



Otter Survey Report
Rose Kiln Court, Reading

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Date: June 2021



OTTER SURVEY REPORT

Rose Kiln Lane
Reading

Prepared for:
Stenprop Ltd

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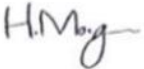
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EXECUTIVE SUMMARY

Site Address	Rose Kiln Court, Rose Kiln Lane, Reading, RG2 0BY
Coordinates	E 471315, N 172360
Site Area	Approximately 0.4 ha
Current Site Use	The site includes a disused office building, with associated hardstanding carpark, introduced shrub planting beds and treeline to the north. The A33 is located adjacent to the east of the site, with the River Kennet beyond this, approximately 85 m east of the site. Holy Brook is located approximately 5 m north of the site, with residential housing extending further north. Rose Kiln Lane defined the western site boundary, with commercial developments present beyond.
Proposed Development	The proposed scheme includes the conversion of the office building into residential apartments, with some proposed thinning/felling of trees, that overhang the site, present on the southern embankment of Holy Brook.
Results	During the desk study, no records of otter were identified within 1 km of the site. No spraints or other signs of otter were identified during the survey, however, due to the habitats present, the brook was assessed as likely being used as a commuting feature for otters. Two potential holt locations were identified within the survey area, both located under decking associated with residential properties, approximately 290 m and 465 m upstream of the site. However, otter are unlikely to utilise these holts due to the proximity of the residential properties and potential human disturbance. Three potential resting locations were identified within the survey area, located under road and footpath bridges, immediately upstream and downstream of the site and approximately 85 m upstream.
Conclusions and Recommendations	As the only works that will directly affect the brook comprise thinning/felling of trees over an approximate 80 m stretch of the southern bank of Holy Brook, it is deemed highly unlikely that the proposed works will have an impact on the potential holt locations due to the small scale and low impact of the works, distance from the potential holt locations and directional flow of the brook. The Precautionary Working Methods detailed within the report will mitigate against any potential impacts the works may have on otter that may use the bridges as resting locations or use the brook to commute and will protect the brook against any potential pollution resulting from development.



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1. INTRODUCTION

1.1. BACKGROUND

E3P has been instructed by Stenprop Ltd to undertake an Otter Survey at Rose Kiln Court, Reading, hereafter referred to as “the site”.

This report has been produced by Olivia McKechnie BSc (Hons) who holds a Class 1 Natural England bat licence and a qualifying CIEEM membership. Olivia has experience undertaking Preliminary Ecological Appraisals, protected species surveys and ecological mitigation for a wide variety of projects across the UK.

1.2. PROPOSED DEVELOPMENT

The proposed scheme includes the conversion of the office building into residential apartments, with proposed thinning of trees, that overhang the site, present on the southern embankment of Holy Brook.

1.3. PREVIOUS SURVEYS

A Preliminary Roost Assessment and Ecological Walkover was undertaken by E3P in June 2021 (report reference 80-535-R1-1). Holy Brook, located approximately 5 m north of the site, was assessed as providing suitable habitat for otter. Development proposals include the thinning/felling of some of the trees located on the southern bank of Holy Brook, that overhang the site. As such, to ensure the development does not impact otter, it was recommended that an Otter Survey of Holy Brook be undertaken following best practice guidelines detailed in Crawford (2010).

1.4. SITE LOCATION

The site is located in Coley, Reading. The A33 defines the eastern boundary of the site, with the River Kennet located beyond this approximately 85 m east of the site. Holy Brook is situated approximately 5m north of the site, with residential housing extending north beyond the watercourse. The site is accessed via Rose Kiln Lane, located adjacent to the west of the site. Please refer to Figure 1.1. for the approximate site location.



FIGURE 1.1 APPROXIMATE SITE LOCATION



1.5. OBJECTIVES

The purpose of the Otter Survey was to assess the following:

- 🔍 Identify field signs of otters, as well as potential resting sites within the site and 500 m upstream and downstream of the site boundary.
- 🔍 Determine the level of use of any confirmed holts.
- 🔍 Assess potential impacts of the proposed development on otters and determine if a Natural England European Protected Species Licence (EPSL) is required.



2. METHODOLOGY

An Otter Survey was carried out on the 16th of June 2021 by Olivia McKechnie BSc (Hons), Project Manager at E3P, with assistance from Carlin Jones. Weather conditions were dry and sunny, with temperatures of 25°C. Little or no precipitation was encountered during and 48 hours prior to the survey. The survey was carried out by following the methodology set out within the Environment Agency's Fifth Otter Survey of England 2009-2010 (Crawford, 2010) and Monitoring the Otter (Chanin, 2003). The survey assessed the extent of suitable habitats for otters within the proposed development site and approximately 500 m downstream, 500 m upstream from the site boundary and 100 m along to the River Kennet. Any man-made structures and mature trees adjacent to the brook were also inspected for potential holts and resting places.

2.1. LIMITATIONS

Access to all areas of the banks of Holy Brook was not possible due to dense vegetation in places. The northern bank of the brook approximately 130 m to 500 m upstream of the site could not be accessed due to the presence of residential housing along the bank of the brook. This was not considered to have affected the results of the survey, as an assessment was made from the southern embankment and otters are unlikely to have holts or resting places next to residential properties due to human disturbance. In addition, a section of watercourse approximately 30 m to 160 m downstream of the site could not be accessed as the brook was fenced on both embankments, with dense vegetation present.

Otters will range over large distances, males covering 40 km and breeding females ranging over 15 km, the latter could be considered to conceal their use of a den, decreasing sprinting and inhabiting secure well-hidden sites, as such findings signs can be often difficult (Liles, 2003). Therefore, the desk study including the collation of historic records and an overall assessment of habitat suitability (including for breeding) is undertaken.

Appendix I, Drawing 80-535-002 shows the extent of the surveyed area.



3. RESULTS

The following sections should be read in conjunction with Appendix I showing target note locations and Appendix II showing detailed survey results.

3.1. HABITAT DESCRIPTION

3.1.1. HOLY BROOK

Holy Brook initially runs west to east through the landscape, where it passes the site approximately 5 m north of the site boundary. As the brook flows past the north-eastern aspect of the site, a weir is present, where the watercourse spits in two (P1 in Table 3.1). One section continues east and flows under the A33 into the River Kennet, approximately 85 m east of the site. The second section bears north and runs south to north away from the site.

The section of brook adjacent to the site was approximately 7 m wide and 1.5 m deep, and vegetated. Species included bramble (*Rubus fruticosus*), common nettle (*Urtica dioica*), hogweed (*Heracleum spp.*) spear thistle (*Cirsium vulgare*), rosebay willowherb (*Chamaenerion angustifolium*) and cow parsley (*Anthriscus sylvestris*), with numerous mature crack willow (*Salix fragilis*) trees located along the banks. The substrate of the brook was largely comprised of fine silt deposits at the edges of the brook and the water had a high turbidity, making it more difficult to assess the substrate at the centre of the watercourse. The brook at this location was found to have a moderate velocity, due to the presence of a weir (P2 in Table 3.1).

Within the larger survey area, the majority brooks embankments were densely vegetated with mature willow species (*Salix spp.*), weeping willow (*Salix babylonica*), horse chestnut (*Aesculus hippocastanum*) and elder (*Sambucus nigra*) present. The brook was approximately 7 m to 5 m wide and 1.5 m to 2 m deep (P3 in Table 3.1).

The brook had largely unmanaged banks, excluding the embankments adjacent to residential housing, where the banks had been developed into decking areas and moorings for small boats. Aquatic vegetation in this location included yellow flag iris (*Iris pseudacorus*) and water lily species (*Nymphaeaceae sp.*) (P4 in Table 3.1).

3.1.2. RIVER KENNET

Holy Brook flows into the River Kennet after passing under the A33, the river then runs south to north through the landscape. The River Kennet is located approximately 85 m east of the site and is approximately 15 m wide, 2 m deep and has shallow sloping banks. Emergent vegetation is present in places along the bank and included yellow flag iris. Residential properties border the river to the east with decking and moorings forming the eastern bank of the river. The western embankment is vegetated with species including common nettle, cow parsley and broad-leaved dock (*Rumex obtusifolius*), with occasional mature willow trees present. A footpath runs adjacent to the western embankment, with industrial/commercial developments beyond this to the west (P5 in Table 3.1).

Appendix I shows the location of the photographs taken within Table 3.1.



TABLE 3.1 HABITAT PHOTOGRAPHS

PLATE	DESCRIPTION	PHOTOGRAPH
P1	Photo showing weir present as the brook flows past the north-eastern aspect of the site.	
P2	Photo showing the section of brook adjacent to the site.	
P3	Photo showing the brook with densely vegetated banks present over the majority of its extent.	



PLATE	DESCRIPTION	PHOTOGRAPH
P4	Photo showing the embankments of the brook adjacent to residential housing, with the banks developed into decking areas and moorings.	
P5	Photo showing the River Kennet where Holy Brook joins.	

3.2. DESK STUDY

On consultation with Thames Valley Environmental Records Centre (TVERC), no records of otters were identified within the 1 km search area.

3.3. HABITAT SUITABILITY

The habitats surrounding the brook are deemed suitable for otter based on the mature trees in proximity to the brook and anticipated food resources within the brook. The aspects of the brook which were surveyed were found to have minimal disturbance from surrounding activities, with the highest level of disturbance resulting from the residential housing located on the banks of the brook, with decking and moorings present.



3.4. FIELD SURVEY RESULTS

No spraints or other signs of otter were identified during the survey. Several mature trees were present along the banks of the brook however no overhanging roots were identified that would be suitable to support an otter holt. Two individual potential holt sites were located along the length of the brook, both located under decking associated with residential properties on the brook embankment, approximately 290 m and 465 m upstream of the site. However, otter are unlikely to utilise these holts due to the proximity of the residential properties and potential human disturbance. Three potential resting locations were identified along the extent of the brook, all located under road and footpath bridges, immediately upstream and downstream of the site and approximately 85 m upstream.



4. CONCLUSIONS AND RECOMMENDATIONS

4.1. CONCLUSIONS

No spraints or other signs of otter were identified during the survey, however, due to the habitats present, the brook was assessed as likely being used as a commuting feature for otters, with connection to the River Kennet and surrounding landscape.

Two potential otter holts were recorded along the brook approximately 290 m and 465 m upstream of the site. However, otter are unlikely to utilise these holts due to the proximity of the residential properties and potential human disturbance. In addition, as the only works that will directly affect the brook comprise thinning/felling of trees over an approximate 80 m stretch of the southern bank of Holy Brook, where it flows adjacent to the site, it is deemed highly unlikely that the proposed works will have an impact on the potential holt locations due to the small scale and low impact of the works, distance from the potential holt locations and directional flow of the brook.

No potential holt locations or signs of otter were identified within the proposed working area, however, the A33 and Rose Kiln Lane bridges were assessed as providing potential resting locations for otter that may use the brook to commute. The Precautionary Working Methods detailed within Section 4.2.1 will mitigate against any potential impacts the works may have on otter that may use the bridges as resting locations or use the brook to commute.

4.2. RECOMMENDATIONS

4.2.1. OTTER

The following Precautionary Working Methods should be adhered to for all works on-site, particularly in relation to the thinning/felling of trees on the southern bank of Holy Brook:

- ✿ All site operatives/personnel will be given a Toolbox Talk on the potential presence of otter within Holy Brook and their legal protection. Site operatives will be required to sign the Toolbox Talk to confirm they have understood the details provided. Contact details of the ecologist will be provided to the site operatives during the Toolbox Talk.
- ✿ All construction related materials must be well maintained and not stored within 10 m of the brook.
- ✿ No works within 30 m of the brook will be undertaken after dusk or before dawn.
- ✿ As otters are naturally inquisitive, any excavations that are left overnight will include a ramp of 45° or less on one face to allow otter and other wildlife to climb out should they fall into the excavation.
- ✿ Commuting otters may lie-up in stacked pipes or beneath pallets. These features, where they are within 30 m of the brook, should be inspected daily before the start of works.
- ✿ No artificial lighting will be directed at Holy Brook, its surrounding vegetation or the A33 and Rose Kiln Lane bridges, both during the works period and post development, to ensure the brook and related features are maintained as a dark area for otter.
- ✿ The banks of the brook will be litter picked at the start and end of the works.



4.2.2. POLLUTION PREVENTION

The control measures detailed within Section 4.2.1, in addition to the following, are recommended during the construction phase to ensure there are no impacts on the watercourses and water table or any wildlife utilising it:

- ✚ To protect Holy Brook during the construction phase, an 8 m buffer zone is recommended to be maintained adjacent to the watercourse, in which no works should be permitted. This excludes the thinning/felling works or building work where an 8m buffer would be impractical.
- ✚ Best practice protection measures as detailed within PPG5 Pollution Prevention Guidelines (2007) should be put in place to protect the watercourse.
- ✚ Measures to prevent pollutants from entering ground and surface water is standard construction practice through the use of a bunded fuel storage and refuelling area at a discrete distance from any watercourse. These measures should be supported by spill management equipment capable of being effectively utilised by trained operatives to contain any accidental spillage within any part of the operational area.
- ✚ Turning off plant when not in use.



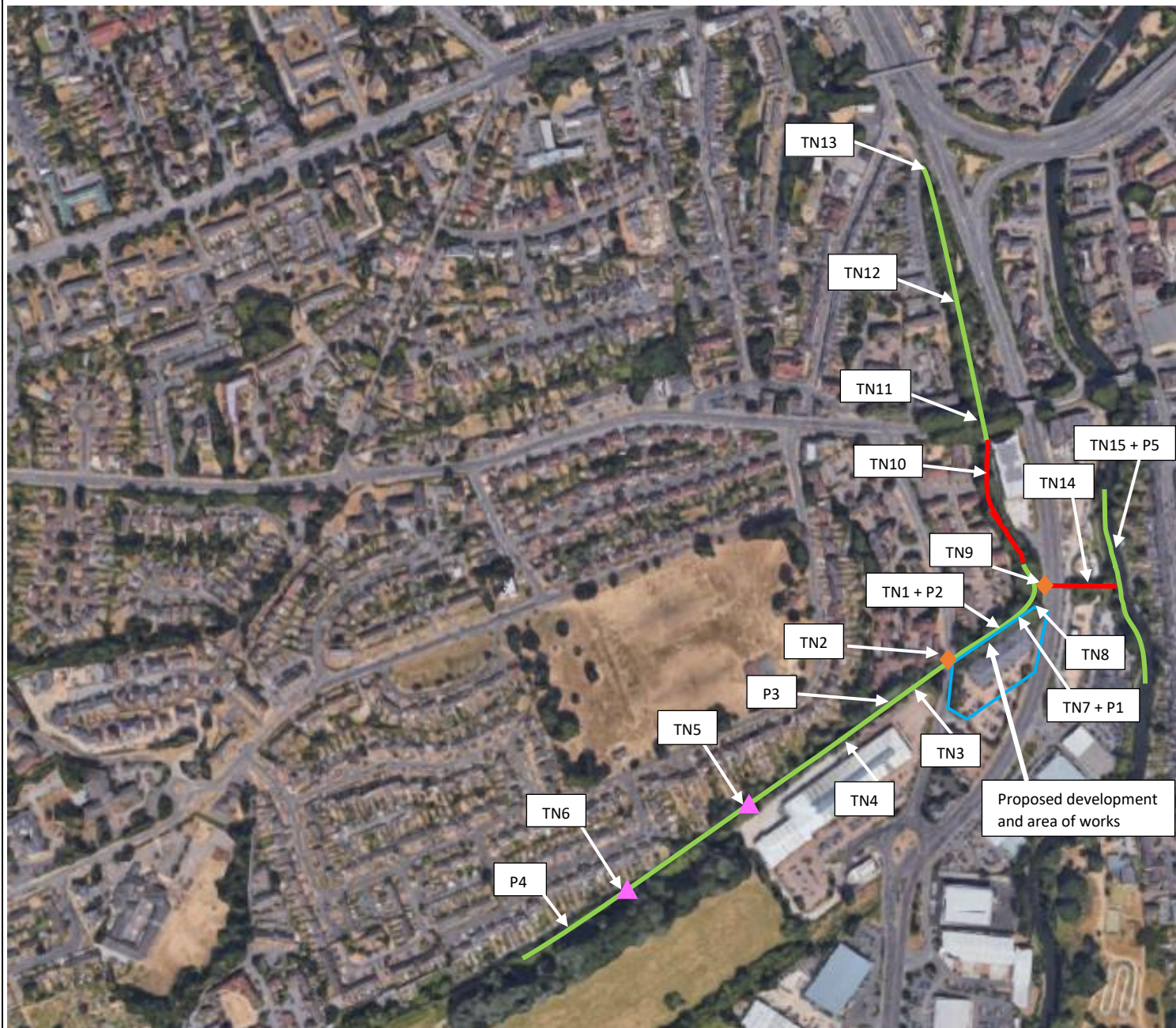
5. REFERENCES

- ✚ Chanin, P. (2003) Monitoring the Otter, Conserving Natura 2000 Rivers Monitoring Series No. 10. English Nature.
- ✚ Crawford, A. (2010) Environment Agency's Fifth Otter Survey of England 2009-2010.
- ✚ E3P (2021) 80-535-R1-1-Preliminary Roost Assessment and Ecological Walkover – Rose Kiln Lane, Reading.
- ✚ Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.
- ✚ Liles, G. 2003. Otter Breeding Sites. Conservation and Management. Conserving Natura 2000 Rivers Conservation Techniques Series No. 5.

END OF REPORT



APPENDIX I SURVEY AREA AND TARGET NOTES



Key:

Surveyed area

Inaccessible area

Site boundary

Potential holt location

Potential resting place

Target note

Photographs

Notes

Issue:	Revision:	Date:	Drawn:	Authorised:		
01	01	22/06/2021	CJ	OM		
Client:	Job No:	Date:				
Stenprop	80-535	22/06/2021				
	Drawing No:	Scale:				
	002	NTS				
Job title:	Drawing title:					
Rose Kiln Court, Reading	Otter Survey Plan					

Issue:	Revision:	Date:	Drawn:	Authorised:
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Client:	Job No:	Date:
Stenprop	80-535	22/06/2021
	Drawing No:	Scale:
	002	NTS

Job title:	Drawing title:
Rose Kiln Court, Reading	Otter Survey Plan

	Environmental Engineering Partnership Ltd Manchester Office Taylor Road, Urmston M41 7JQ Tel: 0161 707 9612 Email: info@e3p.co.uk Website: www.e3p.co.uk
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APPENDIX II OTTER SURVEY RESULTS

SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN1	Area of the brook located approximately 5 m north of the site. The brook is approximately 1.5 m deep and 7 m wide with a silty bed and turbid water. Mature crack willow trees were present on either bank with no obvious exposed roots identified. The brook had a moderate steady flow.	None	None	Thinning/felling of trees on southern embankment	
TN2	The brook passed under Rose Kiln Lane, where the brook was channelised and the banks were constructed of concrete. These features provided potential resting locations for otter, however, no field signs were identified.	Potential resting location	None	None	

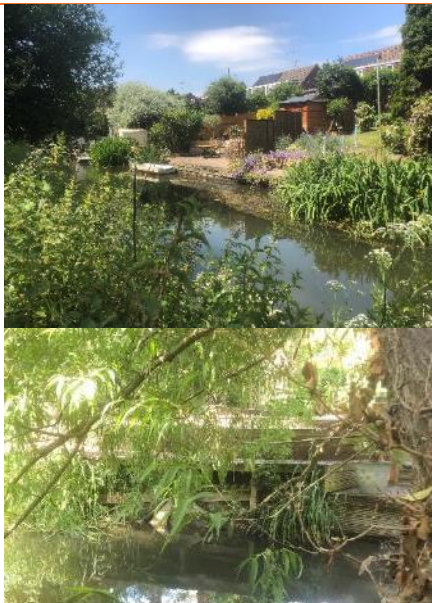


SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN3	The embankments were heavily vegetated, comprising bramble, weeping willow, horse chestnut, elder and hogweed species. The channel was approximately 7 m wide and 1.5 m deep, with a silty bed and turbid water. A footbridge was present, forming a potential resting place for otter beneath it, however, no field signs were identified.	Potential resting location	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
					
TN4	The northern embankment of the brook was bordered by residential gardens, limiting access to this aspect of the watercourse. Wooden sleepers formed a retaining wall along the northern embankment in this location.	None	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN5	Decking from the residential properties was present on the northern embankment of the brook. A potential holt location was identified within a damaged section of decking creating an enclosed cavity at the water's edge. Closer inspection was not possible due to restricted access from residential housing. However, otter are unlikely to utilise these holts due to the proximity of the residential properties and potential human disturbance. Grid reference (SU 71064 72184).	Potential holt location	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN6	Decking from the residential properties continued along the northern embankment of the brook. A potential holt location was identified within a cavity below an area of decking at the water's edge. Closer inspection was not possible due to restricted access from residential housing. However, otter are unlikely to utilise these features as holts due to the proximity of the residential properties and potential human disturbance. Grid reference (SU 70909 72096).	Potential holt location	None	None	
TN7	Area of brook flowing approximately 5 m north-east of the site. A weir was present in this location, increasing the velocity of the watercourse.	None	None	Thinning/felling of trees on southern embankment	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN8	Drainage pipe with metal bars in front reducing the suitability for otter.	None	None	Thinning/felling of trees on southern embankment	
TN9	The brook passed under the A33, where the brook was channelised and the banks were constructed of concrete. This feature provided potential resting locations for otter, however, no field signs were identified.	Potential resting location	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN10	Access was restricted from approximately 30 m to 160 m downstream of the site as the brook was fenced on both embankments, with dense vegetation present. Where the brook could be accessed, it was found to be heavily vegetated with highly silted bed and was approximately 3 m wide and 1.5 m deep.	None	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN11	The brook passed under Berkeley Avenue, where the brook was channelised and the banks were constructed of concrete, with a large tunnel present. This feature provided no suitability for otter.	None	None	None	
TN12	The western embankment of the brook comprised concrete, with a road immediately adjacent to the watercourse. Semi-mature trees and dense vegetation was present on the eastern embankment. The brook was approximately 7 m wide and 1.5 m deep.	None	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN13	The brook passed under the A33, where the brook was channelised and the banks were constructed of concrete. This feature provided no suitability for otter.	None	None	None	
TN14	Holy Brook flowed under the A33 to join the River Kennet.	None	None	None	



SURVEY LOCATION	HABITAT DESCRIPTION	OTTER FIELD SIGNS RECORDED	FIELD SIGNS OF OTHER SPECIES	PROPOSED WORKS	PHOTOGRAPH
TN15	The River Kennet was approximately 15 m wide and 2 m deep. The western embankment was vegetated, with occasional mature willow trees present. Residential properties bordered the river to the east, with industrial/commercial developments to the west.	None	None	None	

