

Ledgard Bridge Mills,
Mirfield

Otter Survey

February 2026

Report reference	1776d
Revision	1
Prepared by	Toby Fisher CEnv MCIEEM
Approved by	Andrew Westgarth CEnv MCIEEM
Issue date	Rev 1. 18 th February 2026

This report is valid for a period of 12 months from the issue date.

☎ 01765 600 799

✉ info@quantsenvironmental.com

🌐 quantsenvironmental.com

Quants Environmental Ltd, 65 Kirkby Road, Ripon, North Yorkshire. HG4 2HH

Contents

1	Introduction	3
2	Methodology	5
2.1	Personnel	5
2.2	Aim	5
2.3	Otter Survey	5
2.4	Comments / Limitations.....	5
3	Results	7
3.1	Desk Study	7
3.2	Field Survey	7
3.2.1	Evidence of Otter	7
3.2.2	River Calder	7
3.2.3	River Calder Navigation	7
3.2.4	Unnamed Channel	7
4	Conclusion and Recommendations	8
4.1	Conclusion.....	8
4.2	Recommendations	8
	Appendix 1. Otter Survey Area	9
	Appendix 2. Photographs	10

1 Introduction

- 1.1.1.1 This report presents the results of an Otter Survey undertaken in relation to a proposed residential development at Ledgard Bridge, Mirfield, WF14 8LZ (Ordnance Survey grid reference SE20191942).
- 1.1.1.2 This report should be read in conjunction with the following report, although all key information relating to Otter has been reproduced in this report:
- Quants Environmental Ltd. (2023). Ledgard Bridge Mills, Mirfield. Ecological Impact Assessment, November 2023. Rev 1776c.3.
- 1.1.1.3 The Otter Survey was undertaken on 16th February 2026 and covered all accessible areas within the area shown in Appendix 1, i.e. the River Calder at least 250 metres both upstream and downstream of the site boundary plus side-channels. The survey involved detailed searches for evidence of Otter using a drone and direct on-foot searches with the aid of binoculars where appropriate.

Figure 1. Site Location (aerial imagery dated 2020)



Figure 2. Site Location



© Crown copyright and database rights (2025) OS licence no. AC000851168.

2 Methodology

2.1 Personnel

2.1.1.1 The Otter Survey was undertaken by Toby Fisher CEnv MCIEEM and David Bodenham BSc Ind (Hons) MSc.

2.2 Aim

2.2.1.1 The aim of the Otter Survey was to identify any evidence of Otter and to provide a detailed assessment of the habitat suitability for Otter.

2.3 Otter Survey

2.3.1.1 The Otter Survey was conducted on 16th February 2026, broadly based on the standard survey methodology¹. As shown in Appendix 1, the survey covered all accessible areas of potential suitable habitat within at least 250 metres of the site:

- River Calder at least 250 metres both upstream and downstream of the site boundary.
- River Calder Navigation channel approximately 100 metres north of the site.
- Unnamed small side-channel immediately south of the site boundary.

2.3.1.2 The weather at the time of the survey was approximately 4°C to 6°C, cloud 70% to 100%, wind Bft 1-2, mostly dry with brief light shower at 10:45am.

2.3.1.3 At the time of the survey, the river level was 1.22 metres (as measured at Ledgard Bridge Monitoring Station²) which is within the normal range. Prior to the survey, the river level had been within the normal range for approximately 4 days (the river level was briefly above the normal range in the early hours of 12/02/2026).

2.3.1.4 The surveyors undertook detailed inspections for evidence of Otter such as spraint, footprints, pathways/trails, slides, hairs, food remains, holts, couches and dens. The surveyors inspected the watercourses including all accessible areas of banks and in-stream features such as boulders and bridge supports. Binoculars were used to aid direct physical searches. The survey involved utilising all safely accessible vantage points, i.e. the river margins and banks where accessible, bank-top paths and roads, and bridges.

2.3.1.5 The on-foot survey was supplemented by a drone-mounted video camera which was used to inspect areas which were difficult to inspect on foot. For safety reasons, the drone could not be used in close proximity to roads and the railway line.

2.3.1.6 The surveyors also assessed the suitability of the habitat for Otter, e.g. suitability of habitat for potential holts, couches and resting places.

2.4 Comments / Limitations

2.4.1.1 Otter surveys can be undertaken year-round. Research has shown that Otters can spraint more in the winter months³ although higher and more variable river levels in the winter months also means that field signs can be more readily washed away. At the time of the survey, river levels were higher than average and had most recently exceeded the normal range approximately 96 hours prior to the survey; meaning that evidence such as spraints and footprints may have been washed away.

¹ Chanin P (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.

² <https://check-for-flooding.service.gov.uk/station/8124?direction=u>

³ <https://cieem.net/wp-content/uploads/2019/07/natural-information-otters-and-development-2011.pdf>

- 2.4.1.2 The nature of the river, including steep retaining walls in several places, steep banks with impenetrable scrubby vegetation, and private land adjacent to the river restricted on-foot access during the survey. The drone enabled good access to certain otherwise inaccessible sections. It is noted that the survey took place on one occasion, thereby providing a snapshot.
- 2.4.1.3 Overall, it is considered that the survey limitations were minor. During the survey it was possible to undertake effective searches in most areas. The vast majority of potentially suitable sprainting sites were clearly visible during the survey. There were no significant limitations to the habitat suitability element of the survey.

3 Results

3.1 Desk Study

3.1.1.1 As detailed in the previous report, WYES provided no records of Otter within 2 km of the site.

3.2 Field Survey

3.2.1 Evidence of Otter

3.2.1.1 No evidence of Otter was observed during the survey on 16th February 2026. Footprints of Domestic Dog and birds including Grey Heron along with bird droppings were observed on the banks of the River Calder during the survey.

3.2.2 River Calder

3.2.2.1 Physical opportunities for resting places / holts are very limited on the surveyed stretch of the River Calder. The presence of retaining walls and the constrained nature of the channel, with generally narrow bands of semi-natural vegetation alongside the channel, tends to limit the availability of suitable Otter resting places. The constrained nature of the channel and background disturbance levels means that the surveyed section of the river has very limited potential for Otter hauling out sites.

3.2.2.2 Locally, there are a very limited number of tree root features which offer some limited potential as resting places. There are also a small number of holes within stone retaining walls which offer limited potential as resting places. Localised areas of dense scrub including Bramble on the western edge of the proposed development also offer some limited potential for resting places.

3.2.2.3 In summary, Otters could use this stretch of the River Calder, e.g. for feeding / passage purposes. However, physical opportunities for resting places / holts are extremely limited. The background levels of disturbance are likely to limit the potential for Otter resting places / holts to be present in this area.

3.2.3 River Calder Navigation

3.2.3.1 The River Calder Navigation approximately 100 metres north of the site is an engineered watercourse with largely manicured banks. Whilst Otters could use the River Calder Navigation, e.g. for feeding / passage purposes, physical opportunities for resting places / holts are almost non-existent within the surveyed section. The background levels of disturbance are likely to severely limit the potential for Otter resting places / holts to be present in this area. No suitable hauling out sites were identified.

3.2.4 Unnamed Channel

3.2.4.1 The unnamed channel on the site's eastern boundary is a narrow channel up to approximately 2 metres wide. At its northern end, the channel ends with a narrow pipe which appears to pass underground for approximately 85 metres to connect with the Calder Navigation; this pipe is unsuitable for Otter passage.

3.2.4.2 The unnamed channel appears to have generally low levels of disturbance although there is an abundance of litter indicating occasional human activity. The water quality appears to be poor. Dense Bramble alongside much of the channel provides good cover but overall, based on all available information, the unnamed channel is assessed as being largely unsuitable for Otter.

4 Conclusion and Recommendations

4.1 Conclusion

- 4.1.1.1 Overall, given the absence of previous Otter records, absence of Otter field signs, background disturbance levels, and the very limited suitable cover for potential resting places, it is considered very unlikely that resting places / holts will be present within the surveyed area.
- 4.1.1.2 Otters could potentially occur within the surveyed area e.g. for foraging / passage purposes, i.e. this part of the river could potentially form part of a wider Otter home range but is not likely to form a key element of Otter habitat.

4.2 Recommendations

- 4.2.1.1 The recommendations for mitigation remain unchanged from those detailed in the Ecological Impact Assessment⁴:
- Biodiversity Protection Zone, i.e. a buffer zone of semi-natural vegetation between the development and the watercourse.
 - Sensitive Lighting Strategy to minimise artificial light spill on the River Calder.
 - Construction Environmental Management Plan (Biodiversity) to detail sensitive working practices and update checking surveys prior to and during the construction phase.

⁴ Quants Environmental Ltd. (2023). Ledgard Bridge Mills, Mirfield. Ecological Impact Assessment, November 2023. Rev 1776c.3.

Appendix 1. Otter Survey Area



- Red Line Boundary
- Otter survey area

Appendix 2. Photographs

Photo 1. Looking south-east along River Calder (site on left side of photo) (drone)



Photo 2. Looking north across River Calder towards the site



Photo 3. Looking south across River Calder from central part of the site' western boundary



Photo 4. Looking north-north-west from southern part of the site



Photo 5. Looking north along River Calder on site's western boundary



Photo 6. Looking south-east towards east bank of River Calder in southern part of the site (drone)



Photo 7. Looking south along River Calder on north-western part of the site



Photo 8. Looking west to River Calder west bank opposite the site (drone)



Photo 9. River Calder west bank opposite the site (drone)



Photo 10. Western bank of River Calder opposite the site



Photo 11. Looking west along River Calder from bridge ~230 metres south-east of the site (Hopton New Road)



Photo 12. Looking north beneath railway bridge ~50 metres north of the site



Photo 13. Looking north-north-east beneath railway bridge ~50 metres north of the site



Photo 14. Looking north-west along River Calder ~175 metres north of the site

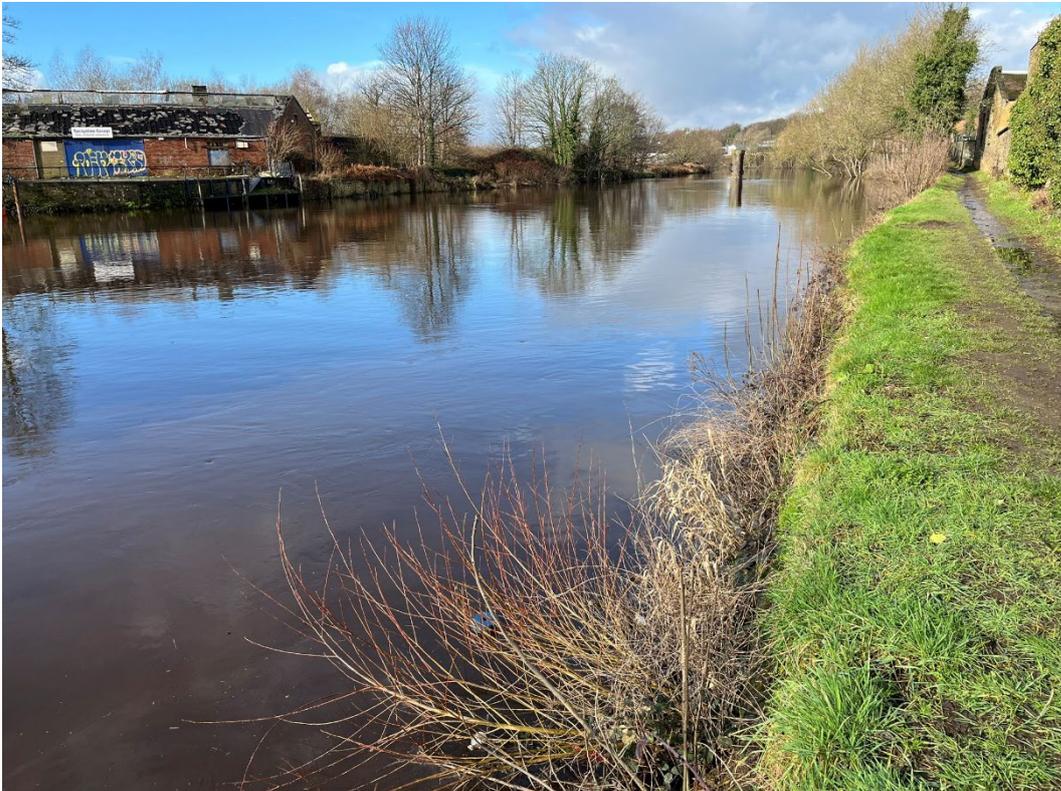


Photo 15. Looking south-east across River Calder Navigation ~100 metres north of the site



Photo 16. Northern end of the unnamed channel adjacent to site's eastern boundary



Photo 17. Looking south along unnamed channel adjacent to site's eastern boundary



Photo 18. Looking south from southern corner of the site (showing confluence of unnamed channel with River Calder)

