

**FINAL**

# **Chapel Reen**

## Habitats Regulations Assessment

**Project no. 4021359**

Prepared for:

Cyfoeth Naturiol Cymru Natural Resources Wales

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# Form

## Record of a Habitats Regulations Assessment of a project

### OGN 200 Form 1

Document owner: Protected Sites Team, EPP

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## Record of a Habitats Regulations Assessment of a project

### 1. Project Details

1(b): Project details where NRW is the project proponent/instigator	
<b>NRW Project reference</b>	CE0626
<b>Activity proposed</b>	<p>The purpose of the Scheme is to repair the Chapel Reen Outfall, which is centred at National Grid Reference ST 367830, in the village of Goldcliff to the south-east of Newport in South Wales.</p> <p>Previously temporary works were carried out at the site to address the risk of immediate failure. Those temporary works will now be removed, and a permanent solution implemented. The Scheme comprises:</p> <ul style="list-style-type: none"> <li>• Upgrading the existing tidal flap valves and installation of new mechanical lifting equipment.</li> <li>• Repairs to the upstream face of the outfall structure consisting of de-vegetation of the wall and masonry works.</li> <li>• Reinstatement of the effluent pipe from the Farmers Arms pub to its original position, which was relocated as part of the emergency works.</li> <li>• Replacement of a 12.6m plan length of existing and failed retaining walls on both sides of the outfall with steel sheet piled retaining walls of depths driven to a footing level of approximately -6.0m Ordnance Datum (OD) (Newlyn). This is an approximate pile length of 12m.</li> <li>• The sheet piles will be installed behind the existing retaining walls, within the area of profiled ground between the head wall and the channel.</li> <li>• The temporary works currently located within the channel will be removed, along with the remnants of the failed existing walls and slumped soils. Ground level will be reinstated around the downstream end of the new structure to tie-in with existing levels.</li> <li>• Installation of steel/reinforced concrete capping beam to the piles.</li> </ul>

- Installation of 7.5m long structural steel universal columns to prop the sheet piles.
- Replacement of a 12.6m plan length of existing masonry channel (invert) bed with a reinforced concrete bed.

Due to the nature of piling works, there is some uncertainty on the embedment depth that can be reached. The drawings submitted as part of the marine licence application show the assumed worst case scenario on site (Drawing References 4021359-BUK-ZZ-00-DR-C-00002, 4021359-BUK-ZZ-00-DR-C-00001, 4021359-BUK-ZZ-00-DR-C-00010 and 4021359-BUK-ZZ-00-DR-C-00009). This comprises a retained height of approximately 3.5m - 4m and the installation of four 7.5m long structural steel universal columns between 6.5 and 7.5mAOD to prop the sheet piles. If possible, during the works, the number of steel universal columns and the retained height will be reduced and the surrounding ground reprofiled and reinstated accordingly. The ground profile behind the piles will not exceed a 1 in 2 slope.

A general arrangement plan illustrating the layout of the items described above is provided as Drawing No. 4021359-BUK-ZZ-00-DR-C-00002. The area identified on this plan as the 'Boundaries of the Site' is henceforth referred to as 'the Scheme Area'.

The activities that will need to be carried out to deliver the Scheme will hereafter be referred to as the 'Proposed Works'. The proposed construction sequence comprises:

1. Site establishment (including access via Goldcliff Road, site offices, compound, welfare facilities, security)
2. Construct temporary access routes and lifting pad(s) in accordance with temporary works designs.
3. Install temporary works for water management to include over pumping measures (dependant on sequencing of works), remove existing flap valves from headwall and install temporary pipework to extend the existing culverts through working area, so they remain operational.
4. Install piling mat and undertake piling activities to drive the new sheet pile walls behind the footprint of the existing masonry training walls to achieve specified depths.
5. Install temporary works and framing (in accordance with temporary works design) to permit removal of the piling mat, temporary trench boxes and existing masonry training walls / fill material and expose face of new sheet piles.
6. Install temporary dam and over pumping measures to permit removal of temporary pipework used to extend existing culverts through working area, reinstate existing flap valves to headwall structure.
7. Prepare formation of existing channel bed and cast reinforced concrete slab (which may also act as low-level strut) between the new sheet piles.
8. Following sufficient curing time allowance to achieve required compressive strength for concrete slab, remove temporary works and framing (5).

	<p>9. Cut sheet piles to finished levels and construct reinforced concrete capping beams with installation of permanent high level props.</p> <p>10. Remove temporary works for water management (if required), temporary dam and pipework. Reinstall existing flap valves to headwall structure.</p> <p>11. Finishing activities and site demobilisation.</p> <p>All works will be undertaken by an NRW framework contractor who will implement best practice techniques to control pollution and siltation. As with all works carried out by NRW framework contractors, the contractor will be required to prepare and comply with a Pollution Prevention Plan, including spill response plans, and a Biosecurity Risk Assessment. Works method statements will be agreed by NRW before works start. Best-practice guidelines (e.g. GPP5: Works and maintenance in or near water, Version 1.2, 2018) will be followed as a minimum to prevent potential adverse effects from pollution and the spread of Invasive Non-Native Species.</p>
<b>Statutory basis</b>	<p>The Scheme falls within the jurisdiction of Newport City Council as the Local Planning Authority. The works are considered to fall under permitted development rights as land drainage works.</p> <p>The Scheme includes works below mean high water springs, therefore also falls within the jurisdiction of the Natural Resources Wales Marine Licensing Team. A marine licence is required for the Scheme.</p>
<b>Location</b>	<p>The site is centred on grid reference ST367830, in Goldcliffe within the Caldicot Levels. Newport is located approximately 5km west of the site.</p>
<b>NRW team responsible for carrying out the project, and name of lead officer</b>	<p>IED, Project Manager = David Jenkins</p>
<b>NRW team responsible for drafting this HRA report, and name of lead officer</b>	<p>Completed by Binnies UK Ltd on behalf of Natural Resources Wales, IED team. Led by Ella Niehorster.</p>
<b>Project documents</b>	<p>Site plan: 4021359-BUK-ZZ-00-DR-C-00002</p> <p>General arrangement: 4021359-BUK-ZZ-00-DR-C-00001</p> <p>Typical cross sections: 4021359-BUK-ZZ-00-DR-C-00010</p> <p>Long section: 4021359-BUK-ZZ-00-DR-C-00009</p> <p>Pipe easement plan (Farmer's Arm effluent pipe): 4021359-BUK-ZZ-00-DR-C-00006</p> <p>Ecological Appraisal Report: 4021359-BUK-ZZ-00-RP-EN-00001</p>
<b>Environmental Statement</b>	<p>N/A – the project does not comprise EIA Development.</p>

## 2. Determining the need for a Habitats Regulations Assessment

<b>2.1 Is the whole of the project directly connected with or necessary to the management of one or more European Sites, for the purposes of conserving the habitats or species for which the European Site(s) is/are designated?</b>	No
<b>2.2 Is there a possibility that the project could affect a different European Site to the one(s) the project is intended to conserve?</b>	N/A
<b>2.3 Is it necessary to carry out an HRA?</b>	<p>Yes</p> <p>Drawing 4021359-BUK-ZZ-00-DR-EN-00005 (in Appendix A) shows the European Sites which interface with the Scheme.</p> <p>A HRA is needed due to potential connectivity to the following European Sites: Severn Estuary Ramsar, Special Area of Conservation and Special Protection Area.</p>



### 3. Considering the likelihood of a significant effect (LSE)

#### 3.1 Renewal of a permission on the same or more restrictive terms as the extant permission

Is this project a renewal of a current permission which complies with NRW approved criteria for ruling out significant effects of renewals (see section 6.2A of OGN 200) without conducting a project-specific LSE test?	No
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#### 3.2 Likelihood of significant effects (LSE) test

<b>3.2.1 Which Natura 2000 sites might be affected by the proposal?</b>	<p>Based on the project specification or information provided in the application, it is considered that the following European and Ramsar sites have features which could be affected by the project:</p> <ul style="list-style-type: none"><li>• Severn Estuary Ramsar Site (UK11081), within the Scheme Area</li><li>• Severn Estuary Special Area of Conservation (SAC) (UK0013030), within the Scheme Area</li><li>• Severn Estuary Special Protection Area (SPA) (UK9015022), within the Scheme Area</li></ul> <p>The term European Marine Site (EMS) refers to the marine areas of SACs and SPAs. The Severn Estuary EMS defines the marine areas of the Severn Estuary suite of European Sites enabling them to be distinguished from the terrestrial areas of the SAC and SPA with the purpose of providing specific guidance on the EMS. Effects on the Severn Estuary SAC, SPA and Ramsar site are considered in this HRA separately and include the EMS areas where appropriate.</p> <p>The potential for the project to affect the following European sites was also initially considered, but the potential for significant effects can be ruled out without further consideration:</p> <ul style="list-style-type: none"><li>• River Usk SAC (UK0013007), 3.5km north-west of the Scheme Area. Designated for Allis shad <i>Alosa Alosa</i>, Twaite shad <i>Alosa fallax</i>, Bullhead <i>Cottus Gobio</i>, River lamprey <i>Lamprey fluviatilis</i>, Brook lamprey <i>Lampetra planeri</i>, Sea lamprey <i>Petromyzon marinus</i>, Atlantic salmon <i>Salmo salar</i> and Otter <i>Lutra lutra</i>. There are no pathways for effects on supporting habitats within the River Usk; Chapel Reen is not on the fish migration route through the Severn Estuary to the River Usk; and, it is unlikely that species of migratory fish that are River Usk SAC qualifying features are present within the watercourse (Pers. Comm. Richard Sheppard, NRW Angling Developments &amp;</li></ul>
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	<p>Technical Support Officer, 19/12/2023).</p> <ul style="list-style-type: none"> <li>• Wye Valley and Forest of Dean Bat Sites SAC (UK0014794), 16km north-east of the Scheme Area. The site is designated for greater and lesser horseshoe bat. There is no pathway to effects for this site. The works will not involve any loss of greater and lesser horseshoe foraging habitat. The site is not hydrologically connected.</li> <li>• River Wye SAC (UK0012642), 19km north-east of the Scheme Area. Designated for Allis shad, Twaite shad, White clawed (or Atlantic stream) crayfish <i>Austropotamibius pallipes</i>, Bullhead, River lamprey, Brook lamprey, Sea lamprey, Atlantic salmon and Otter. There are no pathways for effects on supporting habitats within the River Wye; Chapel Reen is not on the fish migration route through the Severn Estuary to the River Wye; and, it is unlikely that species of migratory fish that are River Wye SAC qualifying features are present within the watercourse (Pers. Comm. Richard Sheppard, NRW Angling Developments &amp; Technical Support Officer, 19/12/2023).</li> <li>• Avon Gorge Woodlands SAC (UK0012734), 19km south-east of the Scheme Area, not hydrologically connected. The SAC is designated for Tilio-Acerion forests of slopes, screes and ravines and semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia). There is no impact pathway with the project.</li> <li>• North Somerset and Mendip Bats SAC (UK0030052), 19km south of the Scheme Area. The SAC is designated for lesser horseshoe and greater horseshoe bat and various habitats. There is no pathway to effects for this site. The works will not involve any loss of greater and lesser horseshoe foraging habitat. The site is not hydrologically connected.</li> <li>• Cardiff Beech Woods SAC (UK0030109), 24km west of the Scheme Area, not hydrologically connected. The SAC is designated for habitats Tilio-Acerion forests of slopes, screes and ravines and Asperulo-Fagetum beech forests. There is no impact pathway.</li> <li>• Aberbargoed Grasslands SAC (UK0030071), 26km north-west of the Scheme Area, not hydrologically connected. The SAC is designated for Marsh fritillary butterfly and purple moor grass meadows. There is no impact pathway.</li> <li>• Mendip Limestone Grasslands SAC (UK0030203), 27km south of the Scheme Area, not hydrologically connected. Designated for greater horseshoe bat and various habitats. There is no pathway to effects for this site. The works will not cause loss of greater horseshoe foraging habitat.</li> <li>• Chew Valley Lake SPA (UK9010041), 29km south-east of the Scheme Area, not hydrologically connected. The qualifying feature of the SPA is the Northern shoveler <i>Anas clypeata</i> (non-breeding). Due to the distance of the site no impact pathway is identified.</li> </ul>
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### 3.2.2 Screening assessment

	Assessment of likelihood of significant effect		
	I Relevant conservation objectives	II Potential impact pathway	<i>In light of the ruling of the CJEU in case C-323/17 'People over Wind', avoidance measures should not be considered at this stage of HRA, so this column is left blank.</i>
<b>Severn Estuary SPA</b>			
Feature 1: Internationally important population of regularly occurring Annex 1 species: Bewick's swan (wintering)	The 5-year peak mean population size for the Bewick's swan population is no less than 289 individuals (ie the 5 year peak mean between 1988/9 - 1992/3).	The Proposed Works may lead to disturbance of wintering Bewick's swan during construction. Therefore, there is a potential impact pathway.	
	The extent of saltmarsh at the Dumbles is maintained.	The project is located over 30km downstream from the saltmarsh at Dumbles, there is no impact pathway.	
	The extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose is maintained.	The project is located over 30km downstream from the intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose, there is no impact pathway.	
	The extent of vegetation with an effective field size of >6 ha and with unrestricted bird sightlines > 500m at feeding, roosting and refuge sites are maintained.	The Proposed Works will not affect the extent of vegetation available that has an effective field size of >6ha and with unrestricted bird sightlines >500m. The outfall is adjacent to existing property and so works will not affect existing sightlines across the wet grassland of the Gwent Levels. There is no impact pathway.	

	Greater than 25% cover of suitable soft leaved herbs and grasses in winter season throughout the transitional saltmarsh at the Dumbles is maintained.	The project is located over 30km downstream from the saltmarsh at Dumbles, there is no impact pathway.	
	Aggregations of Bewick's swan at feeding, roosting and refuge sites are not subject to significant disturbance.	The Proposed Works may lead to disturbance of wintering Bewick's swan during construction. Therefore, there is a potential impact pathway.	
Feature 2: Internationally important population of regularly occurring migratory species: wintering European white-fronted goose	The 5 year peak mean population size for the wintering European white fronted goose population is no less than 3,002 individuals (ie the 5 year peak mean between 1988/9-1992/3).	The Proposed Works may lead to disturbance of wintering European white-fronted goose. Therefore, there is a potential impact pathway.	
	The extent of saltmarsh at the Dumbles is maintained.	See SPA Feature 1.	
	The extent of intertidal mudflats and sandflats at Frampton Sands, Waveridge Sands and the Noose is maintained.	See SPA Feature 1.	
	Greater than 25% cover of suitable soft-leaved herbs and grasses is maintained during the winter on saltmarsh areas.	The Phase 1 Habitat Survey (see Appendix B) did not identify any saltmarsh within the Scheme Area. There is no impact pathway.	
	Unrestricted bird sightlines of >200m at feeding and roosting sites are maintained.	The Proposed Works will not affect the extent of vegetation available that has unrestricted bird sightlines of >200m. The outfall is adjacent to existing property and so works will not affect existing sightlines across the wet grassland of the Gwent Levels. There is no impact pathway.	

	Aggregations of European white-fronted goose at feeding or roosting sites are not subject to significant disturbance.	The Proposed Works may lead to disturbance of wintering European white-fronted goose. Therefore, there is a potential impact pathway.	
Feature 3: Internationally important population of regularly occurring migratory species: wintering dunlin	The 5 year peak mean population size for the wintering dunlin population is no less than 41,683 individuals (ie the 5 year peak mean between 1988/9 - 1992/3).	The Proposed Works may disturb wintering dunlin. Therefore, there is a potential impact pathway.	
	The extent of saltmarsh and associated strandlines is maintained.	The Phase 1 Habitat Survey (see Appendix B) did not identify any saltmarsh within the Scheme Area. There is no impact pathway.	
	The extent of intertidal mudflats and sandflats is maintained.	Appendix 4a of the Severn Estuary Regulation 33 Advice <sup>1</sup> indicates that the Scheme Area contains intertidal mudflats. The Proposed Works comprises a repair of an existing outfall structure which included masonry walls and a masonry base which has become covered in mud.  There will be no change in extent of the existing mudflats due to the Proposed Works. The mudflat will redevelop on the concrete bed once works are completed.	
	The extent of hard substrate habitats is maintained.	The Phase 1 Habitat Survey (see Appendix B) did not identify any hard substrate habitats within the Scheme Area, nor is any mapped within the	

<sup>1</sup> Severn Estuary SAC, SPA and Ramsar Site: Regulation 33 Advice from CCW and Natural England, June 2009. Available online at: <https://naturalresources.wales/media/673887/severn-estuary-sac-spa-and-ramsar-reg-33-advice-from-ne-and-ccw-june-09.pdf> [Accessed December 2023]

		Scheme Area on Appendix 7 of the Severn Estuary EMS. There is no impact pathway.	
	The extent of vegetation with a sward height of <10cm is maintained throughout the saltmarsh.	The Phase 1 Habitat Survey (see Appendix B) did not identify any saltmarsh within the Scheme Area. There is no impact pathway.	
	The abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained.	There is a hypothetical pathway from accidental pollution affecting habitat quality. But the construction approach requires creating a working area that is isolated from the water in the watercourse (temporary dam with culvert extensions pipes) so there will be no effect pathway.	
	The abundance and macro-distribution of suitable invertebrates in hard substrate habitats is maintained.	As per abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats.	
	Unrestricted bird sightlines of >200m at feeding and roosting sites are maintained.	The Proposed Works will not affect the extent of vegetation available that has unrestricted bird sightlines of >200m. The outfall is adjacent to existing property and so works will not affect existing sightlines across the wet grassland of the Gwent Levels. There is no impact pathway.	
	Aggregations of dunlin at feeding or roosting sites are not subject to significant disturbance.	The Proposed Works may disturb wintering dunlin. Therefore, there is a potential impact pathway.	
Feature 4: Internationally important population of regularly occurring migratory species: wintering redshank	The 5 year peak mean population size for the wintering redshank population is no less than 2,013 individuals (ie the 5 year peak mean between	The Proposed Works may disturb wintering redshank. Therefore, there is a potential impact pathway.	

	1988/9 - 1992/3).		
	The extent of saltmarsh and associated strandlines is maintained.	See SPA Feature 3.	
	The extent of intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	The extent of hard substrate habitats is maintained.	See SPA Feature 3.	
	The extent of vegetation with a sward height of <10cm is maintained throughout the saltmarsh.	See SPA Feature 3.	
	The abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	The abundance and macro-distribution of suitable invertebrates in hard substrate habitats is maintained.	See SPA Feature 3.	
	Unrestricted bird sightlines of >200m at feeding and roosting sites are maintained.	See SPA Feature 3.	
Feature 5: Internationally important population of regularly occurring migratory species: wintering shelduck	Aggregations of redshank at feeding or roosting sites are not subject to significant disturbance.	The Proposed Works may disturb wintering redshank. Therefore, there is a potential impact pathway.	
	The 5 year peak mean population size for the wintering shelduck population is no less than 2,892 individuals (ie the 5 year peak mean between 1988/9 - 1992/3).	The Proposed Works may disturb wintering shelduck. Therefore, there is a potential impact pathway.	
	The extent of saltmarsh is maintained.	The Phase 1 Habitat Survey (see Appendix B) did not identify any	

		saltmarsh within the Scheme Area.	
	The extent of intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	The extent of hard substrate habitats is maintained.	See SPA Feature 3.	
	The abundance and macro-distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	Unrestricted bird sightlines of >200m at feeding and roosting sites are maintained.	See SPA Feature 3.	
	Aggregations of shelduck at feeding or roosting sites are not subject to significant disturbance.	The Proposed Works may disturb wintering shelduck. Therefore, there is a potential impact pathway.	
Feature 6: Internationally important population of regularly occurring migratory species: wintering gadwall	The 5 year peak mean population size for the wintering gadwall population is no less than 330 (ie the 5 year peak mean between 1988/9 - 1992/3).	The Proposed Works may disturb wintering gadwall. Therefore, there is a potential impact pathway.	
	The extent of intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	Unrestricted bird sightlines of >200m at feeding and roosting sites are maintained.	See SPA Feature 3.	
	Aggregations of gadwall at feeding or roosting sites are not subject to significant disturbance.	The Proposed Works may disturb wintering gadwall. Therefore, there is a potential impact pathway.	
Feature 7: Internationally important assemblage of waterfowl (wintering)	The 5 year peak mean population size for the waterfowl assemblage is no less than 68,026 individuals (ie the 5	The Proposed Works may disturb wintering waterfowl. Therefore, there is a potential impact pathway.	



	year peak mean between 1988/9 - 1992/3).		
	The extent of saltmarsh and associated strandlines is maintained.	See SPA Feature 3.	
	The extent of intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	The extent of hard substrate habitats is maintained.	See SPA Feature 3.	
	Extent of vegetation of <10cm throughout the saltmarsh is maintained.	See SPA Feature 3.	
	The abundance and macroscale distribution of suitable invertebrates in intertidal mudflats and sandflats is maintained.	See SPA Feature 3.	
	The abundance and macro-distribution of suitable invertebrates in hard substrate habitats is maintained.	See SPA Feature 3.	
	Greater than 25% cover of suitable soft-leaved herbs and grasses during the winter on saltmarsh areas is maintained.	See SPA Feature 1.	
	Unrestricted bird sightlines of >500m at feeding and roosting sites are maintained.	The Proposed Works will not affect the extent of vegetation available that has unrestricted bird sightlines of >500m. The outfall is adjacent to existing property and so works will not affect existing sightlines across the wet grassland of the Gwent Levels. There is no impact pathway.	
	Waterfowl aggregations at feeding or	The Proposed Works may disturb	

	roosting sites are not subject to significant disturbance.	wintering waterfowl. Therefore, there is a potential impact pathway.	
<b>Severn Estuary SAC</b>			
Feature 1: Estuaries	The total extent of the estuary is maintained.	The Scheme will not result in any changes to the extent of the estuary. The tidal flap will remain in the same location as the existing, and the piled retaining walls will be provided behind the existing walls. There is no impact pathway.	
	The characteristic physical form (tidal prism/cross sectional area) and flow (tidal regime) of the estuary is maintained.	<p>The Scheme will result in a very minor change to the physical form of the estuary through the replacement piles being located behind the existing failed masonry wall.</p> <p>The tidal flow of the estuary will be maintained to the same as the existing situation, by the use of a tidal flap at the Chapel Reen outfall.</p> <p>Therefore, there is no impact pathway.</p>	
	The characteristic range and relative proportions of sediment sizes and sediment budget within the site is maintained.	The Proposed Works will include minor removal of sediment only, in order to cast the concrete bed. These minor works will not affect the range and relative proportions of sediment sizes and sediment budget within the SAC. There is no impact pathway.	
	The extent, variety and spatial distribution of estuarine habitat communities within the site is maintained.	Refer to Features 2 – 5.	
	The extent, variety, spatial distribution	The Phase 1 Habitat Survey (see	

	and community composition of hard substrate habitats and their notable communities is maintained.	Appendix B) did not identify any hard substrate habitats within the Scheme Area, nor is any mapped within the Scheme Area on Appendix 7 of the Severn Estuary EMS. There is no impact pathway.	
	The abundance of the notable estuarine species assemblages is maintained or increased.	<p>Due to the in water works and overpumping required during construction there is potential impact pathway to marine, estuarine and migratory fish species which are part of the assemblage of fish species, including to passage of eels into the re-en system.</p> <p>There is a potential impact pathway due to disturbance to the assemblage of waterfowl species (refer to Severn Estuary SPA Features).</p> <p>There is no impact pathway to the assemblage of vascular plant species. No saltmarsh or eel grass was identified during the Phase 1 Habitat Survey (see Appendix B).</p>	
	The physico-chemical characteristics of the water column support the ecological objectives described above.	There is a hypothetical pathway from accidental pollution and sediment release affecting habitat quality. But the construction approach requires creating a working area that is isolated from the water in the watercourse so there will be no effect pathway.	
	Toxic contaminants in water column and sediment are below levels which would pose a risk to the ecological objectives described above.	As per physico-chemical characteristics of the water column.	

	Airborne nutrient and contaminant loads are below levels which would pose a risk to the ecological objectives described above.	Due to the scale of the Proposed Works there is no potential for release of quantities of airborne nutrient and contaminant loads that could have any appreciable effects. Therefore, there is no impact pathway.	
Feature 2: Subtidal sandbanks which are covered by sea water all the time (subtidal sandbanks)	The total extent of the subtidal sandbanks within the site is maintained.	There are no subtidal sandbanks within the Scheme Area. Therefore, there is no potential impact pathway.	
	The extent and distribution of the individual subtidal sandbank communities within the site is maintained.	There are no subtidal sandbanks within the Scheme Area. Therefore, there is no potential impact pathway.	
	The community composition of the subtidal sandbank feature within the site is maintained.	There is a hypothetical pathway from accidental pollution and sediment release affecting habitat quality. But the construction approach requires creating a working area that is isolated from the water in the watercourse so there will be no effect pathway.	
	The variety and distribution of sediment types across the subtidal sandbank feature is maintained.	Due to the scale of the works, the distance to the nearest subtidal sandbank (over 1km according to Appendix 3 of the Severn Estuary EMS) and considering the existing sediment dynamics of the Severn Estuary the Proposed Works would not affect sediment distribution. Therefore, there is no impact pathway.	
	The gross morphology (depth, distribution and profile) of the subtidal sandbank feature within the site is maintained.	There are no subtidal sandbanks within the Scheme Area. Therefore, there is no potential impact pathway.	

Feature 3: Mudflats and sandflats not covered by seawater at low tide (mudflats and sandflats)	The total extent of the mudflats and sandflats feature is maintained.	<p>Appendix 4a of the Severn Estuary Regulation 33 Advice<sup>2</sup> indicates that the Scheme Area contains intertidal mudflats. The Proposed Works comprises a repair of an existing outfall structure which included masonry walls and a masonry base which has become covered in mud.</p> <p>There will be no change in extent of the existing mudflats due to the Proposed Works. The mudflat will redevelop on the concrete bed once works are completed.</p> <p>Therefore, there is no impact pathway.</p>	
	The variety and extent of individual mudflats and sandflats communities within the site is maintained.	There is a hypothetical pathway from accidental pollution and sediment release affecting habitat quality. But the construction approach requires creating a working area that is isolated from the water in the watercourse so there will be no effect pathway.	
	The distribution of individual mudflats and sandflats communities within the site is maintained.	As per variety and extent of mudflats and sandflats communities.	
	The community composition of the mudflats and sandflats feature within the site is maintained.	As per variety and extent of mudflats and sandflats communities.	
	The topography of the intertidal flats and the morphology (dynamic	The Proposed Works will include minor removal of sediment only, in order to	

<sup>2</sup> Severn Estuary SAC, SPA and Ramsar Site: Regulation 33 Advice from CCW and Natural England, June 2009. Available online at: <https://naturalresources.wales/media/673887/severn-estuary-sac-spa-and-ramsar-reg-33-advice-from-ne-and-ccw-june-09.pdf> [Accessed December 2023]

	processes of sediment movement and channel migration across the flats) are maintained.	cast the concrete bed, which will resettle on the channel bed. These minor works will not affect sediment movement across intertidal mudflats and sandflats.	
Feature 4: Atlantic salt meadow	The total extent of Atlantic salt meadow and associated transitional vegetation communities within the site is maintained.	<p>The Phase 1 Habitat Survey (Appendix B) did not identify any saltmarsh habitats within the Scheme Area.</p> <p>An area of swamp habitat of sea club rush and common reed was identified within the Scheme Area to the south of the outfall. However, this habitat is considered to be quite common and not likely to transition to saltmarsh due to the distance from the estuary and the amount of tidal inundation.</p> <p>There is a hypothetical pathway from accidental pollution affecting salt meadow. But the construction approach requires creating a working area that is isolated from the water in the watercourse. Therefore, no impact pathways are identified.</p>	
	The extent and distribution of the individual Atlantic salt meadow and associated transitional vegetation communities within the site is maintained.	As per total extent of Atlantic salt meadow.	
	The zonation of Atlantic salt meadow vegetation communities and their associated transitions to other estuary habitats is maintained.	As per total extent of Atlantic salt meadow	
	The relative abundance of the typical species of the Atlantic salt meadow	As per total extent of Atlantic salt	

	and associated transitional vegetation communities is maintained.	meadow	
	The abundance of the notable species of the Atlantic salt meadow and associated transitional vegetation communities is maintained.	As per total extent of Atlantic salt meadow	
	The structural variation of the salt marsh sward (resulting from grazing) is maintained within limits sufficient to satisfy the requirements of the previous two conditions above and the requirements of the Ramsar and SPA features.	As per total extent of Atlantic salt meadow	
	The characteristic stepped morphology of the salt marshes and associated creeks, pills, drainage ditches and pans, and the estuarine processes that enable their development, is maintained.	As per total extent of Atlantic salt meadow	
	Any areas of <i>Spartina anglica</i> salt marsh (SM6) are capable of developing naturally into other saltmarsh communities.	As per total extent of Atlantic salt meadow	
Feature 5: Reefs	The total extent and distribution of <i>Sabellaria</i> reef is maintained.	<p>No <i>Sabellaria</i> reef has been identified within the Scheme Area through the Phase 1 Habitat Survey or in Appendix 6 of the Severn Estuary EMS.</p> <p>There is a hypothetical pathway from accidental pollution affecting reefs. But the construction approach requires creating a working area that is isolated from the water in the watercourse.</p> <p>Therefore, there is no impact pathway</p>	

		to this feature.	
	The community composition of the <i>Sabellaria</i> reef is maintained.	As per total extent and distribution of <i>Sabellaria</i> reef.	
	The full range of different age structures of <i>Sabellaria</i> reef are present.	As per total extent and distribution of <i>Sabellaria</i> reef.	
	The physical and ecological processes necessary to support <i>Sabellaria</i> reef are maintained.	The Scheme comprises repair of an existing structure, therefore, no changes to physical or ecological processes are identified. No impact pathway is identified.	
Feature 6: River lamprey <i>Lampetra fluviatilis</i>	The migratory passage of both adult and juvenile river lamprey through the Severn Estuary between the Bristol Channel and any of their spawning rivers is not obstructed or impeded by physical barriers, changes in flows, or poor water quality.	<p>River lamprey are not likely to be using the reen system (Pers. Comm. NRW Angling Developments &amp; Technical Support Officer Richard Sheppard 19/12/2023) and so works at the outfall will not affect migratory passage.</p> <p>The Scheme comprises repairs to an existing outfall which acts as a barrier to passage along the watercourse. The Scheme includes replacing the existing tidal flap with a fish and eel friendly flap, which will extend the amount of time the outfall is passable by fish and eels. Therefore, there is no impact pathway during the permanent works.</p>	
	The size of the river lamprey population in the Severn Estuary and the rivers which drain into it, is at least maintained and is at a level that is sustainable in the long term.	Due to the in water works required during construction there is a potential impact pathway for direct effects on individual fish in the watercourse downstream of the outfall.	



	The abundance of prey species forming the river lamprey's food resource within the estuary, is maintained.	The Scheme comprises of minor works and would not affect prey species abundance in the estuary.	
	Toxic contaminants in the water column and sediment are below levels which would pose a risk to the ecological objectives described above.	There is a hypothetical pathway from accidental pollution. But the construction approach requires creating a working area that is isolated from the water in the watercourse. Therefore, there is no impact pathway.	
Feature 7: The conservation objective for sea lamprey <i>Petromyzon marinus</i>	The migratory passage of both adult and juvenile sea lamprey through the Severn Estuary between the Bristol Channel and any of their spawning rivers is not obstructed or impeded by physical barriers, changes in flows, or poor water quality.	Sea lamprey are not likely to be using the reen system (Pers. Comm. NRW Angling Developments & Technical Support Officer Richard Sheppard 19/12/2023) and so works at the outfall will not affect migratory passage.  The Scheme comprises repairs to an existing outfall which acts as a barrier to passage along the watercourse. The Scheme includes replacing the existing tidal flap with a fish and eel friendly flap, which will extend the amount of time the outfall is passable by fish and eels. Therefore, there is no impact pathway during the permanent works.	
	The size of the sea lamprey population in the Severn Estuary and the rivers which drain into it, is at least maintained as is at a level that is sustainable in the long term.	Due to the in water works required during construction there is a potential impact pathway for direct effects on individual fish in the watercourse downstream of the outfall.	

	The abundance of prey species forming the sea lamprey's food resource within the estuary, is maintained.	As per SAC Feature 6.	
	Toxic contaminants in the water column and sediment are below levels which would pose a risk to the ecological objectives described above.	As per SAC Feature 6.	
Feature 8: The conservation objective for twaite shad <i>Alosa fallax</i>	The migratory passage of both adult and juvenile twaite shad through the Severn Estuary between the Bristol Channel and their spawning rivers is not obstructed or impeded by physical barriers, changes in flows or poor water quality.	<p>Twaite shad are not likely to be using the reen system (Pers. Comm. NRW Angling Developments &amp; Technical Support Officer Richard Sheppard 19/12/2023) and so works at the outfall will not affect migratory passage.</p> <p>The Scheme comprises repairs to an existing outfall which acts as a barrier to passage along the watercourse. The Scheme includes replacing the existing tidal flap with a fish and eel friendly flap, which will extend the amount of time the outfall is passable by fish and eels. Therefore, there is no impact pathway during the permanent works.</p>	
	The size of the twaite shad population within the Severn Estuary and the rivers draining into it is at least maintained and is at a level that is sustainable in the long term.	Due to the in water works required during construction there is a potential impact pathway for direct effects on individual fish in the watercourse downstream of the outfall.	

	The abundance of prey species forming the twaite shad's food resource within the estuary, in particular at the salt wedge, is maintained.	As per SAC Feature 6.	
	Toxic contaminants in the water column and sediment are below levels which would pose a risk to the ecological objectives described above.	As per SAC Feature 6.	
<b>Severn Estuary Ramsar Site</b>			
Feature 1: Estuaries	The conservation objective for the "estuaries" feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SAC "estuaries" feature", in so far as these objectives are applicable to the area designated as Ramsar Site and as defined in Table 17 of Natural England's & County Council for Wales' advice (Natural England & County Council for Wales, 2009).	Refer to SAC Feature 1: Estuaries.	
Feature 2: Assemblage of migratory fish species (sea lamprey, river lamprey, twaite shad, allis shad, salmon, sea trout and eel)	The migratory passage of both adults and juveniles of the assemblage of migratory fish species through the Severn Estuary between the Bristol Channel and any of their spawning rivers is not obstructed or impeded by physical barriers, changes in flows, or poor water quality.	<p>Eels are likely to be present within the reen system. The watercourse will be temporarily overpumped for some periods during the proposed works, therefore, there is a potential impact pathway to migratory eels during construction.</p> <p>Other migratory and estuarine species are not likely to be using the reen system upstream of the existing outfall (Pers. Comm. NRW Angling</p>	

		<p>Developments &amp; Technical Support Officer Richard Sheppard 19/12/2023)</p> <p>The Scheme comprises repairs to an existing outfall which acts as a barrier to passage along the watercourse. The Scheme includes replacing the existing tidal flap with a fish and eel friendly flap, which will extend the amount of time the outfall is passable by fish and eels. Therefore, there is no impact pathway during the permanent works.</p>	
	The size of the populations of the assemblage species in the Severn Estuary and the rivers which drain into it, is at least maintained and is at a level that is sustainable in the long term.	Due to the in water works required during construction there is a potential impact pathway for direct effects on individual fish in the watercourse downstream of the outfall.	
	The abundance of prey species forming the principle food resources for the assemblage species within the estuary, is maintained.	The Scheme comprises of minor works and would not affect prey species abundance in the estuary.	
	Toxic contaminants in the water column and sediment are below levels which would pose a risk to the ecological objectives described above.	There is a hypothetical pathway from accidental pollution and sediment release affecting habitat quality. But the construction approach requires creating a working area that is isolated from the water in the watercourse so there will be no effect pathway.	
Feature 3: Internationally important populations of waterfowl: Bewick's swan	The conservation objective for the "Bewick's swan" feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA "Bewick's swan" feature.	Refer to SPA Feature 1.	

Feature 4: Internationally important populations of waterfowl: European white-fronted goose	The conservation objective for the “European white-fronted goose” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “wintering European white-fronted goose” feature.	Refer to SPA Feature 2.	
Feature 5: Internationally important populations of waterfowl: dunlin	The conservation objective for the “dunlin” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “wintering dunlin” feature.	Refer to SPA Feature 3.	
Feature 6: Internationally important populations of waterfowl: redshank	The conservation objective for the “redshank” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “wintering redshank” feature.	Refer to SPA Feature 4.	
Feature 7: Internationally important populations of waterfowl: shelduck	The conservation objective for the “shelduck” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “wintering shelduck” feature.	Refer to SPA Feature 5.	

Feature 8: Internationally important populations of waterfowl: gadwall	The conservation objective for the “gadwall” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “wintering gadwall” feature.	Refer to SPA Feature 6.	
Feature 9: Internationally important assemblage of waterfowl	The conservation objective for the “internationally important assemblage of waterfowl” feature of the Severn Estuary Ramsar Site is to maintain the feature in favourable condition, as defined by the conservation objective for the SPA “internationally important assemblage of waterfowl” feature.	There is a potential disturbance impact pathway to overwintering birds (as per SPA Feature 7) and to passage birds that form part of the Ramsar assemblage: ringed plover, dunlin, whimbrel and redshank.	

### 3.2.3 Screening decision of the project ‘alone’

<b>(a) If ALL rows in column II of Table 3.2.2 are GREEN</b>	<del>The project is not likely to have a significant effect on any Natura 2000 site, because there is no impact pathway from the project to any Natura 2000 features, and no further consideration under the Habitats Directive/Regulations is required in order to determine the application.</del>
<b>(b) If there are NO rows coloured RED in column II of Table 3.2.2, and there are ANY rows which are BLUE</b>	<del>The project is not likely to have a significant effect on any Natura 2000 sites when considered alone, but the possibility of significant effects in combination with other plans and projects needs to be considered.</del>
<b>(c) If ANY rows in Column II of Table 3.2.2 are RED</b>	The project is likely have a significant effect on one or more European sites and therefore an appropriate assessment is required.

## 4. Appropriate assessment of the project when considered alone

### 4.1 Assessment of project as currently defined

Natura 2000 site feature (from Table 3.2.2 – <b>RED</b> rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out?
<b>Severn Estuary SPA</b>				
Features: 1. Bewick's swan (wintering) 2. European white-fronted goose (wintering) 3. Dunlin (wintering) 4. Redshank (wintering) 5. Shelduck (wintering) 6. Gadwall (wintering) 7. Internationally important assemblage of waterfowl (wintering)	The Proposed Works may lead to disturbance of wintering birds during construction.	The Proposed Works will require the use of machinery/ vehicles, including piling, and associated workforce within the designation which may result in disturbance of the qualifying populations of birds as a result of noise or visual stimuli. This could have implications for the distribution and long-term fitness/ survivorship of the populations.	<p>The conservation objectives which could be affected by the Proposed Works are maintaining the mean population sizes and potential aggregations of species at feeding, roosting and refuge sites.</p> <p>Due to the nature and size of the works within the context of the Severn Estuary it is considered unlikely that the proposed works could significantly affect populations of wintering birds. However, no wintering bird survey has been completed for the works area therefore, in the absence of mitigation, it cannot be concluded that there will not be an adverse effect on site integrity.</p>	No

Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out?
<b>Severn Estuary SAC</b>				
<p>Feature 1: Estuaries</p> <p>Feature 6: River lamprey</p> <p>Feature 7: Sea lamprey</p> <p>Feature 8: Twaite shad</p>	<p>There is a potential impact pathway to eel during construction from works causing a barrier to migration, and form harm during over-pumping.</p> <p>There is a potential impact pathway to all migratory and estuarine and marine species from direct harm during in water works.</p>	<p>In the existing scenario there is a barrier to passage through the outfall structure on incoming tides as the tidal flap closes. During construction while the culvert pipes are being extended and removed there may be no passage through the outfall structure.</p> <p>A temporary dam will be installed to create a dry working area in combination with the culvert extension pipes and fish may become stranded in this area.</p> <p>Overpumping may be required while the culvert extension pipes are installed and removed, and there is the potential for eel to be harmed through interaction with the pumping arrangement.</p>	<p>The relevant conservation objective for Estuaries is ‘the abundance of the notable estuarine species assemblages is maintained or increased’, in relation to the ‘Assemblage of fish species’. The relevant conservation objectives for lamprey and shad are to maintain the population sizes.</p> <p>The main elver run on the Severn Estuary is from the start of March to the end of April. No information on the number of eels within or that migrate through the watercourse is currently available.</p> <p>Although it is unlikely that significant numbers of other species will be present in the watercourse and affected by works, this cannot be ruled out.</p> <p>Therefore, it cannot be concluded that there will not be an adverse effect on site integrity.</p>	No



Natura 2000 site feature (from Table 3.2.2 – RED rows only)	Impact pathway(s) (from Table 3.2.2)	Description of impacts	Assessment in view of conservation objectives	Can adverse effect on site integrity be ruled out?
<b>Severn Estuary Ramsar</b>				
<p>Feature 1: Estuaries</p> <p>Feature 2: Assemblage of migratory fish species (sea lamprey, river lamprey, twaite shad, allis shad, salmon, sea trout and eel)</p>	<p>Refer to SAC Features:</p> <p>1: Estuaries</p> <p>6: River lamprey</p> <p>7: Sea lamprey</p> <p>8: Twaite shad</p>	<p>Refer to SAC Features:</p> <p>1: Estuaries</p> <p>6: River lamprey</p> <p>7: Sea lamprey</p> <p>8: Twaite shad</p>	<p>The relevant conservation objectives are:</p> <p>'migratory passage of both adults and juveniles of the assemblage of migratory fish species through the Severn Estuary between the Bristol Channel and any of their spawning rivers is not obstructed or impeded by physical barriers, changes in flows, or poor water quality.';</p> <p>and</p> <p>'the size of the populations of the assemblage species in the Severn Estuary and the rivers which drain into it, is at least maintained and is at a level that is sustainable in the long term'</p> <p>As per the SAC features, the works could impede migration of eel and could result in direct harm to eel and other species.</p>	No

<b>Natura 2000 site feature (from Table 3.2.2 – RED rows only)</b>	<b>Impact pathway(s) (from Table 3.2.2)</b>	<b>Description of impacts</b>	<b>Assessment in view of conservation objectives</b>	<b>Can adverse effect on site integrity be ruled out?</b>
Features: 3. Bewick's swan (wintering) 4. European white-fronted goose (wintering) 5. Dunlin (wintering) 6. Redshank (wintering) 7. Shelduck (wintering) 8. Gadwall (wintering)	Refer to SPA Features 1 to 6.	Refer to SPA Features 1 to 6.	Refer to SPA Features 1 to 6.	No
Feature 9: Internationally important assemblage of waterfowl	Refer to SPA Feature 7 in respect of over-wintering birds.  There is also a potential disturbance impact pathway to over wintering birds and to passage birds that are not included in the SPA assemblage but that are listed as being part of the Ramsar assemblage: ringed plover, dunlin, whimbrel and redshank.	Refer to SPA Feature 7.  The Proposed Works will require the use of machinery/ vehicles, including piling, and associated workforce within the designation which may result in disturbance of the qualifying populations of birds as a result of noise or visual stimuli. This could have implications for the distribution and long-term fitness/ survivorship of the populations.	Refer to SPA Feature 7 in respect of over-wintering birds.  Due to the nature and size of the works within the context of the Severn Estuary it is considered unlikely that the proposed works could significantly affect the distribution or populations of passage birds. However, no passage bird survey has been completed for the works area therefore, in the absence of mitigation, it cannot be concluded that there will not be an adverse effect on site integrity.	No

## 4.2 Assessment of the project taking into account mitigating measures, conditions or restrictions

Natura 2000 Feature (from Table 4.1 – ‘NO’ rows only)	Description of adverse effect(s)	Can adverse effect(s) be mitigated?	Description of mitigation measures, and how they would be applied (e.g. contractual obligations, consent conditions)	Can adverse effect on site integrity be ruled out?
SPA Features 1–7; Ramsar Features 3-9	Disturbance to wintering birds during construction.	Yes	No works to be undertaken from November to March (inclusive).	Yes
Ramsar Feature 9	Disturbance to passage bird species during construction.	Yes	<p>If works are required during passage seasons – April to mid-May (spring) or September to October (autumn), the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>- No works for 1.5 hours either side of high tide unless a suitably qualified ecologist has surveyed the watercourse and adjacent wetland habitats at Chapel Pill for assemblages of ringed plover, dunlin, whimbrel and redshank that could be disturbed the works being undertaken, and confirmed that works can proceed.</li> </ul>	Yes
<p>SAC Features 1, 6, 7 &amp; 8</p> <p>Ramsar Features 1 &amp; 2</p>	<p>Barrier to eel migration and risk of direct harm when using a temporary dam (if needed) and during periods of over pumping from upstream of the outfall.</p> <p>Potential direct harm to fish during works including from being stranded behind a temporary dam and overpumping.</p>	Yes	<p>No in-water works to be undertaken between the 1<sup>st</sup> of March and 30<sup>th</sup> of April to avoid the main elver run.</p> <p>A fish rescue plan will be agreed with NRW fisheries officer and implemented if a dam is required to facilitate the works which may trap fish between the temporary dam and the outfall structure.</p> <p>For overpumping, the type of pump and the use of screening on the pump inlet will be agreed in advance with the NRW fisheries officer. If significant numbers of fish (i.e. more than just the occasional individual) are observed by operatives to be being moved through the pumps, or if signs of injured fish are seen, pumping will stop (if safe to do so) and advice sought from the NRW fisheries officer.</p>	Yes

### 4.3 Concluding the appropriate assessment of the project alone

<b>(a) If the right hand column of Table 4.1 and Table 4.2 (if applicable) is 'YES' for all features</b>	<p>It has been ascertained that the proposal, when considered alone, will not adversely affect the integrity of any Natura 2000 sites.</p> <p><i>Strike out row (b) below and go to row (c)</i></p>
<b>(c) Are there any residual effects of the project (net of any mitigation measures identified) which, though insignificant on their own, could be significant if considered in combination with the effects of other plans or projects?</b>	<p>Yes.</p> <p>Residual risk of harm to individual eels and other fish species.</p>


## 5 In combination assessment


### 5.1 Identifying possible in combination effects

<b>BLUE</b> impact pathway from Table 3.2  and/or  Residual effect (from appropriate assessment in section 4)	Natura 2000 site feature(s) concerned	Other plans/projects with effects that might interact with the effects of the project to render its effects significant (if any)	Nature of the in-combination effect (if any)	Is there likely to be any significant in-combination effect, in view of the site's conservation objectives?
There is a potential residual risk to fish from the impact pathway of causing a barrier to migration (eels) and risk of direct harm, e.g. harmed or stranded during the overpumping works.	SAC Features 1, 6, 7, 8 Ramsar Features 1, 2	A review of plans/projects has been undertaken and none have been identified which could interact with the residual effects of this project.	N/A	No
<b>(a) If the right hand column is 'NO' for all rows</b>		The project, when considered in combination with other plans and projects, is either not likely to have a significant effect on, or will not adversely affect the integrity of any Natura 2000 site.		
<b>(b) If any rows in the right hand column are 'YES' or 'DON'T KNOW'</b>		The project is likely to have a significant effect in combination with other plans or projects.		

## 6. Conclusion

<p>HRA is not required because the whole of the project is directly connected with or necessary to the management of one or more Natura 2000/Ramsar sites, for the purposes of conserving the habitats or species for which the site(s) is/are designated, <u>and</u> the project is not likely to have a significant effect on any other Natura 2000/Ramsar sites. (As documented in section 2.1 and 2.2 of this form)</p>	
<p>HRA is not required because there is no conceivable impact pathway to any Natura 2000/Ramsar site (As documented in section 2.3 of this form)</p>	
<p>This project is a renewal of a current permission which complies with NRW agreed criteria for ruling out significant effects of a renewal without conducting a project-specific LSE test. Therefore it is considered not likely to have a significant effect on any Natura 2000/Ramsar sites, either alone or in-combination with other plans and projects. (As documented in section 3.1 of this form)</p>	
<p>The project has been screened for likelihood of significant effects and, taking account of the advice received from protected sites advisors, is considered not likely to have a significant effect on any Natura 2000/Ramsar site (As documented in section 3.2 of this form, or section 5 if applicable)</p>	
<p>In light of the conclusions of an appropriate assessment, and taking account of the advice received from protected sites advisors, it has been established that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, taking into account any conditions or restrictions as applicable, either alone or in-combination with other plans and projects. (As documented in section 4 of this form, and section 5 if applicable)</p>	<b>X</b>
<p>In light of the conclusions of the appropriate assessment, it has <u>not</u> been ascertained that the project will not adversely affect the integrity of any Natura 2000/Ramsar site, as documented in section 4 of this form, and section 5 is applicable.</p> <p>Approval for the project <u>cannot</u> be given unless either:</p>	

<ul style="list-style-type: none"> <li>the project specification, and/or the terms under which it might be approved, are modified so as to remove the risk of adverse effects, and a revised HRA report is prepared, or</li> <li>the project satisfies the requirements of Article 6(4) of the Habitats Directive, an Article 6(4) Statement of Case is prepared (OGN 200 Form 3) and submitted for consideration by the appropriate authority, normally Welsh Ministers</li> </ul>	
<p><b>Signed:</b> </p> <p><b>Name:</b> Ella Niehorster</p> <p><b>Position:</b> Principal Environmental Scientist (Binnies UK Ltd.)</p> <p><b>Date:</b> 01/03/2024</p>	

Signed : 

Name: David Jenkins

Position : Project Manager (NRW)

Date : 02/04/2024

**7. Consultation with protected sites advisor(s) and how sections 2, 3, 4 and 5 of this HRA report (as applicable) take into account that advice.**

<b>Relevant section of the HRA report</b>	<b>Date(s) of correspondence* and any meeting(s) with protected sites advisor(s)</b>	<b>Description of how the comments from protected sites advisors have been taken into account</b>
2		
3		
4		
5		

*\*Attach copies of all written representations (Form 2) received from protected sites advisor(s)*

**Reference**

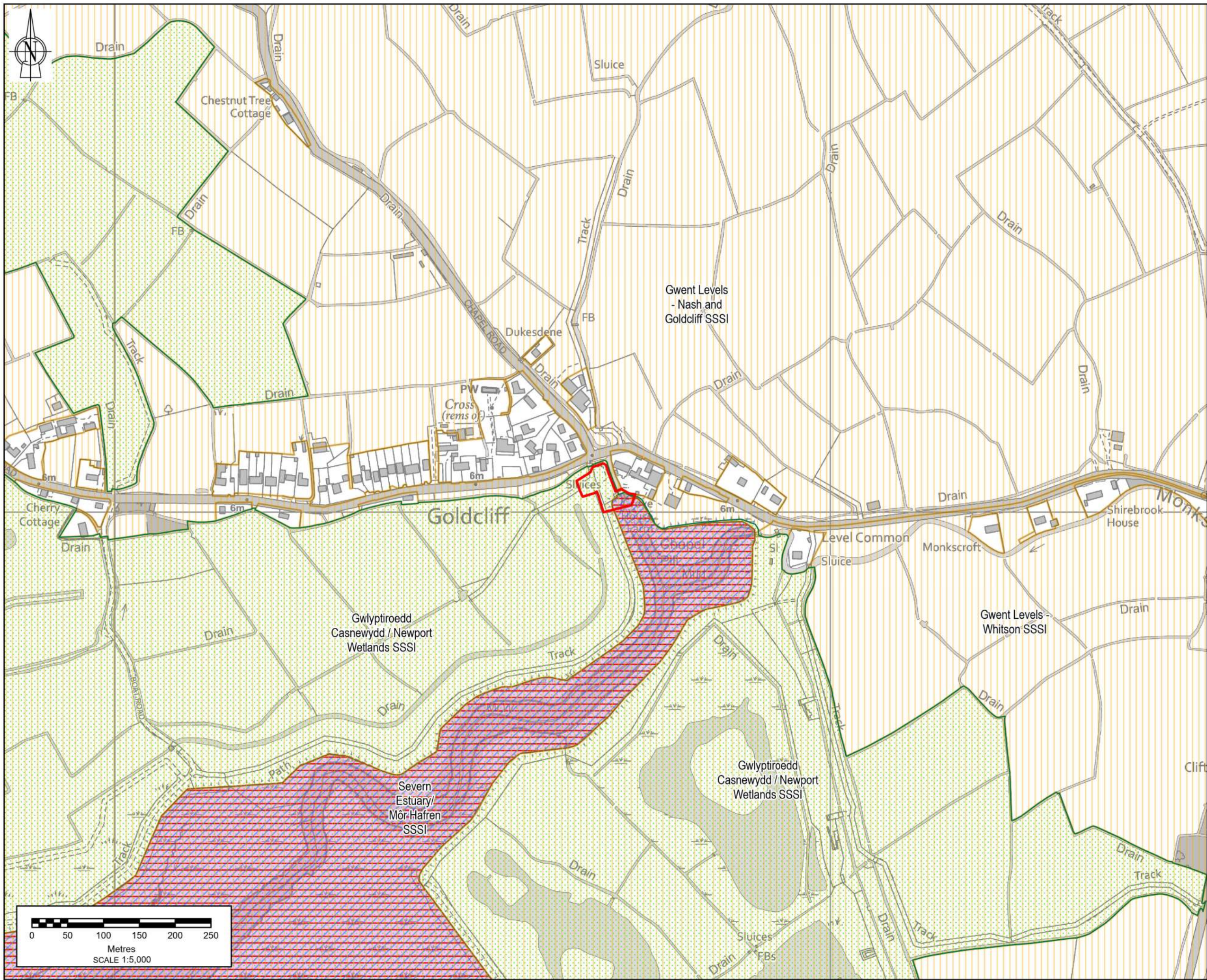
Natural England & County Council for Wales. (2009). The Severn Estuary/Môr Hafren European Marine Site. Natural England & the Countryside Council for Wales' advice given under Regulation 33(2)(a) of the Conservation (Natural Habitats, &c.) Regulations 1994, as amended. Available at [citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=60f047dedd4ac360aa7510f5d7b959e304f46185](https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=60f047dedd4ac360aa7510f5d7b959e304f46185) Accessed 26/10/23.



# Appendix A – Designated Site Map

Drawing 4021359-BUK-ZZ-00-DR-EN-00005





Note: The limits, including the height and depths of the Works, shown in this drawing are not to be taken as limiting the obligations of the contractor under Contract.

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OS [100019741]

- LEGEND**
- SCHEME AREA
  - SEVERN ESTUARY - SPECIAL PROTECTION AREA (SPA)
  - SEVERN ESTUARY - RAMSAR SITE
  - SEVERN ESTUARY, GWENT LEVELS NASH AND GOLDCLIFF, NEWPORT WETLANDS, WHITSON - SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)
  - SEVERN ESTUARY - SPECIAL AREA OF CONSERVATION (SAC)
  - NEWPORT WETLANDS - NATIONAL NATURE RESERVE



**SAFETY HEALTH AND ENVIRONMENT INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER

CONSTRUCTION
NOT APPLICABLE
MAINTENANCE / CLEARING / OPERATION
NOT APPLICABLE
DECOMMISSIONING / DEMOLITION
NOT APPLICABLE

P02	TW	KT	KN	ES	07/02/2024	FOR INFORMATION
P01	TW	KT	KN	ES	10/01/2024	FOR INFORMATION
Rev	Drawn	Chkd	Rev'd	Approved	Date	Description

Designed by: TW Date: JAN 2024

Client:



Client Drawing No. Revision



Project:

CHAPEL REEN

Drawing title:

DESIGNATED SITE MAP

Drawing scale: 1:5,000 Sheet size: A3

Drawing no: 4021359-BUK-ZZ-00-DR-EN-00005 Revision: P02