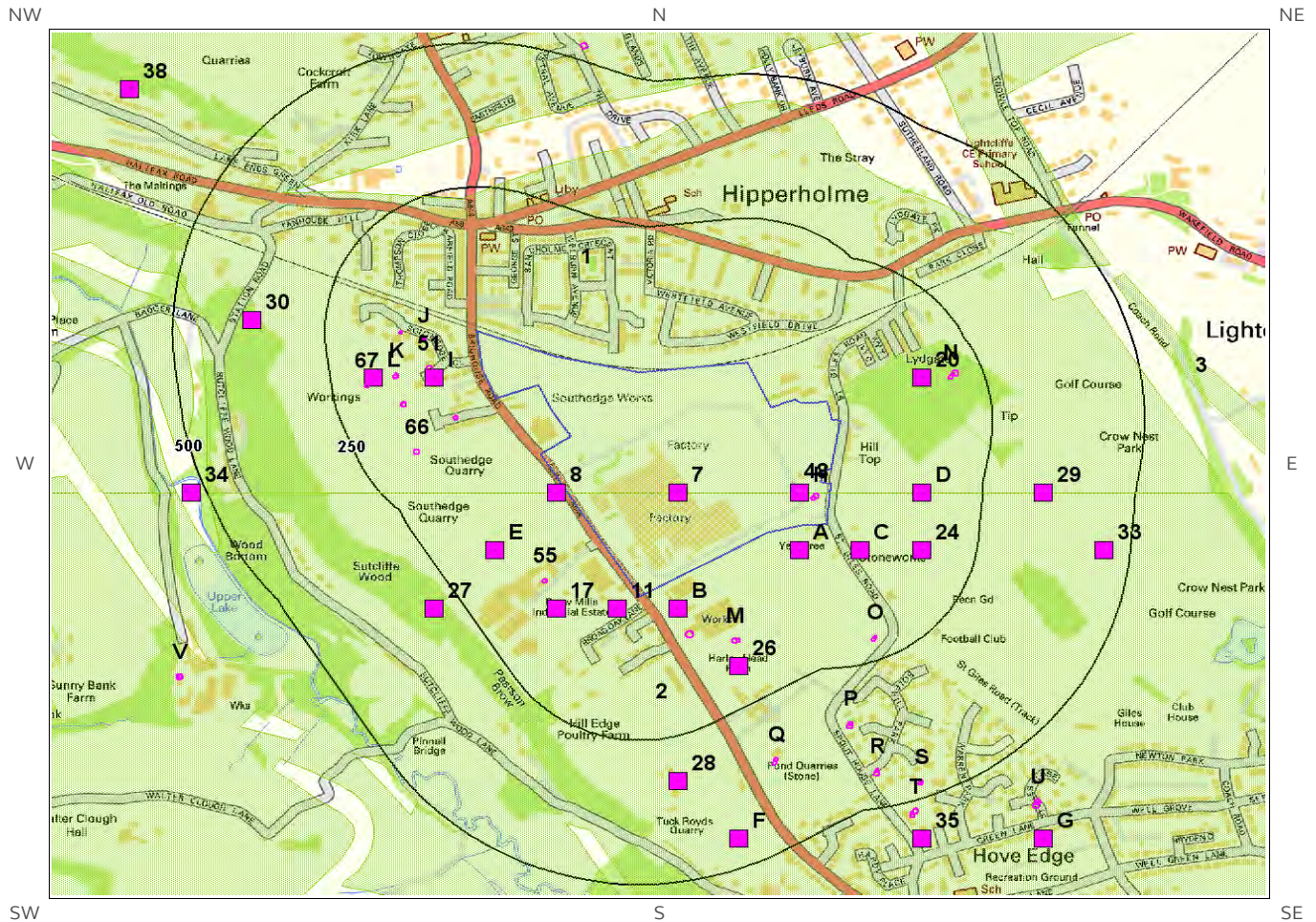
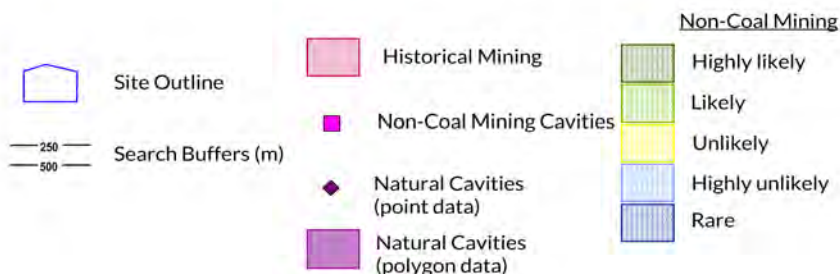


5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

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5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
47H	0.0	On Site	413023 424991	Unspecified Old Shaft	1948
48	0.0	On Site	413027 424994	Unspecified Disused Shaft	1969
49I	71.0	SW	412435 425130	Unspecified Shaft	1905
50I	71.0	SW	412436 425129	Unspecified Old Shaft	1951
51	82.0	W	412392 425215	Unspecified Shaft	1905
52J	86.0	W	412383 425264	Unspecified Old Shafts	1905
53J	86.0	W	412383 425264	Unspecified Shafts	1892
54B	91.0	SE	412820 424754	Unspecified Old Shaft	1905
55	112.0	SW	412582 424847	Unspecified Old Shaft	1905
56J	123.0	W	412346 425278	Unspecified Old Shafts	1905
57J	123.0	W	412346 425278	Unspecified Shafts	1892
58M	137.0	SE	412894 424743	Unspecified Old Shaft	1948
59K	138.0	W	412338 425202	Unspecified Old Shafts	1948
60K	138.0	W	412338 425202	Unspecified Old Shafts	1905
61L	139.0	SW	412350 425153	Unspecified Old Shafts	1905
62L	139.0	SW	412350 425153	Unspecified Old Shafts	1948
63L	139.0	SW	412351 425152	Unspecified Old Shafts	1951
64K	140.0	W	412336 425201	Unspecified Old Shafts	1951
65M	140.0	SE	412900 424744	Unspecified Old Shaft	1951
66	155.0	SW	412371 425071	Unspecified Old Shaft	1905

ID	Distance (m)	Direction	NGR	Details	Date
67	189.0	W	412289 425186	Unspecified Old Shafts	1951
68N	193.0	NE	413249 425200	Unspecified Old Shaft	1948
69N	199.0	NE	413251 425205	Unspecified Old Shaft	1951
70N	201.0	NE	413255 425207	Unspecified Disused Shaft	1973
71N	201.0	NE	413255 425207	Unspecified Disused Shaft	1984
72O	209.0	S	413125 424749	Unspecified Old Shaft	1951
73O	211.0	S	413122 424746	Unspecified Old Shaft	1948
74P	345.0	S	413084 424599	Unspecified Old Shaft	1951
75P	348.0	S	413083 424595	Unspecified Old Shaft	1905
76P	348.0	S	413083 424595	Unspecified Old Shaft	1948
77Q	352.0	SE	412962 424537	Unspecified Old Shaft	1951
78Q	354.0	SE	412959 424532	Unspecified Old Shaft	1948
79Q	354.0	SE	412959 424532	Unspecified Old Shaft	1905
80R	432.0	S	413128 424518	Unspecified Old Shafts	1951
81R	435.0	S	413127 424513	Unspecified Old Shaft	1905
82R	435.0	S	413127 424513	Unspecified Old Shaft	1948
83S	470.0	S	413200 424498	Unspecified Old Shafts	1951
84S	472.0	S	413199 424495	Unspecified Old Shafts	1948
85T	514.0	S	413191 424448	Unspecified Disused Shaft	1969
86T	517.0	S	413185 424444	Unspecified Old Shaft	1951
87	518.0	N	412646 425775	Unspecified Old Shaft	1905
88T	520.0	S	413186 424440	Unspecified Old Shaft	1948
89T	520.0	S	413186 424440	Unspecified Old Shaft	1905
Not shown	567.0	S	412594 424194	Clay and Coal Pit	1976
Not shown	570.0	S	412580 424196	Clay and Coal Pit	1951
Not shown	586.0	S	412576 424187	Clay and Coal Pit	1948
93U	588.0	SE	413391 424464	Unspecified Disused Shaft	1969
94U	590.0	SE	413390 424461	Unspecified Old Shaft	1951
95U	592.0	SE	413389 424457	Unspecified Old Shaft	1905

ID	Distance (m)	Direction	NGR	Details	Date
96U	592.0	SE	413389 424457	Unspecified Old Shaft	1948
97V	702.0	SW	411982 424681	Unspecified Old Shaft	1948
98V	703.0	SW	411983 424681	Unspecified Old Shaft	1951
Not shown	741.0	W	411411 425430	Colliery	1948
Not shown	822.0	SE	413450 424226	Unspecified Old Shafts	1951
Not shown	825.0	SE	413451 424222	Unspecified Old Shafts	1948
Not shown	825.0	SE	413451 424222	Unspecified Shafts	1905
Not shown	827.0	SE	413527 424269	Unspecified Old Shaft	1951
Not shown	830.0	SE	413528 424265	Unspecified Old Shafts	1948
Not shown	830.0	SE	413528 424265	Unspecified Shafts	1905
Not shown	864.0	SW	411720 424786	Unspecified Disused Shaft	1976
Not shown	864.0	SW	411720 424786	Unspecified Disused Shaft	1969
Not shown	864.0	SW	411720 424786	Unspecified Disused Shaft	1981
Not shown	868.0	SW	411717 424780	Air Shaft	1989
Not shown	869.0	SW	411719 424776	Air Shaft	1976
Not shown	869.0	SW	411719 424776	Air Shaft	1981
Not shown	869.0	SW	411719 424776	Air Shaft	1969
Not shown	874.0	SW	411710 424789	Unspecified Old Shaft	1951
Not shown	874.0	SW	411709 424788	Unspecified Old Shaft	1948
Not shown	874.0	SW	411710 424777	Air Shaft	1948
Not shown	875.0	SE	413533 424215	Unspecified Old Shafts	1951
Not shown	875.0	SW	411710 424778	Air Shaft	1951
Not shown	878.0	SE	413535 424212	Unspecified Old Shafts	1948
Not shown	878.0	SE	413535 424212	Unspecified Shafts	1905
Not shown	901.0	SE	413478 424151	Unspecified Old Shafts	1951
Not shown	905.0	SE	413479 424146	Unspecified Old Shafts	1948
Not shown	932.0	SE	413530 424146	Unspecified Old Shafts	1951
Not shown	935.0	SE	413530 424140	Unspecified Old Shafts	1948
Not shown	965.0	W	411561 425617	Air Shaft	1973

ID	Distance (m)	Direction	NGR	Details	Date
Not shown	965.0	W	411561 425617	Air Shaft	1984
Not shown	976.0	S	413407 424033	Unspecified Disused Shaft	1969
Not shown	976.0	SE	413537 424099	Unspecified Old Shafts	1951
Not shown	979.0	SE	413536 424093	Unspecified Old Shafts	1948
Not shown	982.0	S	413402 424027	Unspecified Shaft	1948

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? Yes

The following Coal Mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0.0	On Site	The site lies in or in proximity to the coal mining reporting area as defined by the Coal Authority

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? Yes

The following non-coal mining information is provided by the BGS:

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
2	0.0	On Site	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
3	510.0	NE	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
Not shown	775.0	E	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
Not shown	875.0	NE	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? Yes

The following Non-Coal Mining Cavities information provided by Peter Brett Associates:

ID	Distance (m)	Direction	NGR	Address	Superficial Deposits	Bedrock Deposits	Extracted Mineral
6H	0.0	On Site	413000 425000	PARK, West Yorkshire	-	-	Flagstone
7	0.0	On Site	412800 425000	LEASE PLAN, West Yorkshire	-	-	Flagstone
8	16.0	SW	412600 425000	LEASE PLAN, West Yorkshire	-	-	Flagstone
9A	41.0	S	413000 424900	YEW TREE, West Yorkshire	-	-	Flagstone
10A	41.0	S	413000 424900	YEW HOUSE, West Yorkshire	-	-	Flagstone
11	44.0	SW	412700 424800	BROAD OAK, West Yorkshire	-	-	Flagstone
12B	47.0	SE	412800 424800	BROAD OAK FARM, West Yorkshire	-	-	Flagstone
13B	47.0	SE	412800 424800	LEASE PLAN, West Yorkshire	-	-	Flagstone
14C	71.0	SE	413100 424900	ROUGH HEY, West Yorkshire	-	-	Flagstone
15C	71.0	SE	413100 424900	YEW TREES, West Yorkshire	-	-	Flagstone
16I	81.0	W	412400 425200	SOUTH EDGE, West Yorkshire	-	-	Flagstone
17	127.0	SW	412600 424800	BRON, West Yorkshire	-	-	Flagstone
18D	149.0	E	413200 425000	LEASE PLAN, West Yorkshire	-	-	Flagstone
19D	149.0	E	413200 425000	LEASE PLANS, West Yorkshire	-	-	Flagstone

ID	Distance (m)	Direction	NGR	Address	Superficial Deposits	Bedrock Deposits	Extracted Mineral
20	153.0	NE	413200 425200	GAUBERT HALL, West Yorkshire	-	-	Flagstone
21E	154.0	SW	412500 424900	STUBBINS, West Yorkshire	-	-	Flagstone
22E	154.0	SW	412500 424900	HIGH HOUSE, West Yorkshire	-	-	Flagstone
23E	154.0	SW	412500 424900	POCKET STILE, West Yorkshire	-	-	Flagstone
24	161.0	E	413200 424900	HILLTOP, West Yorkshire	-	-	Flagstone
25L	180.0	W	412300 425200	MIDDLE WOOLHOUSE, West Yorkshire	-	-	Flagstone
26	182.0	SE	412900 424700	HARLEY HEAD, West Yorkshire	-	-	Flagstone
27	293.0	SW	412400 424800	FW120/66, LEASE PLAN, West Yorkshire	-	-	Flagstone
28	326.0	S	412800 424500	HALIFAX, West Yorkshire	-	-	Fireclay
29	349.0	E	413400 425000	LEASE PLAN, West Yorkshire	-	-	Flagstone
30	372.0	W	412100 425300	STATION ROAD, West Yorkshire	-	-	Flagstone
31F	450.0	S	412900 424400	TUCKROYD, West Yorkshire	-	-	Flagstone
32F	450.0	S	412900 424400	TUCKROYD, West Yorkshire	-	-	Flagstone
33	456.0	E	413500 424900	CROWS NEST, West Yorkshire	-	-	Flagstone
34	525.0	SW	412000 425000	SOUTH EDGE, West Yorkshire	-	-	Flagstone
35	566.0	S	413200 424400	PINFOLD, West Yorkshire	-	-	Flagstone
36G	650.0	SE	413400 424400	LOWER GREEN FARM, West Yorkshire	-	-	Flagstone
37G	650.0	SE	413400 424400	POND, West Yorkshire	-	-	Flagstone
38	709.0	NW	411900 425700	FW95/143, LEASE PLANS, West Yorkshire	-	-	Flagstone
Not shown	825.0	SE	413400 424200	HILL CREST, West Yorkshire	-	-	Flagstone
Not shown	861.0	S	413000 424000	HOVE EDGE, West Yorkshire	-	-	Flagstone
Not shown	873.0	SE	413500 424200	PREMIER, West Yorkshire	-	-	Flagstone
Not shown	873.0	SE	413500 424200	FINKIE, West Yorkshire	-	-	Flagstone
Not shown	873.0	SE	413500 424200	KLONDYKE, West Yorkshire	-	-	Flagstone
Not shown	873.0	SE	413500 424200	HOVE EDGE, West Yorkshire	-	-	Flagstone

ID	Distance (m)	Direction	NGR	Address	Superficial Deposits	Bedrock Deposits	Extracted Mineral
Not shown	929.0	SE	413600 424200	LEASE PLAN, West Yorkshire	-	-	Flagstone
Not shown	979.0	S	413300 424000	CLOGSOLE, West Yorkshire	-	-	Flagstone

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.9 Cornwall and Devon Metalliferous Mining

This dataset provides information on metalliferous mining areas in Cornwall/Devon and is derived from records held by Mining Searches UK.

Are there any Cornwall and Devon Metalliferous Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

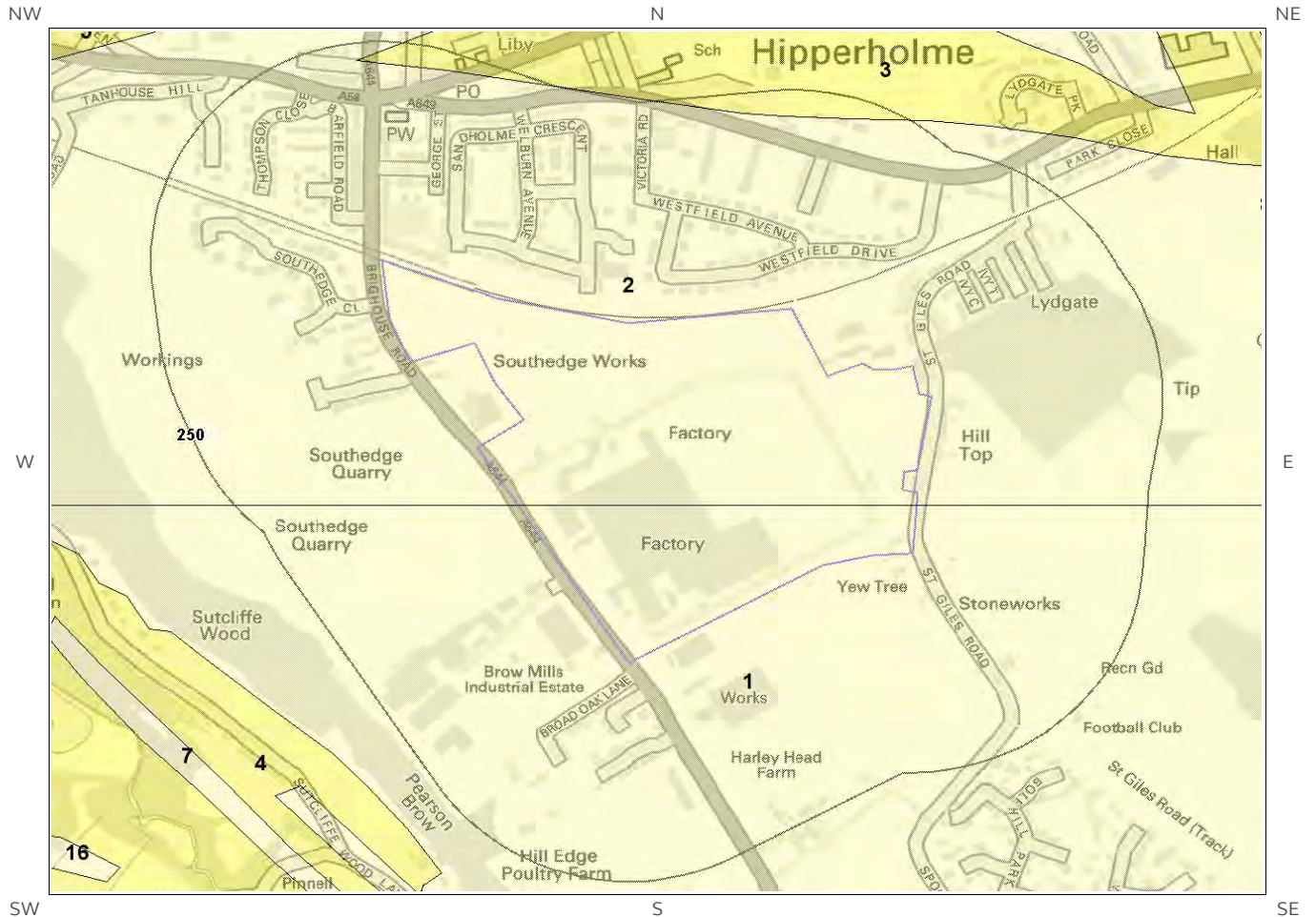
Are there any Clay Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map

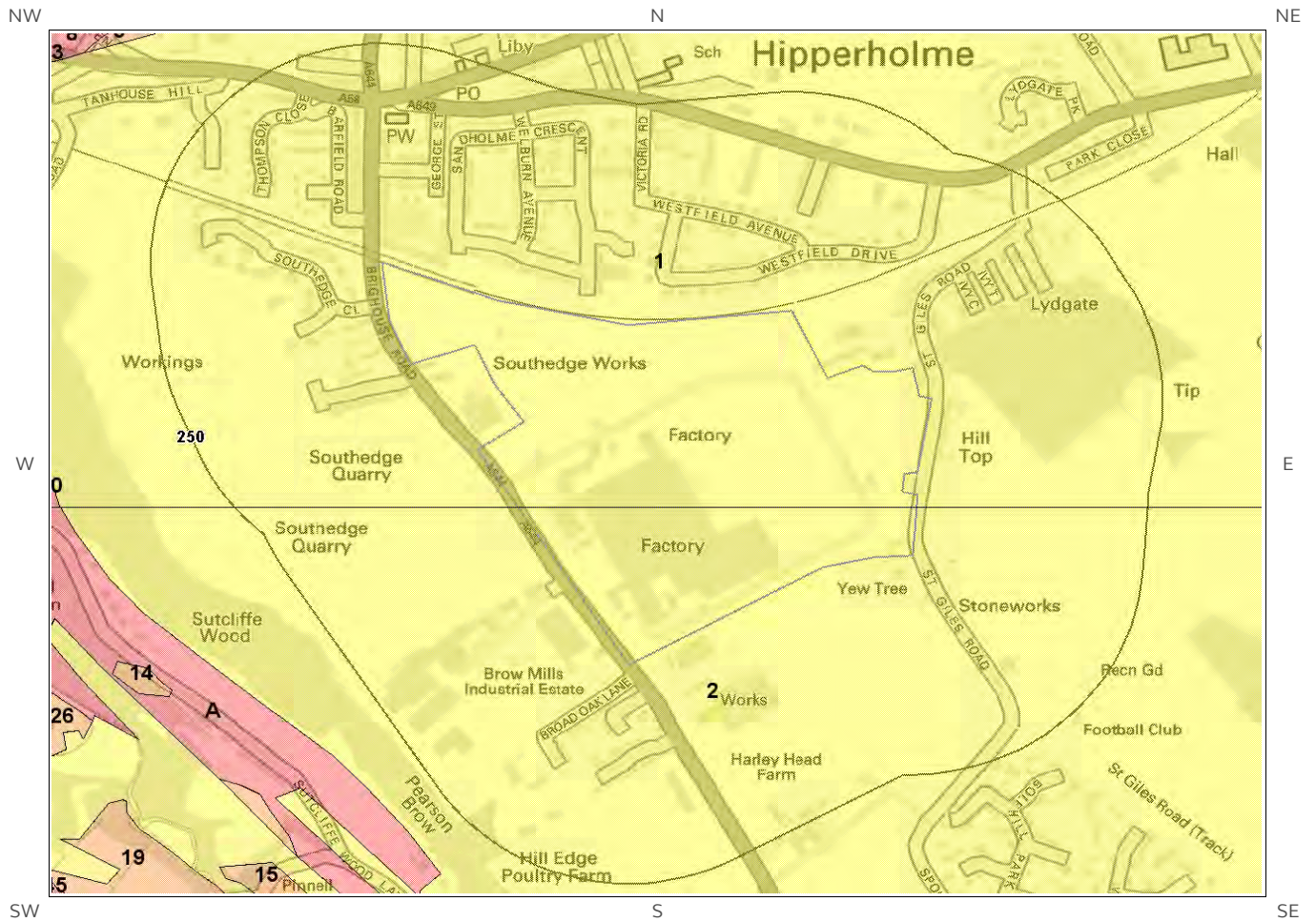


Shrink Swell Clay Legend

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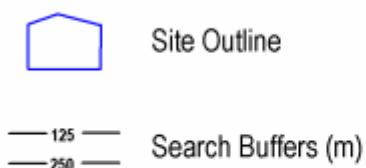


6.2 Landslides map

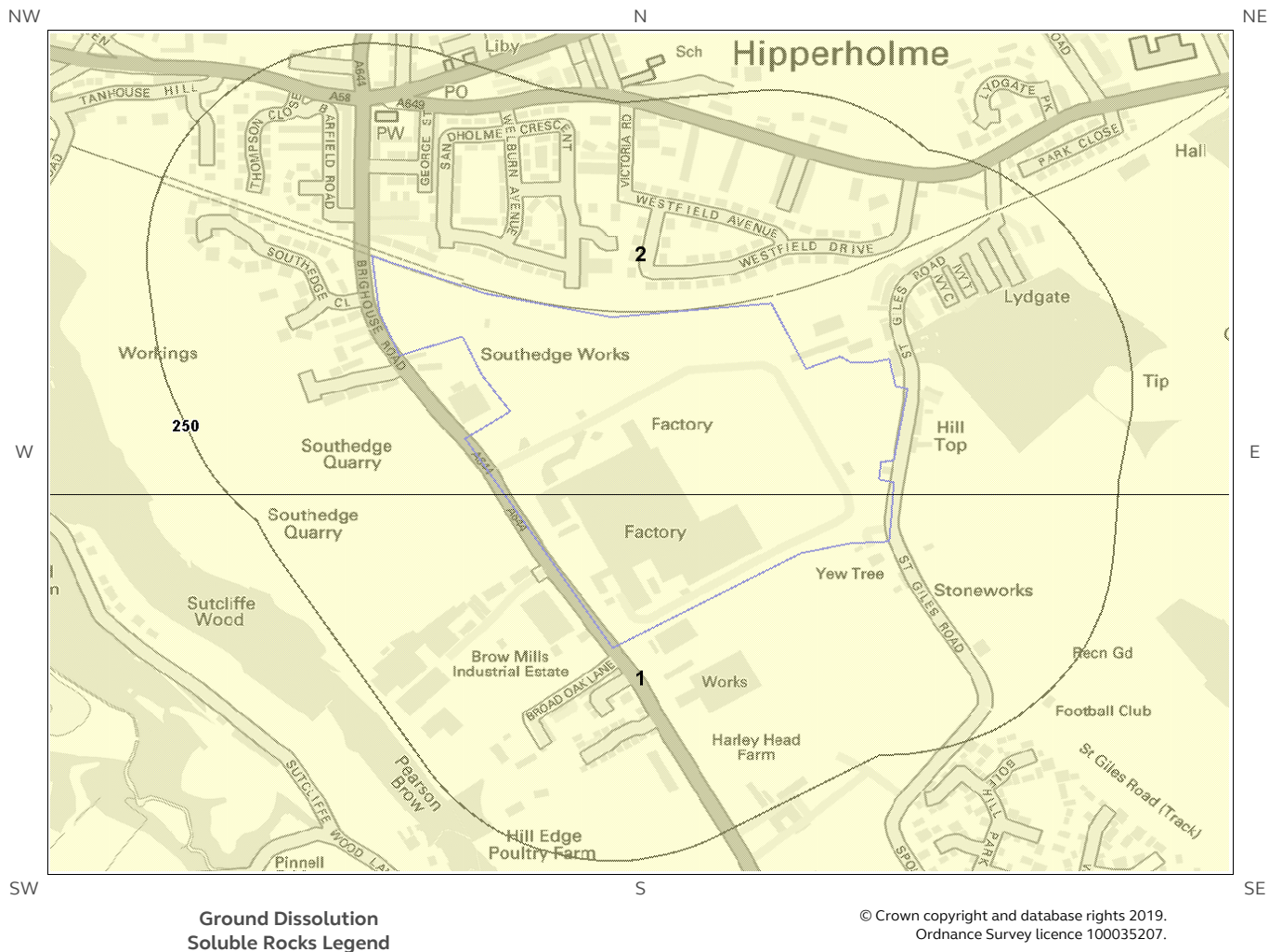


Landslides Legend

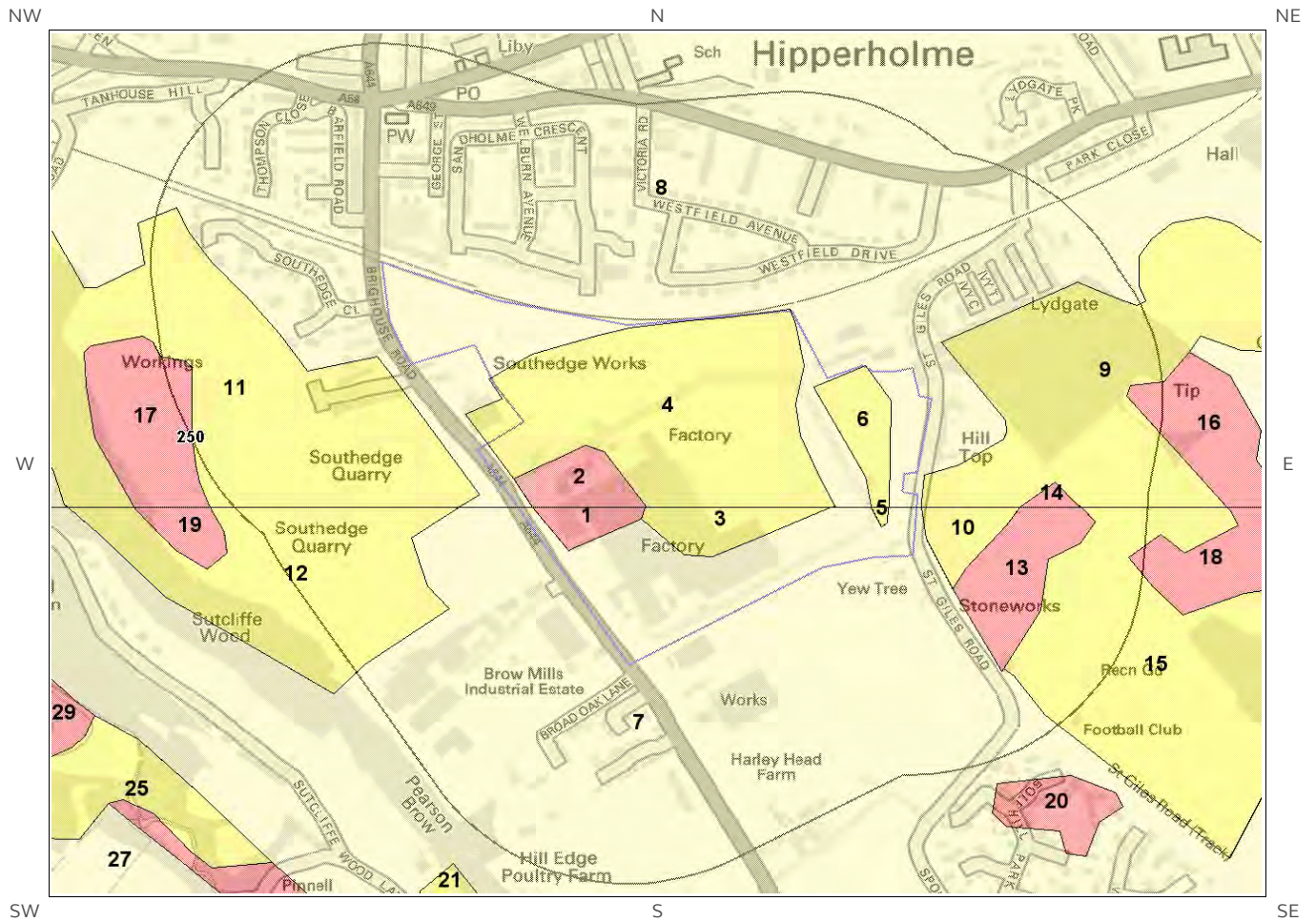
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6.3 Ground Dissolution of Soluble Rocks map



6.4 Compressible Deposits map



Compressible Deposits Legend

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6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site* boundary? **Moderate**

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.
2	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.
2	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

* This includes an automatically generated 50m buffer zone around the site

6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.
2	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build - consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
2	0.0	On Site	Moderate	Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build - consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property - possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.
3	0.0	On Site	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
4	0.0	On Site	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
5	0.0	On Site	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
6	0.0	On Site	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
7	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

ID	Distance (m)	Direction	Hazard Rating	Details
8	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
9	4.0	E	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
10	5.0	E	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.
11	23.0	SW	Very Low	Very low potential for compressible deposits to be present. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.
2	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
2	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
3	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
4	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

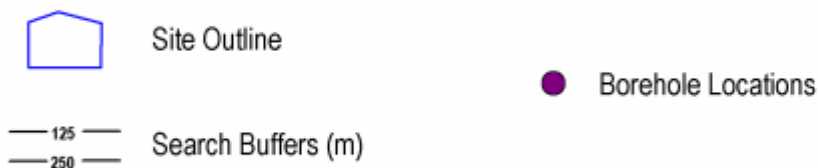
ID	Distance (m)	Direction	Hazard Rating	Details
5	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
6	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
7	4.0	E	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
8	5.0	E	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.
9	23.0	SW	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

7 Borehole Records map



Borehole Records Legend

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7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

14

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	77.0	SE	412770 424750	SE12SW635	Not Available	HALIFAX ROAD HIPPERHOLME TP1
2	81.0	S	412750 424740	SE12SW633	Not Available	HALIFAX ROAD HIPPERHOLME 6
3A	91.0	S	412730 424730	SE12SW636	Not Available	HALIFAX ROAD HIPPERHOLME TP2
4B	96.0	S	412770 424730	SE12SW628	Not Available	HALIFAX ROAD HIPPERHOLME 1
5A	100.0	S	412740 424720	SE12SW629	Not Available	HALIFAX ROAD HIPPERHOLME 2
6B	103.0	S	412760 424720	SE12SW634	Not Available	HALIFAX ROAD HIPPERHOLME 7
7C	104.0	S	412710 424720	SE12SW632	Not Available	HALIFAX ROAD HIPPERHOLME 5
8C	108.0	S	412700 424720	SE12SW637	Not Available	HALIFAX ROAD HIPPERHOLME TP3
9B	108.0	S	412780 424720	SE12SW640	Not Available	HALIFAX ROAD HIPPERHOLME TP6
10	120.0	S	412740 424700	SE12SW639	Not Available	HALIFAX ROAD HIPPERHOLME TP5
11	126.0	S	412700 424700	SE12SW630	Not Available	HALIFAX ROAD HIPPERHOLME 3
12	141.0	S	412730 424680	SE12SW631	Not Available	HALIFAX ROAD HIPPERHOLME 4
13	146.0	S	412700 424680	SE12SW638	Not Available	HALIFAX ROAD HIPPERHOLME TP4
14	241.0	SE	413167 424737	SE12SW330	2	SPOUTHOUSE LN BRIGHOUSE TP 20

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#14: scans.bgs.ac.uk/sobi_scans/boreholes/44374

8 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

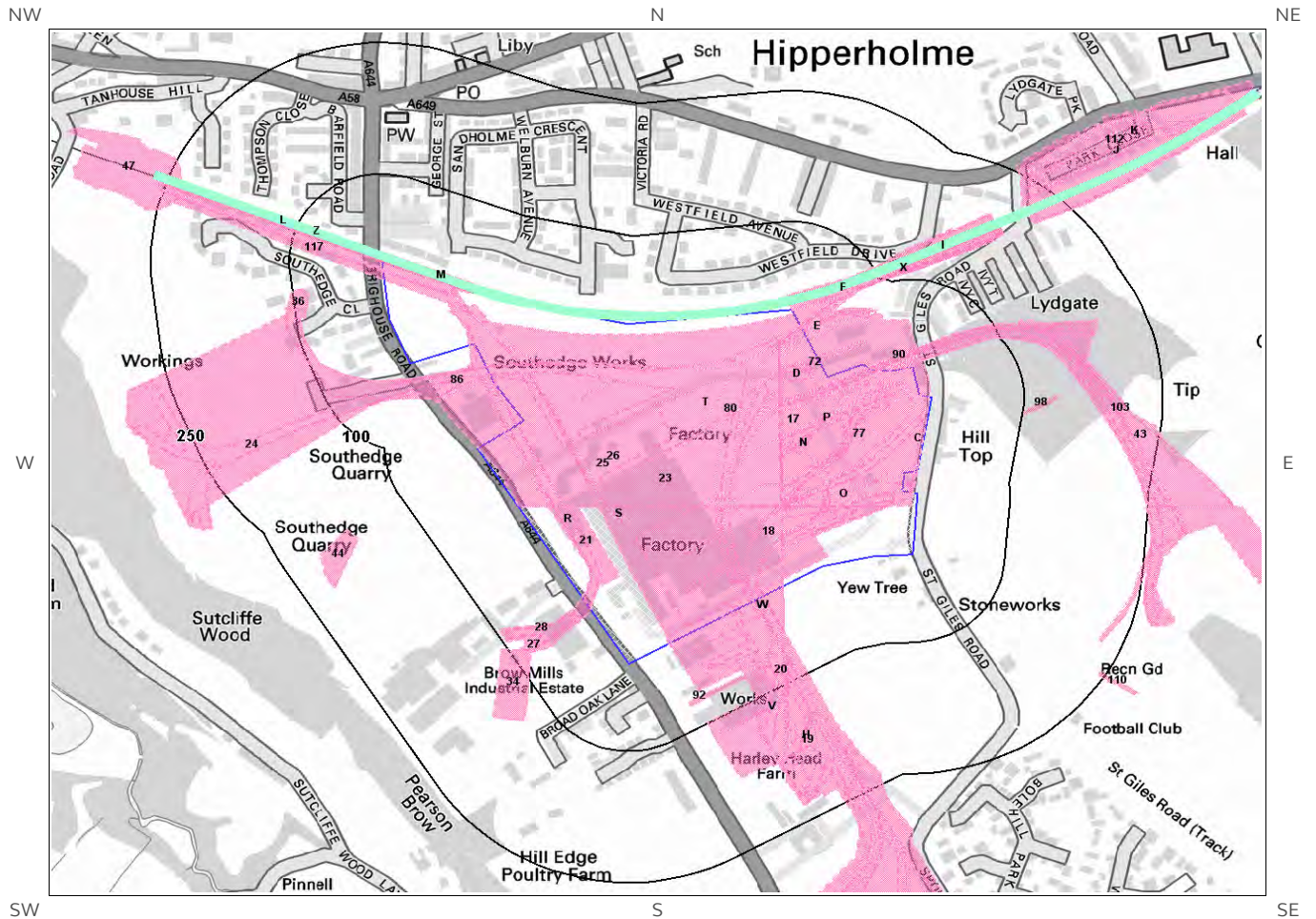
10

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	25 - 35 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg
0.0	On Site	RuralSoil	15 - 25 mg/kg	<1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg	100 - 200 mg/kg

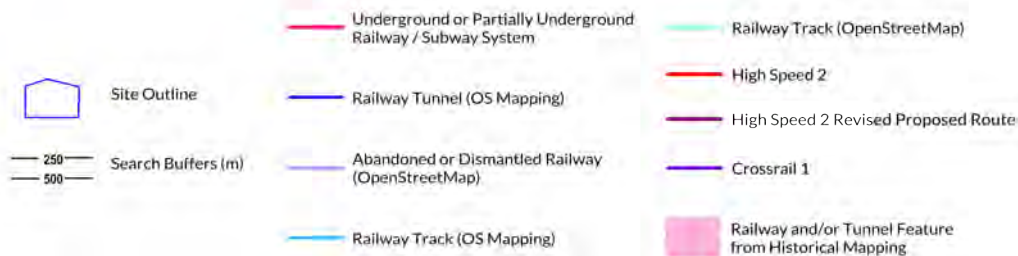
*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

9 Railways and Tunnels map



Railways and Tunnels Legend

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9 Railways and Tunnels

9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? Yes

Distance (m)	Direction	Detail
3	N	Railway Tunnel

Any records that have been identified are represented on the Railways and Tunnels map.

9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? Yes

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
1D	0	On Site	412919 425150	Mineral Railway Sidings	1931
2A	0	On Site	413298 425034	Mineral Railway Sidings	1938
3A	0	On Site	413298 425034	Mineral Railway Sidings	1938
4A	0	On Site	413298 425034	Mineral Railway Sidings	1931

ID	Distance (m)	Direction	NGR	Details	Date
5C	0	On Site	412947 425098	Mineral Railway Sidings	1948
6B	0	On Site	412942 425042	Mineral Railway Sidings	1931
7B	0	On Site	412942 425042	Mineral Railway Sidings	1938
8B	0	On Site	412942 425042	Mineral Railway Sidings	1938
9C	0	On Site	412976 425038	Mineral Railway Sidings	1948
10D	0	On Site	412919 425150	Mineral Railway Sidings	1938
11D	0	On Site	412919 425150	Mineral Railway Sidings	1938
12E	0	On Site	412928 425197	Mineral Railway Sidings	1938
13E	0	On Site	412928 425197	Mineral Railway Sidings	1938
14E	0	On Site	412928 425197	Mineral Railway Sidings	1931
15E	0	On Site	412930 425197	Mineral Railway Sidings	1905
16E	0	On Site	412930 425197	Mineral Railway Sidings	1948
17	0	On Site	412947 425098	Mineral Railway Sidings	1905
18	0	On Site	412914 424957	Railway Sidings	1955
19	0	On Site	412895 424778	Railway Sidings	1955
20	0	On Site	412986 424591	Mineral Railway Sidings	1969
21	0	On Site	412690 424954	Railway Sidings	1955
22T	0	On Site	412811 425167	Railway Sidings	1955
23	0	On Site	412800 425021	Railway Sidings	1905
24	0	On Site	412280 424980	Mineral Railway Sidings	1930
25	0	On Site	412687 424960	Mineral Railway Sidings	1938
26	0	On Site	412800 425021	Railway Sidings	1948
52M	0	On Site	412535 425261	Tunnel	1959
53Z	0	On Site	412403 425310	Tunnel	1958
54L	0	On Site	412367 425322	Tunnel	1991
55L	0	N	412368 425323	Tunnel	1959
56L	0	N	412368 425323	Tunnel	1975
58N	0	On Site	412928 425070	Railway Sidings	1907
59N	0	On Site	412928 425070	Railway Sidings	1893

ID	Distance (m)	Direction	NGR	Details	Date
60O	0	On Site	412976 425011	Mineral Railway Sidings	1907
61S	0	On Site	412728 424989	Railway Sidings	1984
62	0	On Site	412938 425057	Mineral Railway Sidings	1907
63P	0	On Site	412953 425098	Mineral Railway Sidings	1907
64Q	0	On Site	413018 425157	Mineral Railway Sidings	1907
65E	0	On Site	412927 425204	Mineral Railway Sidings	1922
66O	0	On Site	412979 425019	Mineral Railway Sidings	1922
67P	0	On Site	412914 425075	Mineral Railway Sidings	1922
68Q	0	On Site	413025 425161	Mineral Railway Sidings	1922
69E	0	On Site	412927 425204	Mineral Railway Sidings	1933
70A	0	On Site	413301 425037	Mineral Railway Sidings	1933
71B	0	On Site	412939 425050	Mineral Railway Sidings	1933
72	0	On Site	412947 425165	Mineral Railway Sidings	1933
73R	0	On Site	412672 424980	Mineral Railway Sidings	1959
74R	0	On Site	412672 424980	Mineral Railway Sidings	1966
75R	0	On Site	412674 424979	Mineral Railway Sidings	1984
76U	0	On Site	412993 425124	Railway Sidings	1893
77	0	On Site	412989 425080	Railway Sidings	1893
78S	0	On Site	412730 424988	Railway Sidings	1966
79T	0	On Site	412590 425129	Mineral Railway Sidings	1959
80	0	On Site	412540 425129	Mineral Railway Sidings	1958
81E	0	On Site	412927 425204	Mineral Railway Sidings	1907
82U	0	On Site	413009 425130	Railway Sidings	1959
83W	0	On Site	412890 424830	Mineral Railway Sidings	1984
84V	0	On Site	412967 424720	Mineral Railway Sidings	1966
85W	0	On Site	412889 424829	Mineral Railway Sidings	1959
86	0	SW	412554 425136	Disused Railway Sidings	1959
113Z	0	On Site	412397 425311	Tunnel	1955
114Z	0	On Site	412397 425311	Tunnel	1973

ID	Distance (m)	Direction	NGR	Details	Date
115Z	0	On Site	412397 425311	Tunnel	1984
116Z	0	On Site	412390 425306	Tunnel	1938
117	0	On Site	412392 425295	Tunnel	1930
118Z	0	On Site	412392 425305	Tunnel	1905
119Z	0	On Site	412392 425305	Tunnel	1948
120Z	0	On Site	412406 425305	Tunnel	1892
57M	1	N	412535 425263	Tunnel	1994
87X	1	NE	413040 425270	Railway Sidings	1907
88X	1	NE	413040 425270	Railway Sidings	1922
89X	1	NE	413040 425270	Railway Sidings	1933
90	11	N	413031 425170	Mineral Railway Sidings	1959
27	14	SW	412615 424820	Railway Sidings	1930
28	15	SW	412644 424862	Railway Sidings	1948
29F	29	NE	412968 425247	Railway Sidings	1948
30F	29	NE	412968 425247	Railway Sidings	1905
91F	31	NE	412971 425240	Railway Sidings	1932
31Y	65	SE	412929 424662	Railway Sidings	1905
32G	65	SE	412929 424662	Railway Sidings	1948
92	68	SE	412815 424780	Railway Sidings	1984
33G	73	SE	412998 424648	Railway Sidings	1948
93	73	SE	412942 424748	Mineral Railway Sidings	1907
94Y	75	SE	412997 424648	Mineral Railway Sidings	1933
95G	75	SE	413005 424639	Mineral Railway Sidings	1922
34	80	SW	412612 424795	Railway Sidings	1955
35V	83	SE	412894 424771	Railway Sidings	1948
36	83	W	412380 425232	Railway Sidings	1905
37H	83	SE	412934 424744	Railway Sidings	1931
38H	83	SE	412934 424744	Railway Sidings	1938
39H	83	SE	412934 424744	Railway Sidings	1938

ID	Distance (m)	Direction	NGR	Details	Date
96I	88	NE	413072 425285	Railway Sidings	1972
97I	88	NE	413072 425285	Railway Sidings	1959
98	100	E	413185 425117	Railway Sidings	1893
40I	103	N	413076 425292	Railway Sidings	1938
99I	106	N	413079 425287	Railway Sidings	1932
41I	108	N	413080 425300	Railway Sidings	1905
42I	108	N	413080 425300	Railway Sidings	1948
100I	109	N	413087 425293	Railway Sidings	1992
101I	109	N	413087 425293	Railway Sidings	1958
102I	109	N	413087 425293	Railway Sidings	1985
43	119	NE	413277 425106	Mineral Railway Sidings	1955
44	165	SW	412425 424940	Railway Sidings	1893
103	192	E	413270 425110	Mineral Railway Sidings	1959
45J	210	NE	413278 425398	Railway Sidings	1938
46J	216	NE	413287 425401	Railway Sidings	1955
104	223	SE	413286 424901	Railway Sidings	1893
47	230	W	412193 425386	Railway Sidings	1955
48K	231	NE	413297 425419	Railway Sidings	1905
49K	231	NE	413297 425419	Railway Sidings	1892
50K	231	NE	413297 425419	Railway Sidings	1948
105J	240	NE	413224 425409	Railway Sidings	1932
106J	242	NE	413249 425410	Railway Sidings	1922
107J	242	NE	413249 425410	Railway Sidings	1893
108J	242	NE	413249 425410	Railway Sidings	1933
109J	242	NE	413249 425410	Railway Sidings	1907
110	243	SE	413268 424799	Railway Sidings	1893
111K	244	NE	413238 425418	Railway Sidings	1959
112	246	NE	413227 425412	Railway Sidings	1958
51	248	E	413312 424957	Railway Sidings	1955

Any records that have been identified are represented on the Railways and Tunnels map.

9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels map.

9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? Yes

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
0	N	Not given	rail
0	N	Not given	rail
2	N	Not given	rail
2	N	Not given	Multi Track
2	N	Not given	Multi Track
2	N	Not given	rail
4	N	Not given	rail
4	N	Not given	rail
5	N	Not given	rail
5	N	Not given	rail
11	NE	Not given	Multi Track
11	NE	Not given	Multi Track
205	NE	Not given	rail
205	NE	Not given	rail
206	NE	Not given	rail
206	NE	Not given	rail
216	NE	Not given	rail
216	NE	Not given	rail
218	NE	Not given	rail
218	NE	Not given	rail

Multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels map.

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

*Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a **Groundsure HS2 and Crossrail 1 Report**.*

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

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NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 02-Jul-2018
Grid Reference: 412795,425063
Site Size: 14.4534ha

Report Reference: EMS-567572_762509
Client Reference: EMS_567572_762509

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Overview of Findings

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Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	107	24	232	247
1.2 Additional Information – Historical Tank Database	13	0	0	1
1.3 Additional Information – Historical Energy Features Database	1	4	3	6
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	7	8
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	38	9	146	148
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	1	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	1	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	1	0	1	1
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	2	0
2.1.9 Records of Water Industry Referrals	0	1	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	2
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	1	0	1	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	1	4	5	5	17
3.1.3 BGS/DoE Landfill Site Survey	0	0	1	3	3	5
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	1	3	1	3
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	4	2	8

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	8	8	27	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	1	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	Identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	None identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified					
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	11
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	5
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology		0-500m				
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	0	16	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding	
7.1 Environment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Low

Section 8: Designated Environmentally Sensitive Sites		On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	1	4	
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	3	
8.8 Records of World Heritage Sites	0	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	1	0	0	0	2

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Moderate
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Negligible
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Moderate
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	Identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

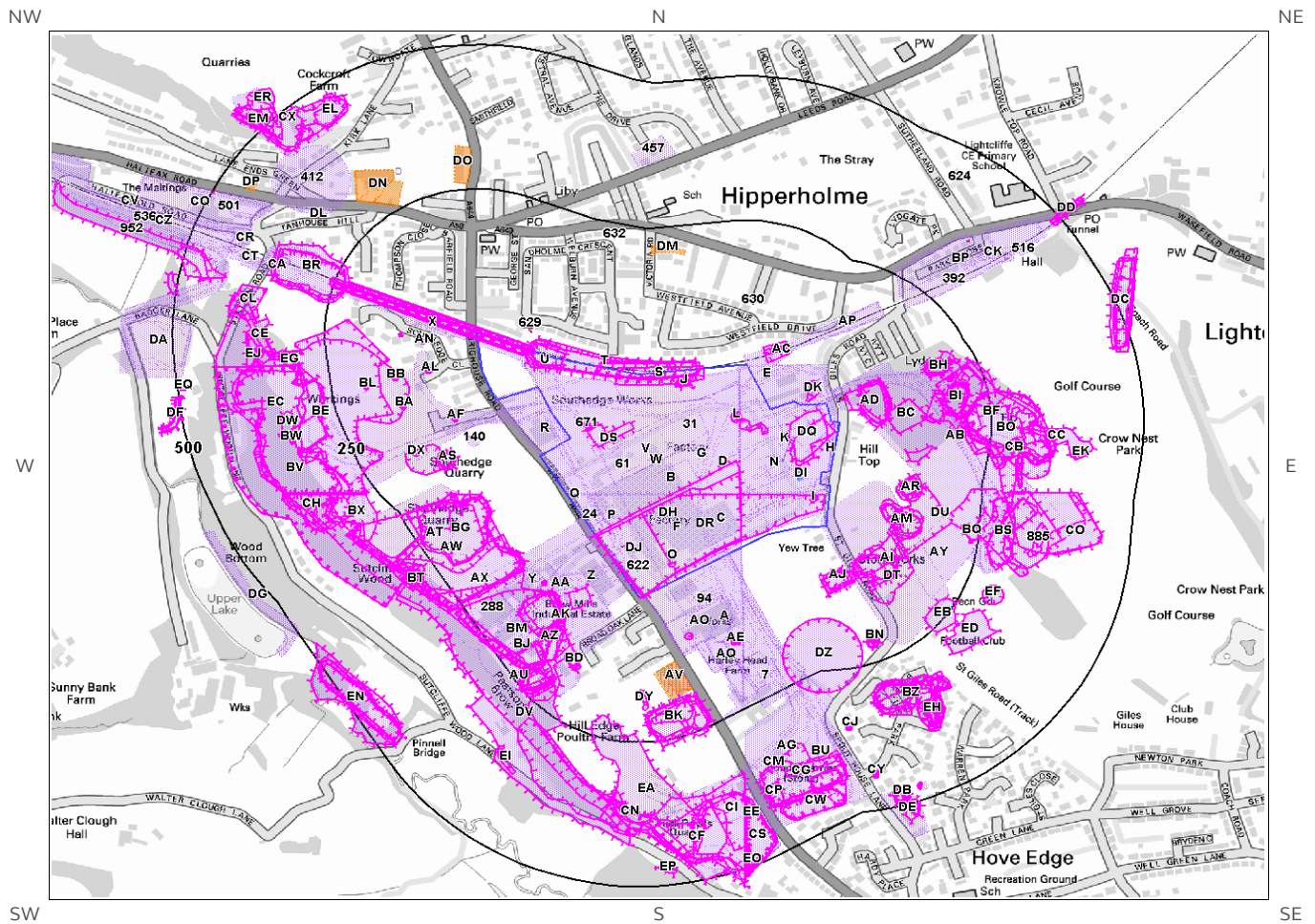
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

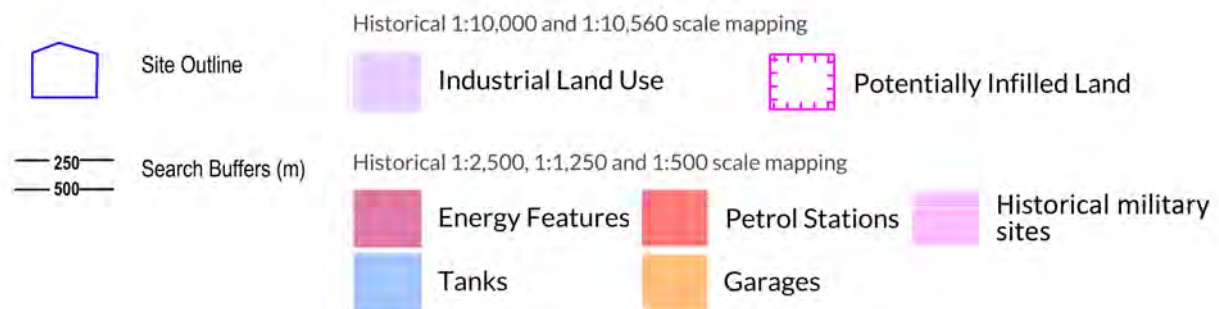
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 610

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Stone Works	1955
2A	0	On Site	Unspecified Works	1981
3DR	0	On Site	Unspecified Commercial/Industrial	1969
4C	0	On Site	Brick Works	1955
5B	0	On Site	Stone Works	1948
6B	0	On Site	Stone Works	1905
7	0	On Site	Railway Sidings	1955
8A	0	On Site	Unspecified Commercial/Industrial	1969
9O	0	On Site	Unspecified Tank	1955
10J	0	On Site	Filter Bed	1948
11C	0	On Site	Railway Sidings	1955
12D	0	On Site	Railway Building	1905
13D	0	On Site	Railway Building	1948
14D	0	On Site	Railway Building	1948
15D	0	On Site	Railway Building	1905
16L	0	On Site	Unspecified Heap	1893
17D	0	On Site	Railway Building	1905
18D	0	On Site	Railway Building	1948
19AE	0	On Site	Mineral Railway Sidings	1969
20F	0	On Site	Glazed Brick Works	1948
21E	0	On Site	Mineral Railway Sidings	1948
22E	0	On Site	Mineral Railway Sidings	1905
23P	0	On Site	Railway Sidings	1955
24	0	On Site	Unspecified Tanks	1948
25H	0	On Site	Mineral Railway Sidings	1948
26F	0	On Site	Unspecified Factory	1981
27Q	0	On Site	Unspecified Tanks	1955
28N	0	On Site	Unspecified Works	1955
29G	0	On Site	Unspecified Factory	1973
30G	0	On Site	Unspecified Factory	1984
31	0	On Site	Railway Sidings	1955
32H	0	On Site	Refuse Heap	1955
33I	0	On Site	Unspecified Old Shaft	1948

34I	0	On Site	Unspecified Old Shaft	1948
35I	0	On Site	Unspecified Old Shaft	1948
36I	0	On Site	Unspecified Disused Shaft	1969
37J	0	On Site	Filter Bed	1955
38K	0	On Site	Unspecified Works	1948
39K	0	On Site	Unspecified Works	1905
40K	0	On Site	Mineral Railway Sidings	1905
41K	0	On Site	Unspecified Works	1948
42L	0	On Site	Unspecified Ground Workings	1892
43H	0	On Site	Mineral Railway Sidings	1948
44E	0	On Site	Mineral Railway Sidings	1938
45M	0	On Site	Mineral Railway Sidings	1938
46I	0	On Site	Unspecified Old Shaft	1938
47K	0	On Site	Silex Works	1938
48I	0	On Site	Unspecified Old Shaft	1938
49E	0	On Site	Mineral Railway Sidings	1938
50M	0	On Site	Mineral Railway Sidings	1938
51N	0	On Site	Mineral Railway Sidings	1938
52K	0	On Site	Silex Works	1938
53M	0	On Site	Mineral Railway Sidings	1931
54N	0	On Site	Mineral Railway Sidings	1931
55E	0	On Site	Mineral Railway Sidings	1931
56K	0	On Site	Silex Works	1931
57AI	0	On Site	Stone Works	1989
58N	0	On Site	Mineral Railway Sidings	1938
59DQ	0	On Site	Unspecified Quarry	1892
60I	0	On Site	Unspecified Old Shaft	1931
61	0	On Site	Mineral Railway Sidings	1938
62Y	0	On Site	Unspecified Works	1976
63Z	0	On Site	Industrial Estate	1989
64W	0	On Site	Railway Sidings	1948
65B	0	On Site	Railway Sidings	1905
66F	0	On Site	Brick Works	1938
67F	0	On Site	Brick Works	1938
68O	0	On Site	Unspecified Tank	1938
69V	0	On Site	Stone Works	1938
70P	0	On Site	Unspecified Tanks	1938
71Q	0	On Site	Unspecified Tanks	1938
72DS	0	On Site	Stone Works	1955
73R	0	On Site	Unspecified Works	1973
74R	0	On Site	Unspecified Works	1984
75L	0	On Site	Mineral Railway Sidings	1938
76L	0	On Site	Mineral Railway Sidings	1938
77J	0	On Site	Filter Bed	1938
78J	0	On Site	Filter Bed	1938

79S	0	On Site	Cuttings	1893
80S	0	On Site	Cuttings	1938
81T	0	On Site	Cuttings	1955
82S	0	On Site	Cuttings	1948
83S	0	On Site	Cuttings	1905
84T	0	On Site	Cuttings	1973
85T	0	On Site	Cuttings	1984
86U	0	On Site	Cuttings	1930
87F	0	On Site	Unspecified Factory	1989
88F	0	On Site	Unspecified Factory	1976
89U	0	On Site	Cuttings	1948
90L	0	On Site	Mineral Railway Sidings	1931
91J	0	On Site	Filter Bed	1930
92F	0	On Site	Brick Works	1930
93V	0	On Site	Stone Works	1930
94	0	On Site	Stone Works	1930
95U	0	On Site	Cuttings	1938
96U	0	On Site	Cuttings	1892
97U	0	On Site	Cuttings	1905
98W	0	On Site	Mineral Railway Sidings	1930
99S	0	On Site	Cuttings	1930
100X	0	On Site	Tunnel	1930
101X	0	On Site	Tunnel	1938
102X	0	On Site	Tunnel	1892
103X	0	On Site	Tunnel	1948
104X	0	On Site	Tunnel	1905
105X	0	On Site	Tunnel	1984
106X	0	On Site	Tunnel	1955
107X	0	On Site	Tunnel	1973
108DK	6	N	Unspecified Heap	1892
109AK	6	SW	Unspecified Foundry	1981
110AA	9	SW	Unspecified Mills	1955
111Y	11	SW	Unspecified Works	1981
112Y	11	SW	Unspecified Works	1989
113Z	14	SW	Railway Sidings	1930
114AA	15	SW	Railway Sidings	1948
115AB	17	E	Silex Works	1938
116AB	17	E	Silex Works	1931
117AB	17	E	Silex Works	1938
118AC	29	NE	Railway Sidings	1948
119AC	29	NE	Railway Sidings	1905
120AD	31	NE	Unspecified Quarry	1905
121AC	32	NE	Cuttings	1892
122X	34	W	Unspecified Heap	1930
123AC	37	NE	Cuttings	1905
124AC	37	NE	Cuttings	1948

125AD	42	NE	Unspecified Pit	1948
126AD	42	NE	Unspecified Pit	1931
127AD	42	NE	Unspecified Pit	1938
128AD	42	NE	Unspecified Pit	1938
129AD	45	NE	Unspecified Pit	1948
130AD	45	NE	Unspecified Pit	1948
131AD	49	NE	Unspecified Pit	1955
132AZ	53	SW	Unspecified Foundry	1989
133AO	58	SE	Stone Works	1938
134A	61	SE	Stone Works	1948
135AE	63	SE	Unspecified Works	1976
136AE	63	SE	Unspecified Works	1989
137AA	64	SW	Unspecified Pit	1969
138AH	65	SE	Railway Sidings	1948
139	65	SE	Railway Sidings	1905
140	67	SW	Unspecified Old Shaft	1930
141AF	69	SW	Unspecified Old Shaft	1938
142AF	69	SW	Unspecified Old Shaft	1938
143AG	71	SE	Railway Land	1938
144AG	71	SE	Railway Land	1938
145AG	71	SE	Railway Land	1931
146AF	71	SW	Unspecified Shaft	1905
147AF	71	SW	Unspecified Old Shaft	1955
148AH	73	SE	Railway Sidings	1948
149AI	75	SE	Unspecified Disused Quarry	1955
150AI	75	SE	Unspecified Disused Quarry	1969
151BC	75	E	Unspecified Quarry	1892
152AI	77	SE	Unspecified Disused Quarry	1948
153AI	77	SE	Unspecified Disused Quarry	1938
154AI	77	SE	Unspecified Disused Quarry	1938
155AI	77	SE	Unspecified Disused Quarry	1931
156AJ	77	S	Unspecified Quarry	1955
157AI	78	SE	Unspecified Disused Quarry	1948
158AJ	80	S	Unspecified Disused Quarry	1969
159AK	80	SW	Railway Sidings	1955
160AL	82	W	Unspecified Shaft	1905
161AJ	82	S	Unspecified Quarry	1948
162AE	83	SE	Railway Sidings	1948
163AL	83	W	Railway Sidings	1905
164AE	83	SE	Railway Sidings	1938

165AE	83	SE	Railway Sidings	1931
166AE	83	SE	Railway Sidings	1938
167AJ	83	S	Unspecified Quarry	1948
168AJ	83	S	Unspecified Quarry	1938
169AJ	83	S	Unspecified Quarry	1938
170AJ	83	S	Unspecified Quarry	1931
171AM	85	E	Unspecified Ground Workings	1938
172AM	85	E	Unspecified Ground Workings	1938
173AM	85	E	Unspecified Ground Workings	1931
174AM	86	E	Unspecified Pit	1948
175AM	86	E	Unspecified Pit	1948
176AM	86	E	Unspecified Pit	1948
177AM	86	E	Unspecified Quarry	1905
178AN	86	W	Unspecified Shafts	1892
179AN	86	W	Unspecified Old Shafts	1905
180AM	89	E	Unspecified Pit	1955
181Y	89	SW	Unspecified Mill	1969
182AO	91	SE	Unspecified Old Shaft	1905
183AQ	103	SE	Nursery	1938
184AP	103	N	Railway Sidings	1938
185AP	108	N	Railway Sidings	1905
186AP	108	N	Railway Sidings	1948
187AK	109	SW	Unspecified Pit	1955
188DU	109	E	Unspecified Quarry	1892
189AK	109	SW	Unspecified Pit	1930
190AR	109	E	Unspecified Quarry	1948
191AQ	110	SE	Nursery	1948
192Y	111	SW	Unspecified Mills	1938
193AK	111	SW	Unspecified Pit	1938
194AK	111	SW	Unspecified Pit	1938
195Y	111	SW	Unspecified Mills	1948
196Y	112	SW	Unspecified Old Shaft	1905
197Y	112	SW	Unspecified Mill	1930
198DT	112	SE	Unspecified Quarry	1905
199AR	113	E	Unspecified Quarry	1955
200AK	113	SW	Unspecified Heap	1969
201AK	113	SW	Unspecified Heap	1976
202AT	113	SW	Unspecified Quarries	1930
203AS	113	SW	Refuse Heap	1930
204AR	114	E	Unspecified Quarry	1948
205AR	114	E	Unspecified Quarry	1905
206AS	114	SW	Refuse Heap	1938
207AS	114	SW	Refuse Heap	1938
208AS	115	SW	Unspecified Quarry	1948

209AS	115	SW	Refuse Heap	1955
210AX	115	SW	Unspecified Quarries	1893
211AQ	115	SE	Nursery	1930
212AQ	115	SE	Nursery	1955
213AT	116	SW	Unspecified Disused Quarries	1976
214AT	116	SW	Unspecified Disused Quarries	1989
215AT	116	SW	Unspecified Disused Quarries	1981
216AT	116	SW	Unspecified Disused Quarries	1955
217AW	117	SW	Unspecified Disused Quarries	1938
218BG	117	SW	Unspecified Disused Quarries	1969
219M	118	E	Refuse Heap	1892
220AS	118	SW	Unspecified Old Quarry	1905
221AI	119	E	Unspecified Disused Quarry	1981
222AB	119	NE	Mineral Railway Sidings	1955
223AU	119	SW	Unspecified Old Quarries	1948
224AU	119	SW	Unspecified Quarries	1905
225AN	123	W	Unspecified Old Shafts	1905
226AN	123	W	Unspecified Shafts	1892
227AV	123	SE	Garage	1981
228AV	123	SE	Garage	1976
229AV	123	SE	Garage	1989
230AW	123	SW	Unspecified Quarries	1905
231AW	123	SW	Unspecified Disused Quarries	1948
232BE	124	W	Unspecified Quarry	1973
233AX	127	SW	Refuse Heap	1989
234AV	128	SE	Garage	1969
235AY	133	E	Poultry Farm	1938
236AY	133	E	Poultry Farm	1938
237AY	133	E	Poultry Farm	1931
238AZ	135	SW	Refuse Heap	1955
239DV	135	SW	Unspecified Quarries	1893
240BJ	136	SW	Unspecified Works	1969
241AE	137	SE	Unspecified Old Shaft	1948
242BA	137	SW	Unspecified Old Shafts	1938
243BA	137	SW	Unspecified Old Shafts	1938
244AE	137	SE	Unspecified Old Shaft	1938
245AE	137	SE	Unspecified Old Shaft	1938
246AZ	137	SW	Refuse Heap	1930
247AZ	138	SW	Refuse Heap	1938
248AZ	138	SW	Refuse Heap	1938

249BA	138	SW	Unspecified Old Shaft	1930
250BB	138	W	Unspecified Old Shafts	1905
251BB	138	W	Unspecified Old Shafts	1948
252AE	139	SE	Unspecified Old Shaft	1930
253BB	139	W	Unspecified Old Shaft	1930
254BA	139	SW	Unspecified Old Shafts	1905
255BA	139	SW	Unspecified Old Shafts	1948
256BA	139	SW	Unspecified Old Shafts	1955
257BC	140	E	Refuse Heap	1948
258BB	140	W	Unspecified Old Shafts	1938
259BB	140	W	Unspecified Old Shafts	1938
260BB	140	W	Unspecified Old Shafts	1955
261AE	140	SE	Unspecified Old Shaft	1955
262BC	140	E	Refuse Heap	1948
263BC	140	E	Refuse Heap	1948
264BF	142	E	Unspecified Quarries	1955
265BD	147	SW	Unspecified Pit	1955
266BD	147	SW	Unspecified Pit	1938
267BD	147	SW	Unspecified Pit	1938
268BE	148	W	Unspecified Disused Quarry	1984
269BD	148	SW	Unspecified Pit	1930
270BD	150	SW	Unspecified Pit	1948
271DX	155	SW	Unspecified Old Shaft	1905
272DY	159	S	Unspecified Heap	1893
273DZ	160	S	Unspecified Quarries	1905
274BF	160	E	Refuse Heaps	1938
275BF	160	E	Refuse Heaps	1938
276BF	160	E	Refuse Heaps	1931
277BI	162	E	Unspecified Quarries	1948
278BG	165	SW	Railway Sidings	1893
279BH	166	NE	Unspecified Quarries	1948
280BH	167	NE	Unspecified Quarry	1948
281BI	167	E	Unspecified Quarry	1905
282BI	170	E	Refuse Heap	1892
283BM	171	SW	Unspecified Works	1969
284BH	171	NE	Unspecified Quarry	1955
285BJ	171	SW	Unspecified Foundry	1976
286BI	177	E	Refuse Heap	1948
287AU	181	SW	Unspecified Ground Workings	1955
288	182	SW	Unspecified Works	1969
289BJ	182	SW	Unspecified Heap	1938
290BJ	182	SW	Unspecified Heap	1938
291BJ	183	SW	Unspecified Heap	1930
292BK	184	S	Unspecified Quarries	1948

293BK	184	S	Unspecified Quarries	1905
294BL	187	W	Unspecified Old Shafts	1938
295BL	187	W	Unspecified Old Shafts	1938
296BK	189	SE	Unspecified Disused Quarries	1938
297BL	189	W	Unspecified Old Shafts	1955
298BL	189	W	Unspecified Old Shaft	1930
299BK	190	S	Unspecified Disused Quarry	1930
300BK	190	S	Unspecified Disused Quarries	1955
301BK	193	SE	Unspecified Quarries	1893
302BH	193	E	Unspecified Old Shaft	1938
303BH	193	E	Unspecified Old Shaft	1938
304BH	193	E	Unspecified Old Shaft	1931
305BH	193	NE	Unspecified Old Shaft	1948
306BJ	194	SW	Unspecified Ground Workings	1976
307BJ	194	SW	Unspecified Ground Workings	1981
308BK	194	S	Unspecified Disused Quarries	1969
309BH	195	NE	Unspecified Old Shaft	1948
310BH	195	NE	Unspecified Old Shaft	1948
311AU	198	SW	Unspecified Pit	1938
312AU	198	SW	Unspecified Pit	1938
313BH	199	NE	Unspecified Old Shaft	1955
314BI	199	E	Unspecified Ground Workings	1984
315BO	200	E	Unspecified Quarries	1948
316BM	201	SW	Unspecified Ground Workings	1969
317BH	201	NE	Unspecified Disused Shaft	1973
318BH	201	NE	Unspecified Disused Shaft	1984
319AU	201	SW	Unspecified Heap	1989
320AU	202	SW	Unspecified Pit	1930
321BN	202	S	Unspecified Heap	1955
322BF	203	E	Unspecified Quarries	1973
323BN	205	S	Unspecified Heap	1938
324BN	205	S	Unspecified Heap	1938
325BN	205	S	Unspecified Heap	1931
326AU	205	SW	Unspecified Pit	1969
327BN	206	S	Unspecified Heap	1948
328BO	207	E	Unspecified Quarries	1948
329CB	207	E	Unspecified Quarries	1905
330BN	207	S	Unspecified Heap	1948
331BN	207	S	Unspecified Heap	1948
332BN	209	S	Unspecified Old Shaft	1955

333BP	210	NE	Railway Sidings	1938
334BO	211	E	Refuse Heap	1984
335BN	211	S	Unspecified Old Shaft	1948
336EA	212	S	Unspecified Quarries	1893
337BN	212	S	Unspecified Old Shaft	1938
338BN	212	S	Unspecified Old Shaft	1938
339BN	212	S	Unspecified Old Shaft	1931
340BN	213	S	Unspecified Old Shaft	1948
341BN	213	S	Unspecified Old Shaft	1948
342BP	216	NE	Railway Sidings	1955
343EB	225	SE	Unspecified Pit	1905
344BQ	227	E	Unspecified Heap	1938
345BQ	227	E	Unspecified Heap	1938
346BQ	227	E	Unspecified Heap	1931
347BQ	227	E	Unspecified Heap	1948
348BQ	227	E	Unspecified Heap	1948
349BR	227	W	Cuttings	1973
350BR	227	W	Cuttings	1984
351BQ	228	E	Unspecified Heap	1948
352BR	230	W	Railway Sidings	1955
353BR	230	W	Cuttings	1948
354BR	230	W	Cuttings	1892
355BR	230	W	Cuttings	1905
356BR	230	W	Cuttings	1938
357BP	231	NE	Railway Sidings	1892
358BP	231	NE	Railway Sidings	1905
359BP	231	NE	Railway Sidings	1948
360BS	247	E	Unspecified Disused Quarry	1981
361BS	247	E	Unspecified Disused Quarry	1976
362BY	248	E	Railway Sidings	1955
363CA	250	W	Railway Station	1930
364BT	260	SW	Unspecified Heap	1969
365BT	260	SW	Unspecified Heap	1976
366BT	260	SW	Unspecified Heap	1981
367BU	263	SE	Railway Sidings	1938
368BU	263	SE	Railway Sidings	1938
369BU	263	SE	Railway Sidings	1931
370BV	263	W	Unspecified Quarries	1948
371EC	264	W	Unspecified Quarries	1955
372BW	265	W	Unspecified Quarries	1930
373BS	265	E	Unspecified Quarries	1948
374BS	266	E	Unspecified Quarry	1948
375BV	267	SW	Unspecified Old Quarries	1905
376BW	268	W	Unspecified Quarries	1938

377BX	268	SW	Sandstone Quarry	1969
378BX	268	SW	Unspecified Disused Quarry	1981
379BX	268	SW	Unspecified Disused Quarry	1976
380BX	268	SW	Unspecified Disused Quarry	1989
381ED	273	SE	Unspecified Quarry	1892
382EE	275	SW	Unspecified Quarry	1955
383EF	281	SE	Sandstone Quarries	1976
384BY	285	E	Refuse Heap	1989
385BZ	285	S	Unspecified Ground Workings	1892
386BZ	286	S	Unspecified Disused Quarry	1976
387BZ	286	S	Unspecified Disused Quarry	1981
388BZ	286	S	Unspecified Heap	1969
389BS	287	E	Unspecified Quarry	1969
390BV	289	W	Unspecified Quarries	1893
391BZ	289	S	Unspecified Heap	1955
392	290	NE	Railway Building	1938
393BZ	292	S	Unspecified Ground Workings	1938
394BZ	292	S	Unspecified Ground Workings	1931
395BZ	292	S	Unspecified Ground Workings	1938
396BZ	292	S	Unspecified Heap	1948
397BZ	293	S	Unspecified Heap	1905
398BZ	295	S	Unspecified Heap	1948
399BZ	295	S	Unspecified Heap	1948
400CC	297	E	Unspecified Quarry	1892
401BX	299	SW	Unspecified Quarry	1955
402EG	299	W	Unspecified Quarry	1905
403CA	300	W	Railway Buildings	1905
404CA	300	W	Railway Buildings	1948
405BZ	303	SE	Unspecified Heap	1948
406BZ	303	SE	Unspecified Heap	1948
407BZ	304	SE	Unspecified Quarry	1948
408CA	307	W	Railway Building	1892
409CB	311	E	Unspecified Quarries	1938
410CC	311	E	Unspecified Quarries	1938
411CB	311	E	Unspecified Quarries	1931
412	315	NW	Tannery	1892
413CH	317	SW	Refuse Heap	1955
414DW	320	W	Unspecified Heap	1955
415CD	322	S	Railway Sidings	1938
416BP	323	NE	Railway Station	1938

417CD	325	S	Railway Sidings	1930
418BP	327	NE	Railway Building	1948
419BP	327	NE	Railway Building	1892
420BP	327	NE	Railway Building	1905
421CA	330	W	Railway Station	1948
422CA	330	W	Railway Station	1905
423CA	331	W	Railway Station	1938
424BP	332	NE	Railway Building	1955
425CE	333	W	Refuse Heap	1905
426CF	334	S	Unspecified Quarry	1905
427CA	334	NW	Railway Station	1955
428CA	334	W	Railway Buildings	1892
429CI	334	SE	Railway Sidings	1905
430CE	335	W	Refuse Heap	1892
431EH	339	SE	Unspecified Quarry	1905
432EI	340	SW	Unspecified Heap	1893
433CF	341	S	Unspecified Quarry	1948
434CG	343	SE	Unspecified Quarries	1989
435CG	343	SE	Unspecified Quarries	1981
436CG	343	SE	Unspecified Quarries	1976
437CJ	345	S	Unspecified Old Shaft	1955
438CH	345	SW	Unspecified Ground Workings	1981
439CH	345	SW	Unspecified Ground Workings	1976
440CH	345	SW	Unspecified Ground Workings	1969
441CH	345	SW	Unspecified Ground Workings	1989
442CI	348	SE	Railway Sidings	1948
443CJ	348	S	Unspecified Old Shaft	1948
444CJ	348	S	Unspecified Old Shaft	1905
445CJ	349	S	Unspecified Old Shaft	1948
446CJ	349	S	Unspecified Old Shaft	1948
447CJ	349	S	Unspecified Old Shaft	1938
448CJ	349	S	Unspecified Old Shaft	1938
449CJ	349	S	Unspecified Old Shaft	1931
450CF	350	S	Unspecified Quarry	1969
451CF	350	S	Unspecified Disused Quarry	1981
452CF	350	S	Unspecified Disused Quarry	1976
453CK	351	NE	Railway Station	1905
454CK	351	NE	Railway Station	1948
455EJ	352	W	Refuse Heap	1905
456AG	352	SE	Unspecified Old Shaft	1955
457	352	N	Telephone Exchange	1973
458CK	353	NE	Railway Station	1892

459CL	353	W	Cuttings	1984
460CL	353	W	Cuttings	1973
461CF	353	S	Unspecified Quarry	1930
462CM	354	SE	Unspecified Old Shaft	1905
463CM	354	SE	Unspecified Old Shaft	1948
464CN	354	S	Refuse Heap	1938
465CN	354	S	Refuse Heap	1938
466CK	355	NE	Railway Buildings	1955
467CM	356	SE	Unspecified Old Shaft	1938
468CM	356	SE	Unspecified Old Shaft	1938
469CM	356	SE	Unspecified Old Shaft	1931
470CM	357	SE	Unspecified Old Shaft	1948
471CM	357	SE	Unspecified Old Shaft	1948
472CG	358	SE	Unspecified Quarry	1955
473CG	361	SE	Unspecified Quarries	1969
474CO	365	E	Sandstone Quarries	1981
475CO	365	E	Sandstone Quarries	1976
476CF	367	S	Unspecified Quarry	1938
477CK	368	NE	Railway Building	1938
478CI	368	S	Unspecified Ground Workings and Heap	1930
479CT	379	W	Railway Building	1892
480CF	380	S	Unspecified Disused Quarry	1989
481CL	383	W	Cuttings	1905
482CL	383	W	Cuttings	1892
483CP	384	SE	Unspecified Quarries	1938
484CP	384	SE	Unspecified Quarries	1938
485CP	384	SE	Unspecified Quarries	1931
486CP	384	SE	Unspecified Quarries	1948
487CP	385	SE	Railway Sidings	1938
488CP	385	SE	Railway Sidings	1938
489CP	385	SE	Railway Sidings	1931
490CP	385	SE	Unspecified Quarries	1948
491CS	387	SE	Unspecified Quarries	1948
492CK	387	NE	Railway Station	1955
493EK	389	E	Unspecified Pit	1905
494BU	392	SE	Railway Building	1948
495CF	392	S	Refuse Heap	1938
496CF	392	S	Refuse Heap	1938
497CQ	398	NW	Unspecified Commercial/Industrial	1905
498CQ	398	NW	Brewery	1948
499CQ	400	NW	Unspecified Commercial/Industrial	1930
500CQ	402	NW	Brewery	1938
501	403	NW	Brewery	1892

502CR	404	W	Railway Building	1973
503CR	404	W	Railway Building	1984
504CS	406	SE	Unspecified Quarries	1938
505CS	406	SE	Unspecified Quarries	1938
506CS	406	SE	Unspecified Quarries	1931
507CS	406	SE	Unspecified Quarries	1948
508CQ	407	NW	Brewery	1973
509CQ	407	NW	Brewery	1955
510CQ	407	NW	Maltings	1984
511CG	407	SE	Unspecified Quarries	1948
512CV	408	NW	Railway Sidings	1892
513CG	408	SE	Unspecified Quarries	1938
514CG	408	SE	Unspecified Quarries	1938
515CG	408	SE	Unspecified Quarries	1931
516	409	NE	Railway Building	1955
517CG	409	SE	Unspecified Quarries	1948
518CT	411	W	Railway Buildings	1905
519CT	411	W	Railway Buildings	1948
520CR	414	W	Railway Station	1892
521CU	420	W	Tramway Sidings	1948
522CZ	423	W	Railway Sidings	1930
523CU	423	W	Refuse Heap	1984
524CU	425	W	Tramway Sidings	1930
525	425	W	Tramway Sidings	1938
526CT	425	W	Railway Building	1955
527CX	426	NW	Unspecified Disused Quarries	1930
528CW	429	SE	Unspecified Quarries	1948
529CV	429	NW	Railway Sidings	1938
530CW	429	SE	Unspecified Quarries	1948
531CU	429	W	Tramway Sidings	1955
532CW	430	SE	Unspecified Quarries	1938
533CW	430	SE	Unspecified Quarries	1938
534CW	430	SE	Unspecified Quarries	1931
535CV	430	W	Railway Sidings	1905
536	430	W	Railway Sidings	1948
537CX	431	NW	Unspecified Disused Quarries	1938
538EL	432	NW	Unspecified Disused Quarries	1948
539CY	432	S	Unspecified Old Shafts	1955
540CR	432	NW	Railway Building	1984
541CV	433	W	Railway Sidings	1955
542CX	434	NW	Unspecified Quarries	1905
543CY	435	S	Unspecified Old Shaft	1948
544CY	435	S	Unspecified Old Shaft	1905
545CX	435	NW	Unspecified Disused	1955

Quarries				
546CY	436	S	Unspecified Old Shafts	1948
547CY	436	S	Unspecified Old Shafts	1948
548CY	436	S	Unspecified Old Shafts	1938
549CY	436	S	Unspecified Old Shafts	1938
550CY	436	S	Unspecified Old Shafts	1931
551CX	438	NW	Unspecified Disused Quarries	1948
552CR	439	NW	Railway Building	1892
553EN	446	SW	Refuse Heap	1989
554CZ	451	W	Unspecified Ground Workings	1955
555CZ	458	W	Railway Sidings	1930
556EO	462	S	Unspecified Quarry	1905
557EP	464	S	Unspecified Pit	1893
558CX	464	NW	Unspecified Disused Quarries	1984
559CX	464	NW	Unspecified Disused Quarries	1973
560DB	467	S	Unspecified Quarry	1955
561DC	468	E	Cuttings	1938
562DA	468	W	Unspecified Mill	1948
563DA	468	W	Unspecified Mill	1905
564DE	469	S	Unspecified Works	1969
565DB	469	S	Unspecified Quarry	1969
566DA	469	W	Unspecified Mill	1930
567DA	469	W	Unspecified Mill	1955
568DA	469	W	Unspecified Commercial/Industrial	1973
569DB	470	S	Unspecified Old Shafts	1955
570DA	470	W	Unspecified Mill	1892
571DB	471	S	Unspecified Quarries	1948
572DB	471	S	Refuse Heap	1938
573DB	471	S	Refuse Heap	1938
574DB	471	S	Refuse Heap	1931
575DB	471	S	Unspecified Quarry	1948
576DB	472	S	Unspecified Old Shafts	1948
577DC	472	E	Cuttings	1948
578DC	472	E	Cuttings	1905
579DC	472	E	Cuttings	1892
580DC	472	E	Cuttings	1955
581DB	473	S	Unspecified Old Shafts	1938
582DB	473	S	Unspecified Old Shafts	1938
583DB	473	S	Unspecified Old Shafts	1931
584DB	475	S	Unspecified Old Shafts	1948
585DB	475	S	Unspecified Old Shafts	1948
586DC	482	E	Cuttings	1973

587DC	482	E	Cuttings	1984
588DD	483	NE	Tunnel	1938
589DD	486	NE	Tunnel	1948
590DD	486	NE	Tunnel	1905
591EQ	488	W	Trial Hole	1905
592DD	493	NE	Tunnel	1955
593DD	493	NE	Tunnel	1973
594DD	493	NE	Tunnel	1984
595DE	494	S	Unspecified Heap	1955
596DG	495	SW	Railway Sidings	1955
597CU	497	W	Refuse Heap	1984
598DF	497	W	Unspecified Heap	1948
599DE	498	S	Unspecified Heap	1948
600DE	498	S	Unspecified Heap	1948
601DE	498	S	Unspecified Heap	1938
602DE	498	S	Unspecified Heap	1938
603DE	498	S	Unspecified Heap	1931
604EM	498	NW	Unspecified Heap	1905
605DB	499	S	Unspecified Heap	1948
606ER	499	NW	Unspecified Quarries	1905
607DF	499	W	Unspecified Ground Workings	1938
608DF	499	W	Unspecified Ground Workings	1938
609DG	500	SW	Railway Sidings	1938
610DF	500	W	Unspecified Ground Workings	1955

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

14

ID	Distance (m)	Direction	Use	Date
611DH	0	On Site	Unspecified Tank	1966
612DH	0	On Site	Unspecified Tank	1984
613DI	0	On Site	Unspecified Tank	1992
614F	0	On Site	Unspecified Tank	1959
615DI	0	On Site	Unspecified Tank	1972
616N	0	On Site	Unspecified Tank	1922
617N	0	On Site	Unspecified Tank	1907
618N	0	On Site	Unspecified Tank	1893
619DI	0	On Site	Unspecified Tank	1994

620DJ	0	On Site	Unspecified Tank	1993
621DJ	0	On Site	Unspecified Tank	1993
622	0	On Site	Unspecified Tank	1993
623DI	0	On Site	Unspecified Tank	1985
624	442	NE	Unspecified Tank	1893

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

14

ID	Distance (m)	Direction	Use	Date
625DJ	0	On Site	Electricity Substation	1993
626DK	24	E	Electricity Substation	1985
627AD	25	E	Electricity Substation	1972
628AD	25	E	Electricity Substation	1992
629	31	N	Electricity Substation	1994
630	105	N	Electricity Substation	1994
631Y	117	SW	Electricity Substation	1993
632	224	N	Electricity Substation	1994
633DL	325	NW	Electricity Substation	1975
634DL	326	NW	Electricity Substation	1991
635CK	363	NE	Electricity Substation	1985
636CK	364	NE	Electricity Substation	1992
637CQ	495	NW	Electricity Substation	1983
638CQ	495	NW	Electricity Substation	1994

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary:

0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

15

ID	Distance (m)	Direction	Use	Date
639AV	123	SE	Garage	1966
640AV	124	SE	Garage	1984
641AV	124	SE	Garage	1959
642AV	125	SE	Garage	1993
643DM	200	N	Garage	1959
644DM	205	N	Garage	1958
645DM	214	N	Garage	1994
646DN	256	NW	Garage	1994
647DN	256	NW	Garage	1983
648DO	259	N	Garage	1983
649DO	260	N	Garage	1994
650DN	282	NW	Garage	1959
651DN	282	NW	Garage	1958
652DP	441	NW	Garage	1983
653DP	441	NW	Garage	1994

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site:

341

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
654F	0	On Site	Glazed Brick Works	1948
655I	0	On Site	Unspecified Old Shaft	1948
656I	0	On Site	Unspecified Disused Shaft	1969
657DQ	0	On Site	Refuse Heap	1955
658J	0	On Site	Filter Bed	1955
659J	0	On Site	Filter Bed	1948
660DR	0	On Site	Brick Works	1955

661L	0	On Site	Unspecified Ground Workings	1892
662L	0	On Site	Unspecified Heap	1893
663DS	0	On Site	Reservoirs	1948
664J	0	On Site	Filter Bed	1938
665J	0	On Site	Filter Bed	1938
666J	0	On Site	Reservoir	1905
667S	0	On Site	Cuttings	1893
668S	0	On Site	Cuttings	1905
669S	0	On Site	Cuttings	1948
670DS	0	On Site	Reservoirs	1955
671	0	On Site	Reservoir	1938
672T	0	On Site	Cuttings	1955
673T	0	On Site	Cuttings	1984
674T	0	On Site	Cuttings	1973
675F	0	On Site	Brick Works	1938
676F	0	On Site	Brick Works	1938
677U	0	On Site	Cuttings	1905
678U	0	On Site	Cuttings	1948
679U	0	On Site	Cuttings	1892
680I	0	On Site	Unspecified Old Shaft	1948
681I	0	On Site	Unspecified Old Shaft	1948
682X	0	On Site	Tunnel	1892
683X	0	On Site	Tunnel	1984
684X	0	On Site	Tunnel	1955
685X	0	On Site	Tunnel	1973
686X	0	On Site	Tunnel	1948
687X	0	On Site	Tunnel	1938
688U	0	On Site	Cuttings	1938
689DQ	0	On Site	Unspecified Quarry	1892
690X	0	On Site	Tunnel	1905
691S	0	On Site	Cuttings	1938
692DK	6	N	Unspecified Heap	1892
693AD	31	NE	Unspecified Quarry	1905
694AC	32	NE	Cuttings	1892
695AC	37	NE	Cuttings	1905
696AC	37	NE	Cuttings	1948
697AD	42	NE	Unspecified Pit	1948
698AD	45	NE	Unspecified Pit	1948
699AD	45	NE	Unspecified Pit	1948
700AD	49	NE	Unspecified Pit	1955
701AA	64	SW	Unspecified Pit	1969
702AF	69	SW	Unspecified Old Shaft	1938
703AF	69	SW	Unspecified Old Shaft	1938
704AF	71	SW	Unspecified Shaft	1905
705AF	71	SW	Unspecified Old Shaft	1955

706DT	75	SE	Unspecified Disused Quarry	1955
707AI	75	SE	Unspecified Disused Quarry	1969
708BC	75	E	Unspecified Quarry	1892
709AI	77	SE	Unspecified Disused Quarry	1948
710AJ	77	S	Unspecified Quarry	1955
711AI	78	SE	Unspecified Disused Quarry	1948
712AJ	80	S	Unspecified Disused Quarry	1969
713AL	82	W	Unspecified Shaft	1905
714AJ	82	S	Unspecified Quarry	1948
715AJ	83	S	Unspecified Quarry	1948
716AM	86	E	Unspecified Pit	1948
717AM	86	E	Unspecified Pit	1948
718AM	86	E	Unspecified Pit	1948
719AM	86	E	Unspecified Quarry	1905
720AN	86	W	Unspecified Shafts	1892
721AN	86	W	Unspecified Old Shafts	1905
722AM	89	E	Unspecified Pit	1955
723AO	91	SE	Unspecified Old Shaft	1905
724AK	109	SW	Unspecified Pit	1955
725DU	109	E	Unspecified Quarry	1892
726AR	109	E	Unspecified Quarry	1948
727AK	111	SW	Unspecified Pit	1938
728AK	111	SW	Unspecified Pit	1938
729Y	112	SW	Unspecified Old Shaft	1905
730DT	112	SE	Unspecified Quarry	1905
731AR	113	E	Unspecified Quarry	1955
732AK	113	SW	Unspecified Heap	1969
733AK	113	SW	Unspecified Heap	1976
734AR	114	E	Unspecified Quarry	1948
735AR	114	E	Unspecified Quarry	1905
736AS	114	SW	Refuse Heap	1938
737AS	114	SW	Refuse Heap	1938
738AS	115	SW	Unspecified Quarry	1948
739AS	115	SW	Refuse Heap	1955
740AX	115	SW	Unspecified Quarries	1893
741AT	116	SW	Unspecified Disused Quarries	1976
742AT	116	SW	Unspecified Disused Quarries	1989
743AT	116	SW	Unspecified Disused Quarries	1981
744AT	116	SW	Unspecified Disused Quarries	1955
745AW	117	SW	Unspecified Disused	1938

Quarries				
746BG	117	SW	Unspecified Disused Quarries	1969
747M	118	E	Refuse Heap	1892
748AS	118	SW	Unspecified Old Quarry	1905
749AI	119	E	Unspecified Disused Quarry	1981
750AU	119	SW	Unspecified Old Quarries	1948
751AU	119	SW	Unspecified Quarries	1905
752AN	123	W	Unspecified Old Shafts	1905
753AN	123	W	Unspecified Shafts	1892
754AW	123	SW	Unspecified Quarries	1905
755AW	123	SW	Unspecified Disused Quarries	1948
756BE	124	W	Unspecified Quarry	1973
757AX	127	SW	Refuse Heap	1989
758AZ	135	SW	Refuse Heap	1955
759DV	135	SW	Unspecified Quarries	1893
760AE	137	SE	Unspecified Old Shaft	1948
761BA	137	SW	Unspecified Old Shafts	1938
762BA	137	SW	Unspecified Old Shafts	1938
763AE	137	SE	Unspecified Old Shaft	1938
764AE	137	SE	Unspecified Old Shaft	1938
765AZ	138	SW	Refuse Heap	1938
766AZ	138	SW	Refuse Heap	1938
767BB	138	W	Unspecified Old Shafts	1905
768BB	138	W	Unspecified Old Shafts	1948
769BA	139	SW	Unspecified Old Shafts	1905
770BA	139	SW	Unspecified Old Shafts	1948
771BA	139	SW	Unspecified Old Shafts	1955
772BC	140	E	Refuse Heap	1948
773BB	140	W	Unspecified Old Shafts	1938
774BB	140	W	Unspecified Old Shafts	1938
775BB	140	W	Unspecified Old Shafts	1955
776AE	140	SE	Unspecified Old Shaft	1955
777BC	140	E	Refuse Heap	1948
778BC	140	E	Refuse Heap	1948
779BF	142	E	Unspecified Quarries	1955
780BD	147	SW	Unspecified Pit	1955
781BD	147	SW	Unspecified Pit	1938
782BD	147	SW	Unspecified Pit	1938
783DW	148	W	Unspecified Disused Quarry	1984
784BD	150	SW	Unspecified Pit	1948
785DX	155	SW	Unspecified Old Shaft	1905
786DY	159	S	Unspecified Heap	1893
787DZ	160	S	Unspecified Quarries	1905

788BI	162	E	Unspecified Quarries	1948
789BH	166	NE	Unspecified Quarries	1948
790BH	167	NE	Unspecified Quarry	1948
791BI	167	E	Unspecified Quarry	1905
792BI	170	E	Refuse Heap	1892
793BH	171	NE	Unspecified Quarry	1955
794BI	177	E	Refuse Heap	1948
795AU	181	SW	Unspecified Ground Workings	1955
796BJ	182	SW	Unspecified Heap	1938
797BJ	182	SW	Unspecified Heap	1938
798BK	184	S	Unspecified Quarries	1905
799BK	184	S	Unspecified Quarries	1948
800BL	187	W	Unspecified Old Shafts	1938
801BL	187	W	Unspecified Old Shafts	1938
802BK	189	SE	Unspecified Disused Quarries	1938
803BL	189	W	Unspecified Old Shafts	1955
804BK	190	S	Unspecified Disused Quarries	1955
805BK	193	SE	Unspecified Quarries	1893
806BH	193	NE	Unspecified Old Shaft	1948
807BJ	194	SW	Unspecified Ground Workings	1981
808BJ	194	SW	Unspecified Ground Workings	1976
809BK	194	S	Unspecified Disused Quarries	1969
810BH	195	NE	Unspecified Old Shaft	1948
811BH	195	NE	Unspecified Old Shaft	1948
812AU	198	SW	Unspecified Pit	1938
813AU	198	SW	Unspecified Pit	1938
814BH	199	NE	Unspecified Old Shaft	1955
815BI	199	E	Unspecified Ground Workings	1984
816BO	200	E	Unspecified Quarries	1948
817BM	201	SW	Unspecified Ground Workings	1969
818BH	201	NE	Unspecified Disused Shaft	1984
819BH	201	NE	Unspecified Disused Shaft	1973
820AU	201	SW	Unspecified Heap	1989
821BN	202	S	Unspecified Heap	1955
822BF	203	E	Unspecified Quarries	1973
823AU	205	SW	Unspecified Pit	1969
824BN	206	S	Unspecified Heap	1948
825CB	207	E	Unspecified Quarries	1948
826CB	207	E	Unspecified Quarries	1905
827BN	207	S	Unspecified Heap	1948

828BN	207	S	Unspecified Heap	1948
829BN	209	S	Unspecified Old Shaft	1955
830BO	211	E	Refuse Heap	1984
831BN	211	S	Unspecified Old Shaft	1948
832EA	212	S	Unspecified Quarries	1893
833BN	213	S	Unspecified Old Shaft	1948
834BN	213	S	Unspecified Old Shaft	1948
835EB	225	SE	Unspecified Pit	1905
836BQ	227	E	Unspecified Heap	1948
837BQ	227	E	Unspecified Heap	1948
838BR	227	W	Cuttings	1973
839BR	227	W	Cuttings	1984
840BQ	228	E	Unspecified Heap	1948
841BR	230	W	Cuttings	1905
842BR	230	W	Cuttings	1892
843BR	230	W	Cuttings	1948
844BR	230	W	Cuttings	1938
845BS	247	E	Unspecified Disused Quarry	1976
846BS	247	E	Unspecified Disused Quarry	1981
847BT	260	SW	Unspecified Heap	1981
848BT	260	SW	Unspecified Heap	1969
849BT	260	SW	Unspecified Heap	1976
850BV	263	W	Unspecified Quarries	1948
851EC	264	W	Unspecified Quarries	1955
852BS	265	E	Unspecified Quarries	1948
853BS	266	E	Unspecified Quarry	1948
854BV	267	SW	Unspecified Old Quarries	1905
855BW	268	W	Unspecified Quarries	1938
856BX	268	SW	Unspecified Disused Quarry	1989
857BX	268	SW	Unspecified Disused Quarry	1976
858BX	268	SW	Unspecified Disused Quarry	1981
859BX	268	SW	Sandstone Quarry	1969
860ED	273	SE	Unspecified Quarry	1892
861EE	275	SW	Unspecified Quarry	1955
862EF	281	SE	Sandstone Quarries	1976
863CO	285	E	Refuse Heap	1989
864BZ	285	S	Unspecified Ground Workings	1892
865BZ	286	S	Unspecified Heap	1969
866BZ	286	S	Unspecified Disused Quarry	1976
867BZ	286	S	Unspecified Disused Quarry	1981

868BS	287	E	Unspecified Quarry	1969
869BV	289	W	Unspecified Quarries	1893
870BZ	289	S	Unspecified Heap	1955
871BZ	292	S	Unspecified Heap	1948
872BZ	293	S	Unspecified Heap	1905
873BZ	295	S	Unspecified Heap	1948
874BZ	295	S	Unspecified Heap	1948
875CC	297	E	Unspecified Quarry	1892
876BX	299	SW	Unspecified Quarry	1955
877EG	299	W	Unspecified Quarry	1905
878BZ	303	SE	Unspecified Heap	1948
879BZ	303	SE	Unspecified Heap	1948
880EH	304	SE	Unspecified Quarry	1948
881CH	317	SW	Refuse Heap	1955
882DW	320	W	Unspecified Heap	1955
883CE	333	W	Refuse Heap	1905
884CF	334	S	Unspecified Quarry	1905
885	334	E	Ponds	1969
886CE	335	W	Refuse Heap	1892
887BZ	335	SE	Pond	1976
888BZ	335	SE	Pond	1981
889BZ	335	SE	Pond	1969
890EH	339	SE	Unspecified Quarry	1905
891EI	340	SW	Unspecified Heap	1893
892CF	341	S	Unspecified Quarry	1948
893CG	343	SE	Unspecified Quarries	1989
894CG	343	SE	Unspecified Quarries	1976
895CG	343	SE	Unspecified Quarries	1981
896CJ	345	S	Unspecified Old Shaft	1955
897CH	345	SW	Unspecified Ground Workings	1981
898CH	345	SW	Unspecified Ground Workings	1969
899CH	345	SW	Unspecified Ground Workings	1976
900CH	345	SW	Unspecified Ground Workings	1989
901CJ	348	S	Unspecified Old Shaft	1948
902CJ	348	S	Unspecified Old Shaft	1905
903CJ	349	S	Unspecified Old Shaft	1948
904CJ	349	S	Unspecified Old Shaft	1948
905CF	350	S	Unspecified Disused Quarry	1976
906CF	350	S	Unspecified Disused Quarry	1981
907CF	350	S	Unspecified Quarry	1969
908EJ	352	W	Refuse Heap	1905
909CG	352	SE	Unspecified Old Shaft	1955

910CL	353	W	Cuttings	1973
911CL	353	W	Cuttings	1984
912CM	354	SE	Unspecified Old Shaft	1948
913CM	354	SE	Unspecified Old Shaft	1905
914CN	354	S	Refuse Heap	1938
915CN	354	S	Refuse Heap	1938
916EH	356	SE	Pond	1955
917CG	357	SE	Unspecified Old Shaft	1948
918CG	357	SE	Unspecified Old Shaft	1948
919CG	358	SE	Unspecified Quarry	1955
920EH	359	SE	Pond	1948
921EH	359	SE	Pond	1948
922CG	361	SE	Unspecified Quarries	1969
923CO	365	E	Sandstone Quarries	1976
924CO	365	E	Sandstone Quarries	1981
925CF	367	S	Unspecified Quarry	1938
926CF	380	S	Unspecified Disused Quarry	1989
927CL	383	W	Cuttings	1892
928CL	383	W	Cuttings	1905
929CP	384	SE	Unspecified Quarries	1948
930CP	385	SE	Unspecified Quarries	1948
931CS	387	SE	Unspecified Quarries	1948
932EK	389	E	Unspecified Pit	1905
933CF	392	S	Refuse Heap	1938
934CF	392	S	Refuse Heap	1938
935CS	406	SE	Unspecified Quarries	1948
936CG	407	SE	Unspecified Quarries	1948
937CG	409	SE	Unspecified Quarries	1948
938CU	423	W	Refuse Heap	1984
939CW	429	SE	Unspecified Quarries	1948
940CW	429	SE	Unspecified Quarries	1948
941CX	431	NW	Unspecified Disused Quarries	1938
942EL	432	NW	Unspecified Disused Quarries	1948
943CY	432	S	Unspecified Old Shafts	1955
944CX	434	NW	Unspecified Quarries	1905
945CY	435	S	Unspecified Old Shaft	1905
946CY	435	S	Unspecified Old Shaft	1948
947CX	435	NW	Unspecified Disused Quarries	1955
948CY	436	S	Unspecified Old Shafts	1948
949CY	436	S	Unspecified Old Shafts	1948
950EM	438	NW	Unspecified Disused Quarries	1948
951EN	446	SW	Refuse Heap	1989

952	451	W	Unspecified Ground Workings	1955
953EN	452	SW	Lake	1955
954EN	452	SW	Lake	1938
955EN	455	SW	Pond	1893
956EN	456	SW	Lake	1905
957EN	456	SW	Lake	1948
958EO	462	S	Unspecified Quarry	1905
959EP	464	S	Unspecified Pit	1893
960EM	464	NW	Unspecified Disused Quarries	1984
961EM	464	NW	Unspecified Disused Quarries	1973
962DB	467	S	Unspecified Quarry	1955
963DC	468	E	Cuttings	1938
964DB	469	S	Unspecified Quarry	1969
965DB	470	S	Unspecified Old Shafts	1955
966DB	471	S	Unspecified Quarries	1948
967DB	471	S	Unspecified Quarry	1948
968DB	472	S	Unspecified Old Shafts	1948
969DC	472	E	Cuttings	1948
970DC	472	E	Cuttings	1892
971DC	472	E	Cuttings	1905
972DC	472	E	Cuttings	1955
973DB	475	S	Unspecified Old Shafts	1948
974DB	475	S	Unspecified Old Shafts	1948
975DC	482	E	Cuttings	1973
976DC	482	E	Cuttings	1984
977DD	483	NE	Tunnel	1938
978DD	486	NE	Tunnel	1905
979DD	486	NE	Tunnel	1948
980EQ	488	W	Trial Hole	1905
981DD	493	NE	Tunnel	1984
982DD	493	NE	Tunnel	1955
983DD	493	NE	Tunnel	1973
984DE	494	S	Unspecified Heap	1955
985CU	497	W	Refuse Heap	1984
986DF	497	W	Unspecified Heap	1948
987DE	498	S	Unspecified Heap	1948
988DE	498	S	Unspecified Heap	1948
989EM	498	NW	Unspecified Heap	1905
990DE	499	S	Unspecified Heap	1948
991ER	499	NW	Unspecified Quarries	1905
992DF	499	W	Unspecified Ground Workings	1938
993DF	499	W	Unspecified Ground Workings	1938

994DF	500	W	Unspecified Ground Workings	1955
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2. Environmental Permits, Incidents and Registers Map



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2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

1

The following List 1 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
3	200	SW	412497 424822	Name: Moss Metal Finishing Ltd, Brighthouse Road Status: Active Receiving Water: - Authorised Substances: Cadmium

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

1

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
4B	138	SE	412900 424750	Name: Marshalls Mono Ltd, Halifax Rd,halifax Status: Not Active Receiving Water: River Calder Authorised Substances: Chromium, Iron

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

3

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
7	0	On Site	412763 424983	Address: Crosslee Plc, Lightcliffe Factory, Hipperholme, HX3 8DE Process: Coating Processes Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
8	134	SE	412800 424701	Address: Marshalls Mono Ltd, Hipperholme Works, Halifax Rd, Hipperholme, HX3 8BS Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
9	487	W	411999 425399	Address: George Watson Construction Ltd, Station Rd, Hipperholme, Halifax, HX3 8HW Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

2

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
5B	138	SE	412900 424750	Address: MARSHALLS MONO LIMITED, HIPPERHOLME WORKS, HALIFAX ROAD, HALIFAX, WEST YORKSHIRE, HX3 8BS Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: WRA7496 Permit Version: 1	Receiving Water: UNDERGROUND STRATA Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 15/03/1999 Effective Date: 15-Mar-1999 Revocation Date: 14/03/2000
6B	138	SE	412900 424750	Address: MARSHALLS MONO LIMITED, HIPPERHOLME WORKS, HALIFAX ROAD, HALIFAX, WEST YORKSHIRE, HX3 8BS Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: WRA7496 Permit Version: 2	Receiving Water: UNDERGROUND STRATA Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 15/03/1999 Effective Date: 15-Mar-2000 Revocation Date: 02/05/2001

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

1

The following Water Industry Referral records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Address	Permission reference	Local Authority	First Date Received	Last Date Received	Status
11C	16	SW	MOSS METAL FINISHING LTD, UNITS 9/14, BRIGHOUSE ROAD, BROWMILLS INDUSTRIAL, HIPPERHOLME, HALIFAX, WEST YORKSHIRE, HX3 8EF	AI0128	CALDERDALE METROPOLITAN BOROUGH COUNCIL	01-Jun-2001	01-Jan-2018	DEAD (APPLICATION)

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

2

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1A	467	W	412012.0 425186.0	Incident Date: 19-Jun-2009 Incident Identification: 689253.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)
2A	467	W	412012.0 425186.0	Incident Date: 19-Jun-2009 Incident Identification: 689253.0 Pollutant: Other Pollutant Pollutant Description: Other Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

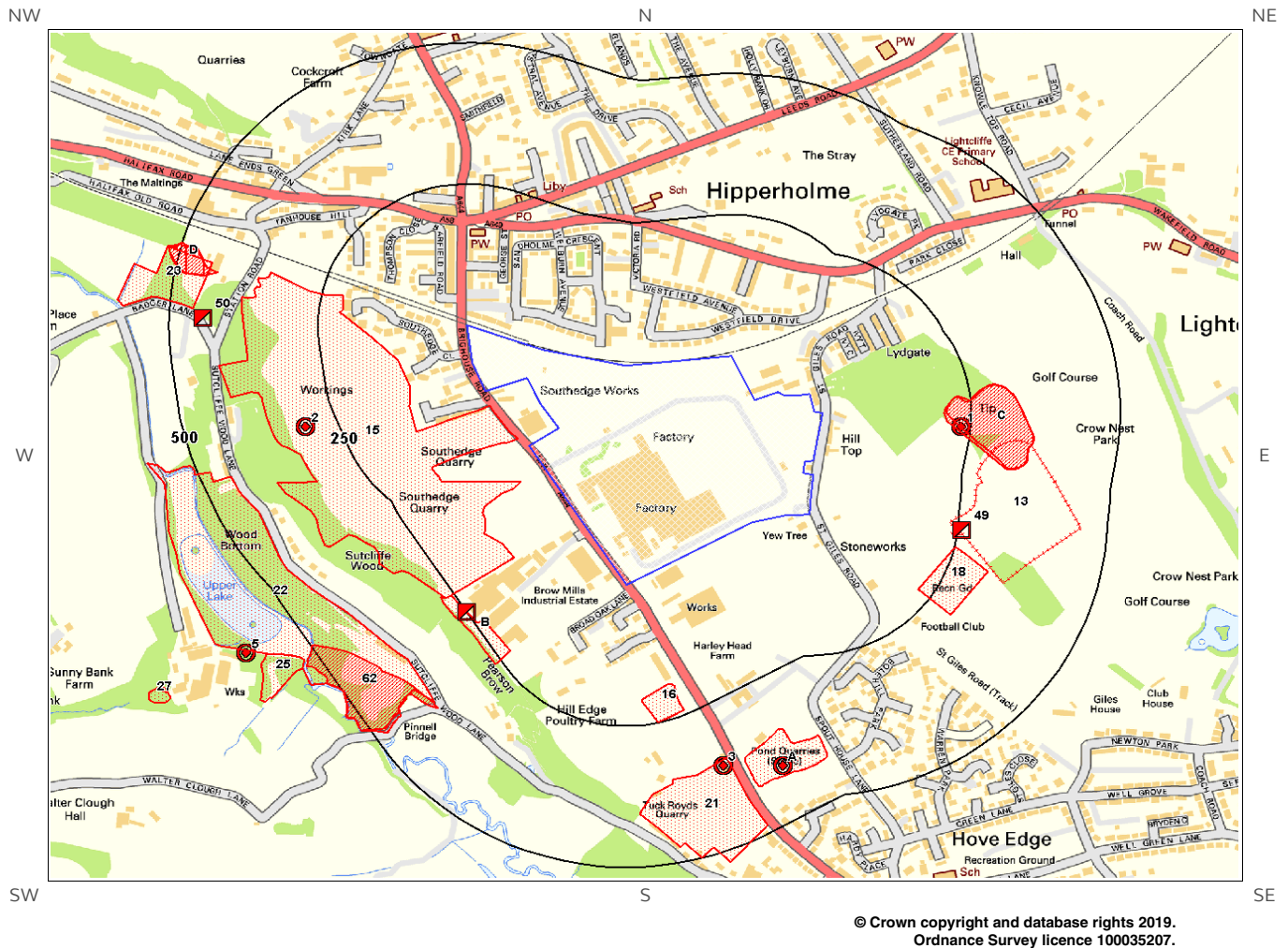
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site

0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



- | | | |
|---------------------------|---|----------------------------------|
| Site Outline | EA/NRW Active Landfill | Historic and Planned Waste Sites |
| EA/NRW Historic Landfill | EA/NRW Licensed Waste Site | |
| BGS / DoE Survey Landfill | Local Authority/Historical Mapping Landfill Records | |
| 250 Search Buffers (m) | | |
| 500 Search Buffers (m) | | |

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

2

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
13	235	E	413300 424918	Address: Spout House Lane, Hipperholme, Southowram, West Yorkshire, HX3 8B Landfill Reference: 60733.0 Environmental Permitting Regulations (Waste) Reference: MAR002 Landfill Type: A04: Household, Commercial & Industrial Waste Landfill Operator: Marshalls Mono Ltd Status: Closure IPPC Reference: EPR Reference:
Not shown	794	SE	413220 424190	Address: Hill Crest Quarry, Halifax Road, Hove Edge, Brighouse, West Yorkshire, HD6 2QJ Landfill Reference: 60734.0 Environmental Permitting Regulations (Waste) Reference: JBH001 Landfill Type: A05: Landfill taking Non-Biodegradable Wastes Operator: J B Hill & Sons Ltd Status: Closure IPPC Reference: EPR Reference:

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

32

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
15	23	NW		Site Address: Southedge and Stubbins Tip, Halifax, Yorkshire Waste Licence: Yes Site Reference: 1269, 4700/0619, X0677, 4700/0677 Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Oct-1979 Licence Surrendered: 31-Jan-1992 Licence Holder Address: Normanby Road, Scunthorpe Operator: Clugston Reclamation Limited Licence Holder: Clugstons Reclamation Limited First Recorded: 01-Jan-1951 Last Recorded: 31-Dec-1989
16	189	S		Site Address: Broad Oak Quarry, Brighouse Road, Hove Edge Licence Issue: Licence Surrendered:

ID	Distance (m)	Direction	NGR	Details
				Waste Licence: - Site Reference: C1827 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Holder Address: - Operator: - Licence Holder: Mr Gidson First Recorded: 31-Dec-1907 Last Recorded: 31-Dec-1972
17C	209	E		Site Address: Crow Nest Park (North), Brighouse, Huddersfield, West Yorkshire Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Brookes Lightcliffe Estates Limited Licence Holder: - First Recorded: 31-Dec-1970 Last Recorded: -
18	225	SE		Site Address: Brighouse Town AFC, St Giles Road, Hove Edge, Brighouse Waste Licence: Yes Site Reference: 4700/0854, X0854 Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 14-Sep-1990 Licence Surrendered: 27-Apr-1994 Licence Holder Address: Horley Green Road, Horley Green, Clarendon, Halifax Operator: - Licence Holder: Shand Construction Limited First Recorded: 30-Sep-1990 Last Recorded: 08-Oct-1991
19B	227	SW		Site Address: M H Fabrications, Hillcrest, Brighouse Road, Hipperholme, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 1269, NE4638 Waste Type: - Environmental Permitting Regulations (Waste) Reference: YQ3/L/MHF001 Licence Issue: 17-Mar-1993 Licence Surrendered: 30-Dec-2003 Licence Holder Address: Hillcrest, Brow Mills Industrial Estate, Brighouse Road, Hipperholme, Halifax, West Yorkshire Operator: M H Fabrications Licence Holder: Michael Hutchinson First Recorded: - Last Recorded: -
20A	344	SE		Site Address: Pond Quarry, Lightcliffe Road, Hove Edge, Brighouse, West Yorkshire Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Mr C Gibson Licence Holder: - First Recorded: - Last Recorded: -
21	348	SE		Site Address: Tuck Royd Quarry, Hove Edge, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 4700/0169 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 27-Jul-1979 Licence Surrendered: 03-May-1994 Licence Holder Address: Halifax, West Yorkshire Operator: Brookes Lightcliffe Estates Limited Licence Holder: Metropolitan Borough of Calderdale First Recorded: 31-Dec-1935 Last Recorded: 05-Apr-1990
22	379	SW		Site Address: Sunnyvale Gardens, Hipperholme, Halifax Waste Licence: Yes Site Reference: 4700/0322 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 02-Jul-1982 Licence Surrendered: 28-Apr-1994 Licence Holder Address: Southowram, Halifax Operator: - Licence Holder: J J Fee Limited First Recorded: 31-Dec-1982 Last Recorded: 28-Apr-1994
23	442	W		Site Address: Stein Refractories Limited, Badger Lane, Hipperholme Waste Licence: - Site Reference: C1109 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Stain Refractories First Recorded: 31-Dec-1973 Last Recorded: 30-Apr-1977

ID	Distance (m)	Direction	NGR	Details
24D	451	W		Site Address: Joinery Services, Station Road, Hipperholme Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 01-Jan-1986 Last Recorded: 31-Dec-1986
25	523	SW		Site Address: Stein's Tip, Sunnyvale, Hipperholme, Brighouse, West Yorkshire Waste Licence: Yes Site Reference: 4700/0104 Waste Type: Inert, Industrial, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 23-Aug-1979 Licence Surrendered: 05-Feb-1991 Licence Holder Address: Hipperholme Works, Hipperholme, Halifax Operator: G R Stein Refractories Limited Licence Holder: G R Stein Refractories Limited First Recorded: 01-Jan-1880 Last Recorded: 31-Dec-1990
Not shown	722	N		Site Address: Lower Wynteredge Farm, Northedge Lane, Hipperholme, Halifax Waste Licence: Yes Site Reference: WDL/1252 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 11-Jan-1993 Licence Surrendered: 28-Apr-1994 Licence Holder Address: Lower Wynterage Farm, Northedge Lane, Hipperholme, Halifax Operator: - Licence Holder: Mr J A Robinson First Recorded: 26-Jan-1994 Last Recorded: 28-Apr-1994
27	746	SW		Site Address: Hipperholme Works - Stoney Royd Holder Station, Siddal New Road, Halifax, Calderdale Waste Licence: Yes Site Reference: 4700/1003, 58 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 22-May-1978 Licence Surrendered: 05-Aug-1980 Licence Holder Address: New York Road, Leeds Operator: G R - Stein Refractories Limited Licence Holder: North East Gas First Recorded: 01-Jan-1967 Last Recorded: 31-Dec-1978
Not shown	909	S		Site Address: Clog Sole Delph, Stead Syke, Brighouse, West Yorkshire Waste Licence: - Site Reference: C1810 Waste Type: Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Joe Beaumont Limited Licence Holder: C Kershaw First Recorded: 31-Dec-1952 Last Recorded: 31-Dec-1975
Not shown	912	W		Site Address: Mytholme Foundry, Shibden Hall Road Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1030	W		Site Address: Mytholme Bridge, Shibden Hall Road, Hipperholme Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1929 Last Recorded: 31-Jul-1977
Not shown	1072	W		Site Address: Tetrodena Pets Hotel, Break Neck, Mytholme Bridge, Shibden Hall Road, Hipperholme Waste Licence: - Site Reference: C1122 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Tetrodena Pet Hotel First Recorded: 31-May-1991 Last Recorded: 31-Dec-1991
Not	1215	SE		Site Address: Ex Brookfoot Dyeworks Site, Licence Issue: 05-Mar-1980

ID	Distance (m)	Direction	NGR	Details
shown				Brookfoot, Brighouse Waste Licence: Yes Site Reference: 4700/0223 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Surrendered: 02-Mar-1990 Licence Holder Address: Group Estates Office, Pennine House, 39 Well Street, Bradford Operator: - Licence Holder: Carrington Viyella Limited First Recorded: - Last Recorded: 31-Dec-1988
Not shown	1216	SE		Site Address: Brookfoot Dyeworks Limited, Brookfoot Lane, Brighouse, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1888 Last Recorded: -
Not shown	1216	S		Site Address: Charles Kershaw, Hove Edge, Brighouse, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Charles Kershaw Licence Holder: - First Recorded: 31-Dec-1920 Last Recorded: -
Not shown	1221	S		Site Address: Watson Quarry, Brookfoot Lane, Southowram, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 1457, NE4644 Waste Type: - Environmental Permitting Regulations (Waste) Reference: YQ3/L/MRG003 Licence Issue: 01-Sep-1994 Licence Surrendered: 27-Jun-2002 Licence Holder Address: The Old Smithy, Southowram Bank, Southowram, Halifax, West Yorkshire Operator: - Licence Holder: Gordon Smith First Recorded: 30-Sep-1994 Last Recorded: -
Not shown	1221	W		Site Address: Thumpus Quarry, Norcliffe Lane, Southowram, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 346, NE4625 Waste Type: - Environmental Permitting Regulations (Waste) Reference: YQ3/L/WSC001 Licence Issue: 16-Dec-1982 Licence Surrendered: 23-Jan-2003 Licence Holder Address: Westfields, West Lane, Southowram, Halifax, West Yorkshire Operator: - Licence Holder: W S Crossley (Yorkstone) Limited First Recorded: - Last Recorded: -
Not shown	1320	W		Site Address: Thumpus Quarry, Norcliffe Lane, Southowram, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 346, NE4625 Waste Type: - Environmental Permitting Regulations (Waste) Reference: YQ3/L/WSC001 Licence Issue: 16-Dec-1982 Licence Surrendered: 23-Jan-2003 Licence Holder Address: Westfields, West Lane, Southowram, Halifax, West Yorkshire Operator: - Licence Holder: W S Crossley (Yorkstone) Limited First Recorded: - Last Recorded: -
Not shown	1321	W		Site Address: Thumpus Quarry, Norcliffe Lane, Southowram, Halifax, West Yorkshire Waste Licence: Yes Site Reference: 346, NE4625 Waste Type: - Environmental Permitting Regulations (Waste) Reference: YQ3/L/WSC001 Licence Issue: 16-Dec-1982 Licence Surrendered: 23-Jan-2003 Licence Holder Address: Westfields, West Lane, Southowram, Halifax, West Yorkshire Operator: - Licence Holder: W S Crossley (Yorkstone) Limited First Recorded: - Last Recorded: -
Not shown	1321	W		Site Address: Thumpas Quarry, Norcliffe Lane, Halifax, Yorkshire Waste Licence: - Licence Issue: Licence Surrendered: Licence Holder Address: -

ID	Distance (m)	Direction	NGR	Details
				Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Operator: W S Crossley Licence Holder: - First Recorded: 31-Dec-1946 Last Recorded: -
Not shown	1325	SE		Site Address: Pond Quarry, Lightcliffe Road, Brighouse, , West Yorkshire Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 14-Aug-1980 Licence Surrendered: 26-Jun-2014 Licence Holder Address: Fagley Lane, Bradford, Eccleshill, West Yorkshire Operator: Hard York Limited Licence Holder: Hard York Limited First Recorded: - Last Recorded: -
Not shown	1336	SE		Site Address: Pond Quarry, Lightcliffe Road, Hove Edge, Brighouse, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Brighouse Estates (Contractors) Limited Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1366	W		Site Address: Dark Lane Quarry, Dark Lane, Southowram, Halifax Waste Licence: Yes Site Reference: 4700/1134, X1134 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 25-Aug-1992 Licence Surrendered: 03-May-1994 Licence Holder Address: Steep Bank Side, Southowram Bank, Halifax Operator: - Licence Holder: Gordon Smith First Recorded: 25-Aug-1992 Last Recorded: 11-Nov-1992
Not shown	1409	SW		Site Address: Land Next to Sunday School, Church Lane, Southowram Waste Licence: Yes Site Reference: 4700/0639 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 15-Jan-1988 Licence Surrendered: 11-Jan-1989 Licence Holder Address: Church Lane, Southowram Operator: - Licence Holder: St Annes Church PCC First Recorded: 01-Jan-1987 Last Recorded: 31-Jan-1989
Not shown	1409	W		Site Address: Marsh Lane Tip, Southorham, Halifax, West Yorkshire Waste Licence: - Site Reference: C1816 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Borough of Brighouse Cleansing Department Licence Holder: D Hodgeson First Recorded: 31-Dec-1948 Last Recorded: 31-Dec-1976
Not shown	1424	W		Site Address: North of Field House, Barrowclough Lane, Southowram Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1428	NW		Site Address: Upper Brear Farm, Bradford Road, Stump Cross, Shibden, Halifax Waste Licence: - Site Reference: C1112 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: F Chislet First Recorded: 31-Jan-1981 Last Recorded: 31-Dec-1989

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

12

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
1	234	E	413300.0 425100.0	Address: Crow National Park, Brighouse, Huddersfield BGS Number: 750.0	Risk: No risk to aquifer Waste Type: N/A
2	302	W	412200.0 425100.0	Address: Southedge Tip, Halifax, Yorks BGS Number: 748.0	Risk: Risk to minor aquifer Waste Type: N/A
3	359	SE	412900.0 424500.0	Address: Tuck Road Quarry, Hove Edge, Halifax, W Yorks BGS Number: 754.0	Risk: No risk to aquifer Waste Type: N/A
4A	405	SE	413000.0 424500.0	Address: Pond Quarry, Halifax Rd, Hove Edge, Brighouse BGS Number: 1356.0	Risk: Risk to minor aquifer Waste Type: N/A
5	598	SW	412100.0 424700.0	Address: Stein's Tip, Sunnyvale, Hipperholme, Brighouse BGS Number: 745.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	852	SE	413200.0 424100.0	Address: Hill Crest Quarry, Halifax, Yorks BGS Number: 743.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	979	S	413300.0 424000.0	Address: Clog Sole, Stead Syke, Brighouse, Yorks BGS Number: 744.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	1228	S	412600.0 423600.0	Address: Bricks Boyd Tip, Brookfoot Lane, Halifax, Yorks BGS Number: 737.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	1232	S	413500.0 423800.0	Address: Charles Kershaw, Hove Edge, Brighouse, Yorks BGS Number: 755.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	1383	W	411100.0 425100.0	Address: Thurpass Quarry, Norcliffe Lane, Halifax, Yorks BGS Number: 735.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	1388	SE	413400.0 423600.0	Address: Brookfoot, Brighouse, Yorks BGS Number: 736.0	Risk: No risk to aquifer Waste Type: N/A
Not shown	1416	SE	414100.0 424000.0	Address: Pond Quarry, Lightcliffe Rd, Brighouse, Huddersf'ld BGS Number: 749.0	Risk: No risk to aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

8

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
61C	205	E	413347 425099	Refuse Tip	1971 mapping	Polygon
62	384	SW	412312 424636	Refuse Tip	1996 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
63D	428	W	412026 425394	Refuse Tip	1974 mapping	Polygon
64D	480	W	411985 425397	Refuse Tip	1994 mapping	Polygon
Not shown	983	S	413345 423985	Refuse Tip	1966 mapping	Polygon
Not shown	1233	S	412459 423602	Refuse Tip	1966 mapping	Polygon
Not shown	1248	S	412775 423551	Refuse Tip	1966 mapping	Polygon
Not shown	1315	SE	413317 423616	Refuse Tip	1966 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

14

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

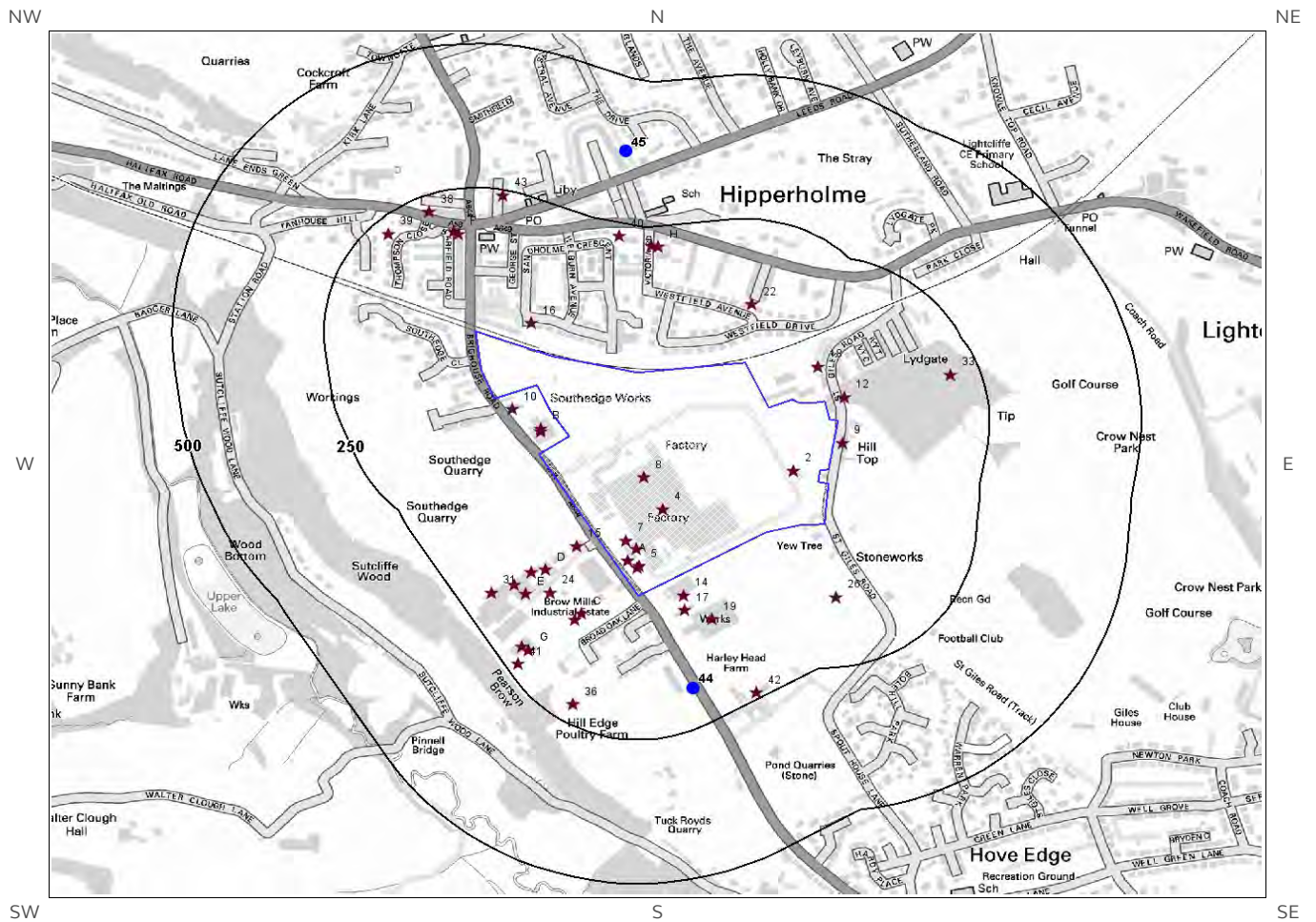
ID	Distance (m)	Direction	NGR	Details
47B	251	SW	412469 424773	Site Address: Hillcrest, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MHF001 EPR reference: EA/EPR/CP3199ZZ/S002 Operator: Hutchinson Michael Waste Management licence No: 60772 Annual Tonnage: 150000.0 Issue Date: 17/03/1993 Effective Date: - Modified: - Surrendered Date: Dec 30 2003 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: M H Fabrications Correspondence Address: -
48B	251	SW	412469 424773	Site Address: Hillcrest, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF Type: Landfill taking Non-Biodegradable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MHF001 EPR reference: - Operator: Hutchinson Michael Waste Management licence No: 60772 Issue Date: 17/03/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: M H Fabrications Correspondence Address: Hillcrest, Brow Mills Industrial Estate, Brighouse Road, Hipperholme, Halifax, West Yorkshire,

ID	Distance (m)	Direction	NGR	Details	
				Annual Tonnage: 0.0	HX3 8EF
49	256	E	413300 424918	Site Address: Spout House Lane, Hipperholme, Southowram, West Yorkshire, HX3 8B Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAR002 EPR reference: EA/EPR/TP3999ZJ/V006 Operator: Marshalls Mono Ltd Waste Management licence No: 60733 Annual Tonnage: 0.0	Issue Date: 04/12/1980 Effective Date: - Modified: 30/01/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Crownest Park Quarry Correspondence Address: -
50	443	W	412028 425294	Site Address: Badger Lane, Hipperholme, Halifax, West Yorkshire, HX3 8PW Type: Material Recycling Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MON003 EPR reference: EA/EPR/CP3099ZF/A001 Operator: Monoplas Industries Ltd Waste Management licence No: 60765 Annual Tonnage: 5000.0	Issue Date: 23/01/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: 01/06/2008 Cancelled Date: - Status: Expired Site Name: Allen Works Correspondence Address: -
Not shown	775	S	413220 424190	Site Address: Hill Crest Quarry, Halifax Road, Hove Edge, Brighouse, West Yorkshire, HD6 2QJ Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JBH001 EPR reference: EA/EPR/TP3599ZN/A001 Operator: J B Hill & Sons Ltd Waste Management licence No: 60734 Annual Tonnage: 23800.0	Issue Date: 05/03/1980 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Hill Crest Quarry Correspondence Address: -
Not shown	980	W	411542 425592	Site Address: Land/ Premises At, Off Shibden Hall Road, Hipperholme, Halifax, West Yorkshire, HX3 8PJ Type: Transfer Station taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LLO001 EPR reference: EA/EPR/ZP3599ZD/A001 Operator: Lloyd Loaders (M H) Ltd Waste Management licence No: 60777 Annual Tonnage: 32000.0	Issue Date: 01/09/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Mytholm Works Correspondence Address: -
Not shown	1360	S	412554 423473	Site Address: Birks Royd, Church Lane, Southowram, Halifax, West Yorkshire, HX3 9TD Type: Landfill taking other wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WIL001 EPR reference: EA/EPR/ZP3799ZP/A001 Operator: Ley William Ernest Waste Management licence No: 60785 Annual Tonnage: 24999.0	Issue Date: 27/07/1995 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Birks Field Correspondence Address: -
Not shown	1391	S	412785 423430	Site Address: Brookfoot Lane, Southowram, Halifax, West Yorkshire, HX3 9PX Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes	Issue Date: 01/09/1994 Effective Date: - Modified: - Surrendered Date: Jun 27 2002 12:00AM Expiry Date: - Cancelled Date: -

ID	Distance (m)	Direction	NGR	Details	
				Environmental Permitting Regulations (Waste) Licence Number: MRG003 EPR reference: EA/EPR/NP3399ZM/S002 Operator: Smith Gordon Waste Management licence No: 60786 Annual Tonnage: 150000.0	Status: Surrendered Site Name: Watson Quarry Correspondence Address: -
Not shown	1391	S	412785 423430	Site Address: Brookfoot Lane, Southowram, Halifax, West Yorkshire, HX3 9PX Type: Landfill taking Non-Biodegradable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MRG003 EPR reference: - Operator: Smith Gordon Waste Management licence No: 60786 Annual Tonnage: 0.0	Issue Date: 01/09/1994 Effective Date: - Modified: - Surrendered Date: 27/06/2002 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Watson Quarry Correspondence Address: The Old Smithy, Southowram Bank, Southowram, Halifax, West Yorkshire, HX3 9XL
Not shown	1411	S	412705 423410	Site Address: Land/ Premises At, Church Lane, Southowram, Halifax, West Yorkshire, HX3 9SZ Type: Household, Commercial & Industrial Waste Landfill Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MAR004 EPR reference: EA/EPR/HP3099ZV/V002 Operator: Marshalls Mono Ltd Waste Management licence No: 60742 Annual Tonnage: 32000.0	Issue Date: 04/12/1984 Effective Date: - Modified: 08/03/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Cromwell Quarries Correspondence Address: -
Not shown	1421	W	411110 424835	Site Address: Norcliffe Lane, Southowram, Halifax, West Yorkshire, HX3 8PL Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WSC001 EPR reference: - Operator: W S Crossley (Yorkstone) Ltd Waste Management licence No: 60741 Annual Tonnage: 0.0	Issue Date: 16/12/1982 Effective Date: - Modified: - Surrendered Date: 23/01/2003 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Thumpas Quarry Correspondence Address: Westfields, West Lane, Southowram, Halifax, West Yorkshire, HX3 9RG
Not shown	1421	W	411110 424835	Site Address: Norcliffe Lane, Southowram, Halifax, West Yorkshire, HX3 8PL Type: Landfill taking other wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WSC001 EPR reference: EA/EPR/HP3399ZJ/S002 Operator: W S Crossley (Yorkstone) Ltd Waste Management licence No: 60741 Annual Tonnage: 100000.0	Issue Date: 16/12/1982 Effective Date: - Modified: - Surrendered Date: Jan 23 2003 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Thumpas Quarry Correspondence Address: -
Not shown	1432	SE	414140 424022	Site Address: Land / Premises At, Lightcliffe Road, Brighouse, West Yorkshire, HD6 2HZ Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HAR001 EPR reference: EA/EPR/TP3499ZC/S002 Operator: Hard York Limited Waste Management licence No: 60736 Annual Tonnage: 0.0	Issue Date: 14/08/1980 Effective Date: - Modified: - Surrendered Date: Jun 26 2014 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Pond Quarry Correspondence Address: -
Not shown	1432	SE	414140 424022	Site Address: Land / Premises At, Lightcliffe Road, Brighouse, West	Issue Date: 14/08/1980 Effective Date: -

ID	Distance (m)	Direction	NGR	Details
				Yorkshire, HD6 Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HAR001 EPR reference: EA/EPR/TP3499ZC/A001 Operator: Hard York Ltd Waste Management licence No: 60736 Annual Tonnage: 150000.0 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Pond Quarry Correspondence Address: -

4. Current Land Use Map



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Site Outline

★ Current Industrial Sites

— Electricity Transmission Cables

— 250 — Search Buffers (m)
— 500 —

● Petrol & Fuel Sites

— Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

43

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1A	0	On Site	Tank	412721 424882	West Yorkshire, HX3	Tanks (Generic)	Industrial Features
2	0	On Site	Tank	412994 425039	West Yorkshire, HX3	Tanks (Generic)	Industrial Features
3A	0	On Site	Tank	412734 424903	West Yorkshire, HX3	Tanks (Generic)	Industrial Features
4	0	On Site	Factory	412778 424972	West Yorkshire, HX3	Unspecified Works Or Factories	Industrial Features
5	0	On Site	Tank	412739 424873	West Yorkshire, HX3	Tanks (Generic)	Industrial Features
6A	0	On Site	Tank	412736 424870	West Yorkshire, HX3	Tanks (Generic)	Industrial Features
7	0	On Site	Electricity Sub Station	412717 424917	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
8	0	On Site	Crosslee	412747 425027	Lightcliffe Factory, Hipperholme, Halifax, West Yorkshire, HX3 8DE	Electronic Equipment	Industrial Products
9	14	E	Calder Appliance Care	413074 425087	19, St. Giles Road, Halifax, West Yorkshire, HX3 8BG	Electrical Equipment Repair and Servicing	Repair and Servicing
10	25	S	Works	412530 425146	West Yorkshire, HX3	Unspecified Works Or Factories	Industrial Features
11B	29	SW	R S H Services	412577 425112	Southedge Works, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Sports and Leisure Equipment Repair	Repair and Servicing
12	32	E	Electricity Sub Station	413077 425167	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
13B	32	SW	Southedge Works	412578 425107	West Yorkshire, HX3	Unspecified Works Or Factories	Industrial Features
14	33	SE	Hopper	412813 424822	West Yorkshire, HX3	Hoppers and Silos	Farming
15	36	SW	R S Saw & Tool Ltd	412636 424908	Unit 6 Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Tool Repairs	Repair and Servicing
16	44	N	Electricity Sub Station	412562 425295	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
17	56	SE	UK Refuse Trucks	412813 424796	Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8BW	New Vehicles	Motoring

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
18	62	N	D & M Trailers Halifax Ltd	413033 425219	St. Giles Road, Halifax, West Yorkshire, HX3 8BN	New Vehicles	Motoring
19	92	SE	Lightcliffe Works	412860 424781	West Yorkshire, HX3	Unspecified Works Or Factories	Industrial Features
20C	96	SW	Brow Quarry Industrial Estate	412644 424790	West Yorkshire, HX3	Business Parks and Industrial Estates	Industrial Features
21D	102	SW	Labelpak Ltd	412584 424866	Unit 1 Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Stationery, Stamps, Tags and Labels	Industrial Products
22	103	N	Electricity Sub Station	412925 425328	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
23C	109	SW	Total Meat Supplies	412634 424780	Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Fish, Meat and Poultry Products	Foodstuffs
24	117	SW	Electricity Sub Station	412593 424827	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
25D	124	SW	Emergent Crown Contract Office Furnishings Ltd	412561 424863	Unit 5 Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Office and Shop Equipment	Industrial Products
26	127	S	Electricity Sub Station	413063 424819	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
27E	153	SW	A-plant: Live Halifax	412552 424825	Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Access Equipment	Industrial Products
28E	159	SW	Mitchell Mould Service Ltd	412533 424841	Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Tools Including Machine Shops	Industrial Products
29F	173	N	Motoretta	412441 425450	2, Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8ER	New Vehicles	Motoring
30F	179	N	Cooltecinnovation Lid Safe	412434 425455	Whitehall Chambers, Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8EN	Rubber, Silicones and Plastics	Industrial Products
31	198	SW	Moss Metal Finishing	412495 424827	Unit 9-14 Brow Mills, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Industrial Coatings and Finishings	Industrial Products
32G	202	SW	F D S	412557 424727	The Old Foundry, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Printing Related Machinery	Industrial Products
33	202	NE	Shaft (Disused)	413252 425206	West Yorkshire, HX3	Unspecified Quarries Or Mines	Extractive Industries
34G	209	SW	Water Jet UK	412546 424732	The Old Foundry, Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Cutting, Drilling and Welding Services	Construction Services
35H	216	N	A & G Autos	412770 425428	Wakefield Road, Hipperholme, Halifax,	Vehicle Repair, Testing and Servicing	Repair and Servicing

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
West Yorkshire, HX3 8AQ							
36	217	SW	Hill Edge Poultry Farm	412630 424633	West Yorkshire, HX3	Poultry Farming, Equipment and Supplies	Farming
37H	219	N	Joinery Works	412760 425430	West Yorkshire, HX3	Unspecified Works Or Factories	Industrial Features
38	222	N	A & B Antiques	412393 425488	11 Lees Building, Halifax Road, Halifax, West Yorkshire, HX3 8EW	Furniture	Consumer Products
39	224	NW	West Riding Freight Forwarding	412326 425450	26a, Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8ER	Distribution and Haulage	Transport, Storage and Delivery
40	227	N	Electricity Sub Station	412706 425446	West Yorkshire, HX3	Electrical Features	Infrastructure and Facilities
41	230	SW	Spoil Heap	412540 424703	West Yorkshire, HX3	Waste Storage, Processing and Disposal	Infrastructure and Facilities
42	239	SE	Pond Quarry Stone Company	412933 424653	212, Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8BW	Unspecified Quarries Or Mines	Extractive Industries
43	241	N	S J Dickinson T V & Video Repair Service	412514 425517	3, Whitehall Street, Halifax, West Yorkshire, HX3 8NB	Electrical Equipment Repair and Servicing	Repair and Servicing

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

2

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
44	183	SE	412827 424660	UK	Brighouse Road, Hipperholme, Halifax, West Yorkshire, HX3 8EF	Not Applicable	Obsolete
45	373	N	412717 425593	OBSOLETE	Halifax Road, Hipperholme, Halifax, West Yorkshire, HX3 8BW	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

5.2 Superficial Ground and Drift Geology

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.3 Bedrock and Solid Geology

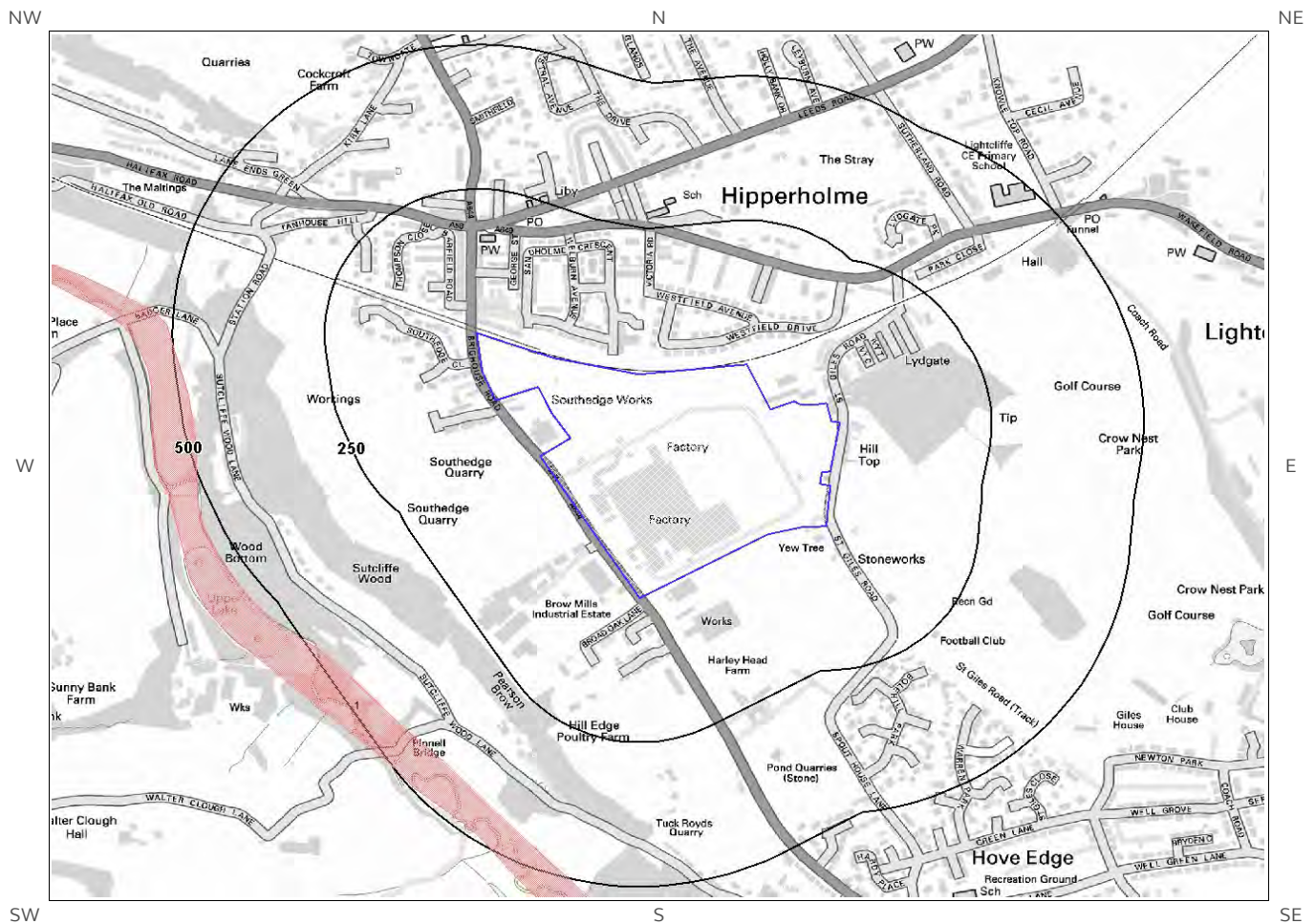
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
EF-SDST	ELLAND FLAGS	SANDSTONE

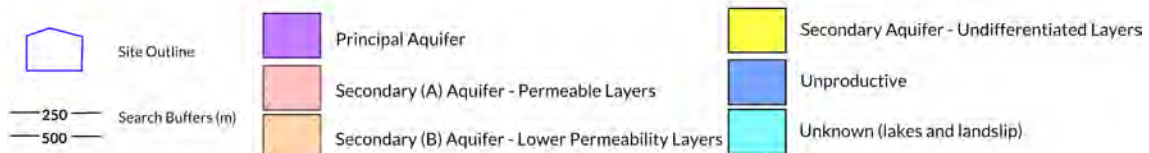
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

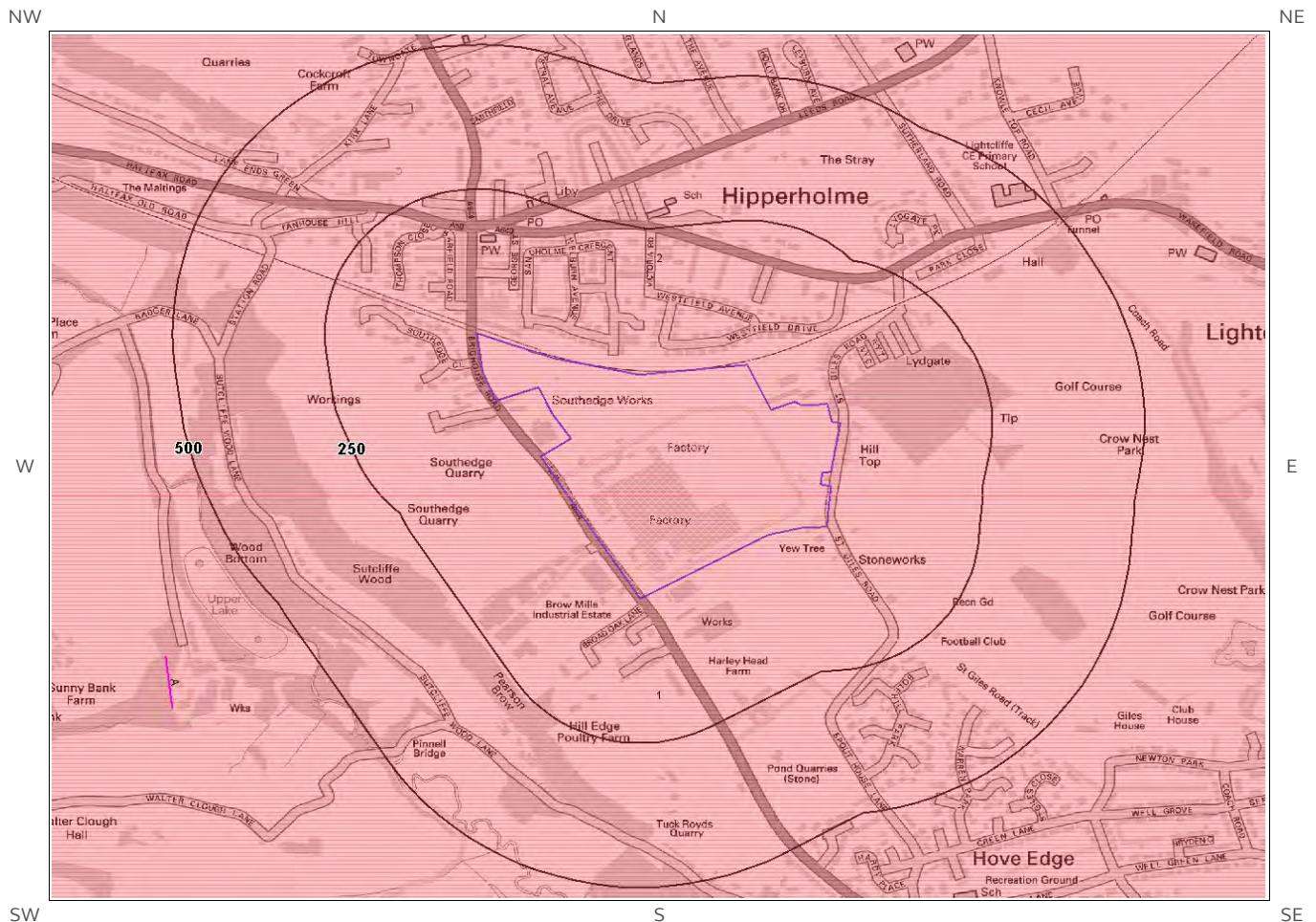
6a. Aquifer Within Superficial Geology



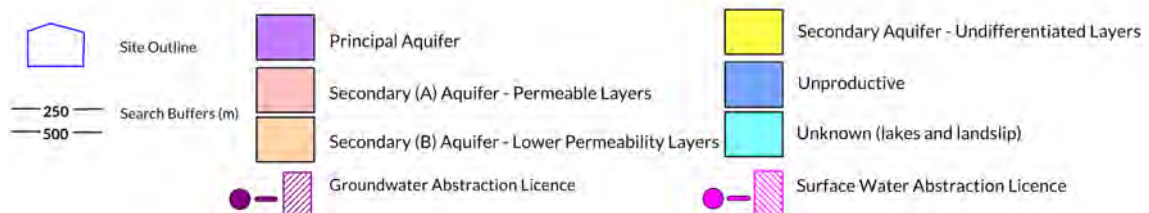
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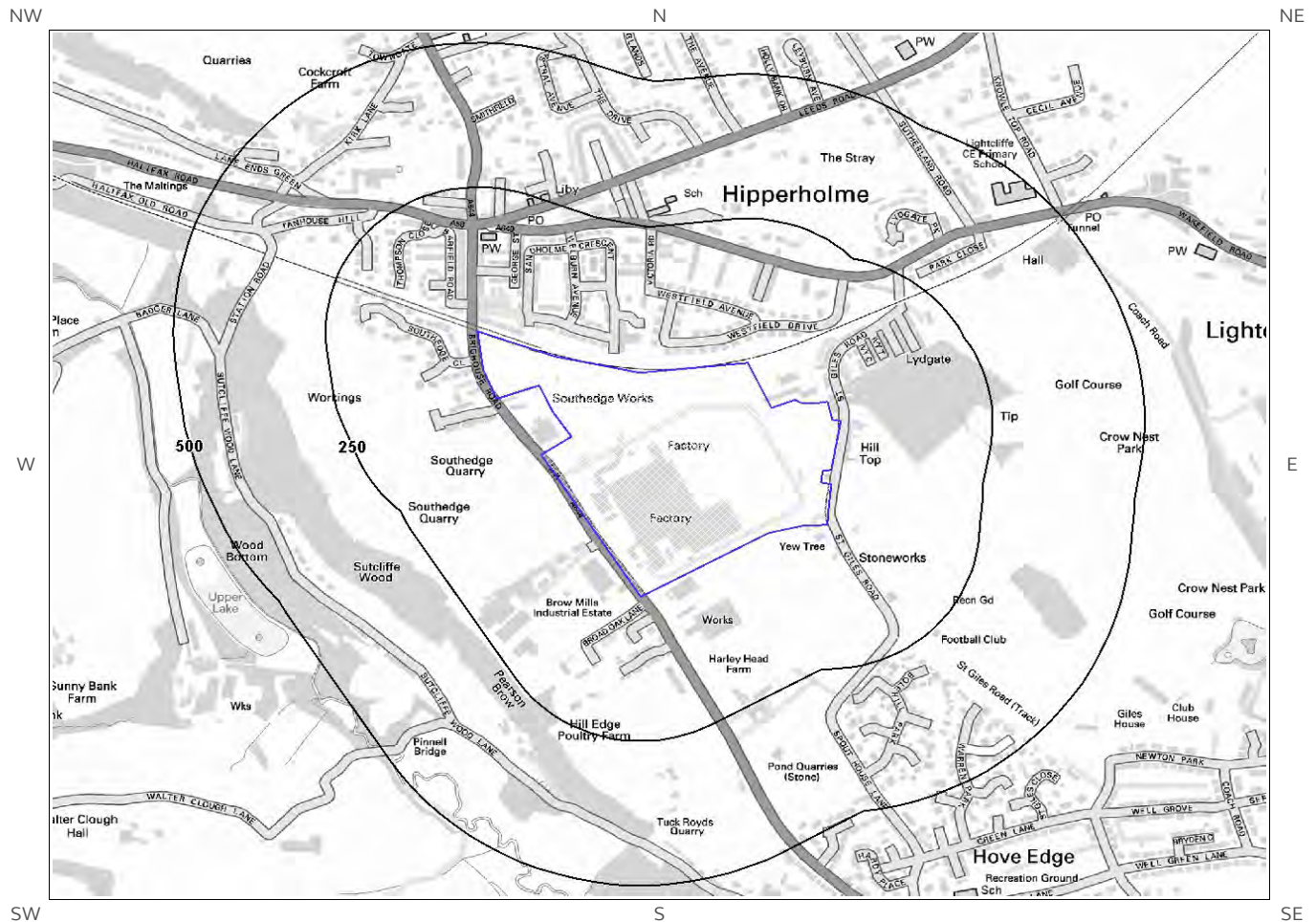
6b. Aquifer Within Bedrock Geology and Abstraction Licences



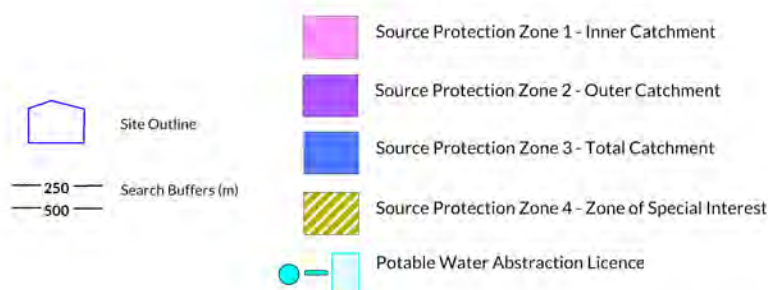
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6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



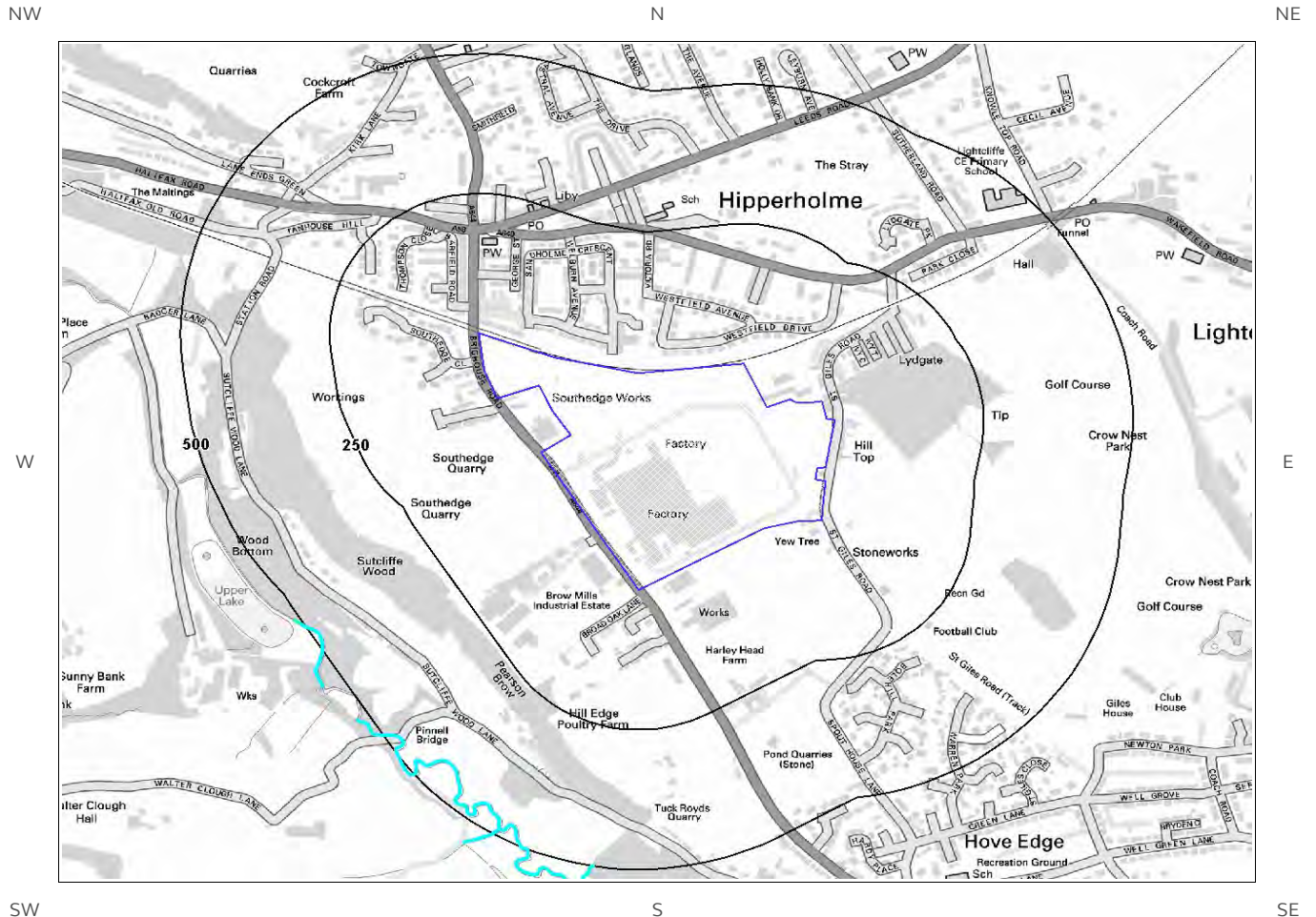
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Legend:

- Site Outline
- Search Buffers (m): 250, 500
- Source Protection Zone 1 - Inner Catchment
- Source Protection Zone 2C - Outer Catchment within Confined Aquifer
- Source Protection Zone 3C - Total Catchment within Confined Aquifer
- Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	429	SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	484	W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1648	E	414700 424900	Status: Historical Licence No: 2/27/12/268 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:
Not shown	1676	S	413590 423360	Status: Historical Licence No: 2/27/12/126 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE-MILLSTONE GRIT-BRIGHOUSE Data Type: Point Name: YOUNGER HOMES (NORTHERN) LIMITED Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 09/08/2000 Version End Date:
Not shown	1717	E	414770 424910	Status: Historical Licence No: 2/27/12/268 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BRIGHOUSE Data Type: Point Name: BLACKSHAW HOLDINGS LTD Annual Volume (m³): 170,000 Max Daily Volume (m³): 500 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/07/2005 Version End Date:
Not shown	1764	NW	410870 426020	Status: Historical Licence No: 2/27/12/340 Details: Lake & Pond Throughflow Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT - SHIBDEN PARK - HALIFAX Data Type: Point Name: CALDERDALE METROPOLITAN COUNCIL Annual Volume (m³): 91,250 Max Daily Volume (m³): 250 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 04/07/2008 Version End Date:
Not shown	1766	NW	410869 426022	Status: Active Licence No: 2/27/12/340/R01 Details: Lake & Pond Throughflow Direct Source: GROUNDWATERS Point: BOREHOLE - MILLSTONE GRIT - SHIBDEN PARK - HALIFAX Data Type: Point Name: CALDERDALE METROPOLITAN COUNCIL Annual Volume (m³): 32,000 Max Daily Volume (m³): 250 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 19/04/2017 Version End Date:
Not shown	1771	E	414800 424700	Status: Historical Licence No: 2/27/12/098 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE-ELLAND FLAGS-BAILIFF BRIDGE Data Type: Point Name: H & C WHITEHEAD LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/01/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1771	E	414800 424700	Status: Active Licence No: 2/27/12/098 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - ELLAND FLAGS - BAILIFF BRIDGE Data Type: Point Name: H & C WHITEHEAD LTD	Annual Volume (m³): 29,549 Max Daily Volume (m³): 109 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/01/1966 Version End Date:
Not shown	1790	SE	413500 423200	Status: Historical Licence No: 2/27/12/133 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: SPRINGS Data Type: Point Name: YOUNGER HOMES (NORTHERN) LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 09/08/2000 Version End Date:
Not shown	1790	SE	413500 423200	Status: Active Licence No: 2/27/12/133 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: SPRINGS - MILLSTONE GRIT - BRIGHOUSE Data Type: Point Name: YOUNGER HOMES (NORTHERN) LTD	Annual Volume (m³): 7,728 Max Daily Volume (m³): 32 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/04/2008 Version End Date:
Not shown	1860	E	414900 424800	Status: Historical Licence No: 2/27/12/074 Details: General use relating to Secondary Category (High Loss) Direct Source: GROUNDWATERS Point: SPRING - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:
Not shown	1860	E	414900 424800	Status: Historical Licence No: 2/27/12/074 Details: Boiler Feed Direct Source: GROUNDWATERS Point: SPRING - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
14A	700	SW	411960 424720	Status: Historical Licence No: 2/27/12/149 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: 2 RESERVOIRS - HIPPERHOLME WORKS Data Type: Line	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 17/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 07/07/1988

ID	Distance (m)	Direction	NGR	Details	
15A	700	SW	411960 424720	Name: MONOPLAS INDUSTRIES LIMITED	Version End Date:
				Status: Historical Licence No: 2/27/12/149 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: 2 RESERVOIRS Data Type: Line Name: MONOPLAS INDUSTRIES LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 17/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 07/07/1988 Version End Date:
Not shown	1542	NE	414400 425900	Status: Historical Licence No: 2/27/12/307 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: SPRING - NORWOOD GREEN Data Type: Point Name: SALAMA	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 29/03/1995 Expiry Date: 30/09/2006 Issue No: 101 Version Start Date: 02/03/2000 Version End Date:
Not shown	1600	S	413530 423420	Status: Historical Licence No: 2/27/12/033 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER Point: RED BECK Data Type: Point Name: YOUNGER HOMES (NORTHERN) LIMITED	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 09/08/2000 Version End Date:
Not shown	1718	NE	414600 425900	Status: Historical Licence No: 2/27/12/307 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: SPRING - NORWOOD GREEN Data Type: Point Name: SALAMA	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 29/03/1995 Expiry Date: 30/09/2006 Issue No: 101 Version Start Date: 02/03/2000 Version End Date:
Not shown	1912	N	413380 427080	Status: Historical Licence No: 2/27/12/305 Details: Lake & Pond Throughflow Direct Source: SURFACE WATER Point: COLEY BECK Data Type: Point Name: ROONEY	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 10/08/1994 Expiry Date: - Issue No: 100 Version Start Date: 10/08/1994 Version End Date:
Not shown	1941	E	415000 425300	Status: Historical Licence No: 2/27/12/073 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: CLIFTON BECK AND UNNAMED TRIBUTARY Data Type: Point Name: INTERFACE EUROPE LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 03/01/1999 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
213	SW	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site

None identified

6.9.1 Biological Quality:

Database searched and no data found.

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	443 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.0
3	443 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.0
2	471 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
Not shown	471 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
3	482 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	482 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	484 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.2
Not shown	484 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				conditions) Average Width in Watercourse Section (m): 3.2
5	487 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
Not shown	487 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.8
6	489 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
8	489 SW	Red Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.7
7	491 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	491 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	498 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	498 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

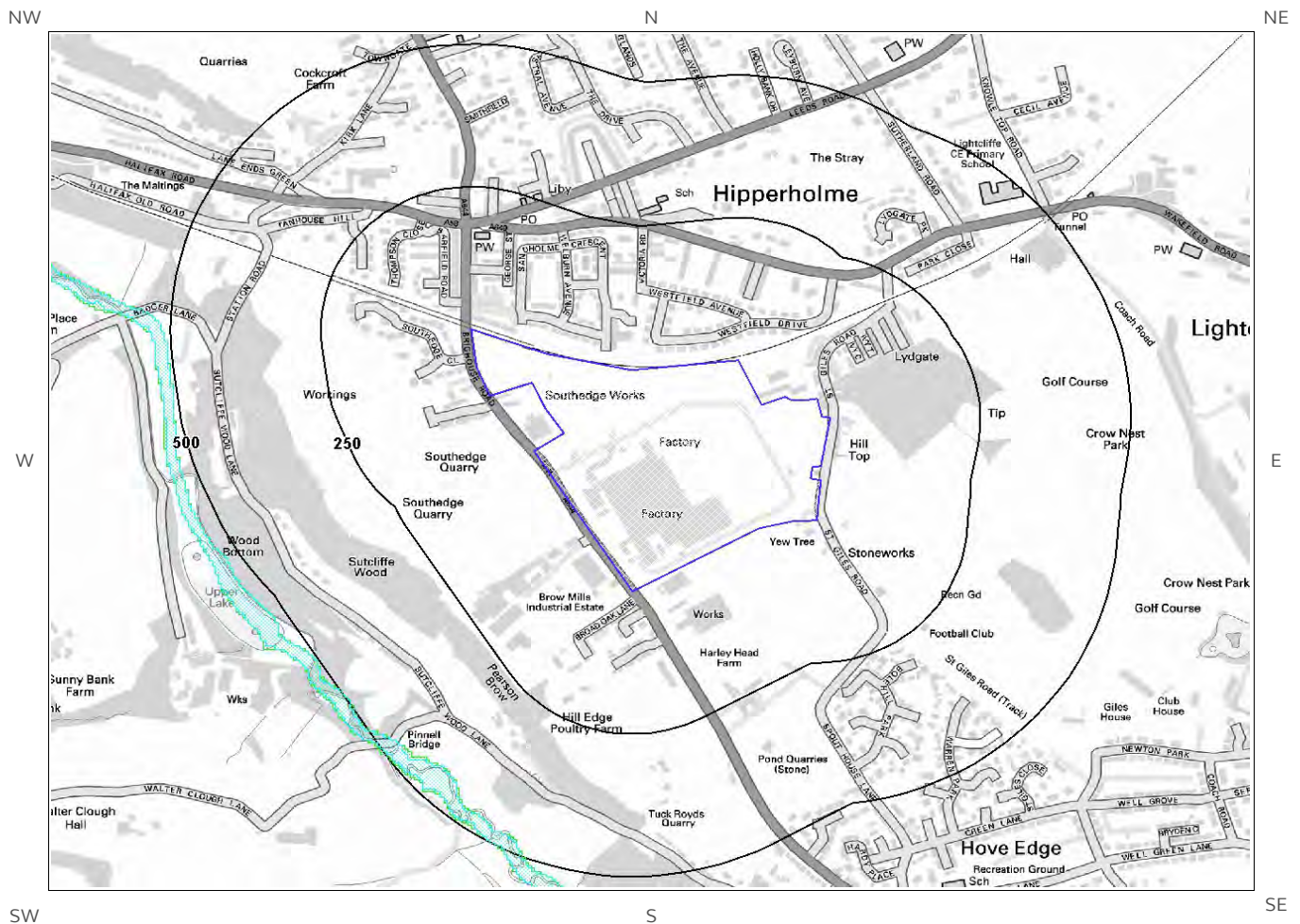
6.11 Surface Water Features

Surface water features within 250m of the study site

None identified

Database searched and no data found.

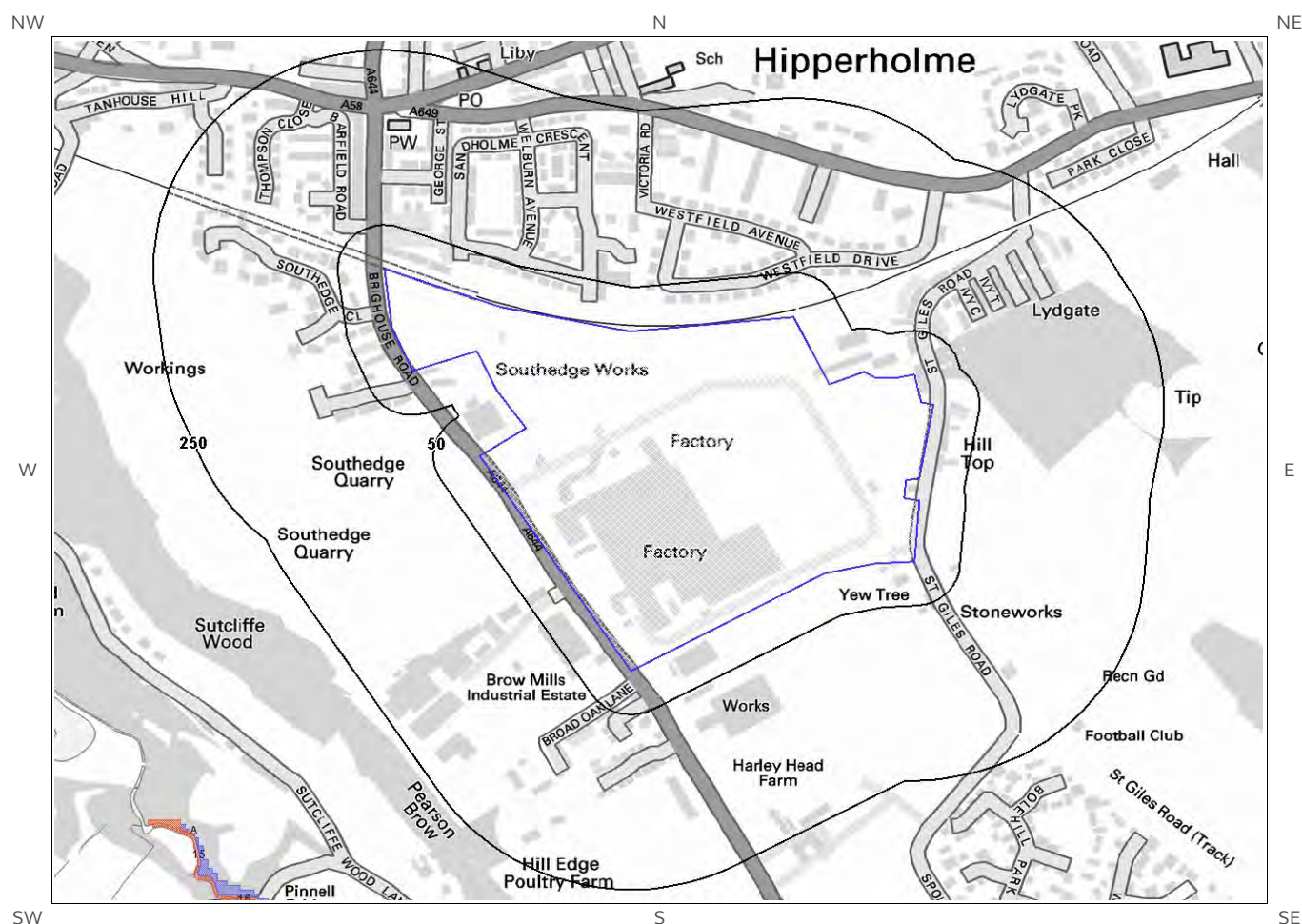
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



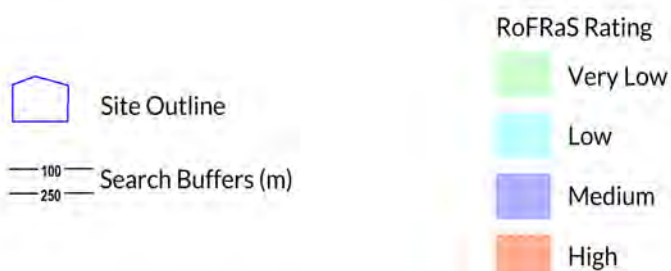
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site None identified
Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

Identified

Clearwater Flooding or Superficial Deposits Flooding

Clearwater Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

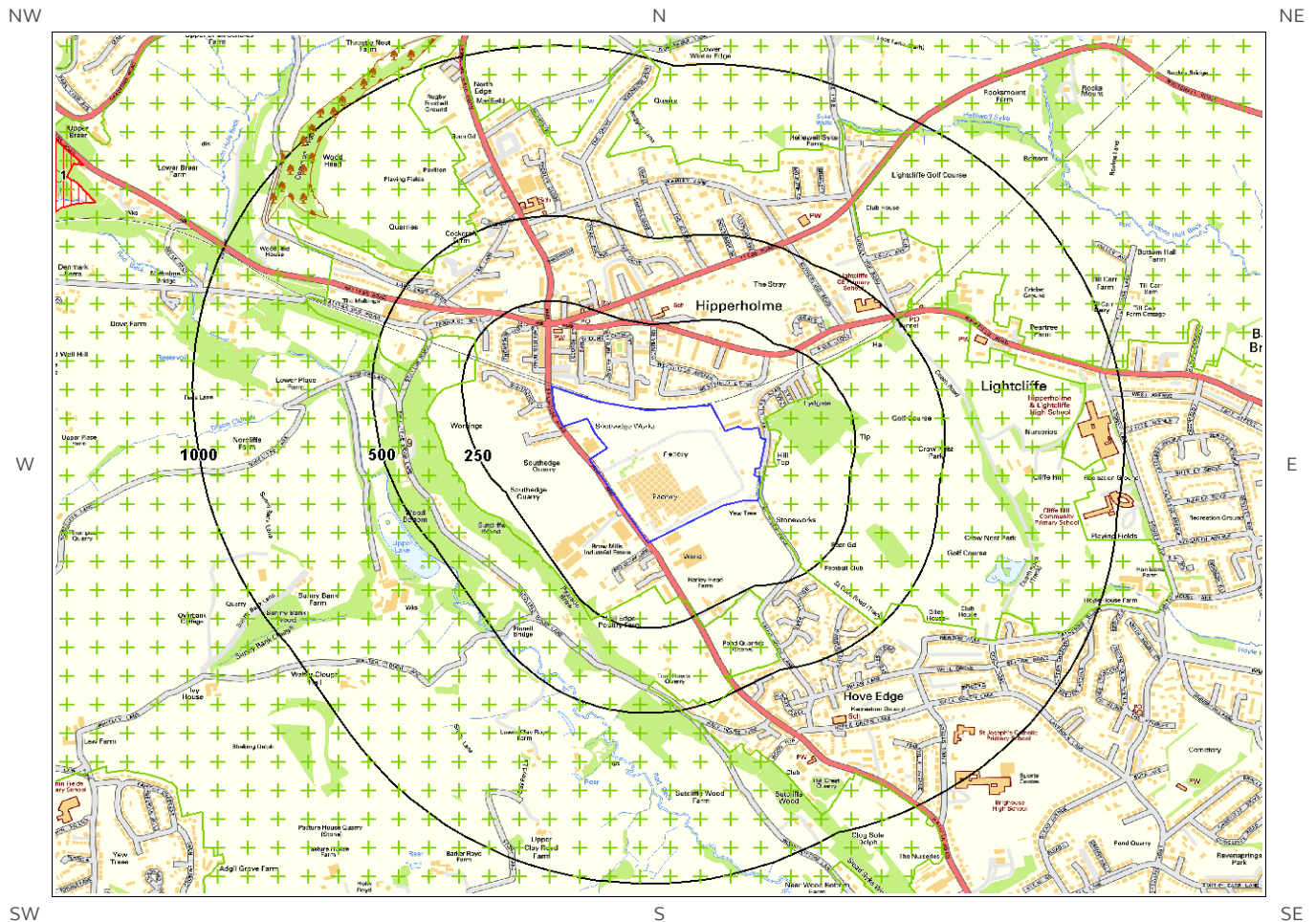
British Geological Survey confidence rating in this result

Low

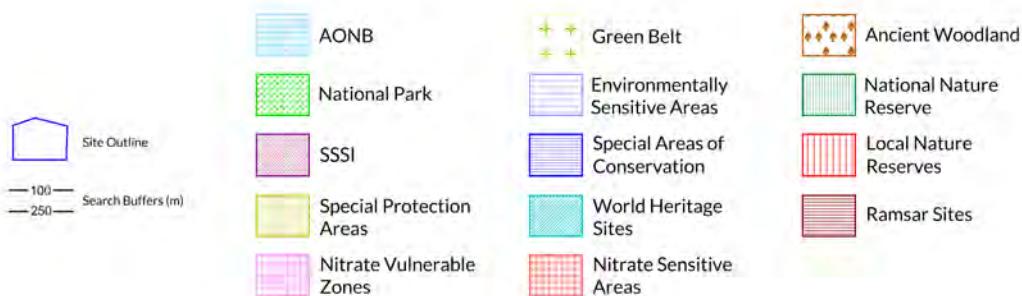
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

5

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
4	798	NW	COMMON WOOD	Ancient Replanted Woodland
Not shown	1666	S	FREEMAN'S WOOD	Ancient and Semi-Natural Woodland
Not shown	1829	S	FREEMAN'S WOOD	Ancient Replanted Woodland
Not shown	1898	S	FREEMAN'S WOOD	Ancient and Semi-Natural Woodland
Not shown	1910	N	SUN WOOD/NORTH WOOD	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

3

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
1	1380	NW	Shibden Park and Cunnery Wood	Natural England
Not shown	1660	W	Shibden Park and Cunnery Wood	Natural England
Not shown	1858	W	Shibden Park and Cunnery Wood	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

3

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
9	3	E	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)
Not shown	1774	NE	Liverpool, Manchester and West Yorks Greenbelt	Bradford District (B)
Not shown	1786	E	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our **website**. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* This indicates an automatically generated 50m buffer and site.

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The site lies in or in proximity to the coal mining reporting area as defined by the Coal Authority

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered
0.0	On Site	Elland Flag Mines	Sandstone - Elland Flags	Underground mining is known or considered likely to have occurred within or close to the area. Potential for difficult ground conditions are at a level where they should be considered

Past underground mine workings are probable. These are areas known or suspected to contain underground mining for minerals and/or other materials. In the case of mineral veins these are areas within 500m of mapped mineral veins within which it is likely that mining activities may have occurred and subsidiary veins explored and exploited. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

emapsite
Telephone: 0118 9736883
sales@emapsite.com

emapsite™

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk



Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk



Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe

Email: enquiries@phe.gov.uk
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The Coal Authority

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DX 716176 Mansfield 5
www.coal.gov.uk



Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505



Local Authority

Authority: Calderdale Metropolitan Borough Council
Phone: 01422 288001

Web: <http://www.calderdale.gov.uk/>

Address: Town Hall, Crossley Street, Halifax, HX1 1UJ

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

<https://www.groundsure.com/terms-and-conditions-feb11-2019>

APPENDIX B – COAL AUTHORITY INFORMATION



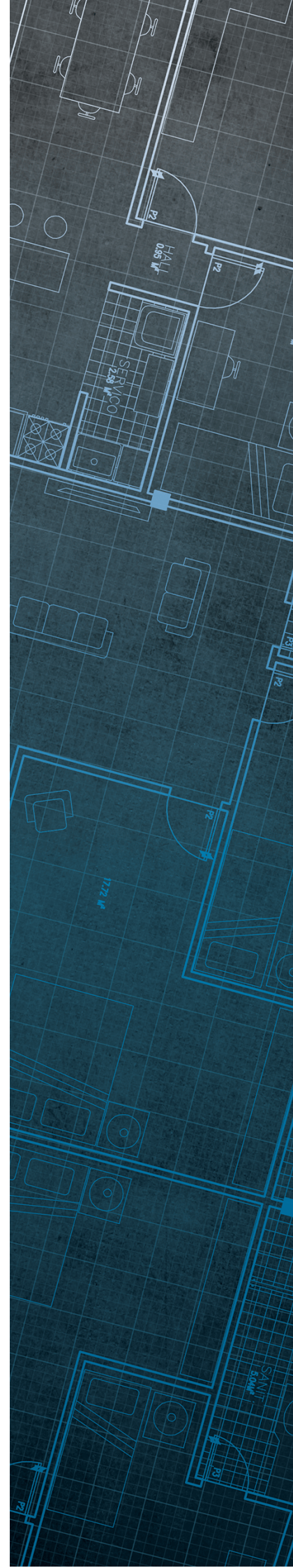
The Coal
Authority

Consultants Coal Mining Report

Brow Mills Industrial Estate
Brighouse Road
Hipperholme
Brighouse
Calderdale
HX3 8EF

Date of enquiry:	23 September 2019
Date enquiry received:	23 September 2019
Issue date:	24 September 2019

Our reference:	51002171434001
Your reference:	Brighouse Road, Hipperholme



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

Stephen Harrison

Enquiry address

Brow Mills Industrial Estate
Brighouse Road
Hipperholme
Brighouse
Calderdale
HX3 8EF

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

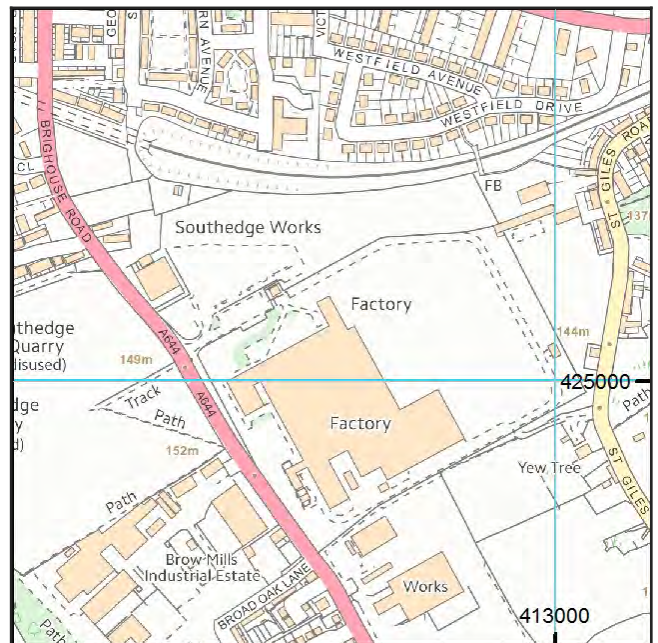
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

No past mining recorded.

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	412424-006	412820 424755		Coal	
Shaft	412425-002	412389 425269		Coal	
Shaft	412425-004	412386 425210		Coal	
Shaft	412425-009	412439 425128		Coal	
Shaft	412425-010	412511 425294		Flagrock	
Shaft	413424-001	413134 424938		Coal	
Shaft	413424-013	413027 424997		Coal	

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

FGB1010	PO0	
---------	-----	--

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

No outcrops recorded.

Geological faults, fissures and breaklines

Please refer to the 'Summary of findings' map (on separate sheet) for details of any geological faults, fissures or breaklines either within or intersecting the enquiry boundary.

Faults under or close to the property recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

Based on the responses in this report, no further information has been highlighted.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

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VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	23 September 2019
Issued to	STEPHEN HARRISON CEDARS BUSINESS CENTRE BARNESLEY ROAD HEMSWORTH PONTEFRACT WAKEFIELD WF9 4PU
Property search for	BROW MILLS INDUSTRIAL ESTATE BRIGHOUSE ROAD HIPPERHOLME BRIGHOUSE CALDERDALE HX3 8EF
Reference number	51002171434001
Date of issue	24 September 2019
Cost	£112.13
VAT @ 20%	£22.43
Total received	£134.56
VAT registration	598 5850 68

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown

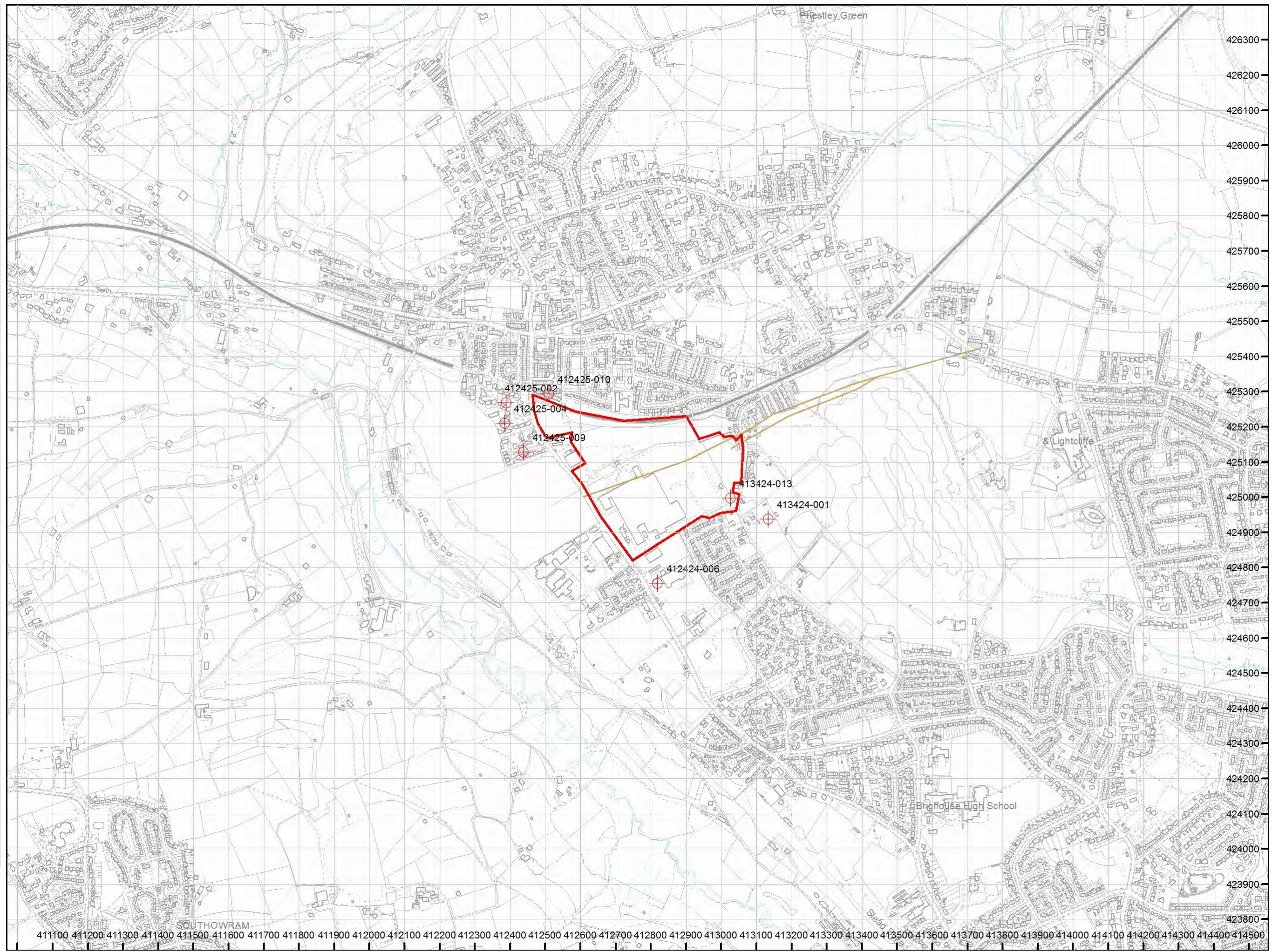
Disused mine shaft

Geological faults









APPENDIX 5

PRELIMINARY ECOLOGICAL APPRAISAL

SF 3057 | Land at Crosslee PLC, Hipperholme

PRELIMINARY ECOLOGICAL APPRAISAL

July 2020 | For Planning

CONFIDENTIAL – NOT TO BE MADE AVAILABLE IN THE PUBLIC DOMAIN

Quality Assurance

Job Title: Land at Crosslee PLC, Hipperholme			Job Number: SF3057	
Document title: Preliminary Ecological Appraisal				
Issue	Date	Prepared by	Checked by	Approved by
Original	21/07/2020	JE	KL	KL

Name:	Initials:	Status:	Licence number(s):
Katie Lawrence <i>Associate Ecologist</i>	KL	BSc (Hons) MCIEEM	Bats: 2015-7301-CLS-CLS (Class 1) GCN: 2015-17393-CLS-CLS (Class 1)
Jessica Eyre <i>Senior Ecologist</i>	JE	BSc (Hons) MSc	Bats: 2015-13434-CLS-CLS (Class 2) GCN: 2015-17834-CLS-CLS (Class 2)

REVISION HISTORY

Original report issued 21/07/2020

SMEEDEN FOREMAN
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Appendix 02: Designated Site Map

Appendix 03: Protected Species Legislation

EXECUTIVE SUMMARY

Smeeden Foreman Limited has been commissioned by Peacock and Smith to undertake an ecological assessment of land at Crosslee PLC, Hipperholme, West Yorkshire (central grid reference SE 12835 25033). The site is proposed for allocation within the local plan for residential development. The report has been commissioned to inform the local plan and a planning application for a development of mixed use including residential, retail, industrial, care home facilities and open green space.

A desk study of relevant information has been undertaken including designated nature conservation sites and existing records of protected species; and initial site survey (extended phase 1 habitat survey).

The habitats within the proposals site include factory structures and associated outbuildings, hard standing access roads, varying grassland habitats, bare ground, two areas of woodland and a small number of single trees.

Designated sites

One statutorily designated nature conservation site lies within 2km of the proposals site boundary which is Shibden Park and Cunnery Wood LNR located approximately 1.6km northwest of the site. Four non-statutorily designated sites lie within a 2km of the site, with the closest being Groveville Hedgerow LWS located approximately 1km north-west.

Due to the nature and scale of the proposals, lack of complimentary habitats, distance and severance of the site from intervening roads and built areas, it is anticipated that there will be no significant adverse effects on statutorily and non-statutorily designated sites within 2km of the proposals site.

The site is situated within an Impact Risk Zone of South Pennine Moors SPA, SAC and SSSI, however the relevant Natural England GIS dataset indicates that the potential nature of the proposed development will not impact upon this statutory site.

Habitats

Although of limited botanical value, the vegetated habitats on site are likely to be used by a range of wildlife such as bats for commuting and foraging purposes, birds for nesting and foraging and amphibians and small mammals such as hedgehogs.

In order to protect habitats of ecological value present and ensure that the proposed development provides enhancement to wildlife, the following is recommended:

- The retention of trees at the site where feasible, or replacement planting using native species;
- If the woodland to the north is to be lost to facilitate the proposed development, it is recommended that a linear strip of woodland is retained to the boundaries, particularly with the northern boundary of the habitat comprising more mature trees. This would provide continued habitat connectivity, a visual barrier and maintain some of the habitat for continued use by local wildlife;
- If the ephemeral/short perennial habitat within grassland to the east of the site is not retained, it is to be translocated to an area of proposed wildflower grassland;

- Use of temporary protective demarcation fencing to protect retained areas/features. The fencing must be in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction', extend outside the canopy of the retained trees, and remain in position until construction is complete;
- Use of directional lighting during construction and post-development, which will not shine upon the site boundaries, retained woodland and areas of existing/new planting;
- The incorporation of an appropriate wildflower seed mix and native tree and shrub planting within the landscape proposals; and,
- A control programme for non-native species such as cotoneaster should be put in place to control/eradicate it from the site with care taken during construction to prevent spread.

Species

The potential for the following protected and notable species to be affected by the development has been assessed with potential mitigation and further survey work as follows:

- **Great crested newt, water vole and otter** – No adverse impact upon these species is anticipated as a result of a development.
- **Bats** – Further assessment of a mature birch tree to the north-east of the site in terms of the presence/absence of roosting bats will be required if this tree was to be affected by future development. Transect activity surveys undertaken during the appropriate period (April – October) are also recommended to assess the use of the site by foraging and commuting bats. Such surveys would inform a planning application.
- **Breeding birds** – Any tree, scrub and brash pile removal will take place outwith the breeding bird period (March – August inclusive) unless checks by an appropriately qualified ecologist find active nests to be absent immediately prior to clearance works commencing. Consideration should be given to the installation of nest boxes onto retained trees and new builds within the site, retention of some of the woodland habitat to the boundaries, where possible, and the planting of native trees and shrubs within the site.
- **Badger** – A detailed survey to assess the use of potential badger setts on site is recommended to inform any future planning applications as signs of this species was noted.
- **Reptiles** – Reptile surveys are recommended to assess the presence/absence of such species. This survey would inform any future planning applications.
- **Hedgehog** – Precautionary working methods are recommended to ensure this species is not harmed/killed during works; providing gaps within any proposed fencing/walls is recommended within the proposals to allow passage of hedgehog across the site.
- **Other mammals** – Signs of fox were recorded on site. Precautionary working methods as recommended for badger during any future demolition/construction works would also avoid harm to this species.

1.0 INTRODUCTION

- 1.1.1 Smeeden Foreman Limited has been commissioned by Peacock and Smith to undertake an ecological assessment of land at Crosslee PLC, Hipperholme, West Yorkshire (central grid reference SE 12835 25033), hereafter referred to as the 'site'.
- 1.1.2 This report will include the following information gathered by a desk study and an initial site walk over:
- Proximity to statutory and non-statutory designated sites;
 - Proximity to existing records of protected species; and,
 - Site habitat appraisal and potential to support protected species.
- 1.1.3 A review of the above information will be made to identify any features or sites of ecological interest which may be affected by the development proposals. Where potential impacts or protected species are identified the need for mitigation measures and requirements for further surveys will be discussed.
- 1.1.4 The site is proposed for allocation within the local plan for residential development. The report has been commissioned to inform the local plan and a planning application for a development of mixed use including residential, retail, industrial, care home facilities and open green space.
- 1.1.5 The methodologies used to survey and assess the ecological value and potential impacts on the site are based upon guidelines produced by the Chartered Institute of Ecology and Environmental Management (CIEEM) (Guidelines for Preliminary Ecological Appraisal 2017).

2.0 SITE DESCRIPTION

- 2.1.1 The proposal site is located along the southern edge of the village of Hipperholme, approximately 0.3km south of its centre. The site itself is approximately 11 hectares and comprises a large factory building located to the west of the site with a number of smaller structures adjacent which are surrounded by a hardstanding access road, semi-improved grassland, single trees, scattered scrub and tall ruderal vegetation, with two areas of broadleaved woodland to the north and east of the site. Refer to *Figure 01* below.
- 2.1.2 To the northwest are adjoining areas of woodland habitat and a car park which was previously utilised by employees of the Crosslee PLC factory. The northern boundary is marked by a railway line, beyond which is a residential area. To the north east of the site there appears to be a scrap merchant, with associated areas of hardstanding and buildings. St Giles Road marks the eastern boundary of the site, beyond which habitats comprise pasture fields, woodland and areas of scrubland. Land adjacent to the south includes a relatively new residential development and a HGV yard. Brighthouse Road marks the western boundary of the site, which is adjacent to industrial units, pasture fields and woodland.



Figure 01: Aerial view of site location

3.0 PRINCIPLE LEGISLATION AND POLICIES

- 3.1.1 The national nature conservation legislation and policies that may be relevant to the proposed development are listed below. A brief explanation of the principle legislation and policies relating to nature conservation, biodiversity and ecology is provided in *Appendix 01*.

Principle Legislation and Policies

- Wildlife and Countryside Act 1981 (*as amended*)
- EC Habitats Directive (92/43/EEC)
- EC Birds Directive (79/409/EEC)
- Conservation of Habitats and Species Regulations 2017
- Countryside and Rights of Way Act 2000
- Protection of Badgers Act 1992
- United Kingdom Biodiversity Action Plan (UKBAP)
- Natural Environment and Rural Communities Act (NERC), 2006 – Biodiversity Duty
- Hedgerow Regulations 1997
- National Planning Policy Framework (NPPF)

4.0 BASELINE INFORMATION

4.1 METHODOLOGY

- 4.1.1 The ecological interest of the site and its surroundings has been investigated by a combination of the following:

- Field survey of the site and immediate surroundings including a phase 1 habitat survey;
- Consultation with relevant bodies to obtain existing protected species records and statutory / non-statutory designated sites information within local area within 2km of the development site: West Yorkshire Ecology Services (WYES) and West Yorkshire Bat Group (WYBG);
- Reference to previous site assessment of woodlands to the north and east of the site undertaken by Smeeden Foreman in September 2017, as follows:
 - SF 2730, Preliminary Ecological Appraisal - Land to the East of Crosslee Factory, September 2017;
 - SF 2730, Preliminary Ecological Appraisal - Land to the North of Crosslee Factory, September 2017, (Revision A);
- The UK Biodiversity Action Plan (UKBAP);
- The Local Biodiversity Action plan (LBAP) for Calderdale;
- Magic map, a government website for nature conservation information; and,
- Aerial photographs.

4.2 NATURE CONSERVATION DESIGNATED SITES

Statutory Designations

- 4.2.1 One statutorily designated nature conservation site lies within 2km of the proposals site boundary which is Shibden Park and Cunnery Wood Local Nature Reserve (LNR) located approximately 1.6km northwest of the site. LNR's are statutory sites of district-wide importance for the enjoyment, study or conservation of wildlife, geological features and landforms, which are designated by local authorities under the National Parks and Access to the Countryside Act 1949.
- 4.2.2 The site is located within the outer limits of the Impact Risk Zone of the South Pennine Moors Special Protection Area (SPA), Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) which is located approximately 9.2km to the north west of the site. The relevant Natural England Geographic Information System (GIS) dataset indicates that the nature and scale of the proposed works are unlikely to impact upon this site.
- 4.2.3 No other European or national statutory designated sites are present within 2km of the proposed development site such as Ramsar Sites, SPA's, SAC's, National Nature Reserves (NNR), Areas of Outstanding Natural Beauty (AONB) and National Parks.

Non-statutory Designations

- 4.2.4 WYES provided information on four non-statutorily designated sites within 2km of the proposals site. These sites are detailed in Table 01 below with additional descriptions of their corresponding designations.

Table 01: Non-statutorily designated sites within 2km

Site Name	Designation	Grid reference	Location from site	Notes
Cromwell Wood	LWS ^[1]	SE 123231	1.7km south	Ancient semi-natural woodland in part, species rich acid woodland and native bluebells
Groveville, Hipperholme Hedgerow	LWS ^[1]	SE 124260	1km northwest	Species rich hedgerow with several native woody species
Shibden Park and Cunnery Wood	LWS ^[1] / LNR	SE 107259	1.6km northwest	Mixed habitat including traditional parkland, mature and new woodland
Wood Head Quarries	LGS ^[2]	SE 118259	1.2km northwest	Several old quarries with mixed rock types.

^[1] Local Wildlife Sites (LWS) are areas identified and selected locally for their wildlife value. The designation is non-statutory but is recognition of a site's significance with many LWS being of county and often regional importance for wildlife. Examples range from field ponds, streams and reed beds, to ancient woodlands, flower-rich meadows and hedgerows. This designation is equivalent to a SINC. This designation is used by local authorities to allow the ecological value of a site to be considered within the planning system.

^[2] Local Geological Sites (LGS) are areas identified as being important for their geological features.

4.2.5 Refer to *Appendix 02* which shows the locations of the designated sites in relation to the application site.

4.3 EXISTING SPECIES RECORDS

4.3.1 Existing biological records were provided following consultation with WYES and WYBG. The records detailed in the following tables are those in closest proximity to the proposed development site within the 2km search area. The raw data provided by the records centre was extensive and is therefore not appended to the report but a copy can be provided on request.

Table 02: WYES - Protected species records within 2km

Species	No. of records	Distance of nearest record*	Grid ref.	Wildlife Barrier**	Notes
Great crested newt <i>Triturus cristatus</i>	35	1.7km east	SE 145 252	Yes	Field observation, dated 27/04/2017
Corncrake <i>Crex crex</i>	1	0.9km north (limited grid ref. to 1km)	SE 1326	No	Historic field record, dated 1970-1988
Woodlark <i>Lullula arborea</i>	1	0.1km east (limited grid ref. to 1km)	SE 1325	No	Historic field record, dated 1970-1988
Redwing <i>Turdus iliacus</i>	1	0.3km north west	SE 125 252	No	Field record, dated 11/09/2015
Water vole <i>Arvicola terrestris</i>	3	0.6km south west	SE 125 245	Yes	Field record, dated 12/03/2004
Otter <i>Lutra lutra</i>	2	1.5km south east (limited grid ref. to 1km)	SE 1424	Yes	Field observation, dated 24/07/2006
Daubenton's bat <i>Myotis daubentonii</i>	1	0.9km south east	SE 1373 2473	No	Field record, date unknown
Unknown <i>Myotis</i> bat <i>Myotis sp.</i>	1	0.9km west	SE 1204 2467	No	Foraging, dated 01/06/2011 - 02/06/2011
Leisler's bat <i>Nyctalus leisleri</i>	3	0.9km west	SE 1204 2467	No	Foraging, dated 01/06/2011 - 02/06/2011
Noctule <i>Nyctalus noctula</i>	7	0.3km north west	SE 12613 25199	No	Field record, dated 06/06/2016 - 14/06/2016
Common pipistrelle <i>Pipistrellus pipistrellus</i>	5	0.9km west	SE 1204 2467	No	Foraging, dated 01/06/2011 - 02/06/2011
Unknown pipistrelle bat <i>Pipistrellus sp.</i>	29	0.2km north west	SE 1264 2518	No	Field record, dated 06/06/2016
Brown long-eared bat	1	0.9km west	SE 1204	No	Foraging, dated

<i>Plecotus auritus</i>			2467		01/06/2011 - 02/06/2011
Vesper bat species <i>Vespertilionidae</i>	10	0.6km south east	SE 13282 24640	No	Roost, count of 20, dated 15/07/2003
* approximate distance					
** Wildlife barriers between the application site and records, e.g. major roads and built up areas.					

Table 03: WYBG - Bat species records within 2km

Species	No. of records	Distance of nearest record*	Grid ref.	Wildlife Barrier**	Notes
Common pipistrelle <i>Pipistrellus pipistrellus</i>	7	0.3km west	SE 126 246	No	24/06/1998, Broadoak Place, 1 adult, roost (possible)
Daubenton's bat <i>Myotis daubentonii</i>	1	0.8km south west	SE 120 246	No	27/05/1999, Hipperholme works, roost (possible)
Leisler's bat <i>Nyctalus leisleri</i>	2	0.8km south west	SE 120 246	No	27/05/1999, Hipperholme works, roost (possible)
Pipistrelle species <i>Pipistrellus sp.</i>	11	0.6km north west	SE 136 255	No	29/09/2015, The Manor House, Lightcliffe, count of 2 adults, roost (demolished)
Vesper bat species <i>Vespertilionidae</i>	11	0.2km south	SE 130 247	No	08/07/2002, Bolehill Park, Hove Edge, roost (possible)
* approximate distance					
** Wildlife barriers between the application site and records, e.g. major roads and built up areas.					

4.3.2 No European Protected Species Licences were identified within the 2km search area. The locations of the nearest EPS licences to the proposals site are approximately 3km southeast (ref: *EPSM2013-6554* for common pipistrelle bat, destruction of a resting place, dated 05/11/2013 - 30/09/2015) and 3.1km west (ref. 2014-4266-EPS-MIT for common pipistrelle, damage/destruction of a resting place, dated 24/10/2014 - 24/10/2019).

4.3.3 Numerous records of badger *Meles meles* were also provided within 2km of the proposals site.

4.3.4 Non-native invasive species included on Schedule 9 of the Wildlife and Countryside Act 1981 which have been recorded within 2km of the proposals site include Canada goose, Japanese knotweed, montbretia, giant hogweed, Himalayan balsam, rhododendron and grey squirrel.

4.3.5 Records of priority UK Biodiversity Action Plan species within 2km of the study area were provided for the following species:

Amphibians: common toad, great crested newt;

Birds: skylark, corncrake, lesser spotted woodpecker, curlew, dunnock, bullfinch, starling, song thrush;

Insects: small heath, wall butterfly, white letter hairstreak, knotgrass moth, green-brindled crescent, ghost moth, white ermine, cinnabar;

Fish: sea trout;

Plants: chamomile;

Mammals: water vole, hedgehog, brown hare, otter, noctule, brown long eared bat.

- 4.3.6 In addition to the notable species detailed above, the following species are listed on the local action plans:

West Yorkshire BAP: common frog, palmate newt, smooth newt, swift, house martin, kestrel, swallow and golden plover.

Calderdale BAP: meadow pipit, black headed gull, grey wagtail, goldcrest, lesser whitethroat, autumn crocus, bee orchid and *Pammene fasciana*.

4.4 BIODIVERSITY ACTION PLANS

National Biodiversity Action Plan

- 4.4.1 The UK Biodiversity Action Plan (UK BAP) identifies priority species and habitats which are those considered to be the most threatened and therefore most in need of conservation action. The lists were updated in 2007 to include 1150 species and 65 habitats. The UK Post-2010 Biodiversity Framework (July 2012) has succeeded the UKBAP, however priority species and habitats listed under the UKBAP remain a valuable reference source and have been used to inform statutory lists at a national level including Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (England).
- 4.4.2 No UK BAP priority species were recorded within the site during the site visit, though habitats within the site, such as woodland and scrub are considered to have potential to support bird species such as dunnock and song thrush and mammals such as bats and hedgehog.
- 4.4.3 Priority habitats known to occur within 2km of the site include the following:
- Ancient Semi-Natural Woodland
 - Ancient Replanted Woodland
 - Lowland Meadows
 - Lowland Dry Acid Grassland
 - Deciduous Woodland
- 4.4.4 During the walkover survey woodland habitat was recorded to the north and east of the site.

Local Biodiversity Action Plan

- 4.4.5 Habitat types for which action plans have been prepared for the Biodiversity Action Plan (LBAP) for Calderdale include:
- Ancient trees
 - Blanket bog and upland heathland
 - Canals

- Hedgerows
 - Native woodlands
 - Rivers and streams
 - Unimproved grassland
 - Urban
- 4.4.6 Woodland habitat is present to the north and east of the site.
- 4.4.7 Species for which action plans have been prepared for the Biodiversity Action Plan (LBAP) for Calderdale include:
- Twite
 - Water vole
 - Waxcap fungi
- 4.4.8 It is considered unlikely that these species occur within the site

4.5 SITE SURVEY – PHASE 1 HABITAT SURVEY

Methodology

- 4.5.1 A walk over survey was undertaken by Senior Ecologist Jessica Eyre BSc (Hons) MSc on the 3rd July 2020. Habitat types and key species were noted and are presented in the Phase 1 Habitat format proposed by the Joint Nature Conservation Committee (2010), refer to Figure 02 for corresponding target notes (TN).

Results

Buildings

- 4.5.2 There are a number of buildings on site which include a large factory building with offices and adjacent outbuildings to the west of the site, and to the east/north east of the site is a pump house with an adjacent water tank, and an outbuilding known as the 'tractor shed'. Demolition consent of these buildings was granted by the LPA and prior to demolition they were subject to inspections by Smeeden Foreman (between April- June 2020) in the interest of roosting bats and that presence/absence surveys were then undertaken of the tractor shed with no roosting bats being recorded using the building.

Hard standing

- 4.5.3 A hard standing road loops around the site with the main access onto site being located to the north-west.

Grassland

- 4.5.4 Located adjacent to woodland to the east of the site is an area of semi-improved grassland habitat which is situated on a western facing slope (**target note 1**). Within this habitat there are scattered self-seeded saplings adjacent to the eastern woodland edge, and patches of ephemeral/short perennial vegetation (see target note 2 below). Grass is dominant within the sward, with species recorded including abundant cock's-foot *Dactylis glomerata*, creeping bent *Agrostis stolonifera* and Yorkshire fog *Holcus lanatus*, and frequent false oat-grass *Arrhenatherum elatius*, crested dog'-tail *Cynosurus cristatus*, red fescue *Festuca rubra* and meadow grass *Poa sp.*, with glaucous sedge *Carex flacca* also recorded occasionally. Forb species occur rarely to frequently within the sward and include red clover *Trifolium pratense*,

meadow buttercup *Ranunculus acris*, creeping buttercup *R. repens*, rosebay willowherb *Chamerion angustifolium*, common ragwort *Senecio jacobaea*, common vetch *Vicia sativa*, tufted vetch *V. cracca*, ribwort plantain *Plantago lanceolata*, meadow vetchling *Lathyrus pratensis*, fox and cubs *Pilosella aurantiaca*, dandelion *Taraxacum agg.*, herb Robert *Geranium robertianum*, colt's foot *Tussilago farfara*, common hogweed *Heracleum sphondylium*, curled dock *Rumex crispus*, mouse-ear hawkweed *Pilosella officinarum*, autumn hawkweed *Leontodon autumnalis*, sheep sorrel *R. acetosella* and cat's-ear *Hypochaeris radicata*. Along the woodland edge are scattered saplings which include birch *Betula sp.*, goat willow *Salix caprea*, oak *Quercus sp.*, dog rose *Rosa canina*, cherry *Prunus sp.* and elder *Sambucus nigra*, with bramble *Rubus fruticosus* also being abundant

- 4.5.5 To the north of the grassland detailed above are patches of ephemeral/short perennial vegetation which were previously bare ground (**target note 2**). Mouse-eared hawkweed is abundant, with other species recorded occasionally including ribwort plantain, red clover, oxeye daisy *Leucanthemum vulgare*, cat's-ear, selfheal *Prunella vulgaris*, lesser trefoil *T. dubium*, sweet vernal-grass *Anthoxanthum odoratum* and common centaury *Centaurea erythraea*. Rarely occurring within this habitat are common spotted orchid *Dactylorhiza fuchsii* and small clumps of non-native cotoneaster *Cotoneaster sp.*, ling heather *Calluna vulgaris* and wild thyme *Thymus serpyllum*.
- 4.5.6 To the centre of the site is a large area of rough grassland which has been left unmanaged with ruderal vegetation and scattered saplings and shrubs throughout (**target note 3**). Grass species include Yorkshire fog, false oat grass, cock's foot and meadow grass. Forb and ruderal species include dandelion, colt's foot, red clover, white clover *T. repens*, bramble, ribwort plantain, rosebay willowherb, common hogweed, creeping thistle *Cirsium arvense*, common toadflax *Linaria vulgaris*, oxeye daisy, bush vetch *Vicia sepium*, tufted vetch, cleavers *Galium aparine*, honeysuckle *Lonicera sp.*, male fern *Dryopteris filix-mas*, meadow vetchling, prickly sow thistle *Sonchus asper* and cats ear. Scattered saplings and shrubs include elder, hawthorn *Crataegus monogyna*, silver birch *B. pendula*, goat willow, cherry, oak and rose. Within this habitat there are also a number of brash and wood chip piles (**target note 4**), which appear to be remnants of previous habitat management, with the adjacent vegetation now growing over/through these areas.
- 4.5.7 To the western boundary of the site and to the north of the factory building entrance is semi-improved grassland (**target note 5**) which is managed. Grass is dominant within the sward, with species recorded including Yorkshire fog which is dominant, cock's-foot, which are abundant, and frequent false oat-grass, creeping bent, crested dog'-tail, perennial ryegrass *Lolium perenne* and meadow grass. Forb species occur rarely to frequently within the sward and include creeping cinquefoil *Potentilla reptans*, ragwort, prickly sow thistle, dandelion, creeping buttercup, ribwort plantain, white clover, common daisy *Bellis perennis*, chickweed *Stellaria media*, colt's foot, curled dock, creeping thistle, greater plantain *Plantago major*, common nettle *Urtica dioica*, spear thistle *C. vulgare*, broad leaved dock *R. obtusifolius* and cuckoo flower *Cardamine pratensis*.
- Bare ground
- 4.5.8 The north eastern side of the main factory building was in the process of being demolished at the time of the survey, therefore there are areas of bare ground within the adjacent grassland due to the demolition activities. There are also large piles of scrap metal which have been created in this area as a result (**target note 6**).

Tall ruderal

- 4.5.9 To the south of the site there are areas of tall ruderal vegetation adjacent to the hard standing access road (**target note 7**). Species include bramble, rosebay willowherb, ribwort plantain, ragwort, false oatgrass, common knapweed *Centaurea nigra*, common hogweed, cleavers, meadow vetchling, horse tail *Equisetum sp.* and cat's ear, with elder and rose shrubs.

Woodland

- 4.5.10 Anecdotal evidence suggests that the woodland has become established to the northern and eastern boundaries. These habitats are which comprise self-seeded broadleaf woodland; it has been advised that the woodland habitat has become established approximately over the last 40 years, with no woodland habitat occurring on site when the Crosslee factory was built during the early 1970's.
- 4.5.11 To the north of the site is a self-seeded immature to semi-mature woodland habitat (**target note 8**) which is situated on relatively level ground, which slopes slightly to the north in the vicinity of the adjacent railway line. The habitat appears to have been thinned fairly recently, as there are a number of new tree stumps and fresh wood piles, as well as older deadwood throughout. The trees within the canopy are relatively immature to semi-mature and intact, with trees adjacent to the railway line appearing to be more mature, with the largest trees noted being a birch within vicinity of the a stone footbridge (**target note 9**). The canopy is dominated by willow, with other tree species recorded including birch, ash *Fraxinus excelsior* and sycamore *Acer pseudoplatanus*. The understorey comprises occasional shrubs, with hawthorn being dominant and other shrub species including ash and holly *Ilex aquifolium*, with the non-native cotoneaster also noted. The ground layer is dominated by bramble, with other species recorded including ivy *Hedera helix*, broadleaved willowherb *Epilobium montanum*, rosebay willowherb, common nettle, male fern, herb robert, broad-buckler fern *D. dilatata*, common hogweed, wood avens *Geum urbnaum* and hart's-tongue fern *Asplenium scolopendrium*. A small amount of fly-tipping was noted within the woodland during the survey.
- 4.5.12 To the east of the site is another self-seeded immature to semi-mature woodland habitat situated on relatively level ground, which has been left unmanaged for some time (**target note 10**). The canopy is dominated by willow, with other tree species recorded including birch, pedunculate oak *Q. robur*, ash, sycamore, whitebeam *Sorbus sp.*, guelder rose *Viburnum opulus* and a small number of non-native conifer species located to the southern end of the woodland. There is also an abundance of dead wood, including a number of standing dead trees and dead wood around the woodland floor. The understorey is relatively dense, with hawthorn being dominant and other shrub species including ash, oak, holly, wych elm *Ulmus glabra*, cherry *Prunus avium*, dog rose and rowan *S. aucuparia*. A number of non-native shrubs were also recorded including a cotoneaster, snowberry *Symphoricarpos sp.* and a fuchsia *Fucshia sp.* The ground layer is co-dominated by bramble and ivy, with other species recorded including herb Robert, cleavers, broadleaved willowherb, rosebay willowherb, male fern, broad-buckler fern, wood avens, common hogweed, meadow buttercup, common nettle, bush vetch, tufted vetch, meadow vetchling, creeping thistle and dandelion.

Trees

- 4.5.13 To the west of the site are a number of trees within areas of grassland adjacent to the factory building. To the north west of the building are three large stand-alone trees which are ash, sycamore and conifer. To the north east is a group of trees which includes one very large mature willow with smaller trees and saplings at the base including silver birch, cherry and ash. To the west of the building is a linear strip which includes sycamore, hawthorn, ash and rose with large cotoneaster shrubs dominating the understory, and to the south of there is a single ash tree. None of these trees were noted to be of significance in regards to bat roosting potential, but they do however provide opportunities for nesting birds.

Fauna

- 4.5.14 During the survey the following bird species were recorded: blackbird, robin, wood pigeon, collared dove, black headed gull, blue tit, great tit, wren and magpie. Three mammal holes were noted within the woodland habitat to the north of the site with two holes recorded towards the north (**target note 11**) and a single hole to the south-east (**target note 12**). Neither of the two holes detected to the north were considered to be potentially active, however the hole to the south-east appeared to be active, with minimal debris at the entrance, and a hole in the fence to the south east of the woodland with a mammal track leading up to it (**target note 13**).
- 4.5.15 No mammal holes were detected within the woodland to the east, however a series of mammal tracks and snuffle holes were noted on the western edge of this woodland (**target note 14**), and a small hole was noted within the fencing between the woodland and adjacent grassland on site (**target note 15**). Further mammal tracks were also noted within the grassland bank. No badger hair was noted on either of the holes within the fencing, however badger were recorded within their vicinity during site inspections of the tractor shed undertaken by Smeeden Foreman in May/June 2020 in relation to demolition consent granted by the LPA prior to the commencement of these works. Foxes were also recorded during these inspections to the east of the site, and fox scat was noted within the grassland to the centre of the site.

4.5.16 Photographs



Image 01: Grassland to the east (TN1)



Image 02: Ephemeral/short perennial to the north of grassland to the east (TN2)



Image 03: Rough grassland to the centre of site (TN3)



Image 04: Brash piles (TN4)



Image 05: Grassland to the west (TN5)



Image 06: Bare ground with scrap piles (TN6)



Image 07: Hard standing road and tall ruderal areas (TN7)



Image 08: Woodland to the north of the site (TN8)



Image 09: Woodland to the east of the site (TN10)



Image 10: Small group of trees to the west of the site



Image 11: Grassland at the factory entrance with single trees



Image 12: Small group of trees to the north of the factory building



Image 13: Mammal hole within northern woodland (TN12)

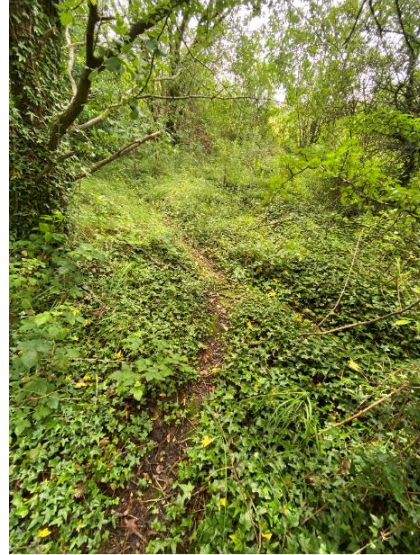


Image 14: Mammal tracks within woodland to the east (TN14)

5.0 IMPLICATIONS/RECOMMENDATIONS

5.1 NATURE CONSERVATION DESIGNATED SITES

- 5.1.1 One statutorily designated nature conservation site lies within 2km of the proposals site boundary which is Shibden Park and Cunnery Wood LNR located approximately 1.6km northwest of the site.
- 5.1.2 The site is situated within an Impact Risk Zone of South Pennine Moors SPA, SAC and SSSI. The relevant Natural England GIS dataset indicates that the potential nature of the proposed development will not impact upon this statutory site.
- 5.1.3 Four non-statutorily designated sites lie within a 2km radius of the site, with the closest being Groveville Hedgerow LWS located approximately 1km north-west.
- 5.1.4 Due to the nature and scale of the proposals, lack of complimentary habitats, distance and severance of the site from intervening roads and built areas, it is anticipated that there will be no significant adverse effects on statutorily and non-statutorily designated sites within 2km of the proposals site.

5.2 HABITATS

- 5.2.1 The habitats within the proposals site include factory structures associated outbuildings, hard standing access roads, varying grassland habitats, bare ground, two areas of woodland and a small number of single trees. Although of limited botanical value, the vegetated habitats on site are likely to be used by a range of wildlife such as bats for commuting and foraging purposes and birds for nesting and foraging, and amphibians and small mammals such as hedgehogs.
- 5.2.2 The two woodland areas of the site (target notes 8 & 10) and the grassland bank to the east of the site (target note 1) were originally assessed in September 2017 which is a suboptimal time of year for botanical surveys (see both 'Preliminary Ecological Appraisal' reports, by Smeeden Foreman, September 2017). The updated survey was undertaken within a more optimal season (July 2020), however, this did not find a significant difference in terms of species identified and distribution within these habitats.
- 5.2.3 In order to protect habitats of ecological value present and ensure that the proposed development provides enhancement to wildlife, the following is recommended:
 - The retention of the woodland and trees at the site where feasible, or replacement planting using native species;
 - If the woodland to the north is to be lost to facilitate the proposed development, it is recommended that a linear strip of woodland is retained to the boundaries, particularly with the northern boundary of the habitat comprising more mature trees. This would provide continued habitat connectivity, a visual barrier and maintain some of the habitat for continued use by local wildlife;
 - Use of temporary protective demarcation fencing to protect retained areas/features. The fencing must be in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction', extend outside the

canopy of the retained trees, and remain in position until construction is complete;

- Use of directional lighting during construction, which will not shine upon the site boundaries, hedgerows or trees within the site;
- Implementation of a sympathetic lighting scheme within proposals that minimises illumination of trees and areas of new planting to the boundaries of the site. Incorporation of appropriate luminaire specifications and locations should be considered in the interest of minimising impacts on ecological receptors, including light sensitive species i.e. bats. Reference should be made to the document published by the Bat Conservation Trust and the Institute of Lighting Professionals 'Bats and artificial lighting in the UK' (2018);
- The incorporation of an appropriate wildflower seed mix and native tree and shrub planting within the landscape proposals.

5.3 PROTECTED SPECIES

5.3.1 Existing records data and site survey have noted the potential for various protected species to occur within the search area or on site, upon which the potential effects of the proposed development are discussed in the following sections.

5.3.2 Refer to *Appendix 03* for relevant species legislation.

Great Crested Newts

5.3.3 There are no areas of standing water within the site, however habitats such as woodland, scrub, tall ruderal vegetation and rough grassland provide opportunities for amphibians during their terrestrial phase. From consulting an OS plan of the site and surrounding area, there are no ponds within 500m. Consultation with West Yorkshire Ecology provided recent records of great crested newt approximately 1.7km east of the site. Due to the intervening land uses, the distance and the lack of breeding habitat in within 500m of the proposals site, no adverse impact upon great crested newts is therefore anticipated as a result of a proposed development.

Bats – commuting/foraging habitat

5.3.4 Bat species recorded within 2km of the proposals site include field and roost records relating to Leisler's bat, noctule, Daubenton's bat, brown long-eared bat, common pipistrelle, unknown pipistrelle and Myotis bat species. The closest of these records being field records of unknown pipistrelle bat species located 0.2km north west of the site (field record dated 2016).

5.3.5 The woodland habitats within the site are considered to offer suitable bat foraging and commuting habitat. To assess the frequency of use and bat species which use this habitat it is recommended that transect activity surveys are undertaken, with results used to consider the potential impact of a proposed development and inform appropriate mitigation, such as lighting design, habitat mitigation, etc. Transect activity surveys would be undertaken during the appropriate survey season (April – October). Such surveys would be undertaken to inform a planning application.

5.3.6 Mitigation and enhancement recommendations for bats could include sympathetic lighting design, native tree and shrub planting and the installation of bat boxes, suitable for a range of species on retained trees and new buildings.

Bats – (potential) building roosts

- 5.3.7 Demolition consent of buildings on site was granted by the LPA and prior to demolition they were subject to inspections by Smeeden Foreman in the interest of roosting bats prior to commencement. The majority of buildings were to be of negligible potential for roosting bats, however, presence/absence surveys were undertaken in May/June 2020 of the 'tractor shed', which is considered to be of moderate bat roosting potential. No bats were recorded exiting or entering the building, therefore no further bat activity surveys or a protected species licence are required for the proposed demolition works. However, if proposed works to this building are not undertaken within 1 year of the activity surveys being carried out, updating surveys are recommended to re-assess the use of the building by bats prior to the demolition works commencing.
- 5.3.8 Consideration should be given to the installation of bat roosting features on new buildings/retained trees to enhance site biodiversity in line with the National Planning Policy Framework (NPPF).

Bats – potential tree roosts

- 5.3.9 The majority of trees within the woodland habitat are immature to semi-mature and intact with no suitable bat roosting features noted at the time of survey. This is with the exception of the birch tree to the north-east of the site (target note 9), which is mature and may have suitable roosting features for use by bats. If this tree is affected by a proposed development further survey to assess its use by roosting bats is recommended. Such assessment would likely include a detailed inspection from the ground, using binoculars and a torch, followed by emergence/re-entry surveys, if necessary, undertaken during the appropriate survey season (May – September). Due to the trees proximity to the railway line, a climb and inspect survey would not be recommended. Such surveys would be undertaken to inform a planning application.
- 5.3.10 If during felling works or surveying of trees (if required) roosting bats are identified, a European Protected Species Licence (EPSL) obtained from Natural England would be required prior to works commencing/re-commencing.

Breeding Birds

- 5.3.11 Bird species recorded during the survey included blackbird, robin, wood pigeon, collared dove, black headed gull, blue tit, great tit, wren and magpie. Woodland habitats and single trees on site provide opportunities for local breeding and roosting bird populations.
- 5.3.12 All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended) during breeding. It is therefore recommended that any vegetation clearance takes place outwith the bird nesting period (March – August inclusive) unless checks by an appropriately qualified ecologist find active nests to be absent immediately prior to clearance works.
- 5.3.13 The retention of some of the existing woodland habitats to the boundaries of the site, where possible, would maintain a degree of suitable nesting and foraging habitat for a range of birds. To enhance the site for cavity nesting bird species, consideration should be given to the installation of bird boxes onto retained trees/new buildings within a proposed development, and the incorporation of an appropriate wildflower

seed mix and native tree and shrub planting within the landscape proposals would enhance the site for local bird populations in general.

Badger

- 5.3.14 Three mammal holes were noted within the woodland habitat (target notes 11 & 12), holes within fences between both woodland areas (target notes 13 & 15), and snuffle holes and mammal tracks were recorded within the eastern woodland (target note 14), as well as within the grassland between the two woodland areas. Badger were also observed on site moving between the two woodlands during a bat survey undertaken in May 2020. Prior to the submission of a planning application it is recommended that a detailed badger survey is undertaken to further assess if these mammal holes are that of badgers and the potential impact upon this species and mitigation requirements if present.
- 5.3.15 If active badger setts are confirmed on site, a protected species licence may be required depending on the proposed works. This would allow for construction works within the vicinity of the setts with prescribed working methods or the closure of the setts, if necessary. Depending on the status of the badger setts identified, an artificial badger sett may have to be provided as mitigation.
- 5.3.16 Irrespective of whether active setts are found, as badgers have been noted on site precautionary working methods are recommended during any future demolition/construction works to avoid harm to this species including any trenches created on site to be covered or a means of escape to be provided and any open pipe work to be capped at the end of each working day.

Reptiles

- 5.3.17 Habitats within the site provide opportunities for reptile species for cover and during hibernation with habitats including grassland and ephemeral/short perennial to the east providing opportunities for foraging and basking respectively. The rough grassland to the centre of the site may also be suitable in some areas due to brash piles being present, however due to recent demolition activities this habitat is now highly disturbed, therefore reptiles may be deterred from utilising this location.
- 5.3.18 No records for reptiles were provided within the most recent consultation with the local records centre, however a single historic record of slow-worm was provided during previous assessments, approximately 2km from the site boundary (refer to both 'Preliminary Ecological Appraisal' reports, by Smeeden Foreman, September 2017). It is therefore recommended that reptile surveys undertaken within the appropriate season (April – September) are carried out to assess the presence/absence of such species. Such surveys would inform a planning application for the site.

Other Species

- 5.3.19 Due to the lack of suitable habitats within and immediately adjacent to the site no adverse impact upon protected species such as otter, water vole or white-clawed crayfish is anticipated as a result of the proposed development.

5.4 NOTABLE SPECIES

Hedgehog

- 5.4.1 The site is considered to provide suitable habitat for hedgehogs and numerous records for this species were provided by WYES. Precautionary working methods should therefore be adopted to ensure hedgehogs are not harmed/killed during works. Such works would include the removal of any tree/shrub cuttings from site once vegetation is cut so as to avoid the creation of brash piles; these may be attractive to hedgehogs, which could subsequently be harmed if the brash pile is burnt or removed with machinery. Existing brash and log piles should be checked for hedgehog and preferably dismantled by hand or using handheld machinery. In addition, any trenches created on site will be covered or a means of escape shall be provided and any open pipe work will be capped at the end of each working day.
- 5.4.2 It is recommended that small gaps (0.15m) are left under sections of new fencing/walls within the development to allow passage of hedgehog and maintain connectivity across the site.

5.5 OTHER SPECIES

- 5.5.1 Signs of fox were noted within the grassland in the centre of the site (i.e. fox scat, mammal tracks with grassland), and foxes were seen on site to the east during bat surveys undertaken in May/June 2020. Construction works in close proximity to this boundary and grassland to the centre of the site have the potential to harm this species and due care should be taken in the interests of animal welfare.
- 5.5.2 Precautionary working methods as recommended for badger during any future demolition/construction works would also avoid harm to this species.

6.0 CONCLUSIONS

- 6.1.1 The habitats within the proposals site include factory structures associated outbuildings, hard standing access roads, varying grassland habitats, bare ground, two areas of woodland and a small number of single trees. Although of limited botanical value, the vegetated habitats on site are likely to be used by a range of wildlife such as bats for commuting and foraging purposes and birds for nesting and foraging, and amphibians and small mammals such as hedgehogs.
- 6.1.2 One statutorily designated nature conservation site and four non-statutorily designated sites lie within 2km of the proposals site boundary. Due to the nature and scale of the proposals, lack of complimentary habitats, distance and severance of the site from intervening roads and built areas, it is anticipated that there will be no significant adverse effects on these statutorily and non-statutorily designated sites.
- 6.1.3 Further surveys have been recommended as follows:
- Bat transect surveys are recommended to be carried out at the site (April to October inclusive), in regards to the woodland edges to the north and east of the site, with results used to consider the potential impact of a proposed development and inform appropriate mitigation, such as lighting design, habitat mitigation, etc.;
 - A birch tree within the woodland to the north of the site has potential roosting features for bats. If this tree is to be affected as a result of the development, further assessment in the form of presence/absence surveys for bats (May- August inclusive) are to be undertaken carried out prior to works;
 - A detailed survey to assess the use of potential badger setts on site is recommended to inform any future planning applications as signs of this species was noted; and,
 - Reptile surveys are recommended to assess the presence/absence of such species.
- 6.1.4 Recommendations for general site enhancements include the retention of habitats of value, where possible and appropriate native species planting, wildflower seeding, sympathetic lighting, incorporation of bat boxes and bird nesting features, and if it is not possible to retain the ephemeral/short perennial habitat as part of the development, the translocation of such habitat into the proposed wildflower areas.
- 6.1.5 Precautionary working methods have been recommended for species such as badger, fox, hedgehog and breeding birds.

7.0 REFERENCES

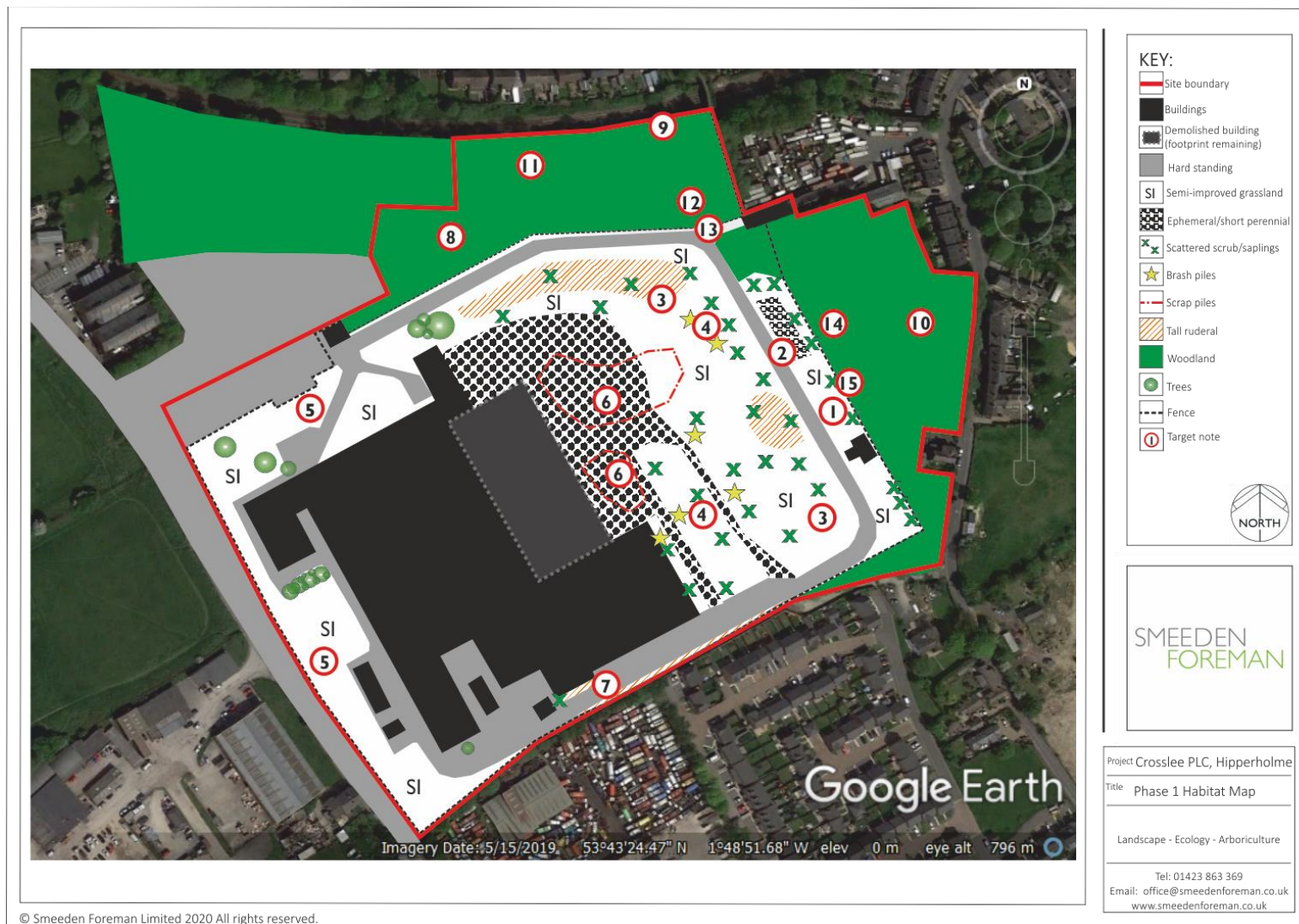
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FIGURES

Figure 01: Aerial view of site location (*within report text*)

Figure 02: Phase 1 Habitat Map

FIGURE 01: PHASE 1 HABITAT SURVEY MAP



APPENDICES

Appendix 01: Principle Legislation and Policies

Appendix 02: Designated Site Map

Appendix 03: Protected Species Legislation

APPENDIX 01: PRINCIPLE LEGISLATION AND POLICIES

Principle Legislation

Wildlife and Countryside Act 1981 (as amended)

This is the primary legislation for nature conservation in England and Wales. It confers varying degrees of protection on selected species according to their conservation status, ranging from making it an offence to take a species from the wild for profit, to full protection of a species and its habitat. The Act also gives guidance and instruction on statutory sites, such as sites of Special Scientific Interest (SSSI). License exempting specific works can be granted by Natural England. Such licenses are only granted once a full assessment has been made and an appropriate, sustainable mitigation package devised.

Protection of Badgers Act 1992

Allied to the Wildlife and Countryside Act, 1981 are subsidiary Acts such as the Protection of Badgers Act, 1992 which consolidated and added to previous legislation. According to the PBA it is an offence to wilfully kill, injure or maim a badger. Badger setts are also protected from interference unless such activities are licensed through Natural England. Any mitigation packages devised for badgers found on development sites must be agreed by Natural England and all mitigation activities must be fully licensed.

Countryside and Rights of Way Act 2000

As well as providing measures to improve countryside access for walkers, ramblers and horse riders, this Act also strengthens the protection of species and designated sites made in the Wildlife and Countryside Act 1981. This Act also gives the importance of biodiversity conservation statutory basis requiring government departments to have regard for biodiversity in carrying out their functions, and to take positive steps to further the conservation of listed species and habitats.

Natural Environment and Rural Communities Act (NERC), 2006 – Biodiversity Duty

NERC received royal assent in March 2006. Section 40 of the Act replaces and extends a duty, from Section 74 of the Countryside and Rights Of Way Act 2000, on Ministers and Government which already requires them to have regard to the purpose of conserving biodiversity. Section 40(1) states that, "*Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.*"

EC Habitats Directive (92/43/EEC)

This Directive aims to give Europe-wide protection to certain rare and threatened habitats on land and at sea. It builds on legislation already established under the Birds Directive of 1979, and aims to establish a series of protected sites known as Natura 2000 series. These sites are intended to protect the unique and special wildlife of Europe and to preserve it for future generations. In Britain these Natura 2000 sites include those areas designated as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). The Habitats Directive is implemented in the UK through the Conservation of Habitats and Species Regulations 2017.

EC Birds Directive (79/409/EEC)

The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It sets broad objectives for a wide range of activities, although the precise legal mechanisms for their achievements are at the discretion of each Member State (in the UK delivery is via several different statutes). The Directive applies to the UK and to its overseas territory of Gibraltar.

The main provisions of the Directive include:

The maintenance of the favourable conservation status of all wild bird species across their distributional range with the encouragement of various activities to that end;

The identification and classification of Special Protection Areas (SPAs) for the rare and vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance;

The establishment of a general scheme of protection for all wild birds; Restrictions on the sale and keeping of wild birds.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

For species-specific legislation, please refer to *Appendix 03* for further information.

Policy

National Planning Policy Framework (2018)

The National Planning Policy Framework replaces Planning Policy Statement 9 (PPS 9) Biodiversity and Geological Conservation but the accompanying guidance document (ODPM 06/2005: Biodiversity and Geological Conservation-Statutory Obligations and their impact within the Planning System) has not been withdrawn.

The NPPF sets out the Government's policies on the protection of biodiversity and sites of geological interest through the planning system. It required local planning authorities, when taking decisions, to ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species and to biodiversity and sites of recognised geological interest within the wider environment. It states:

"The planning system should contribute to and enhance the natural and local environment by:

Protecting and enhancing values landscapes, geological conservation interests and soils;

Recognising the wider benefits of ecosystem services;

Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures."

"When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

If significant harm resulting from a development cannot be abided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused."

Biodiversity Action Plan (BAP)

In 1993, the UK government consulted over three hundred organisations throughout the UK and held a two day seminar to debate the key issues raised at the Convention of Biological Diversity. The product of this was the launch of Biodiversity: the UK Action Plan in 1994 which outlined the UK Biodiversity Action Plan for dealing with biodiversity conservation in response to the Rio Convention.

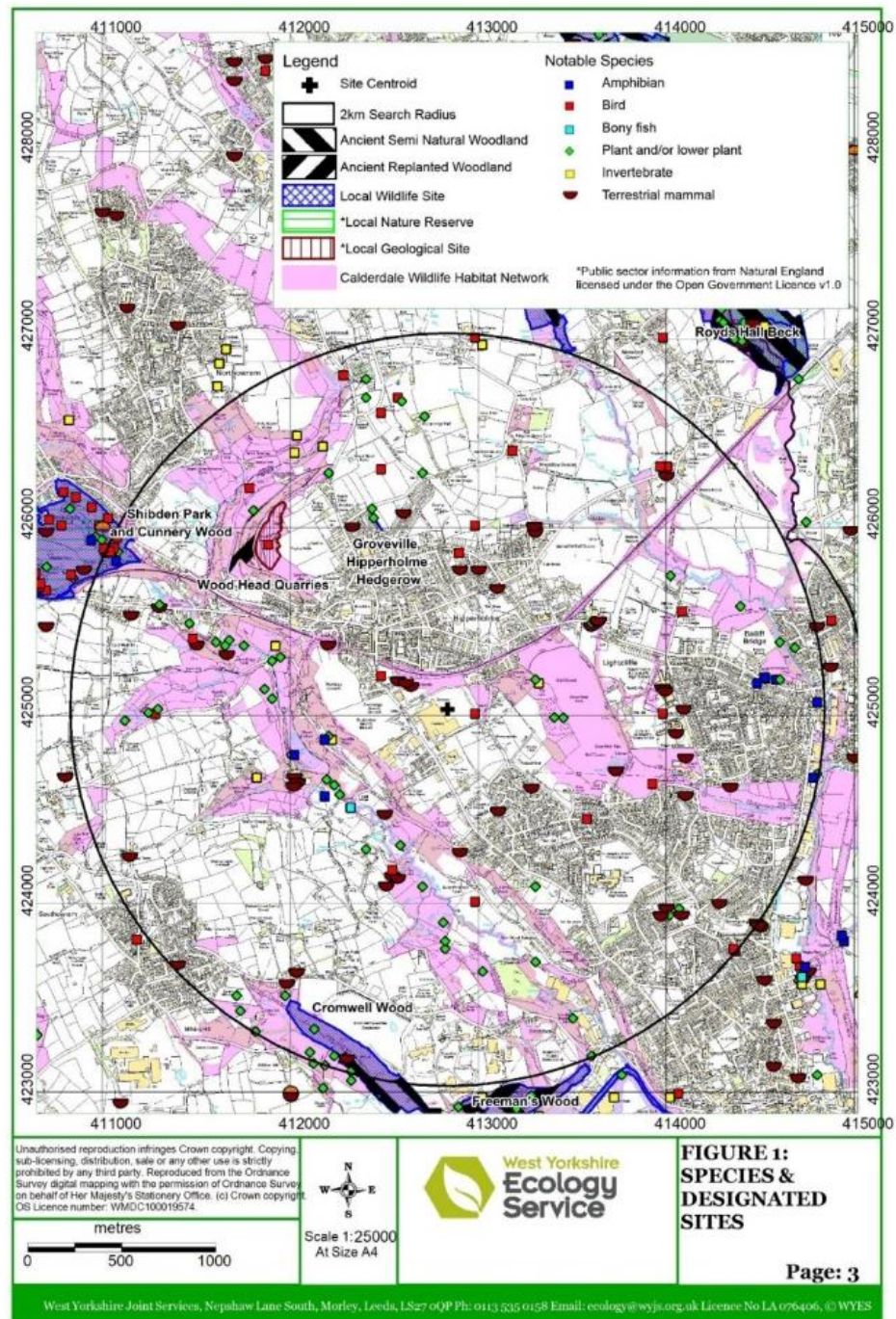
The UK Biodiversity Steering Group was created in 1994 and published Biodiversity: the UK Steering Group Report – meeting the Rio challenge. This established the framework and criteria for identifying species and habitat types of conservation concern.

From this list, action plans for 391 species and 45 broad habitat types were produced. As well as having national priorities and targets, action was also taken at a local level. The Steering Group drew up a set of guidelines that were discussed with the Local Authority Association and the Local Government Board.

Today there are 162 Local Biodiversity Action Plans in the UK. A review of the UK BAP was undertaken between 2003 and 2006.

APPENDIX 02: DESIGNATED SITES MAP

Figure 1 – Species and Designated Sites



West Yorkshire Joint Services are provided by a Joint Committee of the Metropolitan Districts of Bradford, Calderdale, Kirklees, Leeds and Wakefield.

APPENDIX 03: PROTECTED SPECIES LEGISLATION

Bats

Bats and their roosts are afforded full legal protection under both UK and European legislation. Conservation of Habitats and Species Regulations 2017 transpose the Habitats Directive into UK law, making it an offence to:

- deliberately disturb a bat;
- deliberately kill, injure or capture a bat;
- damage, destroy or obstruct access to a breeding site or resting place (note this applies to both deliberate and reckless actions).

The Wildlife and Countryside Act 1981 (as amended) (Schedule 5) made it an offence to:

- intentionally kill, injure or take a bat ;
- damage, destroy or obstruct a bat roost *;
- disturb a bat at a roost *;
- possess or control a bat or any part thereof;
- sell, offer for sale, possess or transport for sale any bat or part thereof;
- set traps for catching, killing or injuring bats;
- possess articles for the purposes of committing offences against bats;

[*= intentional and reckless offences covered].

Legal protection under the Habitats Directive applies to the animals and their breeding sites and resting places. This means that bat roosts are fully protected, whether they are in use at the time or not. Where roosts or resting/breeding sites are identified, any works which may contravene the protection afforded to them require derogation from the provisions of the legislation in the form of a licence from Natural England..

Great crested newts

The Wildlife and Countryside Act 1981 (as amended) transposes into UK law and the Convention on the Conservation of European and Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'). The 1981 Act was amended by the Countryside and Rights of Way ['CRoW'] Act 2000.

The great crested newt is listed on Schedule 5 of the 1981 Act, and is therefore subject to the provisions of Section 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt [Section 9 (1)];
- Possess or control any live or dead specimen or anything derived from a great crested newt [Section 9 (2)];
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt [Section 9 (4)(a)];
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose [Section 9(4)(b)].

The Conservation of Habitats and Species Regulations 2017 transpose into the UK law Council Directive 92/43/EEC of 21st May 1992 on the conservation of Natural Habitats and of Wild Fauna and Flora (often referred to as the 'Habitats [and Species] Directive'). The great crested newt is listed on Annex II and Annex IV of the Directive. The former Annex relates to the designation of Special Areas of Conservation (SACs) for this species; even where great crested newts occur outside SACs, the inclusion on Annex II serves to underline their conservation significance. Inclusion of the Annex IV ('European Protected Species') means that member states are required to put in place a system of strict protection

as outlined in Article 12, and this is done through inclusion on Schedule 2 of the Regulations. Regulation 43 makes it an offence to:

- Deliberately capture or kill a great crested newt [Regulation 43(1)(a)]
- Deliberately disturb a great crested newt [Regulation 43(1)(b)]
- Deliberately take or destroy the eggs of a great crested newt [Regulation 43(1)(c)]
- Damage or destroy a breeding site or resting place of a great crested newt [Regulation 43(1)(d)]

The legislation applies to all life stages of great crested newts.

Breeding birds

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built or,
- take or destroy an egg of any wild bird.

This protection applies from the moment the nest is being built. Additional protection against disturbance on the nest or of dependent young is provided for birds included on Schedule 1.

Badger

Badgers and their setts are protected by the Protection of Badgers Act 1992. Under the Act it is illegal to:

- Wilfully kill, injure or take a badger or attempt to do so;
- Cruelly ill-treat a badger; and,
- Interfere with a sett by doing any of the following:
 - (i) damaging a badger sett or any part of it;
 - (ii) destroying a badger sett;
 - (iii) obstructing access to a badger sett;
 - (iv) causing a dog to enter a sett; and,
 - (v) disturbing a badger while it is occupying a sett.

Reptiles

The Wildlife and Countryside Act 1981 makes it an offence to intentionally kill any of our native snakes and lizards. The sand lizard and smooth snake receive additional protection; for these species, it is unlawful to capture or possess them, or to damage/obstruct access to places they use for shelter or protection, or to disturb them whilst in such a place.

Otter

Otter are afforded full legal protection under both UK and European legislation. The Conservation of Habitats and Species Regulations 2017 transpose the Habitats Directive into UK law, making it an offence to:

- deliberately capture, injure or kill an otter;

- deliberately disturb an otter in such a way as to be likely to significantly affect the local distribution or abundance of otters or the ability of any significant group of otters to survive, breed, rear or nurture their young; or,
- damage or destroy an otter holt.

The otter is also protected under Section 9(4)(b) of the Wildlife and Countryside Act 1981

- intentionally or recklessly disturb any otter whilst it is occupying a holt; or,
- intentionally or recklessly obstruct access to a holt.

Water Vole

Water voles are given full legal protection under Section 9(4) of Schedule 5 of the Wildlife & Countryside Act 1981 (as amended in 2008). This makes it a legal offence to intentionally kill, injure or take, sell, damage or destroy or obstruct access to any structure or place used by water voles for shelter or protection, or to disturb water voles while they are using such a place.

FIGURE 02: PHASE I HABITAT SURVEY

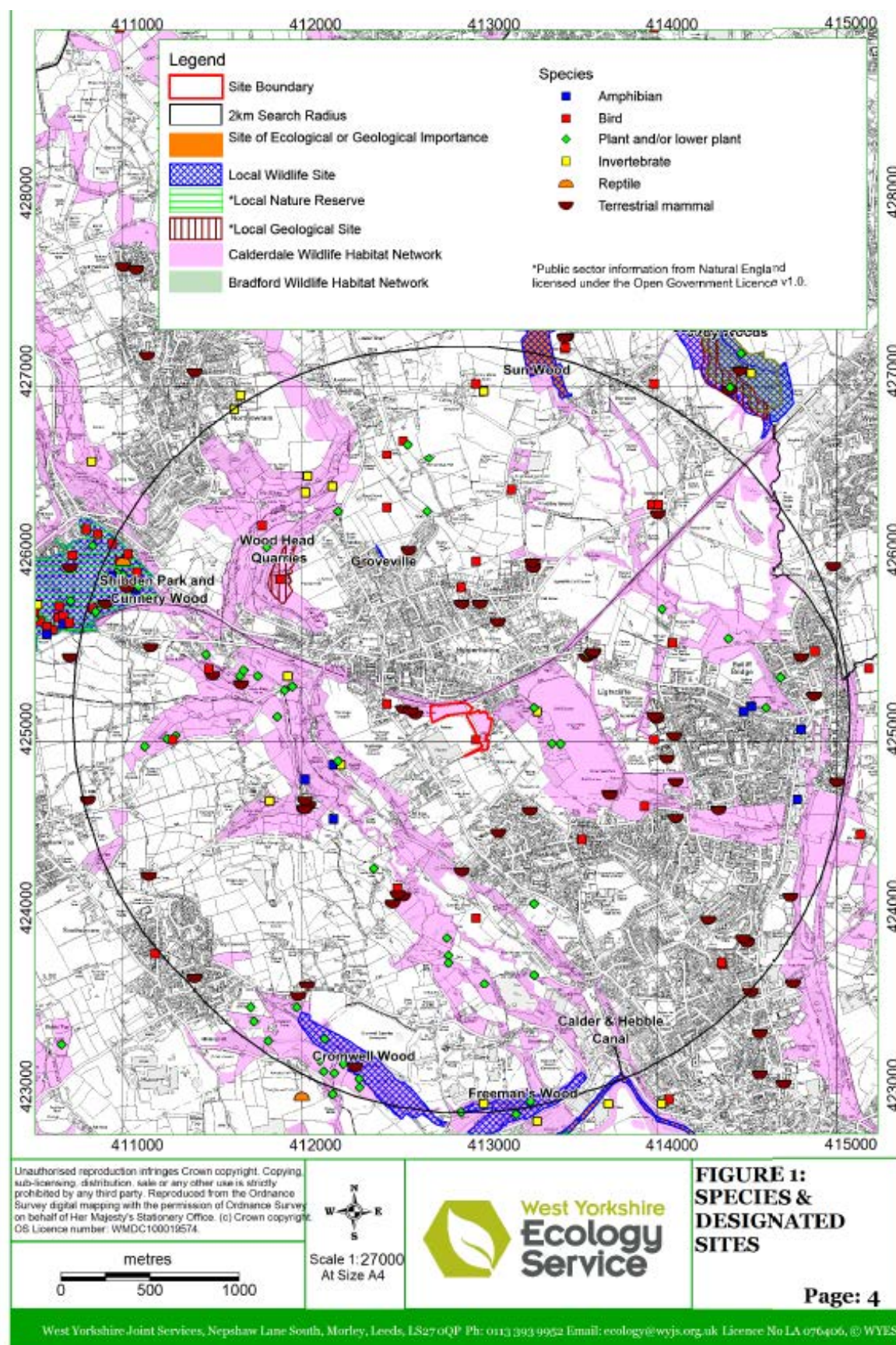


APPENDICES

APPENDIX 01 – Species & Designated Sites (WYE)

APPENDIX 02 – Existing Species Records (WYBG only)

APPENDIX 03 – Legislation Notes: Protected Species.

APPENDIX 01 – Species & Designated Sites (WYE)

APPENDIX 02 – Existing Species Records (WYE & WYBG)

WYBG

SE133238	Woodbottom	10/07/1995	Common Pipistrelle	100-200 Count of Adult	Roost (maternity)
SE126246	Broad oak Place	24/06/1998	Common Pipistrelle	1 Count of Adult	Roost (possible)
SE120246	Hipperholme works	27/05/1999	Common Pipistrelle	Not Recorded Range	Roost (possible)
SE140263	Rookes Hall, Norwood Green, Halifax	01/08/2010	Common Pipistrelle		aural bat detector
SE12022465	Badger Lane, Hipperholme, HX3	01/02/2011	Common Pipistrelle	2 Count of Adult	Roost
SE1398025170	Calderdale, Hipperholme High School	27/08/2002	Pipistrelle Bat species		Roost
SE1399325154	Hipperholme & Lightcliffe High School, Stoney Lane, Lightcliffe	25/09/2006	Pipistrelle Bat species	1 Count of Adult	in building
SE1233026029	4 North Royd, Hipperholme, Halifax	09/08/2007	Pipistrelle Bat species	20 Count of Adult	Roost
SE1398025170	High Sch, Stony La, Lightcliffe, HX3 8TL	01/10/1996	Vesper Bat species	Not Recorded Range	Roost (possible)
SE1374823793	7 Slead Royd, Brighouse, HD6 2JQ	03/07/1997	Vesper Bat species		Roost (possible)
SE1324524559	33 Warren Park, Hove Edge, Brighouse	23/06/1998	Vesper Bat species		Roost (excluded)
SE1374823793	7 Slead Royd, Brighouse, HD6 2JQ	08/09/1998	Vesper Bat species		Roost (possible)
SE1114424275	Law Farm, Law Lane, Southowram, Halifax, HX3 3UG	26/04/2001	Vesper Bat species		Roost
SE130247	Bolehill Park, Hove Edge	08/07/2002	Vesper Bat species		Roost (possible)
SE1115325558	9 Shibden Hall Croft, Calderdale, Calderdale	17/06/2003	Vesper Bat species		Roost
SE1328224640	61 Warren Park, Hove edge, Calderdale	15/07/2003	Vesper Bat species	20 Count of Adult	Roost
SE11982360	Glenwood House, 19 Church lane, Southowram, Calderdale	08/09/2003	Vesper Bat species	1 Count of Adult	in building
SE113262	Marldon House Marldon Road, Northowram HX3	06/08/2006	Bats		Roost
SE140239	Pond Quarry, Brighouse, HD6 2JJ	19/05/2009	Bats		Roost (bachelor)

APPENDIX 03 - LEGISLATION NOTES: PROTECTED SPECIES

Bats

All British bats are afforded full protection under both UK and European legislation.

The Conservation habitats and species regulations 2010 transpose the Habitats Directive into UK law, making it an offence to-

- deliberately disturb a bat or
- deliberately kill or capture a bat
- damage, destroy or obstruct access to a breeding site or resting place (note this applies to both deliberate and reckless actions).

The Wildlife and Countryside Act 1981 (as amended) (Schedule 5) made it an offence to

- intentionally kill, injure or take a bat
- damage, destroy or obstruct a resting place *,
- disturb the species in a resting place *
- possess or control a bat or any part thereof
- sell, offer for sale, possess or transport for sale any bat or part thereof
- set traps for catching, killing or injuring bats
- possess articles for the purposes of committing offences against bats

[*= intentional and reckless offences covered]

Legal protection under the Habitats Directive applies to both the animals and their breeding sites and resting places. This means that bat roosts are fully protected, whether they are in use at the time or not. Where roosts are identified, any works which may contravene the protection afforded to them require derogation from the provisions of the legislation in the form of a licence from Natural England.

Breeding birds

The Wildlife and Countryside Act 1981 gives protection to all bird's nests (whilst being built or in use) and eggs from intentional damage or destruction. Additional protection against disturbance on the nest or of dependant young is provided for birds included on Schedule 1.

Great Crested Newt

The Wildlife and Countryside Act 1981 (as amended) transposes into UK law and the Convention on the Conservation of European and Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'). The 1981 Act was amended by the Countryside and Rights of Way ['CRoW'] Act 2000. The great crested newt is listed on Schedule 5 of the 1981 Act, and is therefore subject to the provisions of Section 9, which make it an offence to:

- Intentionally kill, injure or take a great crested newt [Section 9 (1)]
- Possess or control any live or dead specimen or anything derived from a great crested newt [Section 9 (2)]
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt [Section 9 (4)(a)]
- Intentionally or recklessly disturb a great crested newt while it is occupying a structure or place which it uses for that purpose [Section 9(4)(b)]

The Conservation of habitats and species regulations 2010 transpose into the UK law Council Directive 92/43/EEC of 21st May 1992 on the conservation of Natural Habitats and of Wild Fauna and Flora (often referred to as the 'Habitats [and Species] Directive'). The great crested newt is listed on Annex II and Annex IV of the Directive. The former Annex relates to the



designation of Special Areas of Conservation (SACs) for this species; even where great crested newts occur outside SACs, the inclusion on Annex II serves to underline their conservation significance. Inclusion of the Annex IV ('European Protected Species') means that member states are required to put in place a system of strict protection as outlined in Article 12, and this is done through inclusion on Schedule 2 of the Regulations. Regulation 39 makes it an offence to:

- Deliberately capture or kill a great crested newt [Regulation 39 (1)(a)]
- Deliberately disturb a great crested newt [Regulation 39(1)(b)]
- Deliberately take or destroy the eggs of a great crested newt [Regulation 39 (1)(c)]
- Damage or destroy a breeding site or resting place of a great crested newt [Regulation 39(1)(d)]

The legislation applies to all life stages of great crested newts.

Badger

Badgers and their setts are protected by the Protection of Badgers Act 1992. Under this act it is illegal to: (1) wilfully kill, injure, take a badger or attempt to do so, (2) cruelly ill-treat a badger or (3) interfere with a sett, including disturbing a badger while occupying a sett.