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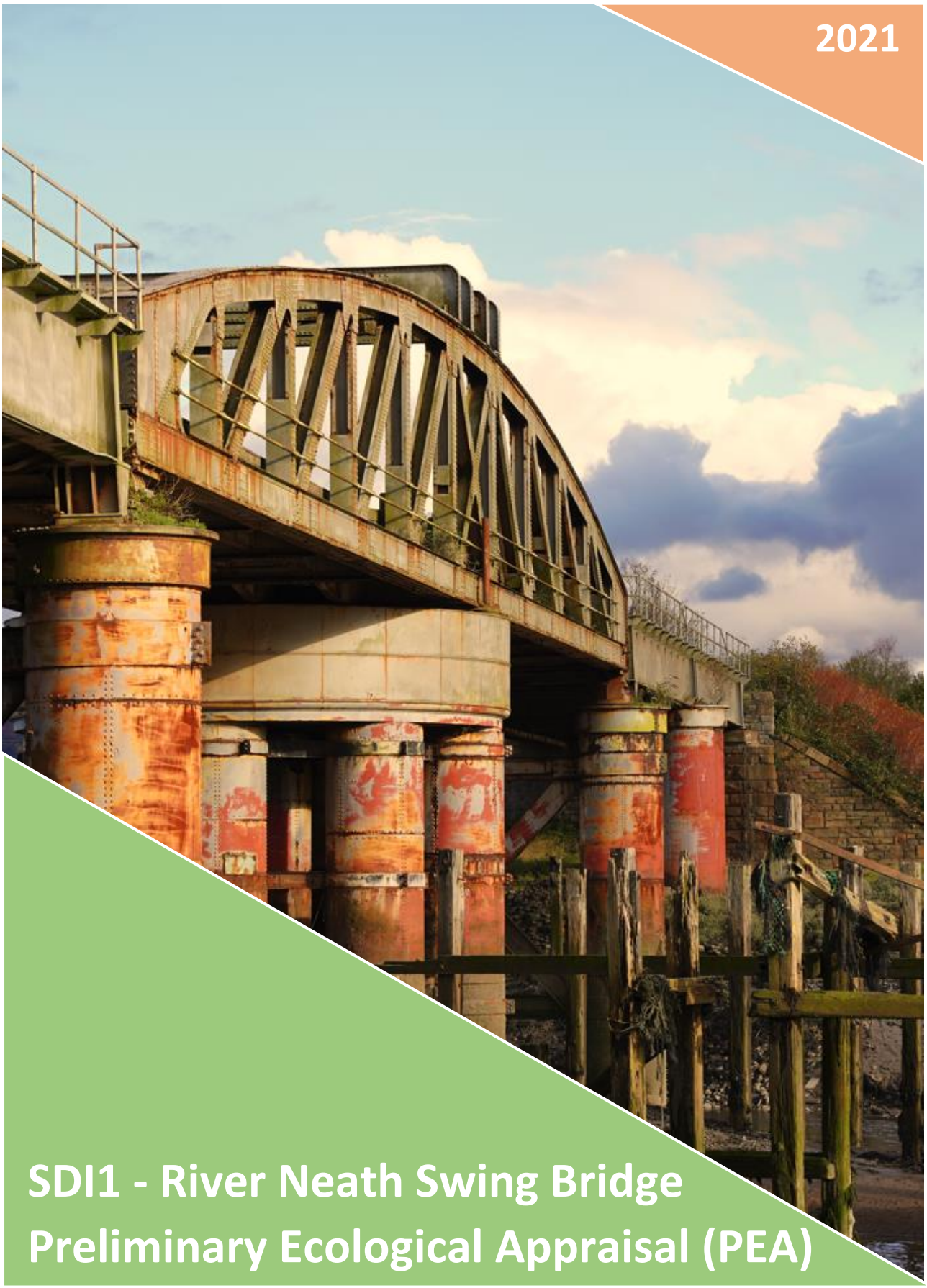

SDI1 - River Neath Swing Bridge
Preliminary Ecological Appraisal (PEA)

EcoVigour
Integrated Environmental Management

NetworkRail

centregreat.co.uk

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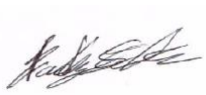
Checked by	Bradley Stokes		11/2021
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1 INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 EcoVigour was instructed by Centregreat – Rail Division to undertake a Preliminary Ecological Appraisal (PEA) at the Neath Rail Swing Bridge.

1.1.2 Originally constructed as a centrally-pivoted swing bridge in 1892. It is a Grade II listed six-deck underbridge carrying the two non-electrified lines of the Swansea District Line (SDI1) railway over River Neath. The swing span is centrally supported on a circular cluster of nine wrought iron caissons / piers with concrete infill, masonry abutments and wingwalls. After declining use of the swing facility, the central span was permanently welded shut in 1985.

1.1.3 Currently, the structure is in generally fair to poor condition, mainly due to significant corrosion to structural elements. The overhead elements and the underslung gangway are severely corroded

1.1.4 Consequently, remedial measures are required to improve the structures longevity and ensure it's continued service life for the SDI1 rail network.

1.1.5 This study is required to inform Centregreat of the ecological constraints present, ahead of the proposed vegetation clearance works.

1.1.6 The objectives for the survey were:

- To undertake an ecological assessment of the site,
- To identify ecological features within the site that could pose a constraint to the proposed development,
- To identify opportunities for incorporating biodiversity enhancements into the development proposals,
- To assess the site's potential to support protected species and make recommendations for further survey, where required to clarify potential ecological constraints,
- To make recommendations for any valuable habitats to be considered, through retention or enhancement, or if this is not possible, by habitat mitigation or compensation,
- To identify the presence of any invasive non-native species on site.

1.1.7 This ecological report has been prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) guidance document 'Guidelines for Preliminary Ecological Appraisal - Second Edition' (CIEEM, 2017). The objective of the report is to provide a preliminary ecological assessment of the site based on the current design.

1.1.8 An initial ecological overview of the site is provided and potential ecological constraints and impacts of the current proposals are assessed. Recommendations for further surveys are provided where necessary.

1.2 SURVEY AREA DESCRIPTION

1.2.1 The works footprint and survey area is situated at the location below;

- **Survey Location:** SDI1 207m63c River Neath Swing Bridge SS 730 963 SA10 6EX

1.2.2 Access to the bridge was achieved via the Derwen Waste Management Centre.

1.2.3 The structure spans the River Neath West to East and is still within the tidal reach. The western shore and beyond is largely dominated by the Waste Management Facility and other industrial sites with narrow woodland corridor/boundaries present between the industrial sites. The proposed access route from the main compound crosses a portion of the Tennant Canal.

1.2.4 To the east appears to be a relatively large wetland habitat north of the rail corridor and a larger semi-reclaimed site, which was the Giants Grave Landfill. The approximate survey areas are illustrated below (Figure 1).

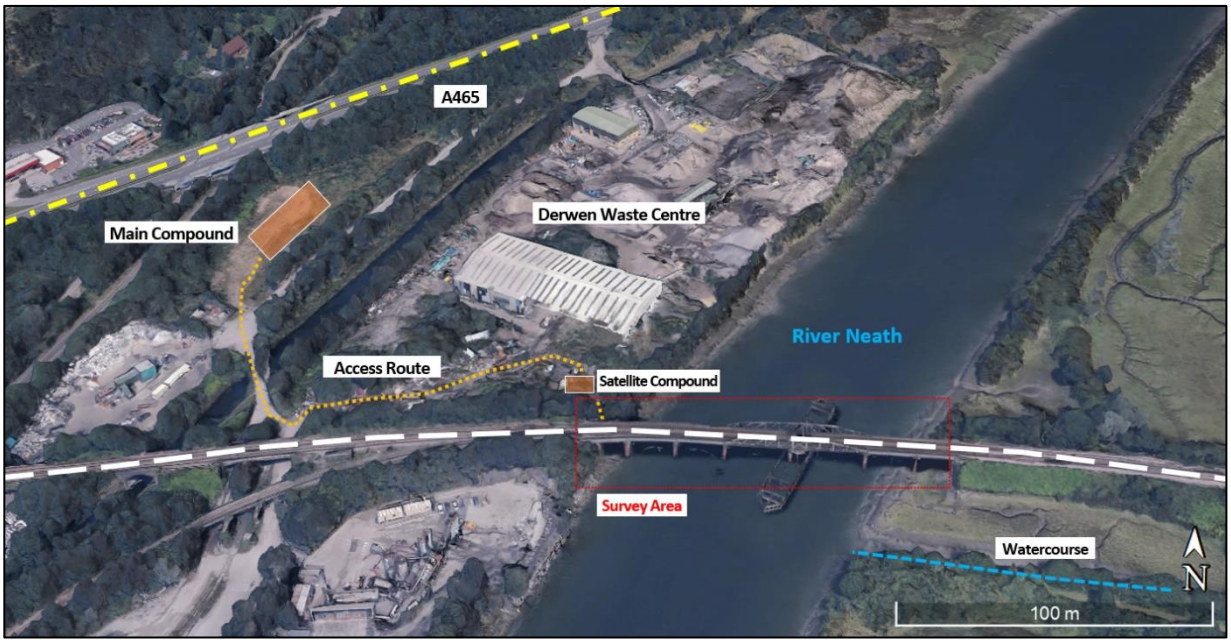

Figure 1: Project survey areas (red boundaries).

1.3 WORKS REQUIRED

1.3.1 Centregreat Rail have been instructed to undertake the Project Scope Below.

- Steelwork strengthening and repairs to achieve the specified rating of RA8 (at 20 mph) and heavy axle rating RA10 (at 20mph)
- Swing span bearing repairs
- Re-painting of the steel superstructure steelwork to provide a surface protection system with a minimum 15-year design life for trackside areas and 25 years for the remaining superstructure.
- Steelwork repairs to the cylindrical piers
- Waterproofing of the swing span
- Masonry repairs to both abutments
- Removal of redundant fenders to swing span
- Replacement of corroded gutters and downpipes
- Vegetation clearance within 3m of the structure.

2 METHODOLOGY

2.1 DESK STUDY

2.1.1 A desk study was conducted to assist with the overall site assessment. Statutory and non- statutory designated sites within 2km of the site boundary were identified Broad habitat boundaries and types were identified from online aerial imagery.

2.1.2 The relevance of the reasons for designation of the protected sites within 2km of the site boundary has been considered during subsequent assessment of whether the proposed works will have any impact upon the biological integrity of such sites.

The desk study also included the following sources:

- Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website;
- Online aerial imagery resources;
- Ancient Woodland Inventory 2011;
- Natural Resources Wales (NRW);
- Joint Nature Conservation Committee (JNCC) and
- A review of OS mapping for waterbodies within 250-500 metres of the site.
- Sewbrec Data Search – No: 20211108_3982

2.2 WALKOVER SURVEY

2.2.1 The walkover was conducted by Owain Waters an experienced EcoVigour Ltd ecologist/environmental consultant supported by Centregreat Rail personnel. The survey was conducted using methods outlined in the Joint Nature Conservation Committee (JNCC)'s 'Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit' (JNCC, 2010). The survey consisted of a visual survey of the site, identifying the broad habitat types present, identifying the suitability of the site to support protected and priority species.

2.2.2 Incidental observations of protected and/or priority species and the potential for such species to occur on site (and in the surrounding landscape where relevant) were also noted, however no specific protected/priority species surveys were undertaken as part of this preliminary ecological assessment

2.2.3 A search for plant species as included in Schedule 9 of the Wildlife and Countryside Act (1981) as amended, was made during the survey. Under the Act it is an offence to spread, or cause the spread of, these species

2.3 LIMITATIONS

2.3.1 Third party biological records do not represent a full species list for the area. The absence of records does not necessarily indicate absence of a species or habitat but rather that these have not been recorded or are perhaps under-recorded within the search area. The results of the survey and assessment undertaken by EcoVigour Ltd are representative at the time of survey.

2.3.2 This document does not contain a comprehensive list of botanical species on site with only plant species characteristic of each habitat and any incidental observations of notable plant species recorded

2.3.3 In addition, many plant species are only evident at certain times of the year; therefore, some plant species may have been undetected. No targeted ecological surveys were undertaken as part of this assessment to determine the presence of specific species.

2.3.4 Direct access to the rail corridor was not available at the time of survey.

2.3.5 Access to the eastern portion of the structure was not possible at the time of survey, with only binocular visual assessments undertaken at this time.

3 RESULTS

3.1 DESIGNATED SITES

3.1.1 There are 2 statutory designated sites within 3km of the project boundary.

Table 1: Statutory Site Description

Site Name	Site Designation	Description
Crymlyn Bog	SAC, RAMSAR, SSSI	Within the NRW Core Management Plan, Crymlyn Bog is described as a large lowland fen situated in a glacial depression on the eastern edge of Swansea. In addition to Crymlyn Bog itself, the SAC also includes Pant-y-Sais fen, a smaller (approximately 20ha) wetland located about 1km east of the main site. The site is also a RAMSAR which is specifically designated for its importance to wading bird species.
Earlswood Road Cutting and Ferryboat Inn Quarries	SSSI - Geological	Described as this site is of special scientific interest for its exposures of late Carboniferous rocks which afford the best available sections through the Carboniferous Rhondda Beds, in deltaic facies.

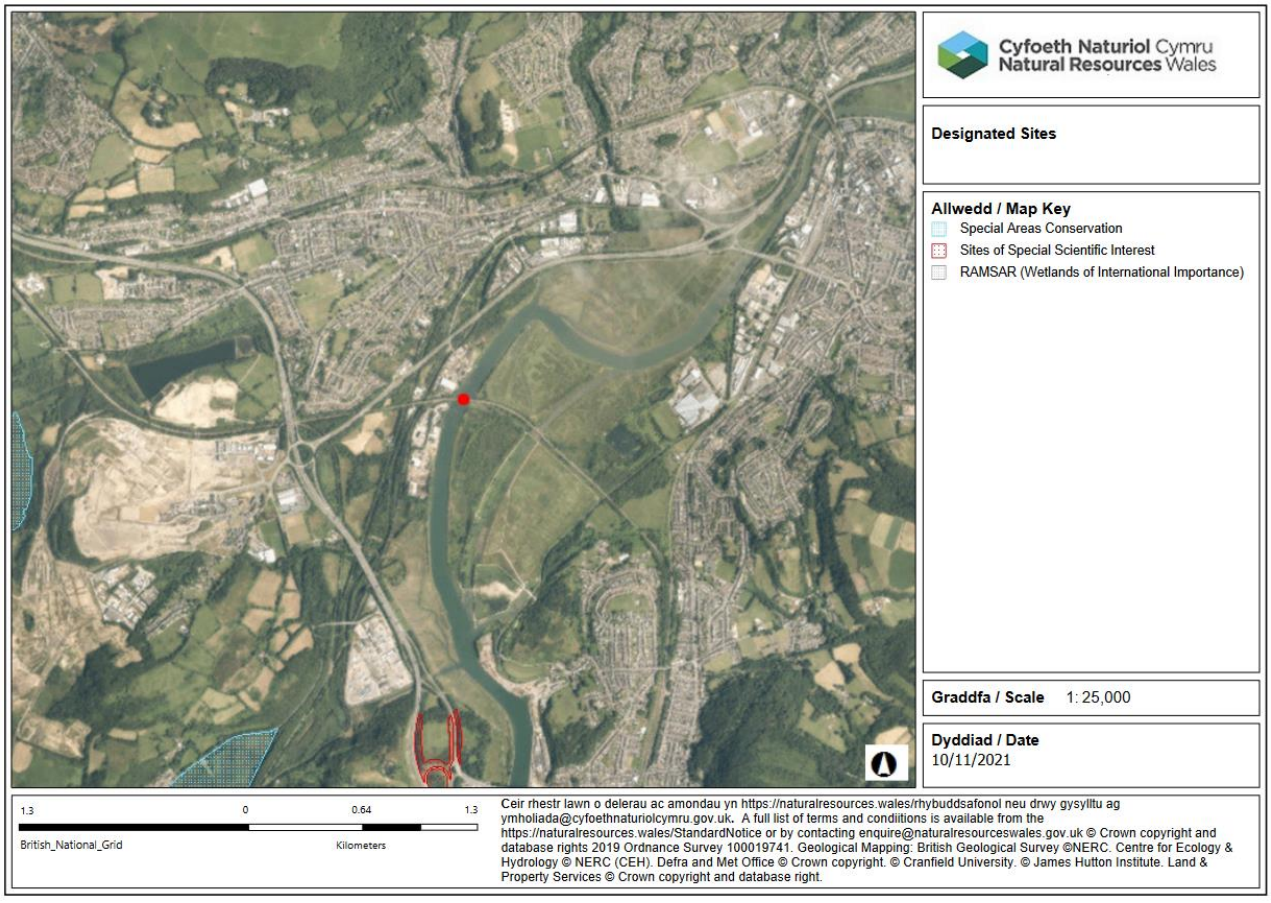

Figure 2: Designated Site Map in relation to Swing Bridge (Red Dot).

3.1.2 There are 5 non-statutory designated sites within 2km of the site boundary.

Table 2: Non-Statutory Site Description.

Site Name	Site Designation	Description
Tannant Canal	SINC	Tennant Canal is of importance for nature conservation. Aside from the water of the canal itself, additional wetland habitats include a fen and a small area of wet woodland. The site is known to be used by otter and is of importance to a variety of bird species such as kingfisher, sedge warbler, peregrine and kestrel.
Neath Canal	SINC	Limited Information – Known Key Feature: Standing open water
Neath Estuary	SINC	Known Key Feature: Coastal Saltmarsh. **Note:** The structure is situated within this site.
Square Pond	SINC	Known Key Feature: Broadleaf Woodlands.
Pentrefynnon	SINC	Known Key Feature: Broadleaf Woodlands & Lowland Meadows.

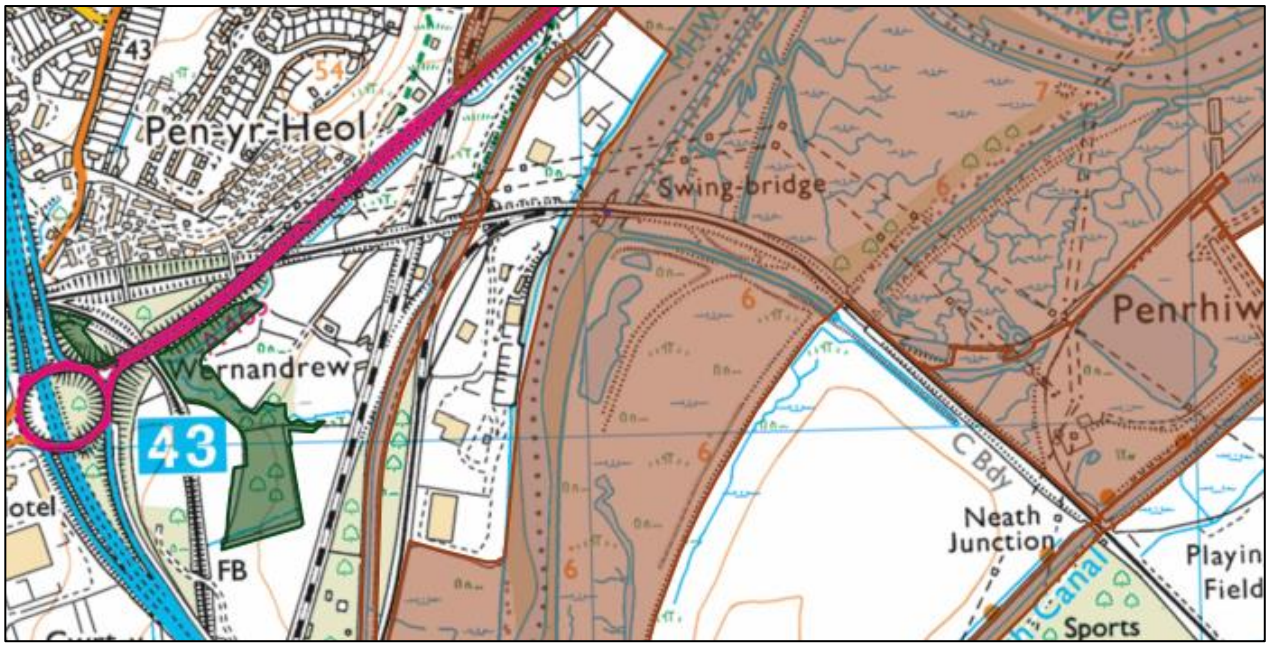

Figure 3: SINC's in relation to Swing Bridge.

3.2 ANCIENT WOODLAND

3.2.1 Ancient Semi Natural Woodland (ASNW) and Restored Ancient Woodland sites are within 1-2km of the ditching works; however no clearance or access is required within ASNW boundaries or within an impact radius of the works.

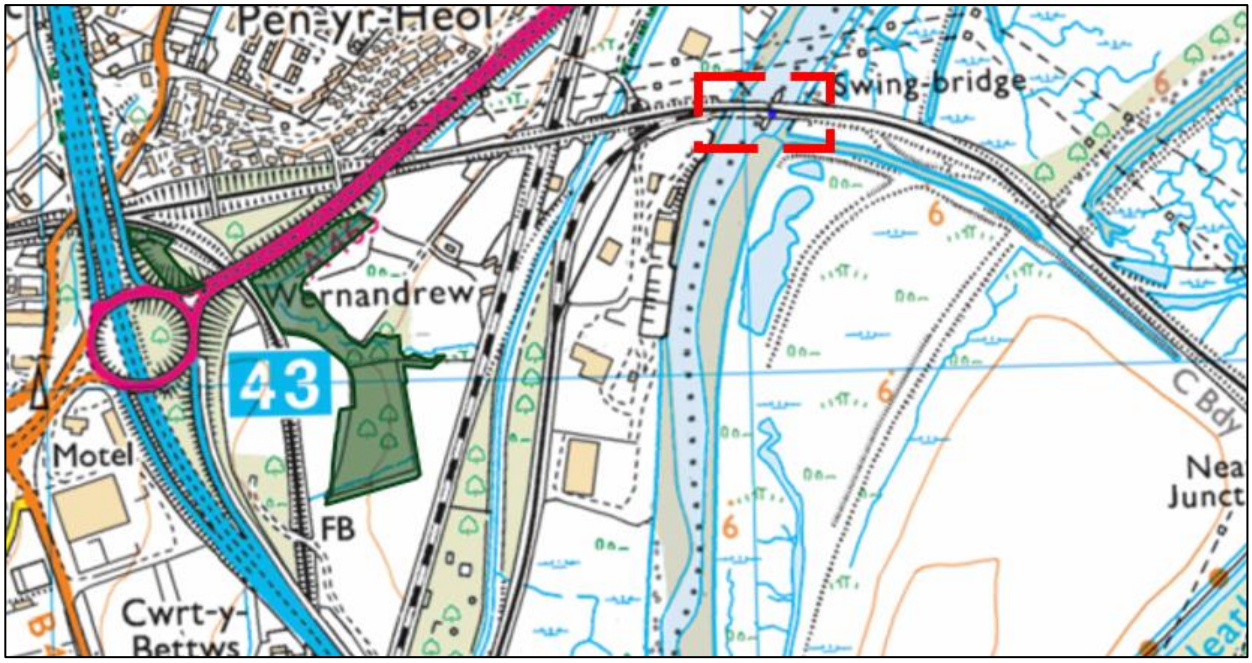

Figure 4: Ancient Woodland in relation to Swing Bridge.

3.3 WATERBODIES & WATERCOURSES

3.3.1 There are **3** natural/semi natural static waterbodies within 250m and a further **5** within 500m of the works site (Excluding the Tannant Canal to the east). The River Neath is the main watercourse of concern in relation to the project, flowing to the South from the Northeast. This portion of the Neath is within the Tidal Reach.

3.4 WORKS FOOTPRINT & ACCESS

3.4.1 A formal main compound and satellite compound are required to support the project. The main compound is to be situated within a derelict hard standing and brownfield site to the Northwest of the structure. The satellite compound is to be situated within the Southeast corner of the Waste Management Facility in a soon to be cleared storage bay.

3.4.2 Access to the structure itself will be via a short formilised haul road to the western bridge abutment. From this area, scaffolding will be erected and supported by the existing structure, cantilevered, or a mixture of both. There is no formal access possible from the east other than material moved along the rail corridor itself during blockades.

3.4.3 A rescue vessel is proposed to be made available during the works. No plant machines are proposed to be used within the marine environment.

3.4.4 It is likely that divers will be required to cut off the redundant wooden fenders either side of the structure.

3.5 SURVEY FIGURES

The survey was undertaken on the 03/11/21 during the afternoon. Weather conditions were mild, with overcast skies, low wind and mild precipitation. Access and observations were made from the western shoreside. Approximate temperature was 15C.

Figure 5: Overview of Neath Swing Bridge from Western Shore (Facing East).

Figure 6: Below space between first and second set of metallic piers.

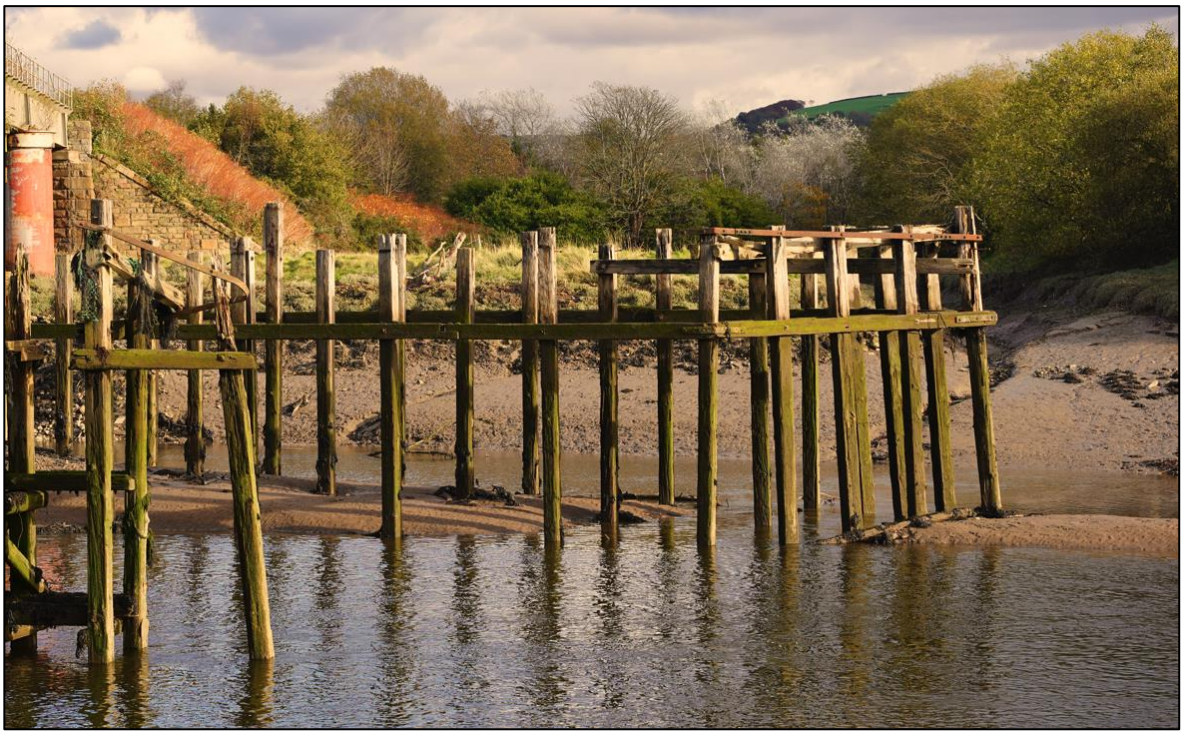

Figure 7: Remaining timber sections from past operational periods.

Figure 8: Mixed dense vegetation below and adjacent to southwest masonry abutment.

Figure 9: Exposed riverbed during low tide conditions (facing north).

Figure 10: Exposed riverbed (facing south/downstream).

3.6 SURVEY & DATA SUMMARY

3.6.1 **Habitat**: Habitat within the working footprint is predominately dense bramble, small saplings, and isolated broadleaf trees with Ivy cover of varied densities. Ground vegetation directly below the structure is essentially non-existent. Japanese Knotweed is present to the northwest; however, these stands will not come within the working footprint. The estuary itself and free flowing portion of the river is the defining habitat feature within the project footprint.

It was not possible to view the eastern shore habitat. A smaller watercourse flowing into the neath is present near the south-eastern portion of the structure with a broadleaf woodland boundary along the upper bank. What appears to be better established marginal habitat is present either side of the structure below the rail embankments further east of the bridge structure itself.

Within the rail corridor itself on either side of the bridge is a narrow broadleaf habitat corridor.

3.6.2 **Bird Species**: The survey was undertaken outside of the traditional bird breeding season (March – August inclusive). The habitat is still highly suitable, i.e., dense vegetation generally undisturbed by humans or domestic animals, elevated areas for perching. Abundant fresh water sources from nearby watercourses.

Seagulls were observed perching on the structure's steelwork and metallic piers (see figure 11).

From the Sewbrec data, within 1km radius, numerous species of bird. Several schedule 1 bird species have been recorded within 1km of the structure, including Cetti's Warbler (recorded within the wetland habitat to the Northeast and Western Osprey, recorded south and on the structure itself during 2010.

Figure 11: Gul observed perching on steelwork.

3.6.3 **Bat Species**: No trees within the western portion of the structure support bat roosting, beyond potential temporary resting locations, in relatively poor Ivy cover, during optimal conditions. Winter roosting or hibernation potential is negligible, within the trees within 5m of the western rail abutments. It was not possible to assess the entire masonry abutment to the west. Observed minor defects appear to be shallow and offer no viable cavities from initial visual assessments (see figure 12 below). The eastern masonry abutments and vegetation remain un-assessed.

Available data highlights an abundance of bat species within 2km, including Brown Long-eared, Common & Soprano Pipistrelle, Lesser Horseshoe and Noctule, predominantly along Tennant Canal. There are no records from the structure itself.

Figure 12: Lower masonry below steel decking.

3.6.4 **Amphibian Species**: Common amphibians such as toad and frog may be present within the general area. There are at least 8 pond of varying sizes within 500m of the swing bridge. There is a very limited amount of available data for amphibians within the Biological Records Centre search, with only common frog noted 500m to the north of the project. It is very likely that the presence of amphibian numbers and species is a result of under recording. Most of the ponds highlighted on the maps are situated to the East and are consequently un-assessed.

3.6.5 **Common Reptile Species**: common species such as lizard and slow-worm are often found within rail corridor environment, however as with amphibians above, there is limited data. There are a significant amount of Grass Snake recording in Penrhiwtyn 1km to the east.

3.6.6 **Aquatic Species**: A watercourse survey was not undertaken as part of this survey. Available data on this section of river is also limited, however an invasive barnacle is recorded (see point 3.6.11).

3.6.7 **Common Mammal Species**: No common mammals such as fox, rabbit or hedgehog were identified during the survey, however several mammal prints where observed along sections of the exposed river bed.

3.6.8 **Priority Mammal Species**: Within the data search, Eurasian Otter and Eurasian Badger have been recorded within 2km of the project.

3.6.9 Eurasian Otter have been recorded within Tennant Canal at several locations to the north and south. During the walkover, potential otter prints were observed along the riverbanks 10m south of the structure (see figure below).

Figure 13: Potential Otter Paw Print.

3.6.10 Eurasian Badger have also been recorded in significant numbers within 2km of the site. Records are predominately from the Pen-yr-Heol area to the west of the project. However, it is possible the narrow corridor not inundated during high tide is used by badgers to move between habitat ranges.

3.6.11 **Invasive non-native plant species:** Japanese knotweed is present within a bund to the northeast of the structure access route.

Additionally, Sewbrec data indicates that Austrominius modestus, an invasive form of Barnacle which is present near the structure. The data does not directly indicate that this species is found on the structure, however given the nature of this barnacle to thrive on any hard manmade marine structure, it is likely this species will be found on lower sections of metallic piers and timber sections within the tidal reach.

Figure 14: Austrominius modestus.

4 ASSESSMENT & RECOMMENDATIONS

The following section combined the above survey information, provides recommendations for the remaining ecological considerations.

4.1 ACCESS

4.1.1 Overall access to the site has been limited to the western shore. For the purpose of this preliminary appraisal. There is enough information to provide an accurate baseline and evaluation of the broad environmental considerations for this project.

4.1.2 With regard to potential access points, that do not require access from the rail corridor and hence, limited rail blockades. Contact with Neath Port Talbot Council has been made. A request has been forwarded to the operations team of the now closed Giants Grave landfill site. The site is still maintained as there is a small gas turbine plant present.

4.1.3 EcoVigour are requesting a foot access permit during the normal site opening periods to allow closer access to the eastern shore to undertake follow up assessments, which are described below.

4.2 DESIGNATED SITES

4.2.1 The statutory sites within 3km of the project are a significant distance away from the project. RAMSAR sites often have a higher buffer zone due to the highly transient nature of the bird species they are designed to protect. As the project is directly adjacent to an operating waste management facility and active rail corrido, it is unlikely the scope of works would be of such an intensity to be beyond current baseline levels of human disturbance.

4.2.2 In relation to the SINC (non-statutory sites), the project is unlikely to impact the local authority council objectives. However, contact with the Local Authority Ecology team is advisable to make them aware of the works.

4.3 HABITATS

3.2.1 The required vegetation clearance footprint to allow for the erection of scaffolding is relatively small with a buffer zone of 3-5m required along either side of the rail abutments to ensure safe construction of the scaffolding structure. As indicated above, the small area of the eastern abutment and lower embankment will be assessed once access has been achieved.

4.4 BIRD SPECIES

4.4.1 The Wildlife and Countryside Act 1981 (as amended) is the principal legislation affording protection to UK wild birds. All birds, their nest and eggs are protected by law under this legislation, it is an offence (with certain exceptions), to recklessly or intentionally:

- Intentionally kill, injure or take any wild bird.
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built.
- Intentionally take or destroy the egg of any wild bird.
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

4.4.2 Nesting bird habitat is present along all sections of the liner site. However, no nesting birds have been identified to date.

4.4.3 The proposed works are scheduled to occur within the nesting season. However, vegetation clearance should be undertaken ahead of the main works to lower this risk of disturbance to nesting birds and impacting project program.

4.4.4 It is highly recommended that a bird activity survey be undertaken at the bridge during early 2022 in relation to Western Osprey, to evaluate whether the structure is of significance to this species e.g. roosting, or whether previous observations are incidental.

4.5 GREAT CRESTED NEWT

4.5.1 As a European Protected Species (EPS), GCN receive full protection under the Wildlife and Countryside Act 1981 (as amended), the 2017 Conservation and Species Regulations (as amended) and the Countryside and Rights of Way Act (CROW) 2000, which make it illegal to:

- Sell, offer for sale, possess, advertise or transport for the purpose of sale;
- Intentionally or deliberately capture, injure or kill GCN;
- Deliberately disturb GCN;
- Damage or destroy a breeding site or resting place;
- Intentionally or recklessly disturb GCN from, or damage, destroy or obstruct access to, a place used for shelter or protection.

4.5.2 There are no available records of GCN within proximity to the works. Although there are numerous ponds within 500m of the projected and further afield. The actual footprint of the works is very small and within poorer quality habitat for GCN. It is unlikely this species would be encountered during the project.

4.5.3 However, GCN identification will form part of good practice toolbox talks.

4.6 BAT SPECIES

4.6.1 All British bats and any place used for shelter or protection or breeding site or resting place (their roosts) are fully protected by law under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).

4.6.2 Together these protect bats from:

- Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species.
- Deliberate, intentional or reckless killing, injury or taking of bats.
- Damage to or destruction of or, obstruction of access to any place of shelter, breeding (roost) or rest.
- Disturbance of an animal occupying a structure or place.
- The deliberate disturbance of any bat species in such a way as to be significantly likely to affect;
  - their ability to survive, hibernate, migrate, breed, or rear or nurture their young; or
  - the local distribution or abundance of that species.

4.6.3 No features pertaining to bats have been noted within the working limits to date. There are no records of roosting within or near the structure. The metallic structure itself is unlikely to support bats, unless the central structure has internal compound and shelter in a manner that would suit bats, while also protecting them from predation from birds.

Figure 15: Internal gearing of Swing Bridge.

4.6.4 Available photos from previous inspections of the gearing house does not suggests highly favorable roosting, however it is not possible to be definitive at this time.

4.6.5 Further photos, video or potentially access to the central housing during a line block should be arranged, with a licensed bat ecologist on site to either inspect the housing using endoscope or directly, dependent on safe access restrictions. Or to direct, specially trained technicians on what features to look for or retrieve for further analysis (e.g., whether there are any bat droppings etc).

4.6.6 Night working should be limited, where possible to reduce potential impacts to flight lines and foraging locations. If lighting is required, this should be low level and confined to the works area with minimal light spill. This will also reduce this impact on species such as otter.

4.6.7 As the scaffolding encapsulation it limited to the deck structure, it is unlikely to significantly impact bat flight lines along this section of the Neath.

4.6.8 The negligible low potential tree noted on the Northwest access point below the structure, should be felled during winter.

4.6.9 Regarding masonry repointing. Once scaffolding is established, a further visual assessment of the repointing areas will take place. If a defect cannot be fully visually assessed, then an endoscope survey undertaken by a licensed bat ecologist will be implemented, who will decern whether there is any bat potential and whether to instruct this feature remain un-changed/repaired during the package of works.

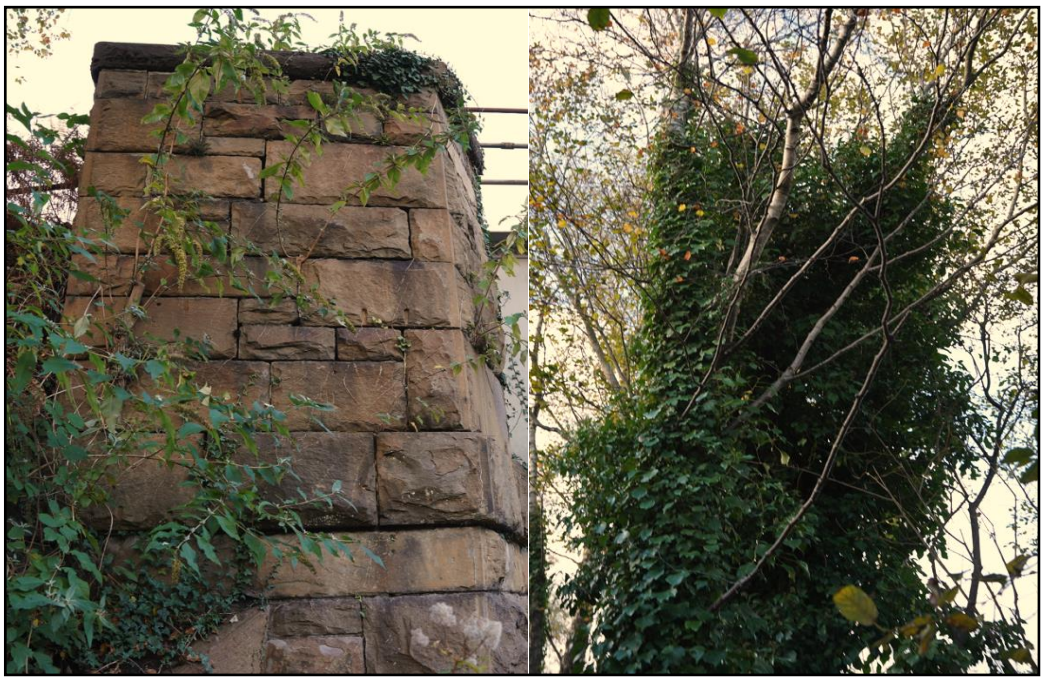

Figure 16: Upper Masonry (Left), Negligible to Low Potential Tree (Right).

4.7 COMMON REPTILES & AMPHIBIANS

4.7.1 All commonly occurring reptile species (common lizard, slow worm, grass snake and adder) are protected by UK law, making it an offence to injure or kill them. Care must be taken to avoid killing or injuring reptiles & amphibians. All reptile species are partially protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). This legislation protects reptiles from:

- Reckless or intentional killing and injury.
- Selling, offering for sale, possessing or transporting for the purpose of the sale or publishing advertisements to buy or sell a protected species.

4.7.2 Where these animals are confirmed as present on land that is to be affected by development, guidance recommends that:

- The animals should be protected from injury or killing during construction operations;
- Mitigation should be provided to maintain the conservation status of the species locally.

4.7.3 The presence of reptiles and amphibians was not visually confirmed during the ecological assessment (presence or absence surveys have not been undertaken).

4.7.4 Vegetation clearance works are unlikely to impact reptile populations, however precautionary measures may be required dependant on the exact location and scale of access clearance required to enter the watercourse.

4.7.5 Such precautionary methods to avoid injury or death of reptiles potentially present on site may include:

- Vegetation removal must be undertaken in a **slow, systematic manner** to allow any animals present to disperse safely away from the site and adjacent suitable habitat;
- Dismantling of refugia/hibernacula by hand or carefully by machine and scraping through ballast with a toothed bucket;
- If, during the works, a reptile is found, **works will stop (this is a legal requirement)** and the project ecologist will be contacted. To aid accurate species identification, a photograph of the animal should be taken and sent to the project ecologist. The animal (if unharmed) should be allowed to disperse of its own accord;
- Works should be undertaken within the reptile active period (March to early October), on warm days, when reptile species are more active and can readily escape any disturbance. If this is not possible due to construction timescales, an ecologist on site will dismantle by hand any hibernation features. Any reptiles discovered in this period should be covered over and remain in situ where possible or moved to a safe place outside of the works area with hibernacula used to shelter them.
- If any injured reptiles are found during the works on site, these will be carefully placed into a clean bucket containing some vegetation and covered over in a quiet place away from the works and an ecologist or local wildlife hospital must be contacted immediately.

4.7.6 If any non-protected amphibian species are found during the works, then these will be moved to safety by the supervising ecologist.

4.8 BADGERS

4.8.1 The Protection of Badgers Act 1992 (as amended) is the main legislation protecting badgers and their habitat in the United Kingdom. Under the Act it is illegal to:-

- Wilfully kill, injure or take a badger or attempt to do so.
- Cruelly ill-treat a badger.
- Interfere with a sett by doing any of the following:
  - (i) damage a badger sett or any part of it,
  - (ii) destroy a badger sett,
  - (iii) obstruct access to a badger sett,
  - (iv) cause a dog to enter a sett,
  - (v) disturb a badger while it is occupying a sett,

4.8.2 No evidence pertaining to badgers has been observed to date within the working areas or directly adjacent to.

4.8.3 Should a Badger sett be found near the footprint of the works, then a Badger Disturbance License will be requested from the Welsh Government Wildlife Team.

4.9 PRIORITY MAMMAL SPECIES

4.9.1 **Otte**r: as otter are recorded in the Tannant Canal, which has connections to the Neath and the finding of potential paw prints. It is recommended that a field camera survey is undertaken during the latter months of 2021 and early months of 2022 to quantify the level of otter activity below the structure and as to whether any formal licensing is required beyond best practice measures in limited noise and light pollution, combined with toolbox talks on how to behave in relation to this species.

4.9.2 Additionally, once access to the west is achieved, field cameras and an Otter feature survey should be undertaken to ensure there are no Otter holts within proximity to the western limits of the project footprint.

4.9.3 Follow up surveys should be concluded by the end of January 2022 at the latest, to ensure there is enough to time to consult with NRW, should a license be required (e.g. an Otter Holt is identified close to the works).

4.10 COMMON MAMMAL SPECIES

4.10.1 The Wild Mammals Protection Act (1996) makes it an offence to crush or asphyxiate any wild mammal. This may apply during site clearance works, particularly where burrowing mammals such as rabbit and fox are present, as such animals could be crushed or asphyxiated in their burrows by heavy machinery.

4.10.2 No small mammal holes have been identified within the working area, however during the clearance ecological supervisor, any identified mammal holes will be marked and accessed by the environmental clerk of works.

4.11 INVASIVE SPECIES

4.11.1 Japanese Knotweed present near the works should be marked up clearly and segregated away from any defined access routes.

4.11.2 The presence of Austrominius modestus necessitates a biosecurity action plan, to ensure this species is not spread as a result of any metallic structure cleaning or during the cutting and removal of timber material.

4.12 WORKING NEAR OF IN A WATERCOURSE

4.12.1 Abiding by the relevant Guidance for Pollution Prevention (GPPs) GPP5 Works & maintenance in or near water during works will be essential to protect the aquatic species within both the Ty Draw, Nant y Rhos and Afon Dulais.

4.12.2 All works near the watercourses within the survey area will be conducted in line with industry standard best practice. This will avoid the risk of polluting the watercourse through chemical contamination or substrate run off. This includes:

- Any chemicals required will be stored in designated places and bunded to prevent leakages;
- Spill kits will be on site to deal with any leakage of fuel, wet concrete or chemicals;
- Vehicles will be inspected regularly to identify leaks and fuelling will be carried out off site;
- On completion of the works the working area will be reinstated on a like-for-like basis.

4.12.3 Toolbox talks can be used to inform personnel undertaking works on the correct site protocol with regards to refuelling and general site behaviour (**i.e. No refuelling on site, all equipment stored on plant nappies, no night works and no materials to be left on site**).

4.13 PERMINTTING

4.13.1 As this structure is within the Tidal reach. A Marine License Application will be required. As this project is not within a statutory designated site, an Appropriate Assessment (e.g. TLSE or HRA) will not be necessary. However, it is likely a Water Framework Directive (WFD) assessment will be required to accompany the marine license application.

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