas would require consent from MMO, dock operator and Environment Agency. 	<p>Mitigation measures included in the CEMP</p> <p>Water quality monitoring reporting to be agreed with Environment Agency.</p> <p>Consents / permits for dewatering: dewatering design details will be required before the licensing process can commence. A Groundwater Investigation Consent (GIC) is likely to be required to drill and test the dewatering system as part of the licensing process.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
W8	CH11			To limit impacts of additional saline intrusion during construction dewatering	<ul style="list-style-type: none"> Excavation design to minimise dewatering and therefore drawdown risks, and hence the risk of inducing additional saline intrusion. Groundwater monitoring plan¹ (GMP) to include water quality sampling prior to, during and after construction (to be agreed with Environment Agency). 	<p>Mitigation measures included in the CEMP</p> <p>Water quality monitoring reporting to be agreed with Environment Agency.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
W9	CH11			To limit the deterioration of groundwater quality as a result of mobilisation of contamination and generation of suspended solids through ground disturbance, Creation of new contamination pathways between	<ul style="list-style-type: none"> Selection of appropriate construction methodology (including piling) to minimise ground disturbance, generation of suspended solids and the potential for down-drag of contaminants. Foundation Works Risk Assessment to ensure appropriate foundation solutions are designed and undertaken to minimise risks. Shallow soils should not be reused, but stockpiled separately onsite, and subject to additional analysis. Known contaminated soils to be excavated segregated, stored appropriately and disposed or treated off- 	<p>Mitigation measures included in the CEMP</p> <p>Water quality monitoring reporting to be agreed with Environment Agency.</p> <p>Consents/permits for dewatering: dewatering design details will be required before the licensing process can commence. A Groundwater Investigation Consent (GIC) is likely to be required to drill and test the</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
				the surface superficial deposits and Chalk, and direct contact with construction materials.	<p>site. Best practice methodologies will be implemented to ensure any potential cause or spread of contamination is mitigated during construction.</p> <ul style="list-style-type: none"> GMP to include water quality sampling prior to, during and after construction (to be agreed with Environment Agency). Known preferential pathways, such as the large diameter chalk borehole LDBH02 to be removed or backfilled prior to adjacent construction works. Construction techniques (including excavation) to be selected to minimise ground disturbance, generation of suspended soils and the potential for down-drag of contaminants. Construction compounds will be covered by hardstanding and have closed drainage system. A specialist contractor will be required for the excavation of the burial ground, together with a detailed CEMP to avoid contaminant mitigation due to ground disturbance. Potentially contaminated water (from dewatering) would be disposed of appropriately and with the necessary consents/permits in place: only compliant water to be discharged to Humber Estuary or other surface water bodies, non-compliant water collected and discharged off-site. Any discharges to docks/marinas would require consent from MMO, dock operator and Environment Agency. 	dewatering system as part of the licensing process.				
W10	CH 11			To limit impacts of pollution on Humber Dock marina as a result of the construction of piled foundations	<ul style="list-style-type: none"> Proper use of bunding, spill kits, emergency clean up and evacuation procedures through adherence to best practice approaches. Measures to contain disturbed silt and sediment as a result of piling activities to be implemented, e.g., silt curtains. 	<p>Mitigation measures included in the CEMP</p> <p>Water quality monitoring reporting to be agreed with Environment Agency and MMO.</p> <p>Marine Licence to be obtained from MMO.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
				for Princes Quay bridge	<ul style="list-style-type: none"> Monitoring plan to include water quality sampling prior to, during and after construction (to be agreed with Environment Agency and MMO). 					
W11	CH11			To limit impacts of construction on access for maintenance of Environment Agency flood defences	<ul style="list-style-type: none"> No materials or plant to be stored within 16m of flood defences in order to allow access for maintenance of flood defence assets by Environment Agency 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
W12	CH11			To limit impacts of flooding on construction workers, plant and materials	<ul style="list-style-type: none"> EA flood warning service to be subscribed to throughout construction. If flood alert or flood warning received, information to be shared with relevant personnel. Flood evacuation plan to be prepared for temporary site compounds and to include provision for safe evacuation of personnel and protection or removal of plant or sensitive material likely to be mobilised during a flood. Any sensitive temporary structures to be constructed in a flood resilient fashion, where appropriate. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
Geology and Soils (G)										
G1	CH12	-	-	Prevent settlement of sections of new highway or adjacent land due to consolidation of underlying soils.	<ul style="list-style-type: none"> No increase beyond the existing load (e.g. lightweight fill or foamed concrete used where increases in ground level is required to avoid inducing settlement) or ground improvement measures. Provide adequate groundwater cut off to limit dewatering requirements. Monitor groundwater levels during dewatering/ excavation works to limit consequences. If drawdown of groundwater reaches a level where settlement may occur, activities suspended to allow groundwater to return to background levels. 	Design criteria stipulated by the Detailed Design and monitoring requirements in place during construction.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
G2	CH12	-	-	Prevent heave of the ground surrounding the active construction area caused by jet grouting or ground improvement measures.	<ul style="list-style-type: none"> During jet grouting or ground improvement measures, the ground level will be monitored for signs of heave. If detectable levels of heave are recorded, operations to be revised to ensure no further ground movements occurred. 	Design criteria stipulated by the Detailed Design and monitoring requirements in place during construction.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	C	Signature: Date:
G3	CH12	-	-	Prevent new or existing development being put at risk from land instability	<ul style="list-style-type: none"> Design includes a robust proposal for construction of the underpass to limit movement and deflections of the walls of the underpass. 	Design criteria stipulated by the Detailed Design.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	P	Signature: Date:
G4	CH12	-	-	Reduce risk of encountering and detonating unexploded ordnance	<ul style="list-style-type: none"> Adhere to safe systems of work in accordance with Explosive Ordnance Safety and Awareness briefings. In areas of medium risk (or above), earthworks/piling to be carried out under supervision of specialist Explosive Ordnance Disposal (EOD), with use of magnetometer surveys and targeting of suspected anomalies, where necessary. 	Mitigation measures included in the CEMP	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	C	Signature: Date:
G5	CH12	-	-	Prevent exposure to soils containing elevated concentrations of contaminants	<ul style="list-style-type: none"> Site workers to use appropriate Personal Protection Equipment (PPE) and safe systems of work as outlined in the CEMP. This will include how contaminated materials are to be managed (Materials Management Plan¹ (MMP)), stored and disposed of to mitigate exposure (e.g. vehicle loads to be covered, roads to be kept clean, damping down of stockpiles to prevent airborne release of contaminants). Validation sampling to verify excavated material meets specific criteria to ensure it is 	Mitigation measures included in the CEMP and MMP.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>suitable for reuse or nominated treatment/disposal route.</p> <ul style="list-style-type: none"> Material from hotspot areas to be excavated and segregated and stored appropriately prior to off-site disposal / treatment. Adoption of dynamic risk assessments to identify remedial actions should unforeseen contamination be encountered during future ground investigation or construction. Adoption of Trinity Burial Ground clearance methodology. 					
G6	CH12	-	-	Prevent exposure to asbestos fibres in localised areas of Made Ground	<ul style="list-style-type: none"> Site workers to use appropriate PPE and safe systems of work as outlined in the CEMP. This will include how contaminated materials are to be managed (MMP), stored and disposed of to mitigate exposure (e.g. vehicle loads to be covered, roads to be kept clean, damping down of stockpiles to prevent airborne release of contaminants). Adherence to Control of Asbestos Regulations. Use of dust suppression systems to ensure any potential for fibre release is minimised. Made ground materials to be subject to asbestos screening as part of validation analysis prior to reuse or disposal. 	Mitigation measures included in the CEMP and MMP.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	C	Signature: Date:
G7	CH12	-	-	Prevent increased leaching of contaminants from soils	<ul style="list-style-type: none"> No re-use of impacts soils without appropriate treatment to ensure they are suitable for reuse without presenting a risk to controlled waters. Controlled stockpile management. Minimise areas of exposed excavation as far as practical. 	Mitigation measures included in the CEMP and MMP.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	C	Signature: Date:
G8	CH12	-	-	Reduce risks associated with the release and migration of	<ul style="list-style-type: none"> Adoption of controlled work areas, use of intrinsically safe equipment, PPE, gas monitoring and suitable siting of any mobile 	Design criteria stipulated by the Detailed Design and mitigation measures included in the CEMP.	Contractual responsibilities between Highways	C	A	Signature:

Ref	ES ref.	DCO ref.	Works info. 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
				ground gas from the ground/groundwater	<p>offices, stores or welfare units as appropriate.</p> <ul style="list-style-type: none"> Ground gas protection measures should be installed (where appropriate) in accordance with UK guidance. Any drainage vents and chambers will also require consideration of ground gas protection/venting. 		England and the Designer and the Principal Contractor.			Date:
G9	CH12	-	-	Management of hazardous waste	<ul style="list-style-type: none"> Validation sampling to verify the waste classification of materials requiring disposal (using the Environment Agency's Technical Guidance WM3: Waste Classification). This would include further Waste Acceptance Criteria analysis to determine suitability for material disposal. 	Mitigation measures included in the CEMP and Site Waste Management Plan ¹ (SWMP).	Contractual responsibilities between Highways England and the Principal Contractor.	C	C	Signature: Date:
G10	CH12	-	-	Prevent the release of contaminants within groundwater/ run-off which may impact local water quality	<ul style="list-style-type: none"> Piling methodology to be selected to minimise the potential for down-drag of contaminants and should be designed to minimise the potential for piles to act as a continuing vertical pathway for contaminants in groundwater during operation. A Foundation Works Risk Assessment¹ (FWRA) to be undertaken in accordance with Environment Agency guidance to ensure appropriate foundation solutions are designed and undertaken to mitigate risks to controlled waters. Best practice methodologies to be implemented and outlined in CEMP to control discharges to drains and run-off. Only compliant discharges to sewer or surface water via consent/permit. 	Design criteria stipulated by the Detailed Design and mitigation measures included in the CEMP.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	P and C	Signature: Date:
G11	CH12	-	-	Prevent direct contact of buried services and structures with aggressive contaminants in soils	<ul style="list-style-type: none"> Selection of design of service ducts and materials in consideration of ground conditions where impacted soils are present. All concrete to be specified in accordance with the recommendations published within Concrete in Aggressive Ground, Special 	Design criteria stipulated by the Detailed Design.	Contractual responsibilities between Highways England and the Designer and the	Contractor	P	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					Digest 1:2005, Third edition BRE Construction Division.		Principal Contractor.			
Materials (M)										
M1	CH13	-	-	Reduce the depletion of natural resources (i.e. use of materials for earthworks including aggregates, sheet piling)	<ul style="list-style-type: none"> Optimise material efficiency (e.g. use of standardised components/pre-fabricated materials, avoid use of hazardous materials) Prioritise use of secondary or recycled materials, with consideration of appropriate Environment Agency/Waste and Resources Action Programme (WRAP) Quality Protocols and regulatory position statement. Responsible sourcing of materials through the use of frameworks such as BES 6001:2014 Adopt Design out Waste principles in accordance with WRAP best practice guidance and employ appropriate design control methods. Development and use of a Materials Logistics Plan¹ (MLP) in accordance with WRAP best practice guidance to manage material procurement, delivery, storage, handling use and disposal. Development of SWMP to support MLP. Best practice methodologies to be implemented during maintenance activities such as asphalt re-surfacing. 	MLP, SWMP.	Contractual responsibilities between Highways England and the Designer and the Principal Contractor.	Contractor	A	Signature: Date:
M2	CH13			Reduce energy/fuel consumption (embodied carbon) and climate change through manufacture of materials.	<ul style="list-style-type: none"> Prioritise use of secondary or recycled materials. Responsible sourcing of materials through the use of frameworks such as BES 6001:2014. Employ Carbon Emission Calculator Tool / or similar methodology to monitor total carbon emission of materials against Key Performance Indicators (KPIs). 	MLP, SWMP, CEMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	A	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
M3	CH13			Minimise the release of contaminants to air (dust), land or the water environment and generation of noise due to handling/movement of materials and waste (including transport)	<ul style="list-style-type: none"> Best practice methodologies to be implemented and outlined in the CEMP to control the generation of dust, noise, discharges to land, drains and run-off. Consider alternate options to road transport (e.g. feasibility assessment of using pumping of grout / slurry waste where possible to reduce vehicle movements for the Scheme and material handling). Minimise distance for pumping of materials/slurry waste to as short a distance as possible to minimise the risk of blockages and line failures and avoid the need for booster pumps. 	CEMP, MLP, SWMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P and C	Signature: Date:
M4	CH13			Reduce demand on handling capacity of regional waste management and disposal facilities	<ul style="list-style-type: none"> On-site treatment of slurry / waste prior to removal from site to reduce volumes and difficulty in handling saturated excavation material. Promote re-use, recycling or recovery of materials either on or off-site. Management of subcontractors to ensure they adhere to appropriate waste minimisation procedures. Undertaking appropriate environmental validation to identify if subsoil is suitable for reuse (or nominated treatment/disposal route) and maximising reuse of excavated materials in accordance with CL:AIRE Definition of Waste (CDEW) Code of Practice. Identify potential for re-use of CDEW at exempted or permitted sites subject to suitability (e.g. use as a landfill capping material). Minimise volumes of hazardous waste generated (e.g. rotary drying of slurry in preference to lime treatment, excavation of any hotspots of soil contamination, 	SWMP, MMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	A	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>segregation and ensuring arisings are stored appropriately prior to treatment; treatment off road planings for re-use in accordance with regulatory position statement).</p> <ul style="list-style-type: none"> Using soil improvement techniques to enhance soil engineering properties to increase potential for material to be re-used. Waste segregation on-site (including plastics, timber, steel, hazardous, general waste etc). Use of KPIs to monitor progress of the Scheme including total waste volumes sent to or diverted from landfill. Use of Materials Management Plan (MMP) to manage the use, treatment and placement of excavated materials (including re-use on/offsite or disposal). 					
M5	CH13			Reduce energy/fuel consumption (transport carbon emissions) and climate change through plant use and transportation of materials and waste	<ul style="list-style-type: none"> Prioritise use of local suppliers Consider alternate options to road transport (e.g. feasibility assessment of using pumping of grout / slurry waste where possible to reduce vehicle movements for the Scheme and material handling). Minimise distance for pumping of materials/slurry waste to as short a distance as possible to minimise the risk of blockages and line failures and avoid the need for booster pumps. Promote re-use of materials on-site (e.g. retention of topsoil). Employ Carbon Emissions Calculation Tool / or similar methodology to monitor total carbon emission of materials against KPIs. 	MLP, SWMP	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	A	Signature: Date:
People and Communities (PC)										
PC1	CH14	-	-	To minimise the impacts of construction on	<ul style="list-style-type: none"> Land use during construction period should be minimised on community land including, 	CEMP to identify how land use during construction has been minimised.	Contractual responsibilities between	Contractor	P, C	Signature:

Ref	ES ref.	DCO ref.	Works info. 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
				communities and people during the construction period	for example, areas of recreation and publicly accessible open space.		Highways England and the Principal Contractor.			Date:
PC2	CH14	-	-	To minimise and mitigate the impacts of construction on economic development	<ul style="list-style-type: none"> The construction period may be able to help meet local demand for construction labour. Job Centres and local economic development officers may be able to support the recruitment of local workers. 	Direct communication with local Job Centre Plus and recruitment agencies.	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
PC3	CH14	-	-	To mitigate the impacts of construction on communities and people during the construction period.	<ul style="list-style-type: none"> The Community Relations Strategy¹ (CRS) should include the following measures to be followed: <ul style="list-style-type: none"> The CRS external and public communication would be the responsibility of the Principal Contractor Project Manager. Communication with the general public would be maintained prior to and during all construction works and would be channelled through a single Communications Officer. The CRS would be delivered in accordance with the Considerate Constructors Scheme and this may include: <ul style="list-style-type: none"> Letter drops Community meetings Public Exhibitions Publishing articles/documents Liaison with the media A complaints procedure should be established, including a 24-hour contact telephone number to be made available for the use of local residents, businesses and other sections of the community. 	<p>Publication of mitigation measures contained in the CEMP in the CRS.</p> <p>Considerate Constructors accreditation attained.</p> <p>Establishment of a 24 hour complaints procedure.</p>	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
PC4	CH14			To ensure workers health and safety	Standard of workers accommodation and facilities to meet statutory requirements ensuring safety and security of workers and the public, following Health and Safety Executive Guidelines.	Workers accommodation and facilities to meet statutory requirements.	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature:
Effects on All Travellers (T)										
T1	CH15	-	-	Communication and consideration of the general public.	<ul style="list-style-type: none"> The CRS should be followed to manage and maintain communication with the general public prior to and during construction works. The Scheme would also be delivered in accordance with the Considerate Constructors Scheme, and would ensure that local residents, businesses and other sections of the community are kept informed about the Scheme. This would include local road users and NMUs. 	Production of a CRS.	Contractual responsibilities between Highways England and the Principal Contractor.	Contractor	P, C	Signature: Date:
T2	CH15	-	-	Limiting driver stress and effect of construction on drivers	<ul style="list-style-type: none"> Traffic management would be the main measure for minimising effects upon vehicle travellers during the construction period. All diversion routes and road closures would be sign posted clearly, to minimise driver stress derived from driver frustration and route uncertainty. 	Production of a Traffic and Transport Management Plan ¹ (TTMP).	Contractual responsibilities between Highways England and the design consultant and construction contractors.	Contractor	P, C	Signature: Date:
T3	CH15	-	-	Effects of construction upon NMUs	<ul style="list-style-type: none"> Footways either side of the A63 would be closed during construction. Diversions would be implemented throughout construction allowing for east to west movements for NMUs. The diversion routes would alter phase by phase as NMU provisions are installed and would be clearly signed. A temporary at-grade road crossing is anticipated to be provided close to the existing Porter Street crossing, which would 	Mitigation measures included in the CEMP.	Contractual responsibilities between Highways England and the design consultant and the Principal Contractor.	Contractor	P, C	Signature: Date:

Ref	ES ref.	DCO ref.	Works info. 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
					<p>be closed once the new pedestrian, cycle and disabled user bridge at Porter Street has been opened.</p> <ul style="list-style-type: none"> 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 during Phase 0. 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. Mitigate the potential for construction noise and dust during works which could temporarily reduce the quality of journeys for pedestrians and cyclists. 					

¹ The following documents will be produced to support the Construction Environmental Management Plan (CEMP) as follows:

- Archaeological Project Design (APD)
- Arboricultural Implications Assessment (AIA)
- Arboricultural Method Statement (AMS)
- Landscape and Ecology Management Plan (LEMP)
- Handover Environmental Management Plan (HEMP)
- Marine Mammal Mitigation Plan (MMMP)
- Groundwater Monitoring Plan (GMP)
- Erosion Prevention and Sediment Control Plan (EPSCP)
- Noise and Vibration Management Plan (NWMP)
- Materials Management Plan (MMP)
- Site Waste Management Plan (SWMP)
- Foundation Works Risk Assessment (FWRA)
- Materials Logistics Plan (MLP)
- Community Relations Strategy (CRS)
- Traffic and Transport Management Plan (TTMP)

Annex C: Key legislation, policies and strategies and best practice

Environmental legislation, policies and strategies, and best practice documents of relevance, are highlighted below:

- Air Quality (England) Regulations 2000 (as amended) and the Air Quality (England) (Amendment) Regulations (as amended)
- Air Quality Standards Regulations 2010 (as amended)
- Ancient Monuments and Archaeological Areas Act 1979
- British Standard 4428 'Code of Practice for General Landscape Operations' 1989
- British Standard 5228 'Code of Practice for noise and vibration control on construction and open sites – Part 1: Noise' 2009 amended 2014
- British Standard 5228 'Code of Practice for noise and vibration control on construction and open sites – Part 2: Vibration' 2009
- British Standard 5837 'Trees in relation to design, demolition and construction – Recommendations' 2012.
- Burial Act 1857 Section 25, as amended by the Church of England (Miscellaneous Provisions) Measure 2014
- Care of Churches and Ecclesiastical Jurisdiction Measure 1991
- CL:AIRE Definition of Waste Code of Practice
- Climate Change Act 2008
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Construction (Design and Management) Regulations 2015
- Construction Industry Research and Information Association (CIRIA) (2010) Environmental Good Practice on Site 3rd Edition
- Contaminated Land (England) Regulations 2006 (as amended)
- Control of Asbestos Regulations 2012
- Control of Noise at Work Regulations 2005
- Control of Pesticides Regulations 1986
- Control of Pollution Act 1974 Sections 60 & 61

- Control of Pollution (Oil Storage) Regulations 2001
- Control of Substances Hazardous to Health Regulations 2002 (as amended)
- Controlled Waste (England and Wales) Regulations 2012 (as amended)
- Countryside and Rights of Way Act 2000
- Energy Performance of Buildings Directive (EPBD) 2003 (and amendments)
- Environment Act 1995 Chapter 25
- Environmental Agency Regulatory Position Statement 178 2014 (as amended)
- Environmental Noise (England) Regulations 2006 (as amended)
- Environmental Permitting (England and Wales) Regulations 2016 (as amended)
- Environmental Protection Act Part III (1990) Sections 79, 80 & 82
- Environmental Protection Act (1990) Sections 59 & 59ZA (supplemented by the Contaminated Land (England) (amendment) Regulations 2012)
- Faculty Jurisdiction Rules 2015
- Flood and Water Management Act 2010
- Hazardous Waste (England and Wales) Regulations 2005 (as amended)
- Highways Act 1980
- Land Drainage Act 1991
- Landfill (England and Wales) Regulations 2002 (as amended)
- Marine and Coastal Access Act 2009
- National Planning Policy Framework (NPPF) 2012 (England only)
- Natural Environment and Rural Communities Act 2006
- Planning and Compulsory Purchase Act, 2004
- Planning Act 2008
- Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended)
- Pollution Prevention and Control Act 1999 (as amended)
- Site Waste Management Plan Regulations 2008

- Trade Effluent (Prescribed Processes and Substances) Regulations 1989 (as amended)
- Water Abstraction and Impounding (Exemptions) Regulations 2017
- Waste Electric and Electronic Equipment Regulations 2013
- Water Act 2014
- Water Industry Act 1991
- Waste (England and Wales) Regulations 2011 (as amended)
- Water Resources Act 1991
- Wildlife and Countryside Act 1981
- WRAP Design out Waste principles