



Ecological Appraisal Report:

**U180, U181, U182 and U183 pylon
replacement
Nr. Metal Box Pond,
Briton Ferry,
SA11 1NJ**

July 16th 2020.

Purchase Order: P1152179

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Summary

I & G Ecological Consulting were commissioned to undertake an ecological appraisal of an area of saltmarsh approximately 7 Hectares in size (Pylons U182 and U183), the salt marsh area measures 49 Acres as whole (19.8 Hectares). A narrow track is needed to access two failing (one has already part failed due to rust and metal fatigue) electricity Pylons labelled U182 AND U183. It is proposed to use existing tracks used by the farmer who owns the field for cattle grazing but to reinforce some key areas with stone and matting as heavy vehicles carrying many tonnes of Pylons will be needed, retrieval of a heavy vehicle and the pylons could prove very difficult in this dynamic, muddy and wet environment. Existing tracks where possible and following the methodology outlined will also be necessary to gain access to make repairs to pylons U180 and U181 too.

Desk based surveys showed that the site itself did not have any statutory or non – statutory conservation designations. The site does not have records for protected fauna or flora. To access the marshy area a gap will be created in a relatively newly created bund, it was noted that this bund did have a Schedule 9 weed present (Japanese Knotweed - *Fallopia japonica*) in a few stands.

The land within the site boundary consists of muddy tracks, “pills” (creeks) of varying width, some scrub, bramble and grasses have grown since the last aerial photograph was taken.

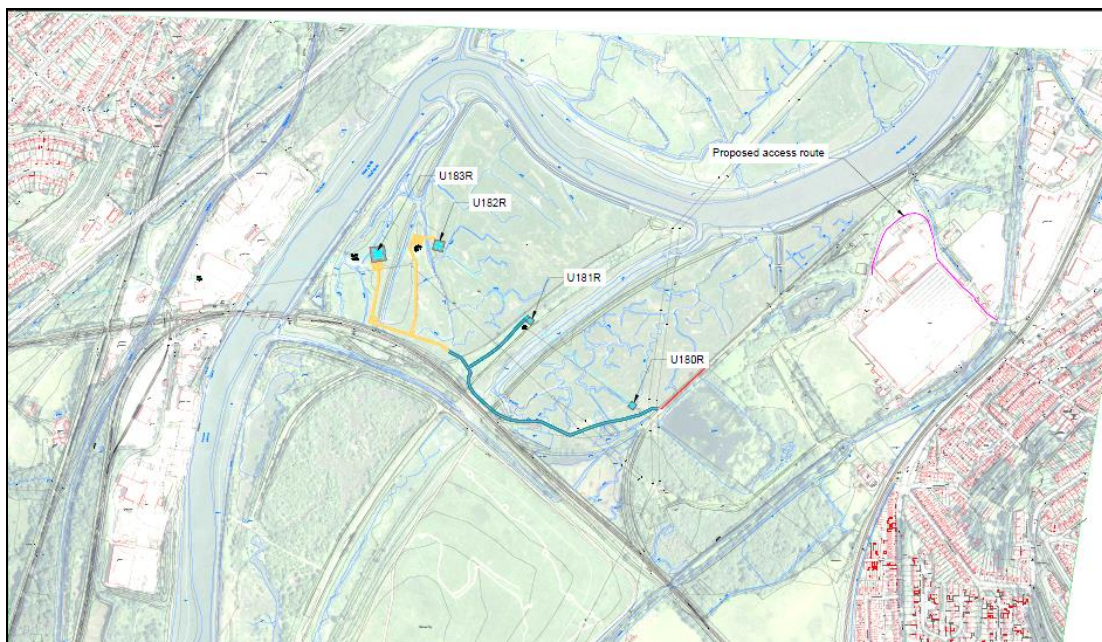


Figure 1: showing an aerial view of the site. Grid ref **SS 73337 96498** (from Apple® Maps).

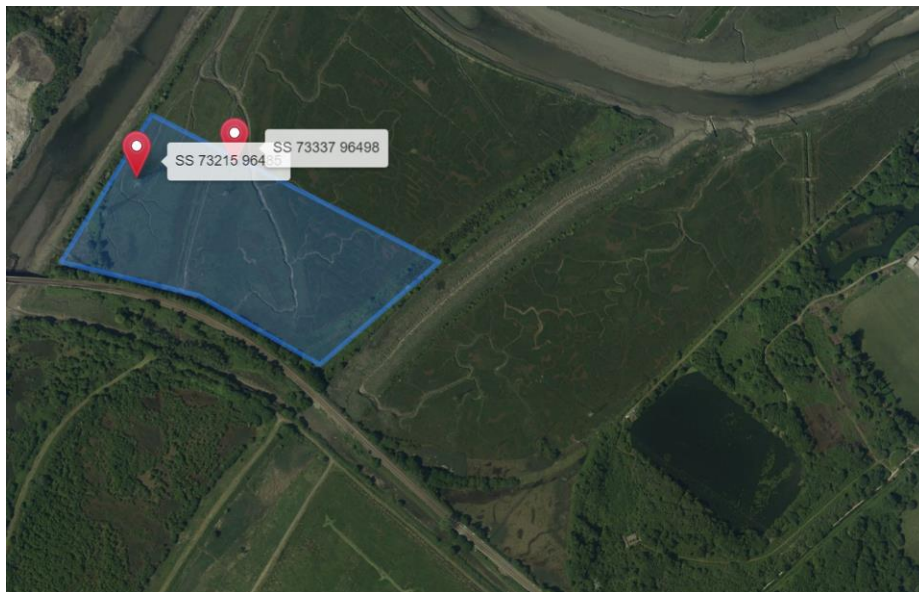


Figure 1.5: showing the site of two of the pylons (U182 and U183) needing urgent replacement and their grid references. The site is accessed via a small gap in the modern site bund to the south east (next to metal box pond) (SS 73805 96176).

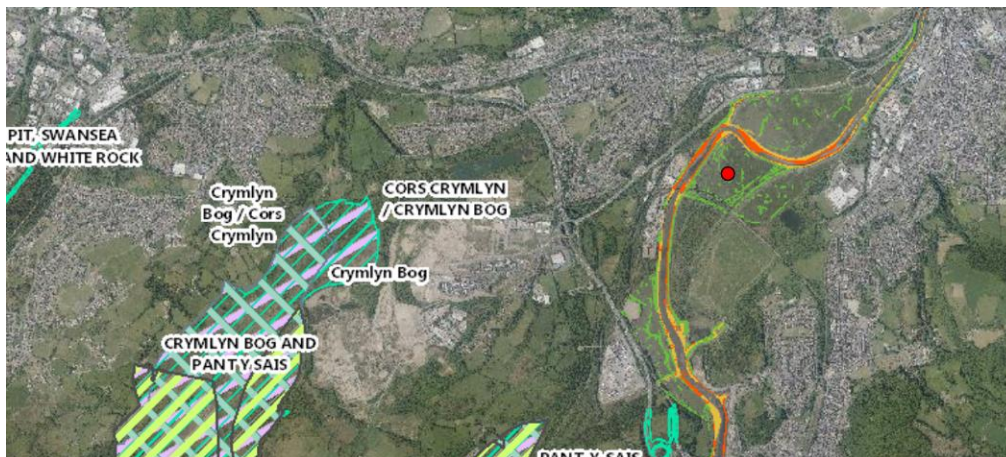


Figure 2: Image showing Crymlyn Bog RAMSAR and SSSI (striped areas) and the saltmarsh, intertidal sediment and rock near to the site. Site of activity indicated by a red spot.

In terms of the proposed works, the site was considered to be of high local ecological interest and value. The vegetation was considered to be of local ecological interest in the context of the site and is likely to provide resources for nesting birds and foraging/ commuting birds and bats as well as contributing to local habitat diversity.

The majority of the vegetation on the landward side was bramble scrub and young willow. The Schedule 9 weed (Japanese Knotweed *Fallopia japonica*) was noted along the bund (which has an access gap) – nearest pylons U182 and 183. Whereas on the estuarine side near the pylons, the dominant flora and fauna were typical of that associated with a classic saltmarsh habitat. The short grassland was being grazed by cattle and no mammal depressions were evident (probably due to the marsh being inundated with water on a regular basis). No birds were seen to fly into or near the Cordgrass on the fringes, but it should be assumed that they are present. It is not thought that will be affected by the proposals. No reptiles or amphibians were seen either.

A 4m wide (maximum) track will be needed to reach the failing pylons numbered U182 and U183. There may be the need to create small areas of hardstanding to accommodate lifting machinery and provide a solid base for staff to work from. There exists on site, an already used track to access the field and this will be followed but augmented in some areas where needed to allow safe passage of heavy vehicles and machinery. Where possible, matting will be used to limit damage to the saltmarsh.

Other considerations include the avoidance of potential harm to cryptic organisms. So and Scrub removal (if deemed necessary) will occur using strimmers and brush-cutters. All access will, where possible be along already used routes.

It is the opinion of I&G Ltd that the proposed project will not significantly effect the Continued Ecological Functionality of the land surveyed as the saltmarsh is a dynamic and changing environment and within 6 months to a year after works have been completed you'd typically find it hard to see signs that any work had been undertaken.

INTRODUCTION

I & G Ecological Consulting were commissioned to undertake an ecological appraisal of a narrow track area on land measuring approximately 7 Hectares in size (which in turn is part of the larger site which as a whole measures about 20 hectares (Grid reference: SS 73337 96498). The land is sited between Skewen to the North and Briton Ferry to the south. It is proposed to repair, widen and create (where needed) a track to facilitate vehicular access to allow two Pylons (U182 and U183) to be replaced as they have rusted badly and one has partly collapsed and is already held up with Stay-cables.

This report presents the findings of both a desk study and a site appraisal undertaken in July 2020. The report outlines the ecological constraints / opportunities associated with future development of the site.

1. METHODOLOGY

Both a desk based survey and an ecological site survey was undertaken to establish ecological conditions on site.

Desk study

A search for relevant information available via the internet was undertaken with data searches limited to an area extending up to 2km from the site centre. Information obtained from the Phase 1 Survey of Wales (CCW2005), was also used to provide an indication of the broad habitat types previously recorded in the local area. The Neath River runs 50m to the north and Crymlyn Burrows SSSI is 7 miles away.

On site survey

The site survey was undertaken on Thursday the 16th of July 2020 by a suitably qualified ecologist. The area of the proposed (and existing) access track was surveyed as well as the immediate areas around it. The field survey was based on standard Phase 1 Habitat survey techniques.

Where possible, habitats were cross referenced to any important UK priority habitats or local habitats adopted by the local Biodiversity Action Plan.

Any pernicious weeds under Schedule 9, Section 14 of the Wildlife and Countryside Act 1981 (as amended) were also noted and mapped during the site survey. These species include Japanese Knotweed *Fallopia japonica* and Himalayan Balsam *Impatiens glandulifera*. **Japanese knotweed was noted either side of the gap of the modern bund created adjacent to Metal Box pond.** It is an offence under Section 14 (2) (a) of the Act to “plant or otherwise cause to grow in the wild any plant which is included in Part II of Schedule 9”. This would include spreading the plant via rhizome.

There were, records of protected birds and mammal species in the local area (1km radius). However, these records were not considered of particular ecological relevance to the candidate site due to a combination of the physical separation and the nature of the habitats at the site as well as the small (narrow) footprint of the proposed works.

A SEWBREC protected species survey can be provided on request.

Most data for designated sites were associated with habitats in areas other than the proposed development site and were not considered of particular relevance to it based on the known habitat preferences of such species, the dynamic and changeable site conditions and the physical separation from the site, also once the track has been created – where it does not presently exist and augmented in key areas, salt marshes are known to recover quickly as sediment is carried by the fluvial processes of the estuary in-filling depressions and covering tracks quickly.

Records of mobile species such as birds and bats were considered of some relevance to the candidate site, and in particular the boundary hedgerows and scrub which are likely to provide food and shelter resources for such species. These features, however are not being affected by the proposals.

The land within the site boundary consisted of a limited range of habitats including grazed saltmarsh; species poor hedgerows and small areas of boundary wood (along the railway track embankment to the east) and marsh boundaries dominated by scrub and *Spartina* Cord grass. The surrounding landscape consists of mainly industrial amenity land, the Railways line, Canal and the River Neath to the north.

Saltmarsh

The area to be accessed is an existing saltmarsh area that is inundated by tide and is up to one metre beneath the Estuarine water of the River Neath during high spring tides. The site has many pills (saltmarsh creeks) of varying depths and widths which are hydrologically connected to the River Neath at high tide.

Species noted here included from the landward edge of the saltmarsh toward the estuarine margin (intertidal zone): Common Marshgrass - *Puccinellia maritima*, Sea purslane: *Halimione portulacoides*, Marsh cordgrass - *Spartina anglica*, Creeping bentgrass - *Agrostis stolonifera*, Saltmarsh Rush - *Juncus gerardii* Loisel, sea thrift (*Armeria maritima*). Goosefoot (Amaranthaceae). A data search revealed 110 records of recorded species near or on the site. The nearest being for the non-native Nuttalls Waterweed *Elodea nuttallii* (Planch.) H. St. John 160m to the east of pylon U182. Identified by the illustrious local botanists Dr Charles and Mrs Hilary Hipkin.

The mud shrimp (*Corophium volutator*) was abundant near and within the tidal pools.

The non-native Egyptian Goose (*Alopochen aegyptiacus* (Linnaeus, 1766) as well as the Canada Goose (*Branta canadensis* (Linnaeus, 1758) has been recorded on site, again a short distance from the pylons.

The estuary ragworm (*Hediste* (*Nereis*) *diversicolor*) hasn't been recorded near to the pylons but is highly likely to be present being a common and omnipresent polychaete.

Most records for the site or nearby were gained from the 100m² red squares. The small blue spots show the location of all four pylons that need replacing due to metal fatigue and rust.



Figure 3: showing the start of the tracked area which will be used (and is) to gain access to repair the pylons.

Scrub

Small stands of marginal scrub had become established on site. The scrub habitat included species such as Bramble (*Rubus fruticosus agg*), and Willow species (*Salix sp.*) saplings.

Hedgerows

There were no hedgerows per se near to the work site, there is a boundary hedge to the north, there are no proposals to manage this.

The bund

Access across the saltmarsh via the track (to U182 and U183) will be through a small gap of 3-4m in the bund. This bund has scrub of mainly willow and bramble and has a number of stands of Japanese Knotweed *Fallopia japonica* present. To prevent its spread some suggestions have been made within the recommendations section below.

Saltmarsh

An area of saltmarsh measuring some 7 Hectares is where the track will be created (and stabilised for heavy vehicles) where it already exists. The distribution of halophytic flora and fauna on the saltmarsh follows a classic pattern seen in the appendix in section 6 below.

Reptiles and Amphibians

The limited mosaic of habitat present over the majority of the site was considered largely unsuitable to support common reptiles, particularly due to the short, grazed vegetation which is subject to inundation with the brackish waters of the River Neath every time the tide is high enough. However, the areas of scrub to the south (along the bund) were identified as potentially suitable habitat capable of supporting small numbers of common reptiles and amphibians especially being close to the pond known as *Metal Box*.

Badgers

The site itself is unsuitable for badgers and no evidence of Badger setts or Badger activity on the site was noted during the survey.

Foxes

No paths were noted in the denser vegetation (bramble to nettle to blackthorn) or on the grassland areas. Probably Due to the site being grazed it is probable that these paths do exist near to the saltmarsh but would be typically hard to spot.

Bats

The majority of trees on site were young and mainly located to the west of the site along the railway embankment. The boundary hedgerow on site the northwest is low, but is likely to be used as foraging and commuting corridors by bats and birds, however none of these will be altered as a result of the works and all works will have to be undertaken during periods of favourable tide. In the unlikely event a bat were discovered all works should immediately cease and I&G called for guidance Natural Resources Wales (NRW) may also be contacted for advice on how to proceed.

Birds

During the survey the only bird seen were a pair of magpies overhead. The site's scrub habitats and marsh grass fringes are likely to offer some nesting opportunity and cover habitat for local birds, although none were seen or heard they should be assumed present as the habitat was suitable.

Otters

No otter signs were seen during the survey and most (if present) would be washed away by diurnal inundation with tidal waters. Classic otter signs include spraint (droppings) and slides where they slide into water courses.

4.0 LEGISLATION

4.1 Otters and the Law

4.1.1 The otter is a European Protected Species (EPS). It is against the law to damage or destroy an otter breeding site or resting place, or deliberately to capture, kill, injure or disturb an otter.

4.1.2 Otters are fully protected by the following pieces of legislation:

□ The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects otters, making it **an offence to:-**

- *Intentionally or deliberately capture, injure or kill an Otter.*
- *Damage or destroy a breeding or resting place of an Otter, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
- *Intentionally or recklessly disturb an Otter in a place used for shelter or protection , or deliberately disturb Otters in such a way as to be likely significantly to affect (i) the ability of any significant group of Otters to survive, breed, rear or nurture their young, or (ii) the local distribution or abundance .*
- *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
- *Possess an Otter (alive or dead), or any part of an Otter*

□ Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000) fully protects otters, making it **an offence to:-**

- *Intentionally or recklessly disturb any otter while it is occupying a structure or place which it uses for shelter or protection*
- *Intentionally or recklessly obstructs access to any structure or place used by an otter for shelter or protection*
- *Sell, offer or expose for sale any otter*

4.1.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. granting the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-

economic nature or will have a benefit of primary importance to the environment.

- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

4.1.4 Otters are also protected by;

- ☐ Natural Environment and Rural Communities Act 2006.
- ☐ Annex II Habitats Directive (protection through Special Areas of Conservation)
- ☐ UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

4.2 **Bats and the Law**

4.2.1 Bats are protected by the following pieces of legislation:

- ☐ Schedule 5 and 6 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countryside Rights of Way] Act 2000)
- ☐ The Environmental Damage (Prevention & Remediation) Regulations 2009 – A protected species and its habitat is protected under this legislation as well as others.
- ☐ The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects all bats and their roosts, making it **an offence to deliberately kill, injure or capture** (take) bats; *to deliberately disturb bats; damage or destroy bat roosts* or resting places (this is considered an “Absolute Offence” as damage and destruction may detrimentally effect the Continuous Ecological Functionality of that roost / resting place); possess or transport a bat or any part of a bat; sell (or offer for sale) or exchange bats or parts of bats.
- ☐ For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;
 - i. the licence would not be detrimental to the Favourable Conservation Status (fcs) of the populations of species concerned within its natural range.
 - ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
 - iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but

which would avoid or reduce the need for any adverse impact to the species.

iv.

4.2.2 Bats are also protected by;

- ☐ Appendix III of the Bern Convention
- ☐ Appendix II of the Bonn Convention (including the Convention's Agreement on the conservation of Bats in Europe)
- ☐ Natural Environment and Rural Communities Act 2006 and now the Environment (Wales) Act 2016.
- ☐ All bats are listed in Annex IV of the EC Habitats Directive and the British species listed in Schedule 2 of the Habitats Regulations 1994 (as amended) and are therefore designated as *European Protected Species*. These *protected* species are afforded enhanced protection and more stringent licensing provisions than those protected by the Wildlife and Countryside Act (WACA) alone.

4.3 ***The Hazel Dormouse and the Law***

4.3.1 The hazel dormouse is a European Protected Species (EPS). It is against the law to damage or destroy a dormouse breeding site or resting place (summer or hibernation nest), or deliberately to capture, kill, injure or disturb a dormouse.

4.3.2 Dormice are fully protected by the following pieces of legislation:

- ☐ The Conservation of Habitats and Species Regulations 2017 (regulation 42) fully protects dormice, making it **an offence to:-**
 - *Intentionally or deliberately capture, injure or kill a dormouse.*
 - *Damage or destroy a breeding or resting place of a dormouse, or intentionally or recklessly damage or destroy any structure or place used for shelter or protection*
 - *Intentionally or recklessly disturb a dormouse in a place used for shelter or protection, or deliberately disturb dormouse in such a way as to be likely significantly to affect (i) the ability to survive, breed, rear or nurture their young, and includes in the case of animals of a hibernating or migratory species, to hibernate or migrate or (ii) the local distribution or abundance.*
 - *Intentionally or recklessly obstruct access to a place used for shelter or protection.*
 - *Possess a dormouse (alive or dead), or any part of a dormouse*

- Schedule 5 of the Wildlife and Countryside Act 1981 (as amended by the CROW [Countrywide Rights of Way] Act 2000) fully protects dormice, making it **an offence to:-**

- *Intentionally or recklessly disturb any dormouse while it is occupying a structure or place which it uses for shelter or protection*
- *Intentionally or recklessly obstructs access to any structure or place used by a dormouse for shelter or protection*
- *Sell, offer or expose for sale any dormouse*

4.3.3 For any disturbance to occur a derogation or **EPS licence** must be gained from Natural Resources Wales. To gain an EPS Licence from Natural Resources Wales (NRW), NRW must be satisfied that;

- i. Granting the licence would not be detrimental to the Favourable Conservation Status (**fcs**) of the populations of species concerned within its natural range.
- ii. the derogation (licence) is in the public interest of Health and Safety or for other reasons of over-riding public interest, including those of a socio-economic nature or will have a benefit of primary importance to the environment.
- iii. there is no satisfactory alternative to the derogation which would allow the described development to proceed but which would avoid or reduce the need for any adverse impact to the species.

4.3.4 Dormice are also protected by;

- Natural Environment and Rural Communities Act 2006, Environment Wales (2016) Act.
- Annex II Habitats Directive (protection through Special Areas of Conservation)
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in Wales

4.4 Reptiles and the Law

4.4.1 All of the UK native reptiles are protected by law. The common species of reptiles found in this locality are common lizard, slow-worm, adder and grass snake. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

- 4.4.2 All native UK reptiles are considered of 'principle importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 4.4.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes all reptiles species) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

4.5 *Amphibians and the Law*

- 4.5.1 All of the UK native amphibians are protected by law. The common species of amphibians in this locality are common frog, common toad, smooth newt and palmate newt. It is illegal to intentionally kill or injure these species under Section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).
- 4.5.2 The common toad is considered of 'principle importance' under Section 7 of the Environment (Wales) Act 2016. This places a duty on every public authority, in exercising its functions, to have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.
- 4.5.3 Under the National Planning Policy Framework (NPPF April 2012), the presence of any Protected Species (which includes the Common Toad) are a material planning consideration. The ODPM 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and Their Impact within the Planning System, provide additional advice and support the NPPF.

4.6 *Birds and the Law*

- 4.6.1 All species of bird are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Protection was extended by the Countryside and Rights of Way (CROW) Act 2000. Under the above legislation it is an offence to intentionally:
- ☐ kill, injure or take any wild bird;
 - ☐ take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
 - ☐ take or destroy an egg of any wild bird.

4.6.2 Certain species are listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive protection under Sections 1(4) and 1(5). The protection was extended by the Countryside and Rights of Way (CROW) Act 2000. There are special penalties where the offences listed above are committed for any Schedule 1 species and it is also an offence to intentionally or recklessly:

- ☐ disturb any such bird when it is building its nest or while it is in or near a nest containing dependent young; or
- ☐ disturb the dependent young of any such bird.

4.7 *Badgers and the Law*

4.7.1 The protection of Badgers Act 1992 makes it illegal to kill, injure or take a badger, or interfere with a sett. In addition, they are listed on Schedule 6 of the Wildlife & Countryside Act 1981, which prohibits certain methods of killing and capture.

4.8 *Water Voles and the Law*

4.8.1 Water voles are listed under Schedule 5 of the Wildlife & Countryside Act 1981, receiving full protection since 2008. The Wildlife & Countryside Act 1981 (as amended), lists the following offences:-

-  Intentionally kill, injure or take water voles (Section 9 (1)).
-  Possess or control live or dead water voles or derivatives (Section 9 (2)).
-  Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection (Section 9 (4) (a & c)).
-  Intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose (Section 9 (4) (b)).
-  Sell water voles or offer or expose for sale or transport for sale (Section 9 (5)).
-  Publish or cause to be published any advertisement which conveys the buying or selling of water voles (Section 9 (5)).

4.9 *Environment (Wales) Act 2016*

- 4.9.1 This act has replaced the section 40 duty in the Natural Environment and Rural Communities Act 2006 (NERC Act 2006), in relation to Wales, and applies to those authorities that fell within the previous duty. It came into force in May 2016.
- 4.9.2 Section 6 of the Act places a duty on public authorities to ‘seek to maintain and enhance biodiversity’ so far as it is consistent with the proper exercise of those functions. In so doing, public authorities must also seek to ‘promote the resilience of ecosystems’. Under Section 6 public authorities will be required to report on the actions they are taking to improve biodiversity and promote ecosystem resilience.
- 4.9.3 Section 7 of the Act places a duty on public authorities to take steps to maintain and enhance biodiversity. This section replaces the duty in section 42 of the NERC Act 2006. The Section 7 Priority Species under this act is a list of the living organisms of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. The Section 7 Priority Habitats is a list of the habitats of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The combination of desk and field surveys undertaken at the site identified a limited range of habitat types including saltmarsh, species poor boundary scrub (atop the bund to the south) with small areas of broadleaf trees alongside the railway track and native hedgerows to the north. The largest habitat areas on site consisted of improved grassland. The saltmarsh grassland was considered to be of ecological importance in a local context and as such are likely to be utilised by a variety of species potentially including invertebrates and birds as well as foraging and commuting bats. Little or no ecological value was attached to the scrub area. The trees alongside the railway could provide “green bridges” for flying species to traverse the railway safely.

There are no plans to alter or “manage” the scrub, main saltmarsh nor the hedgerow or the trees along the railway track.

Further works to the tracks or pylons are unlikely to be needed for another decade or so, when metal fatigue may occur to the new pylons, dictating the need once more for remediation works. The ecosystem surrounding the pylons will be allowed to recover to their former condition once works have been completed.

If any animals are encountered during scrub clearance, ALL work in that area is to stop and the operative to work in an alternative site until the organism has had a chance to move to shelter. If there's any uncertainty at any stage, call I&G for help and advice.

5.1 Track Reinforcement

Silica cemented sandstone is recommended for areas that need a stone base for heavy machinery traversing the site. Where possible existing tracks at the margins of the salt marsh will be used, areas where there are peaks and troughs and adverse cambers will have clean sandstone applied and flat firmer areas of vegetation will have mats applied.

This stone has been chosen as the BGS (British Geological Survey) maps show that the underlying bedrock is Mudstone, Siltstone and Sandstone. Sedimentary Bedrock formed approximately 308 to 310 million years ago in the Carboniferous Period. The second reason is one of geochemistry: when limestones are weathered, a thin alkaline soil is usually left above, whereas weathering of sandstones results in acid soils and peat often forms on them. Because of the differences, the landscape and habitats that develop on sandstone bedrock may be quite different from that formed on limestone.

Concrete hard-standings will be needed at the entrance of the site and this will serve ecological and logistic functions. Knotweed (*Fallopia japonica*) is present at the entrance to the field connecting to where pylons U182 AND U183 are sited. By using a concrete pad at the entrance this will prevent vehicles from carrying rhizomes and plant material upon their wheels across the saltmarsh which could settle and colonise less brackish areas. The placement of the concrete pad at the entrance will also mean that there is a formal entrance and egress point preventing the formation of too many tracks across the marsh and pills.

The stone can be left in the irregular areas to encourage any vehicular access that's needed for agricultural purposes to adhere to that route. The land is grazed by cattle at low tide and during periods of high spring tides the marsh area is inundated with sea water.

5.2 Reptiles & Amphibians

The limited mosaic of habitat present over the proposed worksite site was considered largely unsuitable to support common reptiles, particularly due to the short, grazed vegetation which is inundated by the brackish waters of the Neath Estuary during high tides. The southern end of the site could provide suitable habitat at some times of the year but this too would be ephemeral due to its location. However, the marginal areas of scrub to the south were identified as potentially suitable habitat capable of supporting small numbers of common reptiles and amphibians due to the proximity to "Metal Box Pond". The client is reminded that all common species of reptile are protected against killing or injury under Schedule 5 (Sections 9(1) and 9(5)) of the Wildlife and Countryside Act 1981 (as amended).

All vegetation will be retained where possible. If management is deemed necessary when laying stone and mats to facilitate site access then cutting will be directional to 'encourage' any reptiles present to move into the retained offsite fields. Vegetation would be cut by utilising strimmers or chainsaws (for woody material) to a height of 100 mm above ground with **all arisings removed**.

5.3 Birds

Given the possibility of bird species using some of the denser scrubby areas (bramble & blackthorn). If management is needed (none is planned), all scrub will be taken down to 100mm on day 1 of scrub clearance and will then be left 24 hours until it's taken down to ground level in readiness for the stone to be laid. No ground nesting birds were heard or seen during the site survey and the footprint of the works is extremely small posing negligible risk, this risk will be further reduced by using hand tools rather than scrub clearance machinery attached to a farm vehicle.

If any mobile species are seen during scrub clearance they will be allowed to scatter before continuing with works. If in the unlikely event that an active nest is encountered then work should stop in that area and the area be monitored over the next couple of weeks to ensure that the nest is now vacant and that work can safely proceed.

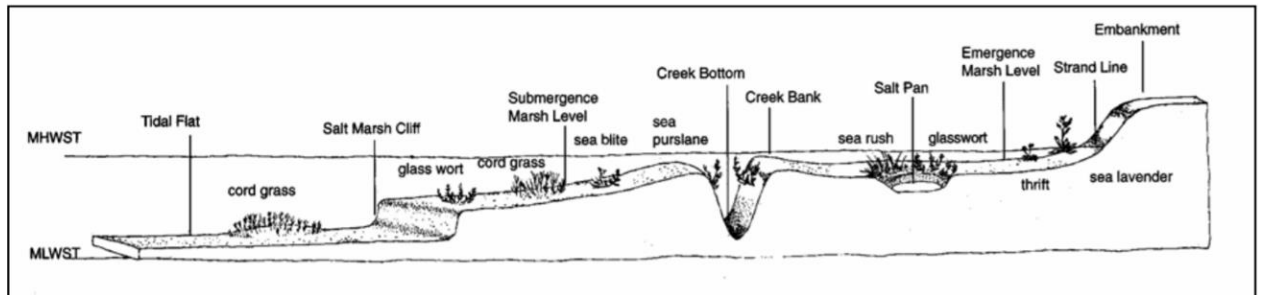
5.4 Extra Precautions

Once a hole has been created for foundations for the feet of the pylons, if it is to remain open overnight for any reason then planks of wood acting as escape points will be put into the trench every 2-3 metres to facilitate the escape of any animal that may fall into the void. No further surveys are required however, working methodologies for Reptiles/Amphibians, Badger and Birds are recommended as outlined above.

Ecosystem Resilience

Area loss can cause populations of organisms to decline due to a decrease in habitat size. The narrow area to be "tracked" consists of grazed Saltmarsh. If the track site is cleared without mitigation the impact is expected to be negligible as a track already exists on site...but needs augmenting in places for health and safety reasons. Saltmarsh is already a resilient habitat due to its exposure to all elements.

6.0 Appendix



Schematic diagram showing the profile of a saltmarsh and mudflat and their main physiographical features (www.abdn.ac.uk/geospatial)



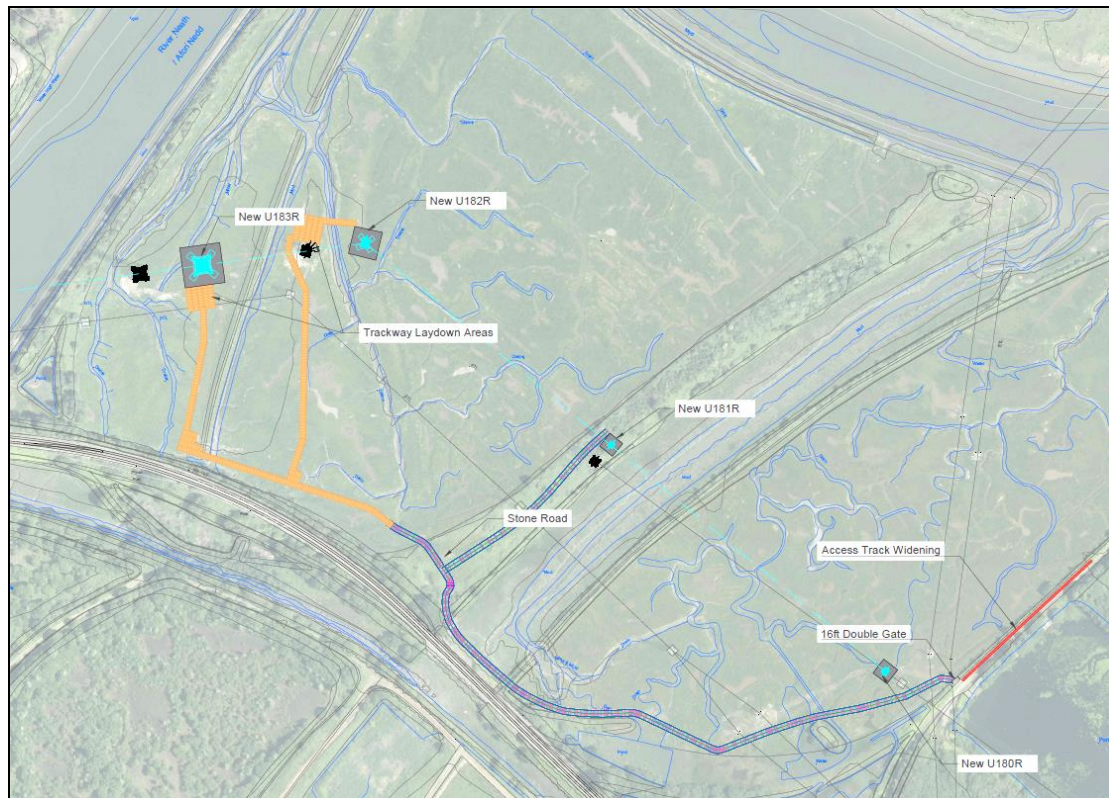






Figure 4: site survey images showing the species encountered. Image 7 shows a large culvert that goes beneath the railway providing trans-site connectivity for mammals and birds. Image 8 shows one of the salt lagoons. Images 11-18 show the pylon legs and why they need urgent replacement. Stay cables can be seen in image 16 which already hold one of the pylons up to prevent its collapse. The final 2 images show the bund / embankment. This is a soil embankment with scrub and bramble coverage but has Japanese Knotweed present in a few areas. A hard standing created for access here will contribute to the prevention of spread as vehicles won't be driving through mud and plant material to access the saltmarsh. Wheels will all be hosed off before finally leaving the site to prevent further spread.

Image below shows the site plan and where works will be undertaken- more detailed site plans are available from Western Power Distribution Engineering staff.



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