

# Ysgol Gyfun Gymraeg Glantaf-Otter Report

**Cardiff Council** 

Project number: 60687936

October 2022

# Quality information

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# 1. Executive summary

- 1.1 AECOM was commissioned by Cardiff Council to conduct an otter *Lutra lutra* survey of the riparian and terrestrial habitats of a section of the River Taff, which lies adjacent to the southwest boundary of Ysgol Gyfun Gymraeg Glantaf (hereafter 'the Site'). The survey was requested in order to inform the construction of a new 1.2 hectare 'Special Resource Base', including two new access points required for the development (hereafter 'the proposed development').
- 1.2 The Site is located in north Cardiff on Bridge Road, Cardiff, CF14 2JL, South Wales (National Grid Reference (NGR): ST1499578692). The Site is currently in use as a school and comprises school buildings, outbuildings, hardstanding, amenity grassland, playing fields, hedgerows, and standalone trees. The Site is bounded by palisade fencing on its southwestern boundary where it meets woodland and scrub adjacent to the River Taff footpath. The River Taff is documented to support otter along its length.
- 1.3 The survey included habitats within 30 m of the Site, as well as the habitats 100 m upstream and downstream (hereafter 'the Survey Area').
- 1.4 The Site itself was not surveyed as it is unsuitable for otters due to the perimeter fence that acts as a physical barrier to otter commuting and exploration, and the fact that the dominant habitat within the Site (amenity grassland) is subject to frequent disturbance from both staff and students.
- 1.5 The survey recorded evidence of otter on the southwest and northeast banks of the River Taff, confirming its use by otter. The evidence comprised four spraints: two under the southwest abutment of Llandaff bridge (NGRs: ST1487578602; ST1488578597; Figure 1: Target Notes (TN) 1 and 2); one on a rock on the southwest bank (NGR: ST1494278544; Figure 1: TN 3); and one on a log on the northeast bank (NGR: ST1499678573; Figure 1: TN 4).
- 1.6 There are two sections of the River Taff within the Survey Area with suitable habitat for otter holts. No holts were identified. A potential hover site was identified downstream of the northeast bank but there was no evidence of use. Three sections of the River Taff were inaccessible due to dense scrub and private land.
- 1.7 There will be no loss of otter breeding holts as a result of the proposed development as none are present within 30 m of the Site. As such there will be no impact to breeding otter within 30 m of the Site. No further surveys are required.
- 1.8 There is potential for disturbance to foraging and commuting otter adjacent to the northeast bank of the River Taff as a result of noise and lighting.
- 1.9 There is the potential for the injury/ killing of otter as a result of a major pollution incident during the works such as an oil/fuel spillage. Pollution control measures must be implemented.
- 1.10 Works on the Site must not be carried out during the period one hour either side of dusk and dawn. Temporary works lighting should be directed away from the River Taff and adjacent scrub habitat.
- 1.11 As foraging and commuting otters are present along the River Taff in vicinity to the Site, and are at risk of being indirectly disturbed by lighting, noise and pollution, mitigation measures are required. Mitigation will adequately reduce the risk of impacts to otter from the proposed development so that a European Protected Species Licence (EPSL) application is not required.
- 1.12 The Executive Summary is intended only as a synopsis of the full report, refer to the full text for further details.

# 2. Introduction

### Introduction

- 2.1 AECOM was commissioned by Cardiff Council to undertake an otter Lutra lutra survey along the River Taff which lies adjacent to the southwest boundary of Ysgol Gyfun Gymraeg Glantaf (hereafter the 'Site'), The survey was recommended by Wardell Armstrong following their Preliminary Ecological Appraisal (PEA) of the Site on 25 March 2022 which determined the River Taff has suitable habitat for otter (Wardell Armstrong, 2022). The central grid reference for the Site is ST1499578692.
- 2.2 The survey was carried out to inform the construction of a 'Special Resource Base' (hereafter the 'proposed development') within the Site. The Survey Area consists of the riparian and terrestrial habitats along the section of the River Taff which lies adjacent to the southwest boundary of the Site and within 30 m of the Site boundary. Additionally, the habitats 100 m upstream and downstream (Figure 1) are included in the Survey Area.
- No desk-based assessment has been carried out for the Site, but it is known that otter use the length of the 2.3 River Taff and associated habitats (MTCBC, 2016) and suitable habitat was confirmed during the PEA (Wardell Armstrong, 2022).
- As otters are fully protected under the law (see Legislation section), a detailed search for otter field signs was conducted on the riparian and terrestrial habitats adjacent to the Site's southwest boundary and 100 m upstream and downstream.

# Site location and description

- 2.5 The Site is approximately 5.5 ha and located in north Cardiff on Bridge Road, CF14 2JL, South Wales.
- 2.6 The Site is currently in use as a school. The Site comprises school buildings, outbuildings, hardstanding, amenity grassland, playing fields, hedgerows, and scattered trees. The Site is bounded by palisade fencing on its southwestern boundary where it abuts woodland and scrub adjacent to the River Taff footpath.
- 2.7 Roads surround the Site on all but its southwestern and eastern boundary (A4054 and Gabalfa Road). The land use to the north and east of the Site is primarily housing. The River Taff runs along the south and west of the Site.

# **Proposed development**

- 2.8 Cardiff Council's proposed development involves the construction of a new 'Special Resource Base' for 60 pupils on an approximately 1.2 ha site of amenity grassland within the grounds of the Ysgol Gyfun Gymraeg Glantaf Secondary School. As the project is still in the early design stages, there is no confirmed proposed development summary or commencement date for the works. At the time of writing, it is presumed works will take place during school summer holiday period during daytime hours.
- 2.9 Two areas of access will be created to the development. One derives from the public footpath along the River Taff, which may require some scrub and tree removal, and the second is located between two existing buildings within the Site to the west.

# **Objectives**

- 2.10 The objectives of the assessment were:
  - To identify the presence/likely absence of breeding/non- breeding holts and/or rest sites (hovers and couches) within the Survey Area, using recognised survey methods;
  - To record evidence of otter within 100 m both upstream and downstream of the Site;
  - To assess potential impacts on otter;
  - To make recommendations for mitigation to avoid impacts on otter; and,

To make recommendations for a European Protected Species Licence (EPSL) application (if required).

### Legislation

- 2.11 Otter are protected under The Conservation of Habitats and Species Regulations 2017 (as amended), making it an offence to:
  - deliberately capture, injure or kill an otter;
  - deliberately disturb an otter; and/or,
  - damage or destroy a breeding site or resting place of an otter.
- 2.12 Disturbance is defined as that which is likely to impair their ability:
  - to survive, to breed or reproduce, or to rear or nurture their young; or,
  - to affect significantly the local distribution or abundance of the species to which they belong.
- 2.13 Otter are also protected under the Wildlife and Countryside Act 1981(as amended) making it illegal 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; and,
  - sell, offer or expose for sale any otter.
- 2.14 A EPSL from Natural Resources Wales would be required for any works likely to constitute an offence in respect to otters.

# **Quality assurance**

- 2.15 This survey and subsequent report were undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2015 and ISO 14001:2015 and BS ISO 45001 2018. In addition, our IMS requires careful selection and monitoring of the performance of all sub consultants and contractors.
- 2.16 All AECOM ecologists who worked on this project follow the Chartered Institute of Ecology and Environmental Management (CIEEM) code of professional conduct (CIEEM, 2022) when carrying out ecological work.

# 3. Methodology

# Otter field survey

- The survey for otter was conducted by two experienced ecologists on 26 September 2022 within the Survey Area, along publicly accessible footpaths using binoculars and a high-powered torch.
- 3.2 The Survey Area was the riparian and terrestrial habitats of the section of the River Taff which lies adjacent to the southwest boundary of the Site, and extending to 30m of the Site boundary. Additionally, habitats at least 100 m upstream and downstream of the River Taff were also surveyed. The Site itself was not surveyed as it is unsuitable for otters, due to the fence around its perimeter that prevents access, and how the habitat within the Site is predominantly amenity grassland with frequent disturbance from staff and students. The second access point will lie within the Site, so was not surveyed.
- 3.3 Searches for otter field signs and resting sites were carried out of the riparian and terrestrial habitat following guidance provided in 'Monitoring the Otter' (Chanin and Smith, 2003). The survey methodology involved recording all evidence of otter activity, as detailed below:
  - Holt entrances holes characteristically in riverbanks or under tree roots at river edges.
  - Couch typically an above-ground nest-like structure used as a rest site.
  - Hover a sheltered structure, for example tree roots, typically used between foraging and exploratory outings.
  - **Footprints**
  - Otter trails and slides through vegetation
  - Spraint
  - Anal jelly
  - Other signs for example, occasionally remains of dead otters can be seen on roads.

### Limitations

- Where any conclusions and recommendations contained in this report are based upon information provided by others, it has been assumed that all relevant information provided by those parties is accurate. Any such information obtained by AECOM has not been independently verified by AECOM, unless otherwise stated in the report. AECOM accepts no liability for any inaccurate conclusions, assumptions or actions taken resulting from any inaccurate information supplied to AECOM from others.
- 3.5 The method adopted and the sources of information used by AECOM in providing its services are outlined in this report. The work described in this report was conducted between 26 September 2022 and 17 October 2022 and is based on the conditions encountered and the information available during that time. The scope of this report and the services are accordingly factually limited by these circumstances. AECOM disclaim any undertaking or obligation to advise any person of any change in any matter affecting the report, which may come or be brought to AECOM's attention after the date of the report.
- 3.6 There was heavy rainfall the night before the survey which had the potential to wash away field signs; however, much of the Survey Area was sheltered by vegetation and Llandaff Bridge, including tree canopies, and field signs of otter and mink Neovison vison were found during the survey. As such, the rain is not deemed a significant limitation to the survey.
- 3.7 Three sections of the riverbank were inaccessible so could not be assessed closely: two sections of the northeast riverbank were inaccessible due to dense scrub and the Llandaff Rowing Club on the southwest riverbank was inaccessible due to it being private land (Figure 1). However, the riparian habitat on the northeast riverbank was able to be observed using binoculars from the opposite bank. The bank of the Llandaff Rowing Club was assessed from the edge, which offered good visibility over this area. All inaccessible areas were also more than 30 m from the Site, with the closest being approximately 70 m away, so any holts and/or rest sites missed are unlikely to be significantly affected by the proposed development. Therefore, the lack of accessibility is not considered a significant limitation.

There are deemed to be no significant limitations to the survey or this report.

# 4. Results

# Field survey

### Otter - foraging and commuting

4.1 Evidence of foraging and commuting otter was found during the field survey. The evidence is outlined in Table 1 and shown on Figure 1.

#### **Table 1 Evidence of Foraging and Commuting Otter**

Target Note (Figure 1; Appendix A)	Location (National Grid Reference (NGR))	Description	Photographs (Appendix B)
1	ST1487578602	Otter spraint. Approximately 5 cm by 8 cm. Quite fresh. Found on the west side of the ledge below southwest abutment of Llandaff Bridge.	1
2	ST1488578597	Otter spraint. Approximately 2 cm by 5 cm. Fairly dry, so not recent. Found on the east side of the ledge below southwest abutment of Llandaff Bridge.	2
3	ST1494278544	Otter spraint. Approximately 5 cm by 5 cm. Full of fish scales. Very crumbly. Found on southwest riverbank on a rock. Adjacent to woodland with scrub understorey.	3
4	ST1499678573	Likely an otter spraint. Approximately 7 cm by 6 cm. Very old and discoloured so uncertain of species. Found on northwest riverbank on log partially submerged within the river. Adjacent to scrub.	4

### Otter - breeding and resting

- 4.2 A potential hover (sheltered resting place) was found on the northeast riverbank, approximately 20 m southeast of the Site (Figure 1 and Appendix A: TN 11; Appendix B: photograph 5; NGR: ST1520078482). The resting place was a hollow beneath a tree root, approximately 1 m deep and 50 cm wide (widest point), that was partially walled with stone and compacted soil. It is approximately 10 m from the waterline so is at low risk of flooding. Immature trees and scrub surround the hollow to give it further protection; however, it showed no signs of recent use (for example, fallen leaves undisturbed) and no otter field signs were in proximity to the hollow. A mink spraint was identified within 5 m of the potential hover (see Mink section).
- 4.3 Two sections within the Survey Area potentially have suitable habitat for holts, though no holts were identified within these sections. Inaccessible areas of dense scrub may provide suitable habitat for holts (see Limitations). See Table 2 for further details.
- 4.4 The remaining sections within the Survey Area did not have suitable habitats for holts. See Table 3 for further details.

#### Table 2 Descriptions of Habitats with Suitability for Otters Holts

•	te Location (NGR) 1;	Description	Photographs (Appendix B)
6 ST1492178564		Southwest riverbank, across the River Taff from the Site. Low holt suitability as the bank is generally very shallow with thin vegetation. However, a few mature trees with exposed root structures were present. No crevices for holts were identified, but holts may be hidden within the roots.	
7	ST 14953 78607	Northeast riverbank. Habitat generally unsuitable for holts as bank is narrow (approximately five metres at widest point). However, a few mature trees with exposed root structure are	·

present. No crevices for holts were identified, but holts may be hidden within the roots.

#### Table 3 Descriptions of Habitats with no Suitability for Otters Holts

Target (Figure Appendix A)	1;	Location (NGR)	Description	Photographs (Appendix B)
5		ST 14862 78609	Upstream of southwest riverbank. Riverbank has been covered by concrete likely to assist the stability of Llandaff bridge. Further upstream, the natural riverbank has been replaced with boulders. The substrate is generally unsuitable for otters as the there are no suitable crevices within the concrete or between the boulders. A few of the boulders further upstream have gaps at waterline that may be suitable for holt building. However, these boulders are beyond the Survey Area.	9
N/A		ST 15144 78396	Llandaff Rowing Club. Unsuitable for otter holts and rest sites due to the lack of dense vegetation and trees, and likely experiences regular disturbance from the club's activities.	10
8		ST 14945 78627	Area between public footpath on northeast riverbank and school. No features for holt building as ground is fairly flat and only immature trees and light scrub are present.	11

#### Mink

- 4.5 During the field survey for otter, two mink spraints were identified: one on the southwest riverbank on a log (Figure 1 and Appendix A: TN 9; Appendix B: photograph 12; NGR: ST1496078531), and another on the northeast riverbank near the potential hover (Figure 1 and Appendix A: TN 10; Appendix B: photograph 13; NGR: ST1519778479).
- 4.6 Mink is an Invasive Non-Native Species (INNS) as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 4.7 The presence of mink will not impact the proposed development.

# 5. Potential impacts

- 5.1 There will be no impact to breeding otter within 30 m of the Site as a result of the proposed development.
- 5.2 There will be no loss of otter habitat (holts/rest sites) as a result of the proposed development.
- 5.3 There is no risk of otter becoming trapped within open excavations on Site during the proposed development as the Site is enclosed by fences which prevent access to the Site.
- 5.4 There is potential for disturbance to foraging and commuting otter as a result of noise and lighting.
- 5.5 There is the potential for the injury/killing of otter as a result of a major pollution incident during the works such as an oil/fuel spillage.

# 6. Recommendations for further surveys and mitigation

# **Further surveys**

6.1 No further surveys are required.

# Mitigation recommendations

# **Timing of works**

6.2 Works on the proposed development must not be undertaken during the period one hour either side of dusk and dawn.

### Lighting

6.3 Temporary works lighting (if required) should be directed away from the River Taff and adjacent scrub habitat.

### **Pollution control during construction**

- Pollution control measures as outlined by the Environmental Good Practice on Site pocket book (Law and D'Aleo, 2016) should be implemented in order to avoid and minimise adverse effects of pollution and runoff on the river and surrounding environment. This should be implemented via a Site Construction Management Plan (CMP).
- 6.5 As of the 17 December 2015, all Pollution Prevention Guidance Documents published by the UK environment agencies were withdrawn. Although they provide useful advice on the management of construction to avoid, minimise and reduce environmental impacts, they should not be relied upon to provide accurate details of the current legal and regulatory requirements and processes.
- 6.6 Measures should be employed to ensure that dust is minimised during the construction works. Measures should be in place in order to deal with pollution incidents efficiently.
- 6.7 In order to avoid potential pollution effects to the Site and surrounding habitats, including the River Taff, during construction, all refuelling and servicing of vehicles should be carried out within a designated area with an impermeable base. To prevent spillages, refuelling should be carried out by pumping through a trigger delivery nozzle. Fuel, oil and other potential contaminants should be stored within bunded tanks to 110% of the volume stored and only the minimum quantity required should be stored on site. The designated area should be maintained in a secure and clean manner. An adequate quantity of oil absorbent material should be stored on site and spillages cleared up immediately. All construction equipment should be maintained in good working order and checked regularly for spillages/leaks.
- 6.8 Concrete should either be imported from a local batching plant or a concrete batching plant should be established onsite. The final choice should depend on the chosen contractor, the availability of local supply and the time of year. If concrete is to be batched onsite, appropriate containment and clean-up measures and procedures should be put in place that are in accordance with industry standards. Particular care should be taken when pouring concrete at foundations, following specific method statements to ensure there is no spillage risk or contamination of soils and vegetation.

# **European protected species licence**

As foraging and commuting otters are present along the River Taff in vicinity to the Site, and are at risk of being indirectly disturbed by lighting, noise and pollution, mitigation measures are required. Mitigation will adequately reduce the risk of impacts to otter from the proposed development. No holts were identified within 30 m of the proposed development and there is no risk of obstructing otter movement. As such, an EPSL application is not required.

# 7. References

Chanin and Smith (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No 10. Peterborough, English Nature.

CIEEM (2022) Code of Professional Conduct. Chartered Institute of Ecology and Environmental Management (CIEEM) February 2022.

Merthyr Tydfil County Borough Council (2016) Extract from Merthyr Tydfil County Borough Council Replacement Local Development Plan (2016-2031): Sites of Importance for Nature Conservation in Merthyr Tydfil County Borough-Afon Taf. [online] Available at: <a href="http://citations.lercwales.org.uk/sinc/mtr/Afon\_Taf.pdf">http://citations.lercwales.org.uk/sinc/mtr/Afon\_Taf.pdf</a> [Accessed 28 September 2022]

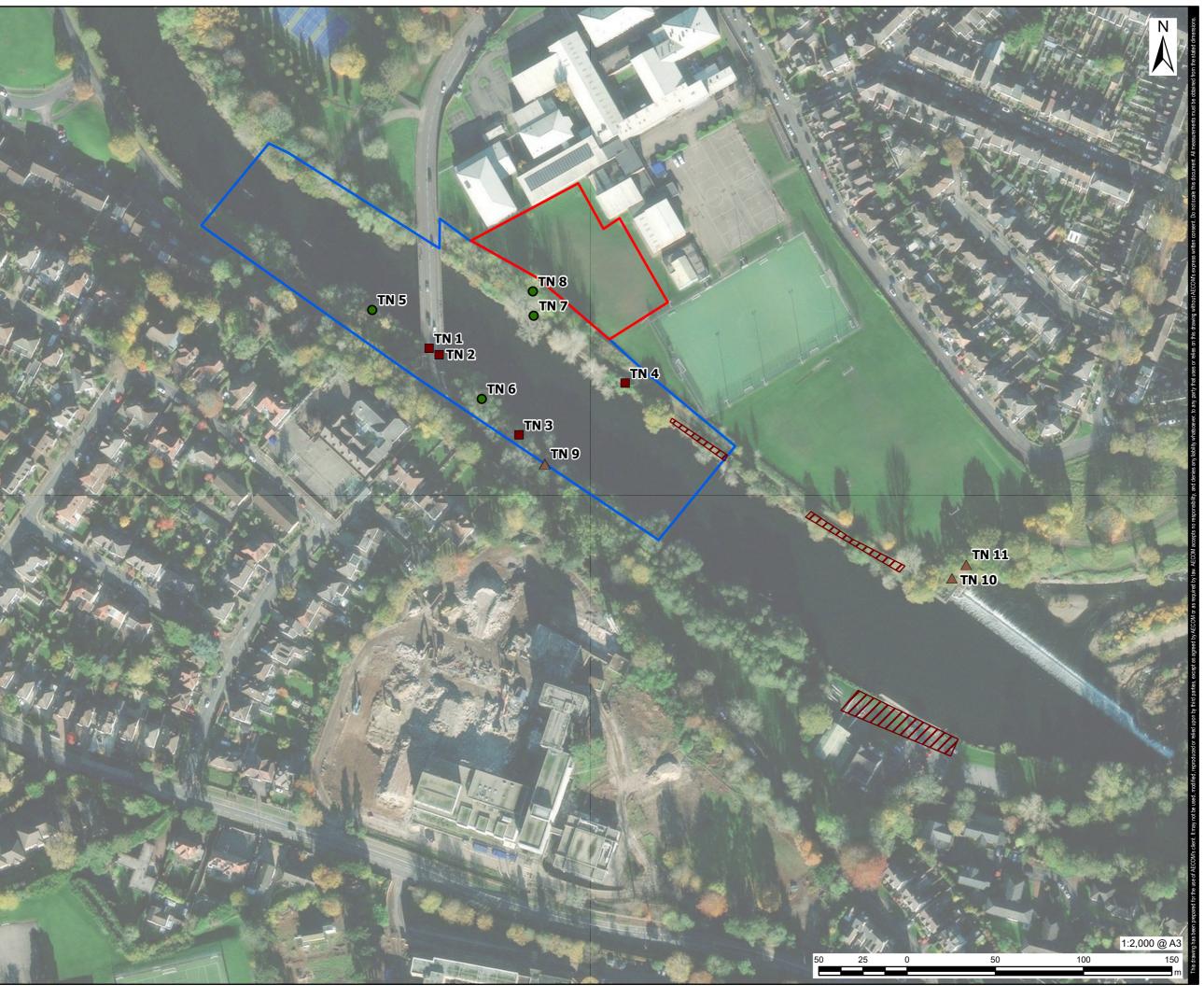
Law, C. and D'Aleo, S. (eds.) (2016) PUB C762 Environmental good practice on site pocket book. 4th edition CIRIA.

Wardell Armstrong (2022) Ysgol Glantaf, Cardiff, Preliminary Ecological Appraisal. April 2022

Prepared for: Cardiff Council AECOM

Project number: 60687936

# Figure 1 – Survey area and results



# **AECOM**

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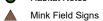
#### LEGEND

Site Boundary



Otter Field Signs





Inaccessible Areas

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#### ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60687936

#### FIGURE TITLE

Ysgol Gyfun Gymraeg Glantaf Otter Survey

#### FIGURE NUMBER

# **Appendix A Target notes for Figure 1**

Target Note	Description				
1	Otter spraint. Sweet, fishy smell typical of otter. On west side of ledge under the southwest abutment of Llandaff bridge. Looks fairly fresh.				
2	Otter spraint. Sweet, fishy smell typical of otter. On east side of ledge under the southwest abutment of Llandaff bridge. Smaller and more dried out than spraint on west side. Less recent.				
3	Otter spraint found on rock. Contains many fish scales.				
4	Potential otter spraint found on partially submerged log. Very old, thin and discoloured, so could potentially be mink.				
5	Southwest riverbank. Concrete riverbank leading north from Llandaff bridge. Converts to boulder bank further north. Generally unsuitable for otter as there are no suitable crevices within the concrete or between the boulders. Rocks have some gaps at waterline that may be suitable for holt building but beyond Survey Area.				
6	Southwest riverbank. Opposite the River Taff from the Site. Low holt suitability. Very shallow banks wit generally thin vegetation. Few mature trees with root structure suitable for holts, though none identified.				
7	Northeast riverbank. Habitat with low suitable for holts as bank is narrow (approximately five metres widest point) and close to public footpath. Few mature trees with root structure suitable for holts, thougonone identified. Disturbance is possible from the public footpath, including from dogs.				
8	Area between public footpath on northeast riverbank and school. No features for holts. Immature trees at light scrub.				
9	Mink spraint. Three dark scars on base of trunk.				
10	Likely mink spraint on rock, approximately 7 cm by 10 cm. Contains hair and smell is not as sweet as otter Smells musky. Approximately six metres from waterline.				
11	Potential hover (sheltered resting spot) for semi-aquatic mammals. Approximately one metre deep under tree roots in area sheltered by vegetation. No evidence of use. Mink spraint within five metres of the resting place.				

# **Appendix B Photographs**



**Photograph 1:** Otter spraint found on west side of ledge under southwest abutment of Llandaff bridge. (Figure 1 and Appendix A: TN 1).



**Photograph 2:** Otter spraint found on east side of ledge under southwest abutment of Llandaff bridge. (Figure 1 and Appendix A: TN 2).



**Photograph 2:** Otter spraint found on rock on southwest riverbank (Figure 1 and Appendix A: TN 3).



**Photograph 4:** Otter spraint found on northeast riverbank on partially submerged log (Figure 1 and Appendix A: TN 4).



**Photograph 5:** Resting place for semi-aquatic mammals near northeast riverbank near Llandaff Weir (Figure 1 and Appendix A: TN 11).



**Photograph 6:** Southwest riverbank, south of Llandaff Bridge with some habitat suitable for otter holts (Figure 1 and Appendix A: TN 6).



**Photograph 7:** Northeast riverbank, south of Llandaff Bridge with some habitat suitable for otter holts (Figure 1 and Appendix A: TN 7).



**Photograph 8:** Southwest riverbank. Downstream section of Survey Area with Llandaff Weir.



**Photograph 9:** Southeast bank in upstream section of the Survey Area. Bank is made of concrete and boulders (Figure 1 and Appendix A: TN 5).



**Photograph 10:** Llandaff Rowing Club with unsuitable habitat for otter holts.



**Photograph 11:** Vegetation between public footpath and the Site, with habitat unsuitable for otter holts (Figure 1 and Appendix A: TN 8).



**Photograph 12:** Mink spraint on log on southwest riverbank (Figure 1 and Appendix A: TN 9).



**Photograph 13:** Mink spraint on log on northeast riverbank near potential resting place (Figure 1 and Appendix A: TN 10).

