

Badger Survey
Nutts Lane, Hinckley

Client:



Consultant

Dr. Stefan Bodnar (MCIEEM)
Wallbrook Farm
Allensmore
HR2 9BE

Tel: 07429 209549
Email: stefan.bodnar01@googlemail.com
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Appendices

Appendix A *Photographs*

An area of land located at Cornerfields, Nutts Lane Hinckley LE10 3EG was subject to survey in relation to the presence/ use by badgers.

- An inspection, as far as health and safety considerations/ access permits of the development site.
- Recording and evaluation of badger setts with regard to location and level of use.
- Recording and evaluation of badger activity in the general area.
- To make recommendations for the development work to take place including any license application and any mitigation/ compensation required.

Reserved matter:

- Reason: In order to protect the protected wildlife species and their habitats that are known to exist on site in accordance with Policy DM6 of the adopted Site Allocations and Development Management Policies Development Plan Document (2016).

PLANNING

CLIENT: MR. MCDONALD

ADDRESS: 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 102, 104, 106, 108, 110, 112, 114, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 232, 234, 236, 238, 240, 242, 244, 246, 248, 250, 252, 254, 256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 308, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374, 376, 378, 380, 382, 384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 436, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 488, 490, 492, 494, 496, 498, 500, 502, 504, 506, 508, 510, 512, 514, 516, 518, 520, 522, 524, 526, 528, 530, 532, 534, 536, 538, 540, 542, 544, 546, 548, 550, 552, 554, 556, 558, 560, 562, 564, 566, 568, 570, 572, 574, 576, 578, 580, 582, 584, 586, 588, 590, 592, 594, 596, 598, 600, 602, 604, 606, 608, 610, 612, 614, 616, 618, 620, 622, 624, 626, 628, 630, 632, 634, 636, 638, 640, 642, 644, 646, 648, 650, 652, 654, 656, 658, 660, 662, 664, 666, 668, 670, 672, 674, 676, 678, 680, 682, 684, 686, 688, 690, 692, 694, 696, 698, 700, 702, 704, 706, 708, 710, 712, 714, 716, 718, 720, 722, 724, 726, 728, 730, 732, 734, 736, 738, 740, 742, 744, 746, 748, 750, 752, 754, 756, 758, 760, 762, 764, 766, 768, 770, 772, 774, 776, 778, 780, 782, 784, 786, 788, 790, 792, 794, 796, 798, 800, 802, 804, 806, 808, 810, 812, 814, 816, 818, 820, 822, 824, 826, 828, 830, 832, 834, 836, 838, 840, 842, 844, 846, 848, 850, 852, 854, 856, 858, 860, 862, 864, 866, 868, 870, 872, 874, 876, 878, 880, 882, 884, 886, 888, 890, 892, 894, 896, 898, 900, 902, 904, 906, 908, 910, 912, 914, 916, 918, 920, 922, 924, 926, 928, 930, 932, 934, 936, 938, 940, 942, 944, 946, 948, 950, 952, 954, 956, 958, 960, 962, 964, 966, 968, 970, 972, 974, 976, 978, 980, 982, 984, 986, 988, 990, 992, 994, 996, 998, 1000, 1002, 1004, 1006, 1008, 1010, 1012, 1014, 1016, 1018, 1020, 1022, 1024, 1026, 1028, 1030, 1032, 1034, 1036, 1038, 1040, 1042, 1044, 1046, 1048, 1050, 1052, 1054, 1056, 1058, 1060, 1062, 1064, 1066, 1068, 1070, 1072, 1074, 1076, 1078, 1080, 1082, 1084, 1086, 1088, 1090, 1092, 1094, 1096, 1098, 1100, 1102, 1104, 1106, 1108, 1110, 1112, 1114, 1116, 1118, 1120, 1122, 1124, 1126, 1128, 1130, 1132, 1134, 1136, 1138, 1140, 1142, 1144, 1146, 1148, 1150, 1152, 1154, 1156, 1158, 1160, 1162, 1164, 1166, 1168, 1170, 1172, 1174, 1176, 1178, 1180, 1182, 1184, 1186, 1188, 1190, 1192, 1194, 1196, 1198, 1200, 1202, 1204, 1206, 1208, 1210, 1212, 1214, 1216, 1218, 1220, 1222, 1224, 1226, 1228, 1230, 1232, 1234, 1236, 1238, 1240, 1242, 1244, 1246, 1248, 1250, 1252, 1254, 1256, 1258, 1260, 1262, 1264, 1266, 1268, 1270, 1272, 1274, 1276, 1278, 1280, 1282, 1284, 1286, 1288, 1290, 1292, 1294, 1296, 1298, 1300, 1302, 1304, 1306, 1308, 1310, 1312, 1314, 1316, 1318, 1320, 1322, 1324, 1326, 1328, 1330, 1332, 1334, 1336, 1338, 1340, 1342, 1344, 1346, 1348, 1350, 1352, 1354, 1356, 1358, 1360, 1362, 1364, 1366, 1368, 1370, 1372, 1374, 1376, 1378, 1380, 1382, 1384, 1386, 1388, 1390, 1392, 1394, 1396, 1398, 1400, 1402, 1404, 1406, 1408, 1410, 1412, 1414, 1416, 1418, 1420, 1422, 1424, 1426, 1428, 1430, 1432, 1434, 1436, 1438, 1440, 1442, 1444, 1446, 1448, 1450, 1452, 1454, 1456, 1458, 1460, 1462, 1464, 1466, 1468, 1470, 1472, 1474, 1476, 1478, 1480, 1482, 1484, 1486, 1488, 1490, 1492, 1

1.1. Background

Badgers and the Law

Prior to 1992, badgers were given protection under the *Badgers Act 1973* and badger setts under the *Badgers Act 1991*. The *Protection of Badgers Act 1992* consolidated the earlier legislation and is based primarily on the need to protect badgers from baiting and deliberate harm or injury. It also contains restrictions that apply more widely and it is important for developers to know how this may affect their work.

Under the regulations it is a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger;
- attempt to do so; or
- intentionally or recklessly interfere with a sett.

Sett interference includes damaging or destroying a sett, obstructing access to a sett, and disturbing a badger whilst it is occupying a sett. A badger sett is defined in the legislation as “any structure or place which displays signs indicating current use by a badger”.

Penalties for offences can be severe with fines of up to £5,000 plus up to six months imprisonment, for each illegal sett interference, or badger death or injury. The legislation does, however, recognise the need for a range of legitimate activities to be carried out and allows licences to be granted for certain purpose permitting work that would otherwise be illegal. Under the 1992 Act, the purposes for which licences can be granted are:

- a) To interfere with badger setts for the purpose of;
 - Any agricultural or forestry operation
 - Any operation to maintain or improve any existing watercourses or drainage works, or to construct new works required for the drainage of land, including works of defence against sea or tidal water
 - Development
 - Controlling foxes in order to protect livestock or penned game
 - Preservation of ancient monuments or an archaeological investigation
- b) To kill or take badgers or to interfere with their setts for the purpose of;
 - Preventing the spread of disease;
 - Preventing serious damage to land, crops, poultry or any other form of property (for example, houses, gardens, roads.)
 - Scientific or educational purposes, or conservation
 - Ringing and marking

Since development operations may take place over a protracted period, Natural England recommends that plans consider the effect of the development on seasonally-used setts as well as currently occupied setts. If a sett has shown signs of occupation within the past few months, it could be in use by badgers when development starts and should therefore be taken into account during the survey and any planning stages of the development. Where interference with a sett showing signs of use cannot be avoided during the development, a license should be sought.

In England all licences regarding badgers are, in practice, granted by Natural England, either as the licensing Authority themselves or on behalf of the Secretary of State, depending on the purpose of the licence. It is not illegal, and therefore a licence is not required, to carry out disturbing activities in the vicinity of a sett if no badger is disturbed and the sett is not damaged or obstructed.

Planning and Development Guidance

Planning authorities are required to take account of protected species and habitat conservation when they consider planning applications. The Department for Environment, Food and Rural Affairs (Defra) published The Planning Policy Statement 9: Biodiversity and Geological Conservation (PPS9) for local authorities in England. This document explains the role of planners in considering the requirements of wildlife legislation to protect wildlife. Where protected species are present local authorities should consult Natural England's area teams before granting planning permission. They should also advise developers that they must conform to statutory species protection.

Natural England believes that all local development plans should contain policies for protected species, including badgers and their setts. Development should not be permitted unless it is possible to take steps to ensure the survival of the badgers in their existing range and at the same population status, with provision of adequate alternative habitats if setts and foraging areas are destroyed. Natural England will only issue a licence after detailed planning permission has been granted, where applicable, so that there is no conflict with the planning process. Local authorities and developers need to be aware that it may be necessary for an environmental assessment to be carried out, prior to the development, if the proposed development site hosts badgers. Before the planning application is determined, the local planning authority should request a detailed ecological survey/report and developers should be prepared to provide the following information:

- The number and status of badger setts and foraging areas that are affected by the proposal;
- The impact that the proposal is likely to have on badgers and what can be done in the way of mitigation;
- Judgement on whether the impact is necessary or acceptable; and
- A recommendation on whether a licence will be required.

Planning Permission and badger licensing are separate legal functions. Thus receiving planning permission from the Local Authority is no guarantee that development operations will not breach the Protection of Badgers Act 1992. Similarly planning permission does not guarantee that a badger licence will be granted. It is important, therefore, that developers take adequate account of badgers at the planning stage in order to ensure that badgers will not be affected or, where a licence is required, that appropriate mitigation measures can be implemented.

1.2. Site Location

The development zone comprises a large garden area of mown grassland with a number of derelict outbuildings. It is flanked by a wooded railway embankment to the north and a native hedgerow to the south. The site location is described on the map in figure 1a below.

A satellite image (figure 1b) and Phase One diagram (see Appendices) also show the areas concerned.

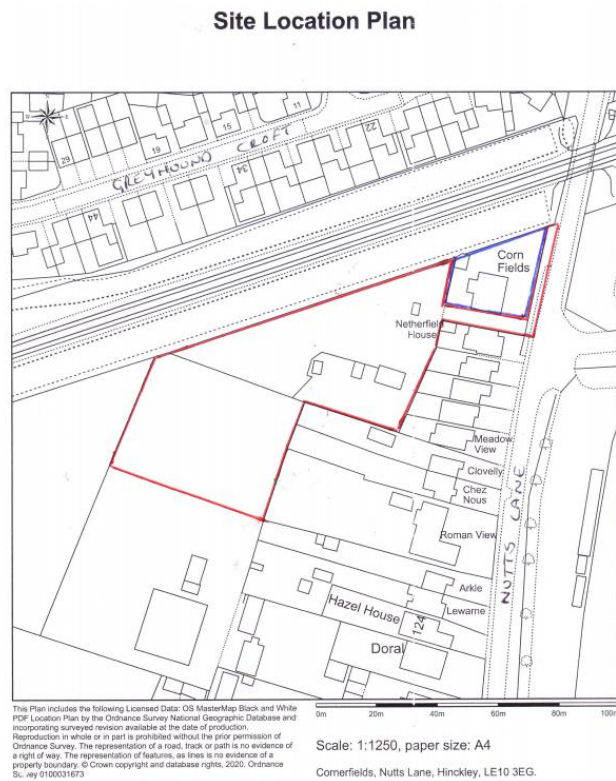


Figure 1a. Showing site location

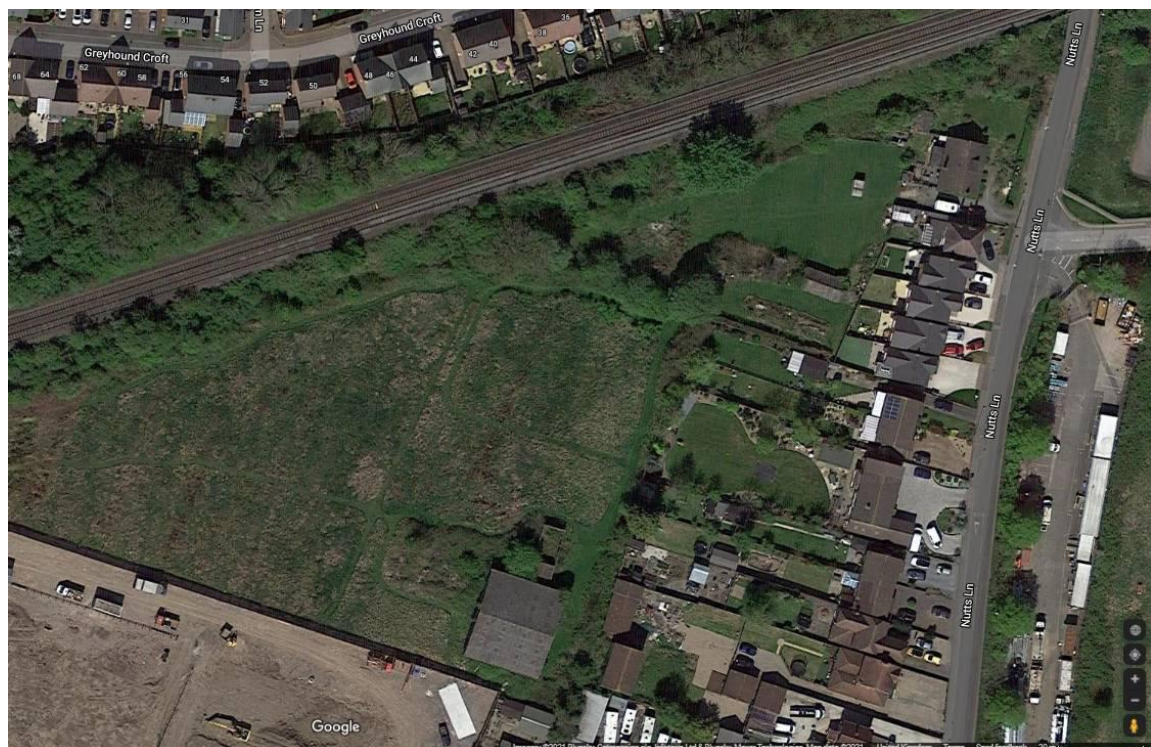


Figure 1b. Showing site location

Map data 2021 © Google

Site Description

The development site is an area of amenity grass, dominated by perennial ryegrass *Lolium perenne*, with other species such as Daisy *Bellis perennis*, Creeping buttercup *Ranunculus repens* and Stinging nettle *Urtica dioica* also present. Around the edges of the site are a small number of planted landscape trees, and self set young trees, and groups of trees on the southern boundary which is an outgrown hedge. Along the northern boundary of the site is a railway embankment dominated by bramble and trees such as aspen. The main house (Cornfields) is excluded from the proposed development as is the immediate garden of the property. Within the site are a series of small sheds which are to be removed. To the south is an area of rough improved grassland dominated by cocksfoot and false oatgrass.

The surrounding land use is mainly residential, with remnant agricultural areas to the West and south of the A5 corridor. (See Appendix 1b).



1.3. Badger Ecology (a Summary)

Badgers are relatively widespread in England, through their nocturnal habits mean that many people encounter them only as road casualties. Adult badgers can grow up to a metre long and males can weigh up to 14 kg. They have strong claws and legs with which they dig and move earth. They are omnivorous and their diet consists of worms, insects, grain and fruits. During late summer and autumn they accumulate fat reserves. Badgers do not hibernate but they are much less active and stay below ground especially during very cold or wet weather.

Badgers live in family or social groups of related mature and young adults and cubs, sometimes known as clans. Their “home ranges” consist of feeding grounds and one or more setts. A badger sett is defined in the legislation as “any structure or place which

displays signs indicating current use by a badger”. Setts can usually be classified as one of the following:

1. *Main Setts*: These usually have a large number of holes with large spoil heaps, and the sett generally looks well used. They usually have well used paths to and from the sett and between set entrances. Although normally the breeding sett is in continual use all year round, it is possible to find a main sett that has become disused because of excessive disturbance or for some other reason.
2. *Annex Setts*: These are always close to the main sett and are usually connected to the main set by one or more obvious, well worn paths. They consist of several holes, but are not necessarily in use all the time, even if the main set is very active.
3. *Subsidiary Setts*: Often these have only a few holes, and are usually at least 50m from a main set, and do not have an obvious path connecting them with another sett. They are not continuously active.
4. *Outlying Setts*: These usually only have one or two holes, often have little spoil outside the hole, have no obvious path connecting them with another sett, and are only used sporadically.

Whilst these categories look clear cut, classification might be difficult in the field. In areas of low badger density main setts may be relatively small with only a few holes. One should not necessarily expect to find examples of all sett types in a particular area. Many badger social groups do not have an annex sett, for instance, whilst in poor badger habitat large areas may be searched without finding a main sett. Setts are sometimes taken over or cohabited by foxes or rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the entrance hole), which is at least 250mm in diameter and rounded or flattened oval shape. Badger family groups usually remain loyal to their main setts unless they are frequently disturbed. Opening up new setts and maintaining and extending old sets is a constant occupation, with bursts of digging activity at certain times of the year. Activity and use of setts can change steadily over the years, or very quickly in response to short-term changes such as flooding or a food crop ripening nearby. In general though, badgers are creatures of habit. They tend to use the same pathways to foraging areas and will continue to try to do so despite any obstacles that are placed in their way. New fences may be broken down and new roads crossed despite any difficulty or danger presented.

Badgers mate throughout the year but pregnancy starts around the end of November, or early December, when the previously fertilised embryos implant into the sow’s uterus. Often only the most dominant sow in a family group will produce cubs, usually two or three per litter. These are born underground, usually towards the end of January or beginning of February, emerging for the first time after about 8 weeks. The cubs remain dependent upon the sow for a further few weeks while they are weaned and learn how to fend for themselves.

1.4 Previous survey:

The PEA in August 2021 concluded the following:

Badgers

Badgers (*Meles meles*) are protected in England and Wales under the Protection of Badgers Act 1992. Protection applies both to the animal itself and to its nesting burrows (setts), and current interpretation of the Act also confers some protection to

key foraging areas. Badgers remain comparatively widespread and common throughout the UK.

The habitat is of moderate suitability for badgers and badger activity across the site was noted, these lead mainly from the embankment. There is evidence of badger foraging on site but no setts on site. However, there is an active badger sett adjacent to the site (within 30m of the site boundary), located within the embankment along the sites northern boundary. The sett is located off-site, behind the ditch which form the site boundary. The sett has 2 holes. The sett is likely to be dug into the embankment. It is highly unlikely that the tunnels for these setts run under the existing ditch and beneath the site itself. Therefore the usual 30m buffer from badger setts to development could be modified to 10m for this sett. A wooden fence should be erected around the rear gardens to reduce the potential for disturbance to these badger setts. This precaution also extends to the area abutting the railway embankment to the West, where further setts are likely, though cannot be determined due to undergrowth and it being a live railway line. No further survey is recommended in respect of this species. Instead a series of precautions during the development should be adhered to. These are described in section 4 below. The location of the identified sett entrances are shown below:





2.0. Methodology

The survey consisted of a visual inspection of the site, during daylight hours, to assess its potential to support badgers. As woodland, hedgerows, scrub land, ditches and banks are more likely to support badger setts, particular attention was given to inspecting these areas. Evidence of badger activity searched for included:

- Badger Setts.
- Paw prints.
- Latrines: Faeces usually deposited in small, dug out holes.
- Foraging signs: Snuffle holes.
- Characteristic worn pathways.

2.1. Personnel

The survey was conducted by Dr. Stefan Bodnar, a full time member of the institute of Ecology and Environmental Management, an experienced ecologist with over 33 years experience of badger surveys, having held a number of badger licenses in respect of development previously.

2.2. Field Survey

A thorough inspection of the site, as far as access permits, was conducted for badger setts and an assessment of sett status and activity was made. Where setts were found, activity levels were classified using the following criteria:

- The number of well-used holes (With one or more of the features: well worn entrance; freshly excavated soil; bedding material);
- The number of partially used holes (leaves or twigs in the entrance and/or mosses and other plants growing in or around the entrances);
- The number of disused holes (Partially or completely blocked, with considerable amount of excavation required for reoccupation).

Setts were also classified using the principles already outlined in chapter 1.5; these conventions are also summarized here in Table 1.

Table 1: Principles used for classifying badger setts.

Sett Type	Definition
Main	Several holes with large spoil heaps and obvious paths emanating from and between sett entrances.
Annexe	Situated near to the main sett, comprising several holes. May not be in use all the time, even if main sett is very active.
Subsidiary	Usually at least 50 m from the main sett with no obvious paths connecting them to other sets. May only be used intermittently.
Outlier	Little soil outside holes. No obvious paths connecting them to other setts and are only used sporadically. May also be used by foxes and rabbits.

In addition, the site was systematically surveyed for other evidence of badger activity which included;

- Faeces; badgers usually deposit faeces in characteristic excavated pits (Latrine sites);

- Pathways linking or leading to forage areas;
- Snuffle holes, formed during foraging and disturbed ground vegetation;
- Paw prints;
- Scratching posts at the base of tree trunks; and,
- Hair traces.

The survey was undertaken on 12th October 2022 in good weather. This is a reasonable period for conducting badger surveys and two visits were made to ensure the validity of the results. .

3.0. Results

3.1. Field Survey Findings

All spatial data regarding any badger setts and evidence of activity are presented in map form and can be found in Appendix B.

Badger Setts

Table 2: Breakdown of badger setts by category.

Table 2 to shows the number of setts discovered, there classification and occupancy. * Number given indicates the location of each sett on the additional Map (Appendix B).

Sett Category	Number *	Activity
Current off site previous sett	NO access due to safety (railway line)	Appears inactive, recent burrows appear to be rabbit and fox use

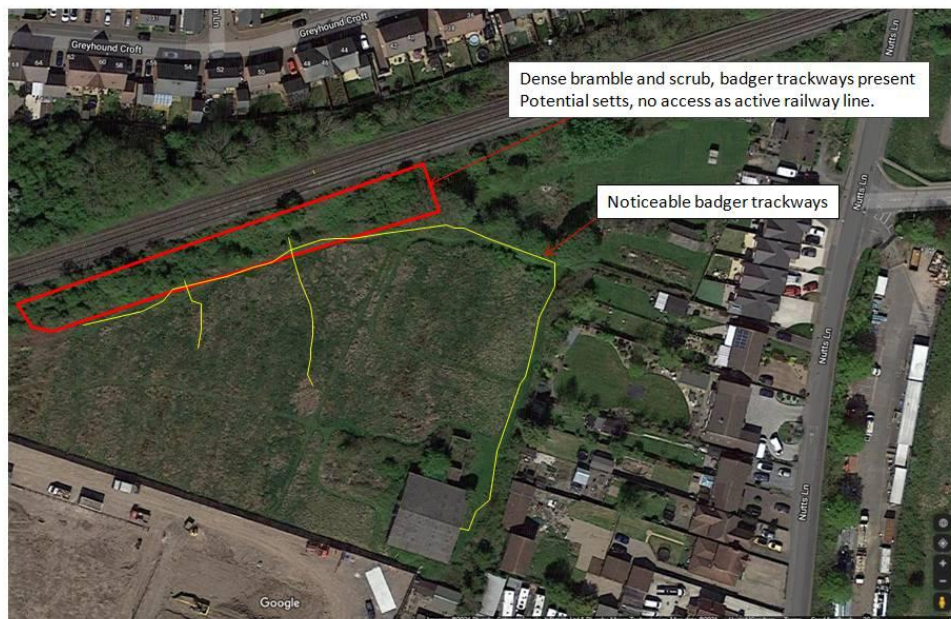
Paw prints: None

Latrines: None

Foraging signs: Some snuffle holes

Pathways

Off and on site, used by both fox and badger. Pattern similar to that previously noted, below:



Additional Records: None

4.0 Conclusion and Recommendations

The survey determined that this location does not support a currently used sett on site though there is likely to be an off site sett (though currently disused) on the railway line at the northern periphery.

Implications for site works and design

The area of works do encompass any active setts.

No works will be undertaken at or within 25m of an active sett.

Due to the potential changing nature of badger use of this site, the survey validity is 6 months from the date of survey report (01st November 2022).

5.0 Mitigation/ Compensation

5.1. Precautionary Measures During Works (note that there is no need for exclusion zones in this case)

Following the advice below will help developers to avoid committing offences. In accordance with the Protection of Badgers Act (1992) precautionary measures that should be taken to minimise disturbance and interference with badgers include;

- Disturbance in the vicinity of a sett where breeding is confirmed or expected is to be avoided during 1st December – 30th June. Badgers are particularly vulnerable at this time of year and sett interference can result in dependent cubs being abandoned. A protection zone is to be established at 30m radius around used setts.
- Disturbances, such as loud noises or vibrations, that might agitate badgers occupying a sett should be avoided or limited to areas well away from the sett.
- Noise in the vicinity of protection zone is to cease 2 hours before sunset.
- Badger tunnels can extend to 20m from the entrance holes and are located between 0.2 and several meters deep, depending on the soil topography. Excavation work and heavy machinery should be kept well away from where it could result in damage to the sett or disturbance to any badger occupying the sett.
- Any security lighting is to be directed away from setts.
- Fires and chemicals should not be used within 20 metres of sett.
- Trenches and excavations are to be covered at the end of each working day, or include ramps as a means of escape for any animal falling in.
- Any temporary exposed open pipe system should be capped to prevent badgers gaining access.

5.2 General Site Construction Safeguards

- Any ground-works that are to be left open overnight will be provided with a means of escape should a badger enter. This could simply be in the form of a roughened plank of wood placed in the trench as a ramp to the surface. This is particularly important if the trench fills with water.

- Any trenches/pits will be inspected each morning to ensure that no badgers have become trapped overnight. Should a badger become trapped in a trench it will likely attempt to dig itself into the side of the trench, by forming a temporary sett. Should a trapped badger be encountered the Named Ecologist should be contacted immediately for further advice who, if necessary, will contact Natural England in respect of legislative and licensing issues.
- The storage of topsoil or other 'soft' building materials on site will be given careful consideration. Badgers will readily adopt such mounds as setts; so as to avoid the adoption of any mounds, these will be kept to a minimum and any essential mounds subject to daily inspections (or nightly patrols if 24 hour security is present on site), with consideration given to temporarily fencing any such mounds to exclude badgers.
- The storage of any chemicals on site will be well away from the setts and contained in such a way that they cannot be accessed or knocked over by any roaming Badgers.
- The specific seasonal sensitivity of this species is summarised at Table 1.

Species	J	F	M	A	M	J	J	A	S	O	N	D
Badger	H	H	H	H	M	M	L	L	L	L	L	H

Table 1. Summary table of seasonal sensitivity of habitats and species found within the site. (L = Low Sensitivity, M = Moderate Sensitivity, H = High Sensitivity).

As works are required within the season of high sensitivity, these have been the subject of special scrutiny by the ecologist, with exclusion zones, and an increased level of on-site supervision employed.

Responsible Persons

- Prior to the commencement of works, in order to ensure compliance with the method statement and to sufficiently mitigate against potential effects on Badgers, the project manager will take responsibility or appoint a person to be responsible for ensuring the following:
 - ☐ Compliance with legal requirements relating to nature conservation;
 - ☐ Installation of physical protection measures during construction;
 - ☐ Implementation of sensitive working practices during construction;
 - ☐ Regular inspection and maintenance of physical protection measures and monitoring of working practices during construction; and

Until such time as a responsible person has been appointed, the project manager shall be responsible for ensuring that the above points are addressed.

Appendix A: *Photographs*











Badger track (faint)



Badger tracks (north, leading on to railway)