



1.3 Environment Agency Recorded Pollution Incidents

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

6

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

ID	Distance	Direction	NGR	De	etails
1	94.0	NW	229118 454826	Incident Date: 02-Dec-2002 Incident Identification: 124289 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	124.0	Е	229188 454832	Incident Date: 06-Apr-2003 Incident Identification: 148949 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3	178.0	SW	228360 454530	Incident Date: 28-Jun-2002 Incident Identification: 87956 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	258.0	SE	228140 455150	Incident Date: 09-May-2003 Incident Identification: 157204 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	264.0	SE	228153 455191	Incident Date: 10-Oct-2001 Incident Identification: 35660 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6	273.0	SE	228200 455310	Incident Date: 04-Jul-2002 Incident Identification: 89265 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

0

Database searched and no data found.

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

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

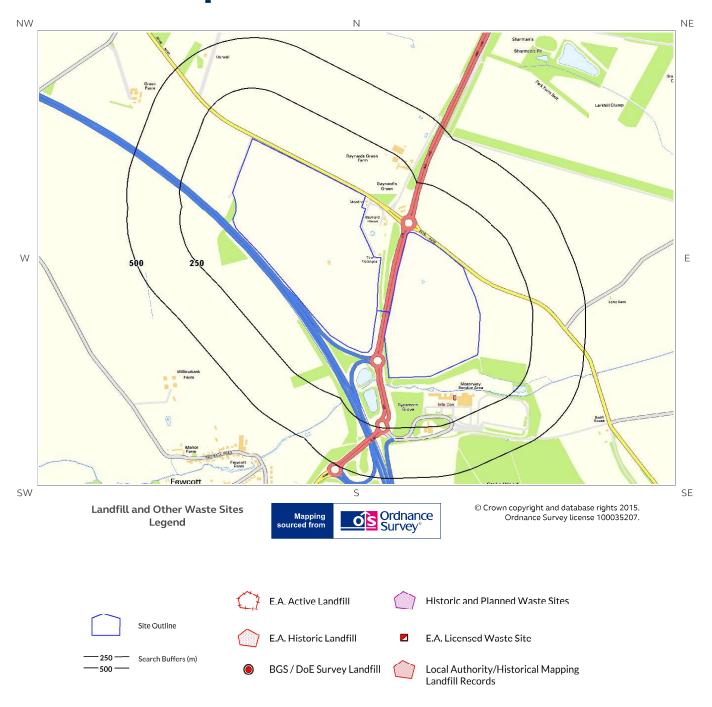
0

Database searched and no data found.





2. Landfill and Other Waste Sites Map







2. Landfill and Other Waste Sites

2.1 Landfill Sites

2.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

2.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

4

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	
Not show n	998.0	W	453000 228900	Site Address: Fritwell, Lodge Farm Waste Licence: - Site Reference: 1365329 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded Input: Last Recorded Input:
Not show n	1160.0	SW	453600 227400	Site Address: Ardley Wood, Cherwell Waste Licence: Yes Site Reference: OCC/R/02, W10034, 13.6.5327, TP0612 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 31-May-1977 Licence Surrendered: 01-Oct-1985 Licence Hold Address: - Operator: Oxfordshire County Council First Recorded Input: 31-Dec-1965 Last Recorded Input: 31-Dec-1980
Not show n	1377.0	SW	453700 227200	Site Address: Ardley Wood, Ardley, Oxfordshire Waste Licence: - Site Reference: - Waste Type: Commercial Liquid sludge, Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: Ploughlye Rural District Council First Recorded Input: Last Recorded Input:
Not show n	1377.0	SW	453700 227200	Site Address: Ardley Wood, Ardley, Oxfordshire Waste Licence: - Site Reference: - Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded Input: 31-Dec-1940 Last Recorded Input:





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

1

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

ID	Distance (m)	Direction	NGR		Details
Not shown	1357.0	SW	45370 0.0 22750 0.0	Address: Ardley Wood, Ardley, Oxon BGS Number: 854.0	Risk: Risk to major aquifer Waste Type: N/A

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

0

Database searched and no data found.

2.2 Other Waste Sites

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

0

Database searched and no data found.

2.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

0

Database searched and no data found.





3. Current Land Use Map







3. Current Land Uses

3.1 Current Industrial Data

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

6

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1A	111.0	Ν	Esso	454887 229184	Baynards Green, Bicester, OX27 7SG	Petrol and Fuel Stations	Road and Rail
2A	111.0	N	Baynards Green Otr Service Station	454887 229184	Baynards Green, Bicester, Oxfordshire, OX27 7SG	Petrol and Fuel Stations	Road and Rail
3B	162.0	SE	Tank		OX27	Tanks (Generic)	Industrial Features
4B	170.0	SE	Tank		OX27	Tanks (Generic)	Industrial Features
5	170.0	SE	Cherwell Valley Motorway Service Area	455175 228249	Cherwell Valley Motorway Services Area, Northampton Road, Ardley, Bicester, OX27 7RD	Motorway Service Stations	Road and Rail
6B	171.0	SE	Tanks		OX27	Tanks (Generic)	Industrial Features

3.2 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
7	154.0	E	454861 229234	Esso	Baynards Green Otr Service Station, Baynards Green, Baynards Green, Bicester, Oxfordshire, OX27 7SG	No	Open
8	292.0	S	454969 228067	Esso	M40 Cherwell Valley Motorway Service Area, M40 J10, M40 J10, A43, Ardley, Bicester, Oxfordshire, OX27 7RD	No	Open





0

3.3 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:

Database searched and no data found.

3.4 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.





4. Geology

4.1 Artificial Ground and Made Ground

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

Lex Code	Description	Rock Type	
DDGR-ARTGR	DISTURBED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND	
MGR-MGRD	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT	

4.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
HEAD	HEAD	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

4.3 Bedrock and Solid Geology

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

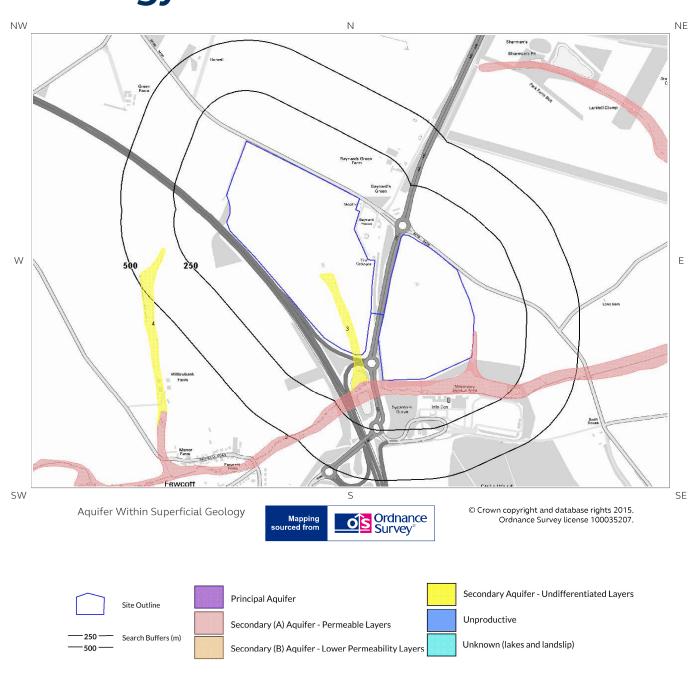
Lex Code	Description	Rock Type
WHL-LMST	WHITE LIMESTONE FORMATION	LIMESTONE

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





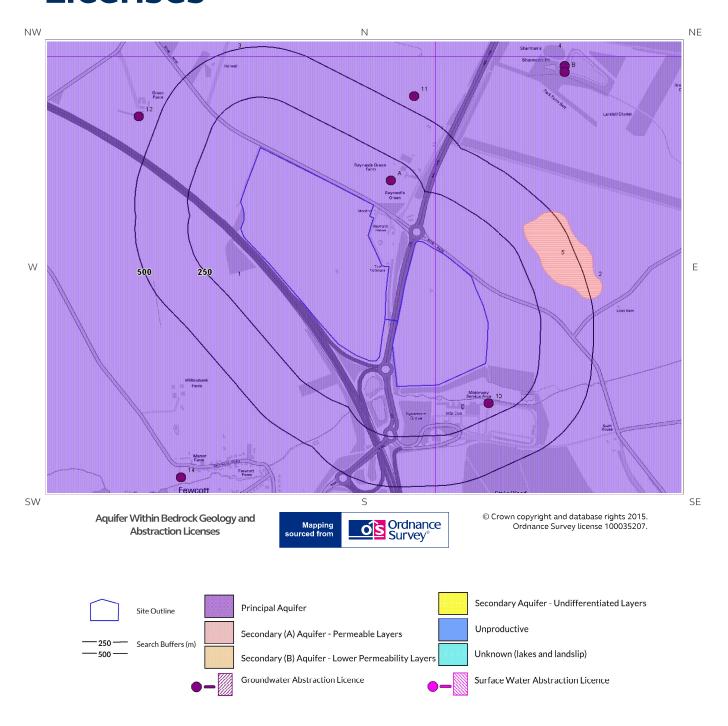
5. Hydrogeology and Hydrology5a. Aquifer Within SuperficialGeology







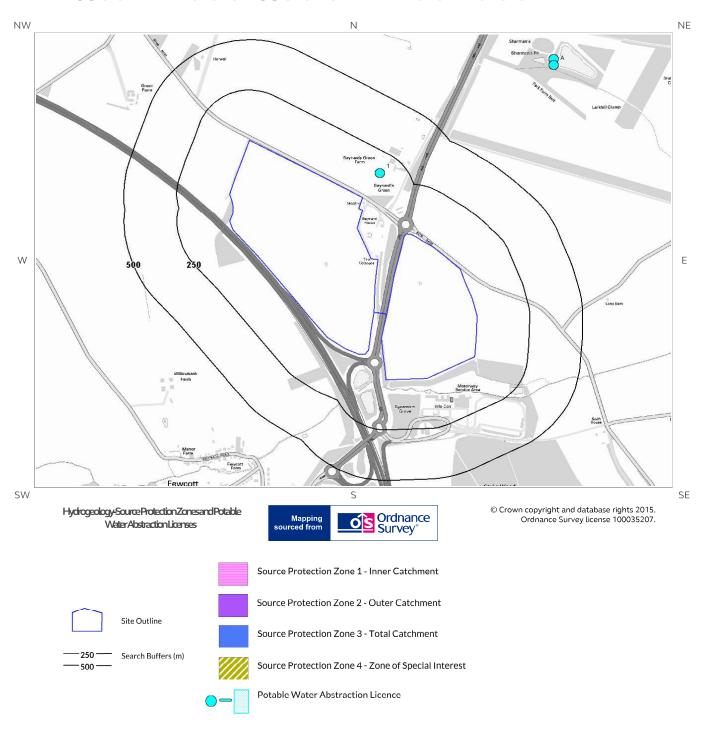
5b. Aquifer Within Bedrock Geology and Abstraction Licenses







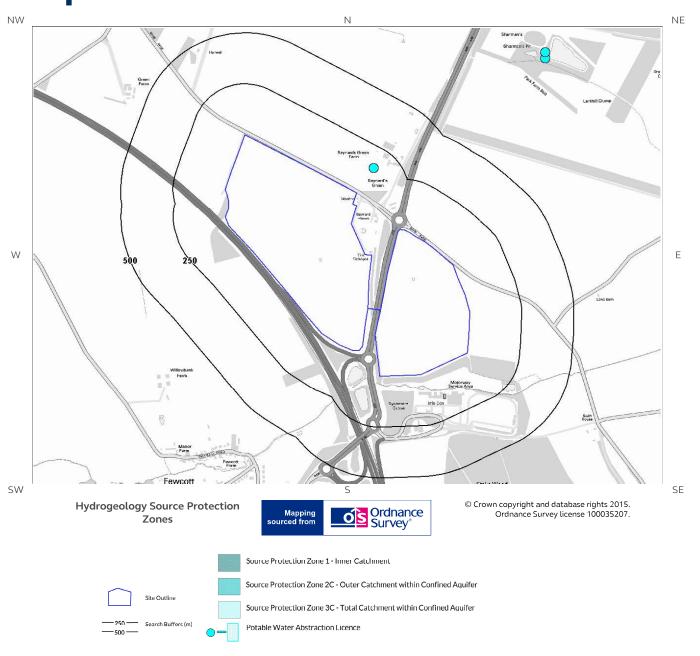
5c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses







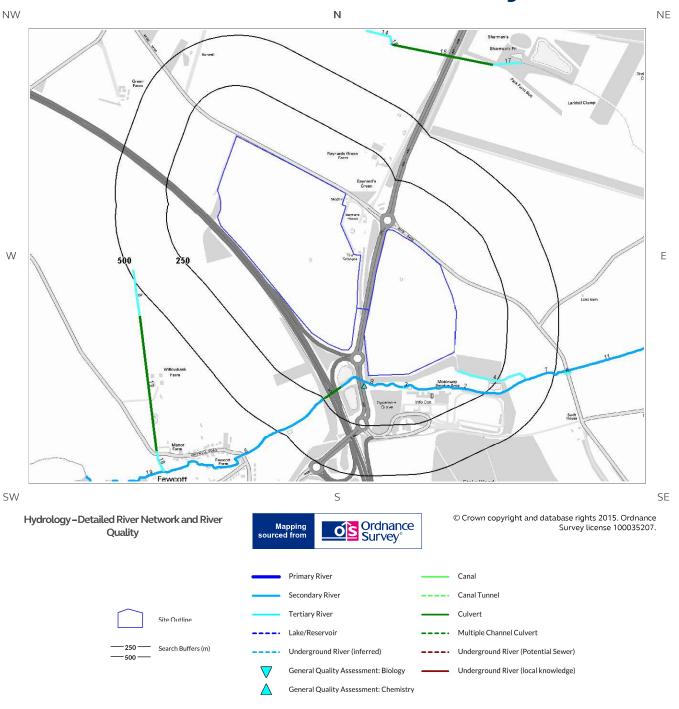
5d. Hydrogeology - Source Protection Zones within confined aquifer







5e. Hydrology – Detailed River Network and River Quality







5. Hydrogeology and Hydrology

5.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property?

From 1 April 2010, the Environment Agency'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 Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (5a):

ID	Distance (m)	Direction	Designation	Description		
1	0.0	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	0.0	S	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		
3	0.0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		
4	320.0	W	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		

5.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency'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 Enviroinsight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (5b):

ID	Distance (m)	Direction	Designation	Description
1	0.0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	0.0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers





ID	Distance (m)	Direction	Designation	Description
5	322.0	NE	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
3	454.0	N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

5.3 Groundwater Abstraction Licences

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (5b):

ID	Distance (m)	Direction	NGR	Name	Detail:	s
8A	146.0	NE	454790 229380	CURTIS	Licence No: 6/33/02/*G/0131 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: Borehole At Stoke Lyne Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/6/1997 Expiry Date: - Issue No: 100 Version Start Date: 1/6/1997 Version End Date:
9A	146.0	NE	454790 229380	CURTIS	Licence No: 6/33/02/*G/0131 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Borehole At Stoke Lyne Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/6/1997 Expiry Date: - Issue No: 100 Version Start Date: 1/6/1997 Version End Date:
10	184.0	SE	455250 228270	MOTO HOSPITALI TY LTD	Licence No: 6/33/02/*G/0130 Details: Spray Irrigation - Direct Direct Source: Ground Water Source Of Supply Point: Borehole At Stoke Lyne Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CS 2207 Original Start Date: 1/8/1994 Expiry Date: 30/9/2004 Issue No: 101 Version Start Date: 11/11/2003 Version End Date:
11	566.0	NE	454900 229800	CURTIS	Licence No: 6/33/02/*G/0007 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Well At Baynard Green Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/4/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/9/1966 Version End Date:
12	594.0	W	453600 229700	EVANS	Licence No: 6/33/02/*G/0056 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Well At Green Farm Fritwell Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/6/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/6/1966 Version End Date:



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ID	Distance (m)	Direction	ection NGR	Name	Details		
Not shown	774.0	N	454000 230300	RANSOM	Licence No: 6/33/02/*G/0093 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Borehole At Horwell Farm Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/1/1968 Expiry Date: - Issue No: 100 Version Start Date: 1/1/1968 Version End Date:	
14	996.0	SW	453800 227900	GODWIN	Licence No: 6/33/02/*G/0091 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Well At Fewcott Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CV 3120 Original Start Date: 15/1/1968 Expiry Date: - Issue No: 102 Version Start Date: 21/11/2003 Version End Date:	
15B	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	
16B	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: Spray Irrigation - Direct Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	
17B	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: Spray Irrigation - Storage Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	
18B	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: Make-Up Or Top Up Water Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	
19B	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	
20B	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:	



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ID	Distance (m)	Direction	NGR	Name	Detai	ls
21B	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: Make-Up Or Top Up Water Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:
22B	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: Spray Irrigation - Storage Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:
23B	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: Spray Irrigation - Direct Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:
24B	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 19/1/2000 Version End Date:
Not shown	1796.0	W	452300 229500	DALTON	Licence No: 6/33/02/*G/0012 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Well At Fritwell Data Type: Point	Annual Volume (m³): 15092 Max Daily Volume (m³): 41.36 Original Application No: - Original Start Date: 1/6/1967 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2008 Version End Date:
Not shown	1796.0	W	452300 229500	DALTON	Licence No: 6/33/02/*G/0012 Details: Spray Irrigation - Direct Direct Source: Ground Water Source Of Supply Point: Well At Fritwell Data Type: Point	Annual Volume (m³): 15092 Max Daily Volume (m³): 41.36 Original Application No: - Original Start Date: 1/6/1967 Expiry Date: - Issue No: 101 Version Start Date: 1/4/2008 Version End Date:
Not shown	1881.0	NW	452500 230400	J A HAZELL & SON	Licence No: 28/39/14/0193 Details: General Farming & Domestic Direct Source: Thames Groundwater Point: Inkerman Farm, Souldern (a) Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: WR.A/2368 Original Start Date: 10/4/1967 Expiry Date: - Issue No: 100 Version Start Date: 31/12/1977 Version End Date:
Not shown	1905.0	SW	452700 227800	PARKER	Licence No: 6/33/02/*G/0092 Details: General Farming & Domestic Direct Source: Ground Water Source Of Supply Point: Borehole At Ardley Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/11/1967 Expiry Date: - Issue No: 100 Version Start Date: 1/3/1977 Version End Date:





5.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site?

No

Database searched and no data found.

5.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site?

Yes

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (5c):

ID	Distance (m)	Direction	NGR	Name	Details		
1	146.0	NE	454790 229380	CURTIS	Licence No: 6/33/02/*G/0131 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: Borehole At Stoke Lyne Data Type: Point	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 1/6/1997 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:	
2A	1071.0	NE	455610 229920	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0071 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: New Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 1/3/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:	
3A	1097.0	NE	455610 229950	TUSMORE PARK HOLDINGS S A	Licence No: 6/33/02/*G/0064 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Ground Water Source Of Supply Point: Existing Borehole At Hardwick Data Type: Point	Annual Volume (m³): 22730 Max Daily Volume (m³): 113.65 Original Application No: - Original Start Date: 28/3/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:	

5.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.





5.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

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.

5.8 Groundwater Vulnerability and Soil Leaching Potential

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Major Aquifer/High Leaching Potential	НЗ	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.
454	N	Major Aquifer/High Leaching Potential	НЗ	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.

5.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site?

Yes

5.9.1 Biological Quality:

Database searched and no data found.





5.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (5d):

				_	Chemical Quality Grade				
ID	Distance (m)	Direction	NGR	River Quality Grade	2005	2006	2007	2008	2009
20B	57.0	S	454800 228300	River Name: Padbury Brook Reach: Ardley Hethe End/Start of Stretch: Start of Stretch NGR	А	А	А	А	А

5.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (5e):

ID	Distance (m)	Direction	ı	Details
1B	35.0	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
2	53.0	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
3	61.0	S	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
4	89.0	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
5	144.0	W	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
6	252.0	SW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
7	376.0	Е	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
8	479.0	SW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined





5.11 Surface Water Features

Are there any surface water features within 250m of the study site?

Yes

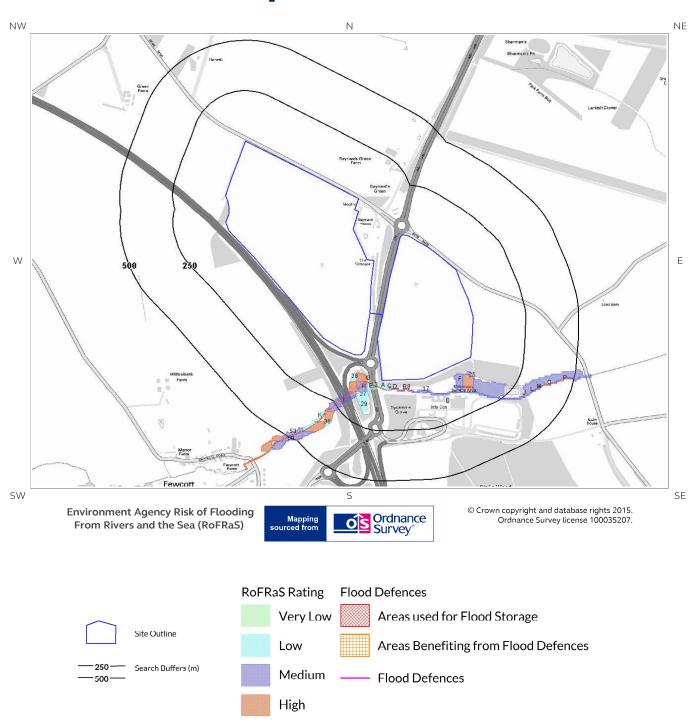
The following surface water records are not represented on mapping:

Distance (m)	Direction
33.0	SW
63.0	S
65.0	S
68.0	W
79.0	S
89.0	SE
93.0	SW
115.0	SE





6. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map







6. Flooding

6.1 Risk of Flooding from Rivers and the Sea (RoFRaS)

What is the risk of flooding at the centre of the study site?

Very Low

What is the highest risk of flooding within 25m of the centre of the study site?

Low

The Environment Agency RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid as used by many of the insurance companies. RoFRaS data is based on a 50m grid system, with the flood rating at the centre of the grid calculated and given below. The data considers the probability that the flood defences will overtop or breach, and the distance from the river or the sea.

RoFRaS data for the study site indicates the property or an area within 25m has a Low (greater than 1 in 1000 but less than 1 in 100) chance of flooding in any given year.

The following floodplain records within 50m of the study site are represented on the River and Coastal Flood Risk Map above:

ID	Distance (m)	Direction	Rofras Flood Risk
1A	24	S	Low
2C	30	S	Medium
3	35	S	High
4A	35	S	High
5D	37	S	Medium
6B	39	S	Medium
7B	40	S	High
8	40	S	Medium
9E	42	SW	Low
10F	43	SE	Medium
11C	45	S	High
12C	45	S	High
13	46	S	Medium
14C	48	S	Very Low
15D	49	S	Very Low
16B	50	S	Medium

6.2 Flood Defences

Are there any Flood Defences within 250m of the study site?

No

Database searched and no data found.





6.3 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

6.4 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

6.5 Groundwater Flooding Susceptibility Areas

6.5.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site?

Yes

Does this relate to 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).

6.5.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

6.6 Groundwater Flooding Confidence Areas

What is the British Geological Survey confidence rating in this result?

High

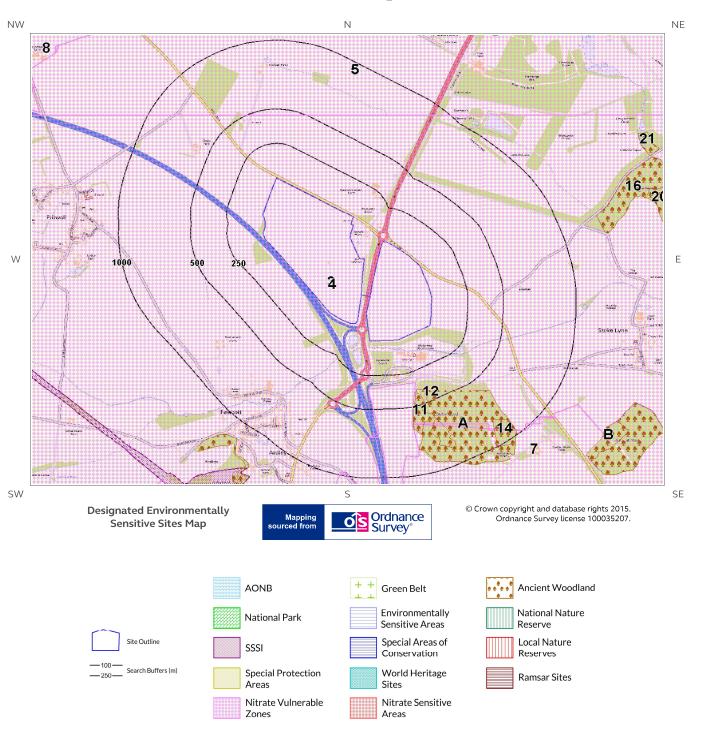
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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.





7. Designated Environmentally Sensitive Sites Map





ID



Yes

7. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?

7.1 Record	s of Sites of Spec	ial Scientific Interest (SSSI) within 2000m of the study sit	2
	Wales are represe	cial Scientific Interest (SSSI) records provided by Natura ented as polygons on the Designated Environmentally Sens	
(m)	Direction	SSSI Name	Data Source
1 1257.0	SW	Ardley Cutting and Quarry	Natural England
lot own 1729.0	S	Ardley Trackways	Natural England
7.2 Record	s of National Nat	cure Reserves (NNR) within 2000m of the study site: Database searched and no data found.	0
7.3 Record	s of Special Area	s of Conservation (SAC) within 2000m of the study site:	0
7.4 Record	s of Special Proto	Database searched and no data found. ection Areas (SPA) within 2000m of the study site: Database searched and no data found.	0



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

Database searched and no data found.

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

12

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
10A	384.0	S	UNKNOWN	Ancient and Semi-Natural Woodland
11	407.0	S	UNKNOWN	Ancient Replanted Woodland
12	415.0	SE	UNKNOWN	Ancient Replanted Woodland
13A	631.0	SE	UNKNOWN	Ancient Replanted Woodland
14	812.0	SE	UNKNOWN	Ancient Replanted Woodland
15	1121.0	SW	UNKNOWN	Ancient and Semi-Natural Woodland
16	1270.0	E	UNKNOWN	Ancient and Semi-Natural Woodland
17B	1427.0	SE	UNKNOWN	Ancient Replanted Woodland
18B	1453.0	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1539.0	S	UNKNOWN	Ancient and Semi-Natural Woodland
20	1626.0	E	UNKNOWN	Ancient Replanted Woodland
21	1764.0	NE	UNKNOWN	Ancient and Semi-Natural Woodland

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.





7.10 Records of Areas of O	utstanding Natural Beauty (AONB) within 2000m of the study s	site:
		0
	Database searched and no data found.	
7.11 Records of National P	arks (NP) within 2000m of the study site:	0
	Database searched and no data found.	
7.12 Records of Nitrate Se	nsitive Areas within 2000m of the study site:	
		O

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

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

Database searched and no data found.

ID	Distance (m)	Direction	NVZ Name	Data Source
3	0.0	On Site	Existing	DEFRA
4	0.0	On Site	Existing	DEFRA
5	454.0	N	Existing	DEFRA
6	454.0	N	Existing	DEFRA
7	619.0	S	Existing	DEFRA
8	1346.0	N	Existing	DEFRA
Not shown	1989.0	SE	New	DEFRA

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

Database searched and no data found.

Report Reference: EMS-304528_411362 Client Reference: EMS_304528_411362 0

7





8. Natural Hazards Findings

8.1 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 GeoInsight**, available from **our website**. The following information has been found:

8.1.1 Shrink Swell

What is the maximum Shrink-Swell** hazard rating identified on the study site?

Verv Low

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

Hazard

Ground conditions predominantly low plasticity. 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 due to potential problems with shrink-swell clays.

8.1.2 Landslides

What is the 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.

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





8.1.3 Soluble Rocks

What is the maximum Soluble Rocks* hazard rating identified on the study site?

Low

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

Hazard

Significant soluble rocks are present. Low possibility of subsidence occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow. Consider implications for stability when changes to drainage or new construction are planned. For new build site investigation should consider potential for dissolution problems on the site and its surroundings. Care should be taken with local drainage into the bedrock. Some possibility groundwater pollution. For existing property possible increase in insurance risk due to soluble rocks.

8.1.4 Compressible Ground

What is the 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.

8.1.5 Collapsible Rocks

What is the 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.





8.1.6 Running Sand

What is the maximum Running Sand** hazard rating identified on the study site?

Low

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

Hazard

Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property so significant increase in insurance risk due to running sand problems is likely.

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





9. Mining

9.1 Coal Mining

Are there any coal mining areas within 75m of the study site?

No

Database searched and no data found.

9.2 BGS Non Coal Mining Hazards

What is the potential for undermining as a result of underground mineral extraction, excluding coal and minerals extracted as a consequence of coal mining?

Unclassified

Database searched and no data found.

9.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site?

No

Guidance: No Guidance Required.





Contact Details

EmapSite Telephone: 0118 9736883 sales@emapsite.com



British Geological Survey Enquiries

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

Fax: 0115 936 3276.
Email: enquiries@bgs.ac.uk
Web:www.bgs.ac.uk
BGS Geological Hazards Reports and general geological enquiries



National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 08708 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 Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane Mansfield Notts NG18 4RG Tel: 0345 7626 848 DX 716176 Mansfield 5 www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton SO16 0AS Tel: 08456 050505

Local Authority
Authority: Cherwell District Council
Phone: 01295 252 535
Web: http://www.cherwell-dc.gov.uk/
Address: Bodicote House, Bodicote, Banbury, Oxfordshire, OX15 4AA

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 who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028]. 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

1 Definitions

In these terms and conditions unless the context otherwise requires:

"Beneficiary" means the person or entity for whose benefit the Client has obtained the Services.

"Client" means the party or parties entering into a Contract with Groundsure.

"Commercial" means any building or property which is not Residential.

"Confidential Information" means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

- (i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and $\,$
- (ii) any information which is in the public domain (other than by virtue of a breach of this Contract).
- "Support Services" means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.
- "Contract" means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.
- "Third Party Data Provider" means any third party providing Third Party Content to Groundsure.
- "Data Reports" means reports comprising factual data with no accompanying interpretation.
- "Fees" has the meaning set out in clause 5.1.
- "Groundsure" means Groundsure Limited, a company registered in England and Wales under number 03421028.
- **"Groundsure Materials"** means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.
- "Intellectual Property" means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.
- "Mapping" means a map, map data or a combination of historical maps of various ages, time periods and scales.
- **"Order"** means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.
- "Ordnance Survey" means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 OAS, UK.
- "Order Website" means the online platform through which Orders may be placed by the Client and accepted by Groundsure.
- **"Report"** means a Risk Screening Report or Data Report for Commercial or Residential property.
- "Residential" means any building or property used as or intended to be used as a single dwelling.
- "Risk Screening Report" means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.
- **"Services"** means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.
- "Site" means the area of land in respect of which the Client has requested Groundsure to provide the Services.
- **"Third Party Content"** means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.
- "User Guide" means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

- 2.1 Groundsure agrees to provide the Services in accordance with the Contract.
- 2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.
- 2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

- 2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.
- 2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.
- 2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

- 3.1The Client shall comply with the terms of this Contract and
- (i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and
- (ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.
- 3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.
- 3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.
- 3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.
- 3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.
- 3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

- 4.1The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.
- 4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;
 - (i) the Beneficiary,
- (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
 - (iv) the first purchaser or first tenant of the Site, and
- (v) the professional advisers and lenders of the first purchaser or tenant of the Site.
- 4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.
- 4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1Groundsure shall charge and the Client shall pay fees at the rate and