



Margam, National Grid Electricity Transmission

July 2025

Prepared for: National Grid Electricity Transmission

Prepared by: Stantec UK Limited

Revision	Description	Date	Author	Quality Check	Independent Review
V1	First Issue	14/11/24	CJ	JT/ HM	HE
V2	Second Issue	26/11/24	CJ	JT/ HM	HE
V3	Third Issue incorporating 2025 survey results	19/07/25	DS	НМ	HE
V4	Forth issue, incorporating client and legal comments	31/07/25	НМ	HE	HE



The conclusions in the Report titled **Water Vole and Otter Report** Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from National Grid Electricity Transmission (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by:		
	Signature	
	Hannah Mitchell	
	Printed Name	
Reviewed by:		
•	Signature	
	Helen Evriviades	
	Printed Name	
Approved by:		
	Signature	,
	Helen Evriviades	
	Printed Name	



Project Number: 331201497

ii

## **Contents**

Executi	ve Sumn	nary	iv
1	Introdu	ction	1
	1.1	Overview	1
	1.2	Project Context	1
	1.3	Purpose of Report	1
2	Legisla	tion	3
	2.1	Overview	3
	2.2	Otter	3
	2.3	Water Vole	3
	2.4	Relevant to both Otter and Water Vole	4
3	Method	ls	5
	3.1	Overview	5
	3.2	Desk Study	5
	3.3	Survey Area	5
	3.4	Survey Methods	5
	3.5	Limitations	7
	3.6	Report Qualification	7
4	Results	S	9
	4.1	Overview	9
	4.2	Desk Study	9
	4.3	Field Survey	9
5	Evalua	tion and Conclusion	. 11
6	Refere	nces	12
7	Figures	3	13
<b>T</b> '			
Figure 1		ation Plan	13
Figure 2	Waterbo	dies Plan	. 13
Figure 3	Waterbo	dies and Water Vole Field Signs.	. 13
Tables	5		
Table 3-	1. Estima	ting Relative Population Density of Water Voles Based on Number of Latrines	6
Appen	dices		
Appen	dix A	Photographs of survey area	
Appen	dix B	Photos of field signs	



## **Executive Summary**

Stantec UK Ltd was commissioned by National Grid Electricity Transmission (NGET) to undertake an otter and water vole survey of land owned by NGET (hereafter 'the Site') and BOC Ltd. (hereafter 'the BOC land') at Margam, Port Talbot, Wales, proposed for a sub-station extension and associated cable route. This survey work was undertaken in 2024 and 2025 to determine ecological constraints and opportunities for the proposed development associated with the presence of otter and water vole.

The field surveys were supported by a desk study including a review of local records within 2 km of the Site, and survey reports undertaken for the Site in 2007, and in 2021-2022 for Tata Steel land, located to the west of the BOC land on the other side of the railway line. Furthermore, this report also takes into account the results from a licenced water vole translocation undertaken within the Site between April and June 2025 to support the Early Works undertaken under NGET's permitted development works.

The local records centre returned no records for water vole from within the past ten years and the during the Early Works water vole translocation, no water voles were translocated or field signs identified within the Early Works area, although this does not preclude that water voles are absent from suitable habitat in the surrounding area. Previous surveys undertaken for the NGET site in 2007 recorded a low population density of water vole. Surveys of the Tata Steel land to the west of the Site, which supports coastal grazing marsh likely similar to the habitats within the BOC land, found no evidence of water voles.

With regards to otter, the local records centre returned four records for otter from the last ten years, the closest of which related to an otter roadkill 1.2 km south of the Site on the M4 adjacent to the Eglwys Nynydd Reservoir, from 2014. Previous surveys undertaken for the NGET Site in 2007 did not report any evidence of otter and surveys of the Tata Steel land to the west of the Site 2021-2022 also found no evidence of otter.

The habitats on the Site and within the BOC land were considered to be of moderate suitability for water vole. The areas of reedbed across the Site provide suitable herbaceous vegetation for foraging, commuting, and above ground nesting water vole. The network of ditches across the Site and the BOC land provides suitable habitat for foraging and commuting, with limited suitability within the banks for burrowing, due to the slope of the banks and water level. A bunded bank is present within the northwest of the Site, which provides a higher level of suitability for burrowing water vole.

With regards to water vole surveys, no latrines (collections of droppings) were recorded on the Site or within the BOC land (the presence of water vole droppings is considered the only field sign that can be used reliably on its own as confirmation of presence of water vole). However, a combination of other water vole field signs (burrows, feeding stations and a run) in close proximity to each other, were recorded on the Site and feeding signs were identified within the BOC land. In accordance with the water vole mitigation handbook (Dean et al. 2016) this suggests water vole are likely present with a low population density across both the Site and the BOC land. Given the limitations to the field survey including, but not limited to, dense vegetation limiting access across the Site, the visibility of the waterbodies within the BOC land, it is possible that field signs for water vole went unrecorded. In addition, given the lack of burrowing habitat for water vole on the Site, water vole may potentially be nesting above ground in woven nests within the reed beds and dense vegetation, which are often difficult to detect. As such, a precautionary assessment of water vole presence and population density has been undertaken within this report.

During the surveys, no evidence of otter was recorded. It can't be entirely ruled out that otter may pass through the Site and the BOC land, due to the ditch system which connects to the Eglwys Nynydd Reservoir to the south of the BOC land. However, the low number of records of otter reported by the desk study and lack of any evidence of otter activity within the Site or the BOC land, is consistent with previous survey results for the Site and Tata Steel land, and would suggest that otters are unlikely to be resident at the Site or within the BOC land. In the unlikely event that evidence of otter is discovered at the Site or the BOC land during the proposed works, the works would need to stop to consider whether a licence for works affecting otters, or their places of shelter or protection, is required to enable the works to proceed legally.



## 1 Introduction

#### 1.1 Overview

Stantec UK Limited (Stantec) was commissioned by National Grid Electricity Transmission (NGET) to undertake water vole *Arvicola amphibius* and otter *Lutra lutra* surveys of the area of land owned by NGET at Margam, Neath Port Talbot; hereafter referred to as 'the Site' and the land to the south of the Site, owned by BOC Ltd, hereafter referred to as 'the BOC land'.

#### 1.2 Project Context

#### **Site Location and Description**

- 1.2.1 The Site is located in Margam Port Talbot, at approximate central grid reference NGR SS780850. The Site is located in Margam, Port Talbot, and comprises an existing substation to the east of the Tata Steel Works and Network Rail railway line; the Site also lies to the south of the Tata Steel Sports and Social Club (golf course), to the west of woodland and to the north of the BOC Ltd. works area and fields owned by BOC Ltd. Beyond the immediate Site surroundings, the M4 corridor lies to the east, Swansea Bay lies to the west, Eglwys Nunydd Reservoir to the south and Margam town to the north. The BOC land considered in this PEA lies immediately to the south of the Site, between the Site and the road to the north of the Eglwys Nunydd Reservoir, Heolcae'r Bont. The location of the Site and the BOC land is shown in Figure 1.
- 1.2.2 The Site was subject to habitat surveys completed in 2024 which identified that the Site comprises a mosaic of reedbed, scrub, grassland and small areas of open water associated with a number of ditches within the Site.

## **Description of Works**

1.2.3 The Site and the BOC land are proposed for an extension to the existing substation and associated cabling works, with the substation extension proposed to the east of the existing substation within the Site and cabling works passing through the Site and the BOC land. The proposed substation extension and associated works within the Site will be progressed under a planning application. The cabling and associated temporary works to link the proposed new substation extension at Margam to the Port Talbot Steelworks will be progressing under NGET's permitted development rights.

#### **Historic Project Understanding and Ecological Context**

- 1.2.4 The Site was subject to a previous successful planning application for a new substation within NGET land which received planning consent in 2009. However, the development was not progressed by NGET.
- 1.2.5 A suite of ecological surveys was completed to inform the planning application. The results of the survey work were presented within the Margam 275kV Substation Environmental Report (National Grid 2009).

### 1.3 Purpose of Report

The purpose of this otter and water vole report is to:

- (i) set out the methods used for the desk study and field survey including their limitations;
- (ii) detail the results of the desk study and field survey for otter and water vole;



Project Number: 331201497

1

- (iii) assess the suitability of the habitats on the Site and the BOC land for water vole;
- (iv) provide an evaluation of otter and water vole presence (and likely population density for water vole) or likely absence, within the Site and the BOC land.



## 2 Legislation

#### 2.1 Overview

2.1.1 This section outlines legislation relevant to otter and water vole in Wales.

#### 2.2 Otter

- 2.2.1 Otter are protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended), which combined makes it an offence to:
  - deliberately capture, injure or kill an otter;
  - deliberately disturb an otter;
  - damage or destroy an otter breeding site or resting place; or
  - obstruct access to a place of shelter or protection.
- 2.2.2 Disturbance includes, but is not limited to, any disturbance which is likely:
  - to impair their ability
    - o to survive, to breed or reproduce, or to rear or nurture their young, or
    - in the case of animals of a hibernating or migratory species, to hibernate or migrate;
      or
    - to affect significantly the local distribution or abundance of the species to which they belong.
- 2.2.3 Works affecting otters can only take place under licence from Natural Resources Wales. The Licence can only be issued for specific purposes, if the following three tests are met:
  - the purpose of the work meets one of those listed in the Habitats Regulations;
  - that there is no satisfactory alternative; and
  - that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 2.2.4 The Habitats Regulations permits licences to be issued for a specific set of purposes including preserving public health or public safety or other imperative reasons of over-riding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

#### 2.3 Water Vole

2.3.1 Water vole are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Under Section 9 of the Act and of relevance to the proposed development, the legislation provides them with protection against intentional killing, injuring, or taking. In addition, they are protected from intentional or reckless damage or destruction of places they use for shelter or protection and intentional or reckless disturbance while it is occupying a structure of place which it uses for that purpose.



2.3.2 Works affecting water voles require a licence issued by Natural Resources Wales (NRW). Licences can only be granted under Section 16 of the Wildlife and Countryside Act for a number of specific purposes. It is not possible to issue a licence for development under these purposes but may be issued for the purposes of preserving public health and safety or for the long-term conservation of water vole (including management or restoration of water vole sites).

#### 2.4 Relevant to both Otter and Water Vole

2.4.1 Otter and water vole are listed under Section 7 of the Environment (Wales) Act 2016 and as such are considered species of principal importance for the purpose of maintaining and enhancing biodiversity in relation to Wales. Section 7 replaces the duty described under Section 42 of the NERC (Natural Environment and Rural Communities) Act, 2006.



## 3 Methods

#### 3.1 Overview

3.1.1 The section below sets out the methods used to inform the assessment of the Site and the BOC land in relation to otter and water vole. This includes a desk study, detailed surveys, evaluation approach and survey limitations.

#### 3.2 Desk Study

- 3.2.1 A 2 km data search was requested from South East Wales Biodiversity Records Centre (SEWBReC), the local biological records centre in October 2024. To ensure that the information is as current as possible, records within the last ten years were considered most relevant. However, records older than this were analysed for their potential relevance to the Site.
- 3.2.2 In addition, the following reports were consulted for ecological information about the Site, surrounding areas, and records of water vole and otter:
  - National Grid (2009) Margam 275kV Substation, Environmental Report, Technical Appendix 1, Water Vole Survey Report
  - RSK Biocensus (2024) Tata Steel UK Ltd., Electric Arc Furnace, Water Vole and Otter Survey Report.
  - RSK Biocensus (2025) Margam Substation. Water Vole Management Plan

### 3.3 Survey Area

- 3.3.1 The survey area for the first survey visit (May 2024) incorporated the Site. The second survey visit (September 2024) incorporated the Site and the BOC land as shown on **Figure 1**.
- 3.3.2 As only a single visit to the BOC land was conducted in 2024, a follow-up survey focusing solely on the BOC land was undertaken in 2025.

### 3.4 Survey Methods

3.4.1 The otter and water vole surveys were undertaken in three visits. The first survey was conducted on 2<sup>nd</sup> May 2024, at the time of the survey weather conditions were cloudy and dry, with a temperature of 19°C. The second survey was conducted on 23<sup>rd</sup> September 2024. The weather was overcast with moderate rain in the days preceding and throughout the survey. The third survey was undertaken on 17<sup>th</sup> April 2025. Conditions were cloudy and dry, with temperatures ranging between 10°C and 15°C.

#### **Water Vole**

- 3.4.2 The water vole survey was conducted in accordance with standard best practice guidelines (Dean *et al.* 2016) and consisted of searching for the following diagnostic field signs of water voles from within the channel:
  - Faeces: these are 8-12 millimetres (mm) long and 4-5mm wide, with a smooth 'tic tac' like shape, varying in colour from green to black, and odourless with a putty-like texture.
  - Latrines: found throughout the territory, often comprising a pile of flattened droppings, with fresh droppings on top, used to mark range boundaries or favoured spots close to burrows.



- Feeding stations: comprise a neat pile of chewed feeding remains, often comprising lengths of vegetation up to 10 centimetres (cm) long, showing the marks of the two large incisors.
- Burrows: these are typically wider than they are high, with a diameter of 4 8cm, and are usually located along the water's edge.
- Lawns: around burrows there is often an area of grazed vegetation, surrounded by taller vegetation, these are most often produced when the female is nursing young.
- Nests: these comprise a large ball of shredded material, often woven into the bases of rushes and reeds, and are normally found in areas where the water table is high, such as wetlands.
- Footprints: as with other rodents, the footprints of the fore foot, show four toes in a star arrangement, with the hind foot showing five toes. The size of footprints for the hind foot is 26-34mm.
- Runways: these are low tunnels within the vegetation, often adjacent to the water's edge.
- 3.4.3 The water vole breeding season runs from April to September. This is the optimal time to conduct a water vole survey as the water voles are more active at this time of year and therefore leave more field signs, where present.
- 3.4.4 The suitability of the ditches for water vole was assessed following criteria outlined in Dean *et al.* (2016). To highlight specific areas of elevated risk of encountering water voles, expert judgment was used to assess the suitability for use by water vole in the context of burrowing, commuting, and foraging. In general, water voles require all three habitat 'preferences' in close proximity:
  - dry areas above water level for nesting, either in burrows or above-ground woven nests;
  - herbaceous vegetation to provide food and cover (areas of heavily shaded, wooded bank provide little suitable feeding habitat), and;
  - water as a means to escape from predators.
- 3.4.5 The number of latrines recorded by the survey, per 100m of bankside habitat, gives an indication of the population density of water voles within the watercourse (Dean *et al.*, 2016). This can be subdivided into areas supporting water voles at 'high', 'medium', or 'low' density as per the criteria displayed in Table 3-1.

Table 3-1. Estimating Relative Population Density of Water Voles Based on Number of Latrines

Relative population density	Approximate number of latrines per 100m of bankside habitat			
	First half of survey season (mid- April to end of June)	Second half of survey season (July to September)		
High	10 or more	20 or more		
Medium	3-9	6-19		
Low ≤ 2 (or none, but with other confirmatory field signs)		≤ 5 (or none, but with other confirmatory field signs)		

#### Otter

3.4.6 The otter surveys were undertaken in parallel with the water vole survey and included searching for evidence of otter presence such as: spraints, footprints, slides, holts, feeding platforms, and resting places such as layup sites and couches.



#### 3.5 Limitations

- 3.5.1 Species records used as desk study data are not often collected as a result of systematic surveys and therefore geographic, temporal, and species coverage are not often representative. This means that a lack of records of a species in an area does not necessarily mean an absence of this species.
- 3.5.2 Whist the National Grid report is more than ten years' old and therefore would be considered out-of-date, it does however provide an historic record of otter and water vole data collected specifically for the Site and therefore provides some useful context to the discussion in this report.
- 3.5.3 The following limitations were encountered during the field survey:
  - Many ditches within both the Site and the BOC land were heavily overgrown, restricting direct access. Where possible, inspections were carried out from the banks through gaps in the vegetation. This specifically affected Ditches 11, 12, 14, 16, and 17.
  - The second and third survey visits were both undertaken following a period of rainfall.
    Therefore, signs of water vole may have been washed away, including latrines, feeding stations and/or prints.
  - During the April 2025 survey, Ditch 13 was found to be completely dry and overgrown.
  - Ditches within the BOC land were extremely shallow, with water dispersing into broader areas of wet ground. All accessible areas with suitable habitat were surveyed despite these conditions.
  - Some areas of the BOC land appeared to have been managed within the past few months with vegetation cut back, potentially removing feeding signs.
  - The survey records the activity of otter and water voles at the time of the survey visit only, representing a snapshot of activity at the site during that time.
- 3.5.4 Given the dense nature of vegetation associated with the ditches and the reedbed, the field survey is considered to provide a sampling approach for the Site and the BOC land which is appropriate to the nature of the Site. In acknowledgement of the access restrictions, the evaluation undertaken in **Section 5** has taken a precautionary approach based on both the field observations, habitat suitability and records from the desk study and previous surveys.

## 3.6 Report Qualification

- 3.6.1 The survey described here was undertaken in accordance with the best practice methodologies current at the time of commissioning. Site circumstances, scientific knowledge or methodological requirements can change during the course of a project, and these external factors may impact on the scope of subsequent work requirements.
- 3.6.2 All survey work and reporting was undertaken by experienced and qualified ecologists, in accordance with the Code of Professional Conduct of the Chartered Institute of Ecology and Environmental Management (CIEEM).
- 3.6.3 All ecological surveys have an expected validity period owing to the tendency of the natural environment to change over time. This validity period varies from receptor to receptor and is also dependent on the degree of change in a site's management and overall landscape ecology. Where the potential for change is considered to be relevant to the site, this is highlighted in the appropriate section.



3.6.4 This report does not purport to provide detailed, specialist legal advice. Where legislation is referenced, the reader should consult the original legal text, and/or the advice of a qualified environmental lawyer



## 4 Results

#### 4.1 Overview

4.1.1 This section outlines the results of the desk study and field survey undertaken, following the methods outlined in **Section 3**.

#### 4.2 Desk Study

#### **Records Centre**

- 4.2.1 The local records centre returned no records of water vole from the local records data search within 2km of the Site in the last ten years. Though four records of water vole were recorded between 1967 and 1976.
- 4.2.2 The Site is designated a Site of Importance for Nature Conservation (SINC): Junction 38 Wetland Complex. The citation for this SINC includes the presence of water vole and otter as part of the site description.

#### **Previous Survey Reports**

- 4.2.3 The survey undertaken for the 2009 application was carried out in October 2007 on ditches within the Site (see **Figure 2** for waterbodies within the Site), including the Upper Mother Ditch that runs along the northern and eastern boundaries of the Site. The access for the survey was limited due to dense vegetation as well as the depth of channel and steeply angled banks of the Upper Mother ditch. During the 2007 survey a water vole was sighted in Ditch 2 in the north of the Site, as well as fresh feeding remains at the same location. It was suspected that a water vole was heard running through vegetation into the water, although the animal was not sighted. Further field signs included fresh feeding remains in two locations along Ditch 2, disused burrows on Ditch 2 and the Upper Mother Ditch (eastern section) and water vole droppings on the Upper Mother Ditch (northern section).
- 4.2.4 The surveys undertaken for the Tata Steel land were undertaken in October 2021 and April 2022 with check of water vole rafts undertaken throughout 2022. Habitat suitable for water vole including a ditch network and lagoon were identified, but no evidence of water vole was recorded.
- 4.2.5 The local records centre returned 2 records of otter for the study area from the last ten years, with the rest from before then. The closest otter record relates to an otter roadkill 1.2km south east of the BOC land on the M4 adjacent to the Eqlwys Nynydd Reservoir, from 2014.
- 4.2.6 The surveys undertaken for the 2009 application for the NGET Site (carried out in 2007) did not report any evidence of otter. Furthermore, surveys carried out 2021-2022 of the Tata Steel land to the west of the Site also found no evidence of otter.

#### **Early Works Water Vole Translocation**

4.2.7 No water voles were translocated, or signs of water vole were identified during the 2025 Early Works water vole translocation within the Site. Although no water voles signs or individuals were recorded within the Early Works area, this does not preclude that water voles are absent from suitable habitat in the surrounding area (RSK Biocensus, 2025).



#### 4.3 Field Survey

#### **Water Vole Habitat Assessment**

- 4.3.1 Locations of waterbodies across the Site and the BOC land are shown in **Figure 2** and representative photographs from the field survey are provided in the Photographs at **Appendix A.**
- 4.3.2 The Site and the BOC land provides a complex of wetland habitats including ditches, ponds and areas of reedbeds. These combined provide suitable habitat for water vole, particularly for foraging, commuting, and the creation of above-ground nests. Whilst the majority of the wetland habitats within the Site and the BOC land provide suitable habitat for foraging and commuting, there is limited suitability within the banks of most of the ditches for burrowing due to the shallow slope of the banks and the shallow water level, although the bunded bank present within the northwest area of the Site provided a higher level of suitability for burrowing water vole. The Upper Mother Ditch was considered to provide the highest suitability for water voles within or immediately adjacent to the Site because of the close proximity of: banks suitable for burrowing, a variety of potential foraging resources and more obvious areas of open water in the Upper Mother Ditch, compared to other ditches in the Site and the BOC land which tended to be more shallow, shaded and overgrown with scrub or young trees, or within a reedbed. However, the connected complex of wetland habitats within the Site and the BOC land, which also included the reedbed areas that offer potential above-ground nesting opportunities for water vole, was overall considered to provide moderate suitability for water vole.

#### **Water Vole Field Signs**

- 4.3.3 Water vole field signs recorded at the Site and the BOC land during the 2024/2025 surveys are shown in **Figure 3**.
- 4.3.4 Visit 1, undertaken within the Site, recorded a run to a nearby waterbody, along which a series of feeding stations of variable size within ditch 4 (D4) were recorded (Appendix A, Photograph 11). No latrines, burrows, nests, or droppings were discovered at the Site during this visit. However, the presence of several potential water vole feeding stations indicated that water voles may be present at the Site.
- 4.3.5 Visit 2, undertaken within the Site and the BOC land, recorded three burrows considered likely to be water vole; two side-by-side and one further north. The burrow in the north of the Site (D1) was not definitively confirmed to be water vole due to the presence of dense vegetation obscuring the view, however the diameter (4-5cm), shape (circular) and position of the burrow (high in bunded bank along ditch) indicates a high likelihood of being a water vole burrow. The two burrows side-by-side were recorded 2-3m away from the ditch (shown as single red dot on D4 in **Figure 3**) in which a run and the potential water vole feeding stations were recorded during visit 1. No latrines were discovered at the Site during this visit; given the amount of rain at the Site in the days preceding the survey, latrine signs may have been washed away but the lack of latrines was also consistent with the findings of visit 1 and survey findings from the Site in 2007 (see **Section 4.2**)
- 4.3.6 Visit 3, undertaken within the BOC land, recorded potential water vole feeding signs but no confirmed water vole latrines or burrows. Three feeding signs were identified two within D12 and one within D11, all of which had the characteristic 45-degree bite mark. A field or bank vole latrine was identified in D15 (Appendix B, Photograph 6)

#### **Otter Field Signs**

4.3.7 No otter field signs were recorded during the surveys.



## 5 Evaluation and Conclusion

- 5.1.1 The complex of wetland habitats within the Site and within the BOC land were considered to be of moderate suitability for water vole. The areas of reedbeds across the Site provided suitable herbaceous vegetation for foraging, commuting, and above-ground nesting opportunities for water vole. The network of ditches across the Site and the BOC land provided suitable habitat for foraging and commuting, with limited suitability within the banks for burrowing, due to the slope of the banks and water level. However, a bunded bank was present within the northwest of the Site, which provided a higher level of suitability for burrowing water vole.
- 5.1.2 The Upper Mother Ditch was considered to provide the highest suitability for water voles within or immediately adjacent to the Site because of the close proximity of: banks suitable for burrowing, a variety of potential foraging resources and more obvious areas of open water in the Upper Mother Ditch, compared to other ditches in the Site and the BOC land which tended to be more shallow, shaded and overgrown with scrub or young trees, or subsumed within a reedbed.
- 5.1.3 During the surveys, no water vole latrines were recorded on the Site or within the BOC land. The presence of water vole droppings/latrines is considered the field sign that can be used most reliably on its own to confirm the presence of water vole. However, a combination of other field signs potentially attributed to water vole (burrows, feeding stations and a run) were recorded in close proximity to each other during the survey. Given the limitations to the field survey (as outlined in **Section 3.5**) including, but not limited to, dense vegetation limiting access across the Site and within the BOC land, there is the potential that field signs for water vole went unrecorded. In addition, given the lack of burrowing habitat for water vole on the Site, water vole have the potential to be nesting above-ground in woven nests within the reed beds, which are often difficult to detect. As such, a precautionary approach to the assessment of water vole presence and population density was concluded following the water vole surveys.
- 5.1.4 Based on the presence of a complex of wetland habitats of moderate suitability for water vole but the relatively low incidence of fields signs being recorded and an absence of latrines, the survey concluded water vole were likely present with a low population density. This conclusion was in accordance with the water vole mitigation handbook (Dean *et al.* 2016) and was consistent with previous survey findings used to support the 2009 application at the Site, where the 2007 survey results recorded evidence of feeding signs, droppings and burrows and water vole themselves in the north and east of the Site. No water voles were translocated, or signs of water vole were identified during the 2025 Early Works water vole translocation within the Site (undertaken under NGETs permitted development works). Although no water voles signs or individuals were recorded within the Early Works area, this does not preclude that water voles are absent from suitable habitat in the surrounding area (RSK Biocens*us*, 2025).
- 5.1.5 No evidence of otter was recorded during the surveys. It can't be ruled out that otter may pass through the Site and the BOC land on occasion, due to the ditch system's connectivity to the Eglwys Nynydd Reservoir to the south of the BOC land. However, the low number of records of otter reported by the data trawl, and lack of any evidence of otter activity within the Site or the BOC land, suggests that otters are unlikely to be resident at the Site. This is consistent with the conclusions of previous surveys for the Site and Tata Steel land which also found no evidence of otter. In the unlikely event that evidence of otter is discovered at the Site or the BOC land in preparation for, or during, the proposed works, the works would need to stop to consider whether a licence for works affecting otters, or their places of shelter or protection, is required to enable the works to proceed legally.



Project Number: 331201497

11

## 6 References

Dean M., Strachan R., Gow D., and Andrews R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Guidance Series). Eds F. Mathews and P. Chanin. The Mammal Society, London.

National Grid (2009) Margam 275kV Substation, Environmental Report, Technical Appendix 1, Water Vole Survey Report

RSK biocensus (2024) Tata Steel UK Ltd., Electric Arc Furnace, Water Vole and Otter Survey Report.

RSK biocensus (2025) Margam Substation. Water Vole Management Plan. Report for Laing O Rourke



# 7 Figures

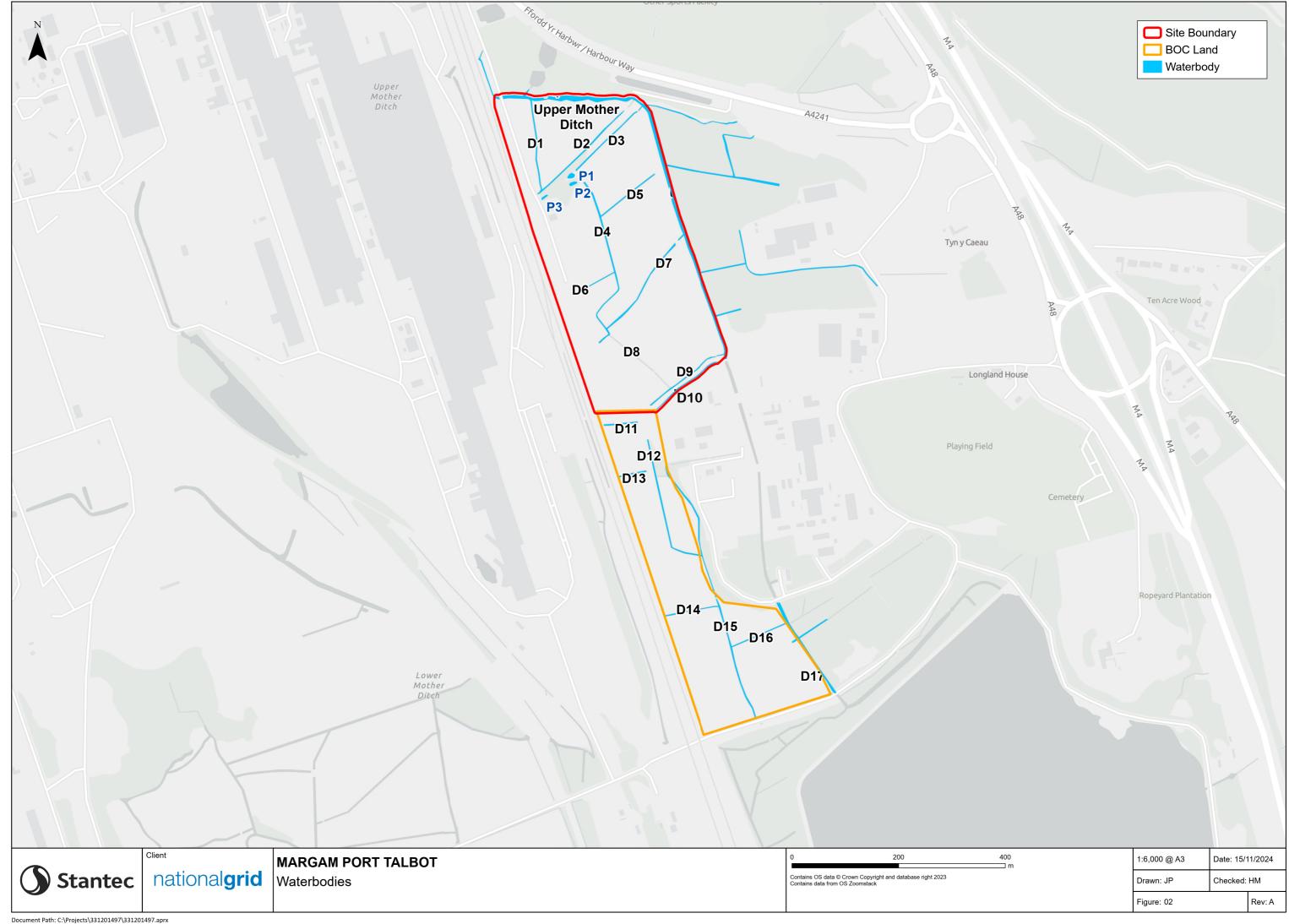
Figure 1 Site Location Plan

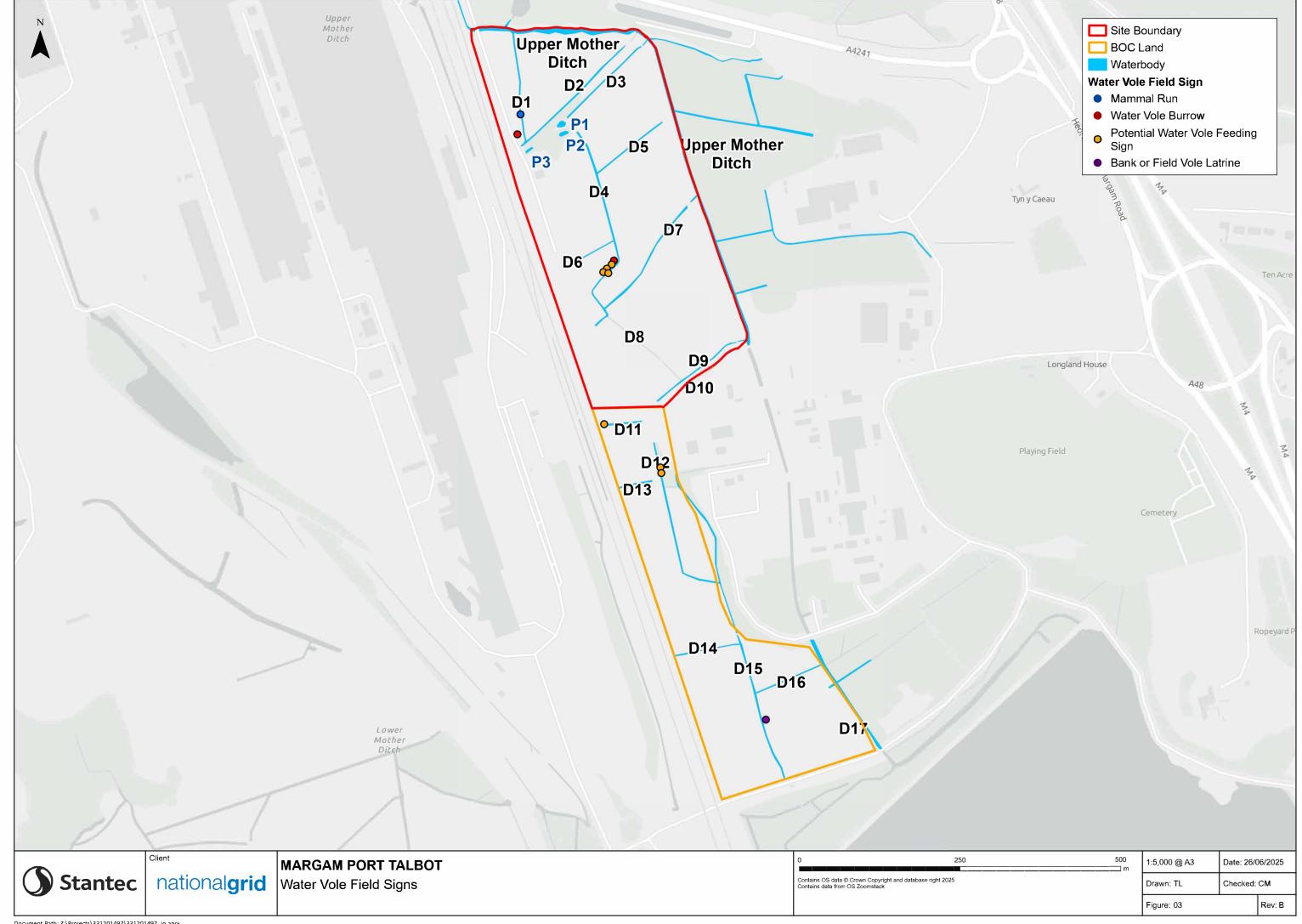
Figure 2 Waterbodies Plan

Figure 3 Waterbodies and Water Vole Field Signs.









# Appendix A Photographs of survey area



Photograph 1: Upper Mother Ditch taken in 2024



Photograph 2: Ditch 1 taken in 2024



Photograph 3: Ditch 4 taken in 2024



Photograph 4: Ditch 6 taken in 2024



Photograph 5: Ditch 7 taken in 2024



Photograph 6: Ditch 8 taken in 2024



Photograph 7: Ditch 9 taken in 2024



Photograph 8: Ditch 10 taken in 2024



Photograph 9: Ditch 11 taken in 2024



Photograph 10: Ditch 12 taken in 2024



Photograph 11 Ditch 11 – thick with vegetation, taken in 2025



Photograph 12 Ditch 12- Thick with vegetation, taken in 2025



Photograph 13 Ditch 13- overgrown with no water, taken in 2025



Photograph 15: Ditch 16 - Narrow and shaded, taken in 2025



Photograph 14 Ditch 14 – with patches of water, filled with emergent vegetation among overgrown sections, taken in 2025



Photograph 16: Ditch 17 - Heavily shaded with trees and bramble limiting access but deeper than other ditches. Taken in 2025

# Appendix B Photos of field signs



Photograph 11: Potential water vole feeding station found near D4 taken in 2024



Photograph 12: Potential water vole burrow taken in 2024.



Photograph 13: Potential water vole feeding signs on ditch 11. Target note 1. Taken in 2025



Photograph 14: Potential water vole feeding sign -Stem with characteristic 45-degree bite mark on ditch 12 Target Note 2. Taken in 2025



Photograph 15: Potential water vole feeding sign - grass with 45-degree bite mark on ditch 12. Target Note 3. Taken in 2025



Photograph 15: Bank or field vole latrine by ditch 15. Target Note 4. Taken in 2025